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HYPOTHESES

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FINDINGS

RECOMMENDATIONS/SUGGESTIONS

CONCLUSIONS

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A STUDY OF VOCATIONAL MATURITY OF COMMERCE STREAM ADOLESCENT STUDENTS IN RELATION TO PERSONALITY AND ACADEMIC ACHIEVEMENT

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ABSTRACT

The present research was an attempt to study Vocational Maturity of Commerce Stream Adolescent Students in relation to Personality and Academic Achievement. The descriptive survey method was used in the study. The study was delimited to the 200 senior secondary stage students. In order to conduct the study, schools were randomly selected from Punjab and U.T. The tools used for the study was Career Maturity Inventory (CMI) John Crites, Indian adaptation by Nirmla Gupta, 1989 and Kundus introversion- extroversion inventory. It is found from the analysis that there will be no significance relationship between vocational maturity and personality of commerce stream students whereas there is positive relationship between vocational maturity and academic achievement of commerce stream students.

KEYWORDS

vocational maturity, Personality, academic achievement, students, relationship.

INTRODUCTION

Needless to say that education and vocational life are inextricably linked. It is a question of means and ends. Education as both an end as well as a means, so also vocation which is both a means and an end of human activity. Ultimate end is peace and happiness which remains elusive as ever.

Students at the 10+2 stage are likely to become career conscious and start showing adult traits. Maturity is the degree of refinement in the proposed vocation and the quality and sensitivity of thinking in regard to the decision about future work and employment opportunities. Maturity may mean commitment to a particular task in future, but it may also mean necessary flexibility in adjustment needed in various situations in the present also.

Ability to choose, plan and prepare for a vocation is a developmental process. Vocational development is therefore a necessary concomitant of overall growth and development. It finds culmination in vocational maturity which is the ability to plan and make judicious choice of future vocation.

CONCEPT OF VOCATIONAL MATURITY

Vocational maturity may be thought of as vocational age, conceptually similar to mental age in early adolescence, but practically different in late adolescence and early adulthood because more distinctions can be made in the developmental curve at those stages. Vocational maturity, the place reached on the vocational development continuum, may be described not only in terms of much smaller and more refined units of behavior manifested in coping with the developmental tasks of a given life stage. This later definition is most helpful in considering a given individual who functions at a certain life stage.

ACADEMIC ACHIEVEMENT

Academic achievement refers to the knowledge attained and skills developed in the school subjects which are assessed by the school authority with the help of achievement test which may be either standardized or teacher made or we can say that high achievement of students in school builds self esteem and self confidence which leads to better adjustment with the group.

PERSONALITY

In this world no two individuals are alike; they differ from each other in each and every aspect of life. Each individual has his own abilities, capabilities and interests, which make him as a separate individual from the others. Etymologically the term 'Personality' has been derived from the Latin word 'persona' which means a mask used by actors in ancient times. According to the concept of mask, Personality was thought to be the effect and influence which the actor left on the mind of the audience. Even today for a layman, personality means the effect which an individual leaves on other people. So, personality is not related with outward behaviour or appearance, but includes totality of one's behaviour, both inner and outer behaviour.

REVIEW OF LITERATURE

The relevant literature reviewed for the present study has been mentioned under the following heads.

According to **Bandura and Pastorelli (2001)** as adolescents mature, they begin to formulate occupational choices, widely influenced by academic performance, college education and socio economic status.

Hoffman's (2001) research suggested that the daughters of employed mothers had higher academic achievement / greater career success more than non traditional career choices and greater occupational commitment.

Strage et al. (2002) found that students with high academic achievement were able to identify in which courses they felt they could get a good grade.

McKenney et al. (2003) examined data from 548 job postings in a college recruitment program and found that academic achievement was related to career indecision.

Robert H Crook, Charles. C Healy, David no 'O' Shea (2004) tested whether self esteem and nature career attitudes related to one another in predicting academic and work achievement for 174 college students. Analysis showed both constructs related to achievement and supported the thesis that self esteem facilitates development of mature career attitudes which in turn promote academic and work achievement. The findings are discussed in terms of their implications for theory and practice.

Ehrler (2005) found that openness to experience encompasses a set of interpersonal and interpersonal nuances that are relevant to educational outcomes.

Fred H. Borzen and Nancy E. Betz (2008) study on career self Efficacy and Personality : Linking career and Personality and career self efficacy by examine relates across two new inventories with scales for identifying human strength. The Healthy Personality Inventory (HPI) has 17 content scales tapping in array of positive personality measures. In a sample of college students, hypothesis correlation between personality is career self efficiency were greenery confirmed.

Hirechi (2010) study on vocational interest and career Goals Development and Relations to personality in middle Adolescence. He found that there is a close relation of vocation interests, goals and person traits. This longitudinal study examined that vocational interest and career goals in relations to big five personality traits among swiss adolescents for 4 year from seventh to eight-grads.

NEED OF THE STUDY

Since the vocation of an individual is of much social significance and since psychology of a man has direct impact on his level of vocational maturity, therefore it is natural for social scientists to focus their attention on the problem of vocational maturity. In order that nation must become self sufficient in economic field, vocational maturity of the individuals is highly important at the school level, as there future citizens of the country will play a significant role in shaping the destiny of the nation. This is only possible if they themselves are self-sufficient, well placed better adjusted, and are effective and happy in their vocation

STATEMENT OF THE PROBLEM

A Study of Vocational Maturity of Commerce Stream Adolescent Students in Relation to Certain Personality and Academic Achievement

OBJECTIVES

- To study the relationship between vocational maturity and personality.
- To study the relationship between vocational maturity and academic achievement

HYPOTHESIS

- There will be a significant relationship between vocational maturity and Personality.
- There will be a significant relationship between vocational maturity and Academic achievement.

DELIMITATIONS

- The study will be delimited to 300 senior secondary stage students.
- It will be delimited to regular school students.

METHODOLOGY

It will include sample, administration of tools, collection of data, analysis and discussion.

SAMPLE

A sample of 200 students of senior secondary stage will be selected as sample by adopting random sampling technique for the schools of Punjab and UT.

TOOLS USED

Following tools were used for data collection in the Present study.

- Career Maturity Inventory (CMI) (John Crites, Indian adaptations by Nirmal Gupta, 1989).
- Kudus introversion extroversion inventory
- Tenth class final examination scores of students.

ANALYSIS AND DISCUSSION OF DATA

The data so collected will be given proper statistical treatment after working out there S.D, Mean and r- value will be worked out and compiled with different tables.

TESTING OF THE HYPOTHESES

THE INTER CORRELATION AMONG THE VARIABLES OF VOCATIONAL MATURITY, PERSONALITY AND ACADEMIC ACHIEVEMENT

HYPOTHESIS-1: There will be significant relationship between vocational maturity and personality of commerce stream students

TABLE 1: SHOWS THE R-VALUE BETWEEN VOCATIONAL MATURITY AND PERSONALITY

	Personality	Vocational Maturity	Significant
Personality	--	-.117	not significant
Vocational Maturity	-.117	--	

The result entered in table 1 shows that r-value i.e. -.117 for the personality and vocational maturity was not found to be significant at any level which means that there is no significant relationship between vocational maturity and personality.

Hence, our hypothesis "There will be significant relationship between vocational maturity and personality of commerce stream students" is rejected.

HYPOTHESIS-2: There will be significant relationship between vocational maturity and academic achievement.

TABLE 2: SHOWS THE R-VALUE BETWEEN VOCATIONAL MATURITY AND PERSONALITY

	Academic achievement	Vocational Maturity	Significant
Academic achievement	--	.307	0.01 Significant
Vocational Maturity	.307	--	

The result entered in table 4.9 shows that r-value i.e. .307 for academic achievement and vocational maturity was significant at .01 level which means that there is significant relationship between vocational maturity and academic achievement.

Hence, our hypothesis "There will be significant relationship between vocational maturity and academic achievement of commerce stream students" is accepted.

CONCLUSIONS

The following conclusions are drawn:

- The correlation between vocational maturity and personality of commerce stream students were not significant.
- The correlation between vocational maturity and academic achievement is positive and significant.

SUGGESTIONS FOR FURTHER RESEARCH

The following suggestions may be offered for prospective researcher in order to carry further research.

Comparative study may be conducted on the students of Government, Model, Private or Public schools, dominational schools managed by some seats e.g. DAV, Missionary schools.

Present study has been conducted by taking the variables of vocational maturity, academic achievement, personality, gender differences or socio eco status. Similar study may also be conducted by deleting one or two of these variables and by adding some more variables such as anxiety, locus of control, self esteem, hardiness, creativity intelligence etc.

A study may be replicated on a larger sample in order to test the reliability of the finding of the present study.

Since the present study is limited only to senior sec. schools students of commerce stream only, it paves way for the investigation to conduct such studies by including engineering sciences, arts, industries and other institutes.

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A STUDY OF GREEN CONSUMERISM AND FACTORS INFLUENCING GREEN PURCHASING BEHAVIOUR**VIJAY PRAKASH ANAND****ASSOCIATE PROFESSOR****SHRI RAM MURTI SMARAK INTERNATIONAL BUSINESS SCHOOL****LUCKNOW****ABSTRACT**

With the 'triple bottom line' or the three pillars of business - people, planet and profit; gaining more attention day by day, green is becoming the new mantra of success in any business. On the other side, a new trend of green consumerism is also emerging, in which consumers are becoming more aware and concerned about the environment and looking for environment friendly products. This paper deals with the concept of green consumerism and the factors influencing green purchasing behaviour. To understand the green purchasing behavior, this paper takes the help of Theory of Reasoned Action by Fishbein and Ajzen, which assists in explaining the influence of antecedents on purchasing intention. Then this paper deals with the factors influencing green purchasing behaviour like environmental attitude, environmental concern, social influence, self-image and man-nature orientation.

KEYWORDS

Green Marketing, Marketing, Green Consumerism, Sustainable Marketing, Consumer Behaviour, Green Purchasing Behaviour.

1.0 INTRODUCTION

With the 'triple bottom line' or the three pillars of business - people, planet and profit; gaining more attention day by day, green is becoming the new mantra of success in any business. On the other side, a new trend of green consumerism is also emerging, in which consumers are becoming more aware and concerned about the environment and looking for environment friendly products. Now the consumers are interested more and more in environment friendly products and companies are also doing their bit by adopting green production process, using recyclable paper and other packaging material and going for paperless offices. Thus it is creating a virtuous circle of consumption and production, which is driving the green culture.

1.1 GREEN CONSUMERISM

Green consumerism is defined as "an attempt by individuals to protect themselves and the planet by buying only green products on the shelves" (Ottman, 1992). Green consumerism started with the Brundland Report, which highlighted the awareness of the global ecological crisis (Gosden, 1995). Green consumerism is now growing and being adopted by more and more consumers. Renner (2002) has also said that what consumers are demonstrating is that, they want more environmentally acceptable choices than the market has been delivering. The Body Shop, a British company won the UK "Company of the Year" Business Enterprise Awards in 1987 for "riding high on a wave of green consumerism" as an outlet for "cruelty-free, minimally packaged, natural ingredient soaps" (Gosden, 1995). Now more and more companies are joining the green league of business.

1.2 GREEN CONSUMER

Business Dictionary.com (2009) has defined, green consumer as a person who is mindful of environment related issues and obligations and is supportive of environmental causes to the extent of switching allegiance from one product or supplier to another even if it entails higher cost. In an article in *BSD global.com* (2007), it has been stated that green consumers "are sincere in their intentions, with a growing commitment to greener lifestyle; almost always judge their environmental practices as inadequate and do not expect companies to be perfect in order to be considered 'green'. Rather, they look for companies that are taking substantive steps and have made a commitment to improve".

In marketing, it's very important to understand the consumer behavior and it becomes especially critical in the case of green products (Widger, 2007). In the last ten years, the demand for green products have risen sharply. It has also been reported by the Natural Marketing Institute that the USD\$200+ billion Lifestyles of Health and Sustainability (LOHAS) market is expected to double by 2010 and quadruple by 2015 (Widger, 2007). If consumers exhibit a high degree of environmental concern and channel it into some pro-environmental purchasing acts, it is likely that profit-driven enterprises will be strongly motivated to adopt the concept of green marketing in their operations.

Consequently, it is also found that this buyer seller interaction will lead to further advancement of green marketing (Othman, 1992; Salzman, 1991). Due to this, there is a lot of research work undertaken all across the world (Chan & Lau, 2000; Soonthonsmai, 2001; Tanner & Kast, 2003; Kamal & Vinnie, 2007; Lee, 2008). But, green consumer behaviour differs from country to country. That's why it is important understanding the consumers' view towards green issues and in turn it will help us in understanding their behavior towards green purchases. Again to understand the green consumer behavior, one needs to understand the purchasing intentions of the consumers.

1.3 GREEN PURCHASING BEHAVIOUR

Lee (2004) has defined green purchasing as "the purchasing of procurement efforts which give preferences to products or services which are least harmful to the environmental and human health". While Mostafa (2007) has defined green purchasing behaviour as the consumption of products which are: beneficial to the environment; are recyclable or conservable; are sensitive or responsive to ecological concerns. To understand the green purchasing behavior, the Theory of Reasoned Action (Fishbein and Ajzen, 1975, 1980) becomes the basis, which assists in explaining the influence of antecedents on purchasing intention.

1.3.1 THEORY OF REASONED ACTION

Theory of Reasoned Action was established by Ajzen and Fishbein in 1975 and modified in 1980. The theory studies human behaviour and develops appropriate interventions. Ajzen and Fishbein (1980) said that "attitudes could explain human actions". The key assumption of this theory is that individuals are usually rational and they make systematic use of information available to them. "People consider the implications of their actions before they decide to engage or not engage in a given behaviour" (Ajzen and Fishbein, 1980). The framework takes into account the behavioural intentions, rather than attitudes as the main predictors of behaviour.

According to the theory of reasoned action theory, an individual's or person's intention is guided by two basic elements i.e. attitudes and subjective norms, which predicts actual behaviour (Miller, 2005). Attitudes are the sum of beliefs about a particular behaviour weighted by evaluations of these beliefs (Miller, 2005). Miller (2005) has also defined subjective norms as it "looks at the influence of people in one's social environment on his/her behavioral intentions; the beliefs of people, weighted by the importance one attributes to each of their opinions, will influence one's behavioral intention". Generally, whenever our attitudes lead us to do one thing, we do something else. But on the whole, both the factors - attitudes and subjective norms influence our behavioral intent.

Ajzen (2005) indicated that a person may form an intention to engage in certain behaviour and this intention remains a behavioral disposition until he gets an appropriate time and opportunity to translate the intention into action. However, many theorists agreed that the disposition most closely linked to a specific action tendency is the intention to perform the action under consideration (Fishbein and Ajzen, 1975; Triandis, 1977; Fisher and Fisher, 1992; Gollwitzer, 1993). Thus except for any unforeseen events, people are generally expected to do, what they intend to do.

1.3.2 PREDICTING BEHAVIOUR FROM INTENTION

It has been proven with many studies that intentions can accurately predict a variety of corresponding action tendencies. Many empirical studies have shown a significant positive relationship between environmental intention and behavior (Maloney and Ward, 1973; Chan and Yam, 1995; Li, 1997; Chan and Lau, 2000). Besides, Ajzen (2005) also indicated that behaviour tends to become routine or habituate with repeated performance. However, research till date suggests that even when this is the case, intentions continue to be good predictors of behaviour (Ouellete and Wood, 1998; Sheeran and Orbell, 1999). That's why consumer actual purchase can be more accurate in examining consumers' actual behaviour.

1.3.3 FACTORS INFLUENCING GREEN PURCHASING BEHAVIOUR

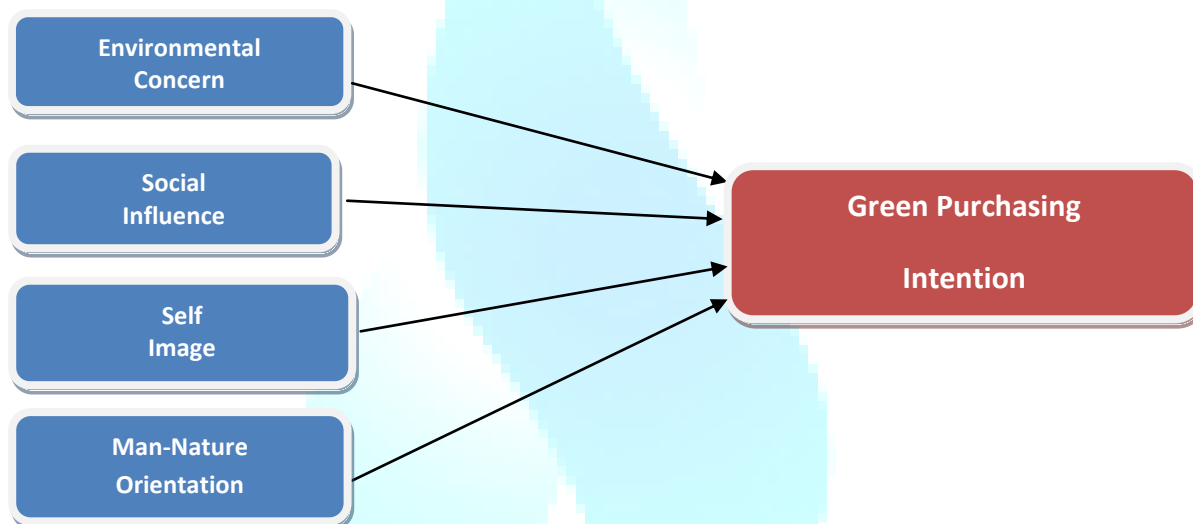
According to Ajzen and Fishbein (1975 & 1980), Theory of Reasoned Action tells that a person's behavioral intention depends on the person's attitude about the behaviour and subjective norms. If a person intends to do a behavior, then it is likely that the person will do it.

In this paper, green purchasing intention of consumers has been considered as the dependent variable, while environmental attitude, environmental concern, social influence, self-image and man-nature orientation has been taken as an independent variable.

The meaning for the terms used in the paper is as follows:

- **Green purchasing intention:** Intention to "selectively choosing products with less environmental impact when purchasing goods" (MOE, 2007)
- **Environmental Concern:** The degree of emotionality, the amount of specific factual knowledge and the level of willingness as well as the extent of actual behaviour on environmental issues (Maloney and Ward, 1973)
- **Social influence:** Changing of belief or behaviour after observing the attitudes or actions of others (Skouteris *et al.*, 2005)
- **Self image:** Perceptions of self as a certain kind of person, with certain traits, habits, possessions, relationships and ways of behaving (Schiffman & Kanuk, 1997).
- **Man-nature orientation:** The relationship between human beings and the natural environment (Chan, 2000).

FIGURE 1: FACTORS INFLUENCING GREEN PURCHASING INTENTION



1.3.4 PAST STUDIES ON PURCHASING INTENTION

In the past, a large number of studies have been undertaken deliberating the purchasing intention. Smith (1965) had presented an interesting article on the use of purchase intentions to evaluate the effectiveness of automobile advertising. Similarly, for a new product model, Silk and Urban (1978) had purchase intention as one input. Pessemier and Lehmann (1972) used purchasing intentions for brand preference and choice. Sewall (1978) used purchase intention to segment markets for proposing new (redesigned) products.

It has been a routine feature by marketing managers to make strategic decisions on both new and existing products on the basis of purchasing intention data. Generally companies use purchasing intentions in concept tests for new products as well as product tests to direct attention to whether a new products merits launch. In addition, it also helps managers to decide in which geographic markets and to which customer segments the product should be launched (Silk and Urban, 1978; Urban and Hauser, 1993).

The Theory of Reasoned Action has also been applied in a number of purchasing intention researches, which are related to green purchasing behaviour. Follows and Jobber (1999) also predicted environmental responsible purchase behaviour and environmental responsible purchase intention to have strong correlation. Follows and Jobber (1999) argued that consumers, who were aware about the environmental consequences, were more likely to intend to engage in green purchasing. In their research, they also found that green purchase intention was formed, as the end result of an evaluation or trade-off between the environmental and individual consequences.

Thus behavioral intention, specifically green purchasing intentions is adopted as the dependent variable for this study.

1.4 ENVIRONMENTAL CONCERN

Environmental concern is found to be a strong attitude towards preserving the environment (Cosby, Gill and Taylor, 1981). Environmental concern is also defined as a global attitude with indirect effects on behaviour through behavioral intention (Gill, Crosby and Taylor, 1981). Environmental concern is also known as "ecological concern", which refers to the degree of emotionality, the amount of specific factual knowledge, and the level of willingness as well as the extent of actual behaviour on pollution-environmental issues (Maloney and Ward, 1973).

Many a times, environmental concern is found to be the most important determinants motivating the attitudes of purchasing intention for ecologically sound products. It indicates that consumers, who are environmentally concerned, are more likely to form positive environmental attitudes. Taylor and Todd (1995) also found that ecological concern had a causal effect on intentions.

Thus it can be argued that environmental concern can be the main antecedents, which influence pro-environmental behaviour.

1.5 SOCIAL INFLUENCE

Social influence is an important determinant in purchase decisions. Generally an individual is influenced by the behaviour of others (Bearden *et al.* 1989). That's why, companies use celebrity endorsers and the product gets consumed in social settings. If one checks out the Cadbury's Dairy Milk ad, the celebrity endorser Amitabh Bachchan is shown in a social setting of a family or friends through its 'Kuchh Meetha Ho Jaye' ad campaign. Thus, it can be assumed that attitudes towards buying decisions are strongly influenced by their social environments, which include family, friends, and peers.

It is also found that individuals learn general behaviours and attitudes from past experiences. Previous research has also indicated that consumers learn or model behaviours, values, attitudes and skills through the observation of other individuals or through observations of electronic or print media (Bandura, 1977).

From this observation, it is obvious that adolescent shopping behaviour are developed and affected by socialization agents, which include family, peers, media and schools (Moschis, 1981; Ozgen, 2003). Many recent studies have analyzed how parents and /or peers influence the consumption attitudes of individual consumers (Bush *et al.*, 1999; Carlson *et al.*, 1994; Keillor *et al.*, 1996; Lacznak *et al.*, 1995). These influences are critical consumer socialization agents among adolescents and may often impact whether or not the young will buy certain products or brands. Shopping patterns of young consumers will be changed depending on the relative presence or absence of interfamily communication about consumption matter and adolescents' media use (Sidin *et al.*, 2008). Overall, socializing agents are critical in affecting adolescent purchasing decision and their consumption patterns will later influence their consumer behaviour as adults. Now a days, social media has also become a big influencer, which impacts purchasing intentions. Business Wire conducted a survey to study online, traditional and social media influence on buying decisions in 2009 and it has found that 57% of 18 to 24 years olds and 48.5% of 25 to 34 year olds. This reflects the growing state of social media as a main input in buying decisions. Social networking sites like Facebook and Twitter are increasingly used by marketers to reach consumers.

1.6 SELF-IMAGE

'Self concept' or 'self image' is an important determinant of individual behaviour, which affects the purchasing behaviour of the consumer. It is concerned with how we see ourselves and how we think other people see us. Individuals tries to create a personal image, that is in sync with the reference group. This 'inner picture' of the self is communicated to the outside world by the purchasing behaviour. 'Self-image' is influenced by social interaction and people make purchases that are consistent with their 'self-concept' in order to protect and enhance it (Lancaster & Reynolds, 2005).

Every Consumer has a self image. Each and every one of us has a perceived self-image as a certain kind of person with certain traits, habits, possessions, relationships and ways of behaving. Consumers frequently try to preserve, enhance, alter or extend their self-images by purchasing products or services and shopping at stores believed to be consistent with the relevant self-image and by avoiding products and stores that are not (Schiffman & Kanuk, 1997). 'Self-image' is also defined as the perceptions individuals have of what they are like (Goldsmith, Moore & Beaudoin, 1999).

Recently some researchers found that self-image dimension can be useful in studying motivations to become pro-environmentally (e.g. Mannetti *et al.*, 2004; Stets & Biga, 2003). For example, Mannetti *et al.* (2004) found that an individual's personal identity of being an environmentally responsible person contributes significantly to the explanation of intentions to recycle. On the other hand, Stets and Biga (2003) revealed that identity factor is important in influencing environmentally responsive behaviour.

Moreover, the image of an environmentally-friendly person could project a good image of oneself to others. Furthermore, consumption is a non-verbal form of communication about the self. Buying goods in order bolster one's self-image may be a motivation in most buying behaviour.

1.7 MAN-NATURE ORIENTATION

Values are enduring beliefs that guides a given behaviour for being desirable or good. It includes valuing the environment also. Environmental values are very important for a marketer, as it may lead to influence the green purchasing behaviour. Values guide the formation of attitudes and actions (Rokeach, 1973). Hoyer and MacInnis is of the view that people's attitudes are affected by their thoughts (the cognitive function) and feelings (the affective function) and thus, influence behaviour as well as purchasing behaviour.

As attitudes can be measured accurately with instruments like Likert scale, it is learnt that attitudes are much more complex than we had realized (Hills, 2002). However, we all have so many attitudes, which are changing so readily and it is different so much, over a period of time. Kluckhohn and Strodtbeck (1961) has defined a value as: "A conception, explicit or implicit, distinctive of an individual or characteristic of a group, of the desirable which influences the selection from available modes, means and ends of action". Their theory later on became popular as the Value Orientation Theory.

The Value Orientation Theory consisted of five dimensions relating to human activities and their relation to them. Kohls (1981) provided a brief introduction to these dimensions as below in figure 1. One of the dimensions of value orientation used in this study is of great importance and that is man-nature orientation, which concerns man's relation to his natural environment. There are three potential types that exist between human and nature: man's mastery over nature, man's subjugation to nature and man's harmony with nature (Berry, 1992). In the Western countries, people tend to view themselves as separate from nature. However among Asian people including Indians, it is viewed that man lives in harmony with nature (de Mooij, 2004). Man is part of nature and therefore, man should not try to overcome or master nature, but has to learn to adapt to the environment (Yau, 1988). In other words, man should live harmoniously with the nature. In African countries also, the same is followed.

FIGURE 1: DESCRIPTION OF FIVE COMMON HUMAN CONCERNS AND THREE POSSIBLE RESPONSES (based on Kohls, 1981)

Concerns/ orientations	Possible Responses		
Human Nature: What is the basic nature of people?	Evil. Most people can't be trusted. People are basically bad and need to be controlled.	Mixed. There are both evil people and good people in the world, and you have to check people out to find out which they are. People can be changed with the right guidance.	Good. Most people are basically pretty good at heart; they are born good.
Man-Nature Relationship: What is the appropriate relationship to nature	Subordinate to Nature. People really can't change nature. Life is largely determined by external forces, such as fate and genetics. What happens was meant to happen.	Harmony with Nature. Man should, in every way, live in harmony with nature.	Dominant over Nature. It the great human challenge to conquer and control nature. Everything from air conditioning to the "green revolution" has resulted from having met this challenge.
Time Sense: How should we best think about time?	Past. People should learn from history, draw the values they live by from history, and strive to continue past traditions into the future.	Present. The present moment is everything. Let's make the most of it. Don't worry about tomorrow: enjoy today.	Future. Planning and goal setting make it possible for people to accomplish miracles, to change and grow. A little sacrifice today will bring a better tomorrow.
Activity: What is the best mode of activity?	Being. It's enough to just "be." It's not necessary to accomplish great things in life to feel your life has been worthwhile.	Becoming. The main purpose for being placed on this earth is for one's own inner development.	Doing. If people work hard and apply themselves fully, their efforts will be rewarded. What a person accomplishes is a measure of his or her worth.
Social Relations: What is the best form of social organization?	Hierarchical. There is a natural order to relations, some people are born to lead, others are followers. Decisions should be made by those in charge.	Collateral. The best way to be organized is as a group, where everyone shares in the decision process. It is important not to make important decisions alone.	Individual. All people should have equal rights, and each should have complete control over one's own destiny. When we have to make a decision as a group it should be "one person one vote."

Previously also, it has been found through research that man-nature orientation is one of the influential factors on environmentally purchase behaviour. Actually culture is so 'automatic' and 'natural' that its influence is often taken for granted (Schiffman & Kanuk, 1994). Thus it's very important for the marketers to

understand the culture of their target consumers and then seek to change consumers' attitudes. In turn, they can influence consumers' decision making and behaviour.

1.8 CONCLUSION

On the whole, green consumerism is going to dominate the business in the future. As consumers are becoming more aware and concerned about the environment, they are definitely going to do their bit by adopting environment friendly products in their consumption pattern. Thus environmental attitude, environmental concern, social influence, self-image and man-nature orientation are needed to be understood to understand the green purchasing behaviour.

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BANK RISK MANAGEMENT AND ROLE OF RESERVE BANK OF INDIA-A STUDY

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ABSTRACT

Growing competition and fast changes in the operating environment impacting the business potentials, banks are forced to encounter various kinds of financial and non-financial risks. Risk is associated with uncertainty and reflected by way of charge on the fundamental/ basic i.e. in the case of business it is the Capital, which is the cushion that protects the liability holders of an institution. The various risks that a bank is bound to tackle is divided into two categories i.e. business risks and control risks. Risk management in banking designates the entire set of risk management processes and models allowing banks to implement risk-based policies and practices. They cover all techniques and management tools required for measuring, monitoring and controlling risks. The range of models and processes extends to all risks: credit risk, market risk, interest rate risk, liquidity risk and operational risk, to mention only major areas. From the banks point of view risk based practices are so important, because banks being 'risk machines', they take risks, they transform them, and they embed them in banking products and services. For centuries bankers as well as their regulators have assessed and managed risk instinctively, without the benefit of a formal and generally accepted framework or common terms. R.B.I. is the guardian of all banks in Indian therefore its role is more promising and vital in managing the bank risk in country like India.

KEYWORDS

Risk, Banking Risk, Risk Management, Role of R.B.I.

I-INTRODUCTION OF THE STUDY

Risk, in one kind or the other, is inherent in every business. Furthermore, risk taking is essential to progress, and failure is often a key part of learning. Although some risks are inevitable, it does not mean that attempting to recognize and manage them will harm opportunities for creativity. Risks pose new challenges to every company. From employment practices to electronic commerce, from social and political pressures to the vagaries of the weather, the hazards that exist in today's business climate are as diverse as the companies that face them. Like any other business organization, banks too face risks inherent to the company and the industry in which they exist. This paper has been undertaken with the objective to critically examine the current risk management practices as directed by RBI and supervision process undertaken by RBI.

II-OBJECTIVES OF THE STUDY

1. To study the nature of bank risk
2. To study the impact of risk on banks
3. To study the risk management practices adopted by banks
4. To assess the role of Reserve Bank of India in bank risk management

III-METHODOLOGY OF THE STUDY

Present study is carried on secondary data collected from various sources i.e. annual reports, R.B.I. reports, Books, periodicals, websites etc.,

IV-RISK MANAGEMENT IN INDIAN BANKS

The banking industry has long viewed the problem of risk management as the need to control four of the given risks which make up most, if not all, of their risk exposure, viz., credit, interest rate, foreign exchange and liquidity risk. While they distinguish counterparty and legal risks, they view them as less central to their concerns. Accordingly, the study of bank risk management processes is essentially an investigation of how they manage all these risks. Irrespective of the nature of risk, the best way for banks to protect themselves is to identify the risks, accurately measure and price it, and maintain appropriate levels of reserves and capital, in both good and bad times. However, this is often easier said than done, and more often than not, mounting a holistic approach to assessing and managing the many facets of risks remains a challenging task for the financial sector.

4.1-STEPS FOR IMPLEMENTATIONS OF RISK MANAGEMENT PROCESS

- **Standards and reports,**
- **Position limits or rules,**
- **Investment guidelines or strategies**
- **Incentive contract sand compensation.**

4.2- CHALLENGES FACED BY THE OPERATIONAL RISK MANAGEMENT DEPARTMENT

- Quantification of operational risk
- Reporting of the near miss events.
- Less stress on operational risk by the top management
- Less available manpower in operational risk management department

4.3-THE THREATS EXPOSED TO THE BANKS

- Competition
- Less of customers
- Volatility in the market share
- Attention
- Threat of new entrants

4.4-STRATEGIES ADAPTED BY BANKS TO OVERCOME RISKS

Integrative growth

Intensive growth

Downsizing older business

Diversification

4.5- RISKS NOT ADDRESSED BY THE BANKS

- ❖ Interest rate risk in the banking book
- ❖ Settlement risk
- ❖ Reputational risk
- ❖ Strategic risk
- ❖ Legal and compliance risk
- ❖ Risk of under estimation of credit risk under the standardized approach
- ❖ Model risk
- ❖ Residual risk of securitization

V-ROLE OF RESERVE BANK OF INDIA IN BANKS RISK MANAGEMENT

Before 1950s regulation and supervision by RBI was not that stringent as the banking activity was limited to collection of deposits and issue of loans. Moreover, there was no separate comprehensive enactment for the banking sector. With the introduction of the Banking Companies Act, 1949, (later Banking Regulations Act, 1949) the scope of RBI supervision broadened over the years, necessary changes in the supervisory system have been made to meet with the new challenges emerging in the financial sector. In the wake of rapid changes in the financial sector such as emergence of Universal Banking, introduction of Securitization, integration of various markets, etc. a lot of preparations for further strengthening the supervisory mechanism is required, not only on the part of RBI but by individual banks also. World over the way financial markets are integrating day by day, risk is continuously increasing.

Since the year 1998 RBI has been giving serious attention towards evolving suitable and comprehensive models for Risk-management. It has laid stress on integrating this new discipline in the working systems of the Banks. In view of this, the risk management division in most of the banks was established in or after 1998 only. All the details regarding the risk management framework is presented by the bank in a policy document called ICAAP.

5.1-R.B.I. GUIDE LINES OF RISK MANAGEMENT FUNCTION

- ❖ organizational structure
- ❖ comprehensive risk measurement approach
- ❖ risk management policies approved by the Board which should be consistent with the broader business strategies, capital strength, management expertise and overall willingness to assume risk
- ❖ guidelines and other parameters used to govern risk taking including detailed structure of prudential limits
- ❖ strong MIS for reporting, monitoring and controlling risks
- ❖ well laid out procedures, effective control and comprehensive risk reporting framework
- ❖ separate risk management framework independent of operational Departments and with clear delineation of levels of responsibility for management of risk
- ❖ Periodical review and evaluation
- ❖ RBI follows a carrot and stick system for implementation of Risk Management and Supervisory controls in Banks.
- ❖ The approach is expected to optimize utilization of supervisory resources.
- ❖ It is to minimize impact of crisis situation in the financial system.
- ❖ Building of a Risk Matrix for each institution.
- ❖ Continuous monitoring & evaluation of risk profile of the supervised institutions.
- ❖ Facilitates implementation of new capital adequacy frame work
- ❖ RBI follows a carrot and stick system for implementation of Risk Management and Supervisory controls in Banks.
- ❖ The approach is expected to optimize utilization of supervisory resources.
- ❖ It is to minimize impact of crisis situation in the financial system.
- ❖ Construction of a Risk Matrix for each institution.
- ❖ Continuous monitoring & evaluation of risk profile of the supervised institutions.
- ❖ Facilitates implementation of new capital adequacy frame work

VI-FINDINGS

- The banks have been making progress in the area of Asset Liability Management. But they are still far from achieving the level, which has been attained in banks abroad.
- All of the banks have set up ALM function and established the requisite organizational framework consisting of the ALCO and the support groups.
- Banks have also made an attempt to integrate ALM and management of other risks to facilitate integrated risk management.
- Banks are grievance with the regulatory requirements of the RBI regarding the preparation of statements.
- Many of them have also achieved 100% coverage of business by ALM.
- Private Banks and foreign banks have made the most progress.
- The number of branches in banks are huge and the level of computerization is low
- Limited use of advanced techniques of ALM and the adoption of sophisticated ALM specific software. Such Absence of a good control framework for ALM
- Banks have also not established any way of measuring the performance of ALM function or conducted any studies about impact of ALM.
- Training of staff is inadequate.
- Articulation of the interest rate view is quite difficult.
- Many of the banks have instituted ALM in order to comply with RBI guidelines and have not adopted the spirit of the guidelines.
- Some of the banks have not laid down clear policies and have failed to establish a hierarchy of objectives.
- Some of the banks also provide their ALCO with a large amount of information rather than specific analytical reports.
- The reason as why targets set for loans have not reached by banks include:
- Projects Placed were not Feasible or Risky in the Respective Category
- Inadequate Security Provided by the Borrowers
- Large No. of Borrowers Whose Credit Worthiness is not Satisfactory
- Fear of Non Performing Assets.
- Availability of Government Securities in the Market at Large scale
- Possible fall in the Interest rates in Future and thus building up a better portfolio as of tomorrow
- Investments give maximum contend, as Risk is reduced very much as compared to that of loans and Advances
- There is at least an amount of satisfaction that some Income may be leaped with least or no risk at all

VII-CONCLUSION

The risk management arrangement followed at all banks is a blend of centralized and decentralized form. Though risk department forms the heart of the organization because if it fails the bank will gasp for breath. But this department is a victim of ignorance in today's scenario. After observations it was found that the banks have lowest number of workforce assigned to this department. Within the department, maximum stress is given to credit risk and other risks are still neglected. The bank does not have sufficient skill set for driving risk management function

RBI, keeping in view international best practices has already taken certain initiatives in this regard and there is a proposal to initiate shortly, the system of Consolidated Supervision too, along with Risk Based Supervision. The impact on bank's key ratios due to banking supervision reveals good results and walking on the same range few issues can be stressed upon like technology up gradation, corporate governance, market intelligence etc. ***In short there is a need of a perfect role to be played by R.B.I. in managing the bank risk so that risk of bank can be restricted from spreading towards other components of financial mechanism at the same time promising policy making and implementation is needed from central government***

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EFFECTS OF HUMAN-WILDLIFE CONFLICT ON FOOD SECURITY: A CASE OF KWALE COUNTY, KENYA

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ABSTRACT

The study assessed the effects of Human-wildlife conflict on food security, based on externalizing and internalizing coexistence. The key question being, are the communities aware of their reactions towards the animals and the way they provoke them? The study gathers evidence on the various factors that cause the different perceptions and relate them to the various effects as portrayed by human-wildlife conflict. The methodology of the study is quantitative and qualitative approach with cross-sectional survey methods. The target population is the household heads of the identified villages. This study clearly illustrates that human-wildlife conflicts occur in kwale, but the governments are not able to consider a proactive approach to managing these conflicts. Until some threshold is met, the communities may not be willing to devote the time or resources necessary to enact proactive approaches and before then, development and utilization of information and educational resources materials can enhance capacities for the Community, Government and other Stakeholders to develop and implement a comprehensive human - wildlife conflict management plan for kwale communities in the future. The human population growth rate, increasing competition for resources clearly scores that human wildlife conflicts will not be eradicated soon and therefore better understanding of conflict management strategies is essential. The most sustainable strategies should ensure improvement of local livelihoods and reduction of community vulnerability through revenues generated from the natural resources.

KEYWORDS

Human-Wildlife conflict, food security, Kenya.

INTRODUCTION

Human-Wildlife Conflict (HWC) or negative interaction between people and wildlife has recently become one of the fundamental aspects of wildlife management as it represents the most Widespread and complex challenge currently being faced by the conservationist around the World. HWC arises mainly because of the loss, degradation and fragmentation of habitats through human activities such as, logging, animal husbandry, agricultural expansion, and development projects (Fernando et al. 2005).

The damage to humans as a result of contact with such animals can include loss of life or injury, threats to economic security, reduced food security and livelihood opportunities. The rural communities with limited livelihood opportunities are often hardest hit by conflicts with wildlife. Without mitigating HWC the results is further impoverishment of the poor, reduced local support for conservation, and increased retaliatory killings of wildlife causing increased vulnerability of wildlife populations. The conflict problem is hence a cause for concern that urges managers to shift their conventional policy from that of managing wildlife populations to enhancing their societal values. As such understanding the ecological and socio-economical context of the HWC is a prerequisite to bring about an efficient and long-term management of Wildlife and its habitats.

Kwale, one of the districts in coastal province of Kenya, with an area of 8,960km² and a population of 692,991 persons (2009 census) faces this negative human – wildlife interaction. The district borders Taita Taveta to the West, Kilifi district to the North- West, Mombasa and Indian Ocean to the East and Republic of Tanzania to the South.

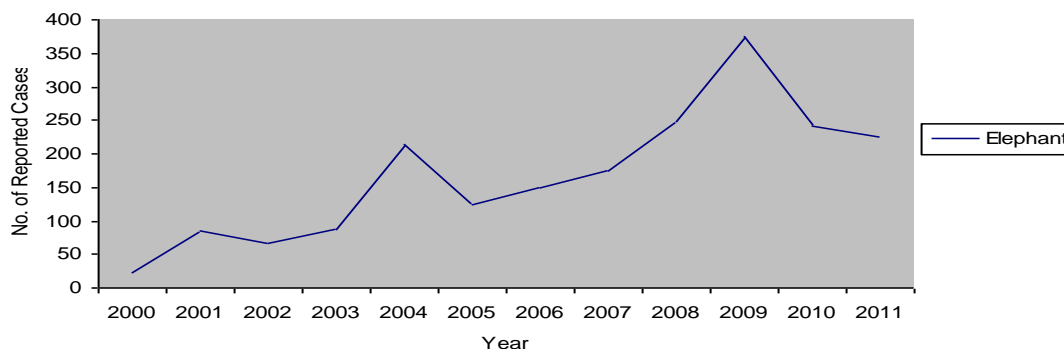
Shimba hills ecosystem which houses the protected wildlife habitat lies along Kenya's 600 Km coastlines, 30 Km to the South West of Mombasa Town. Shimba Hills Ecosystem is completely surrounded by communities whose main economic activity is mixed farming. Many of the wild animals, including elephants stray outside the protected areas (Shimba national reserve and Mwaluganje elephant sanctuary). The livestock keeping communities (Duruma), the mixed farmers (Digo) and their families who live around these wildlife protected habitat, all have to cope with the consequences of damage to and destruction of crops, livestock predation, competition for grazing and water, increased risk of some livestock diseases, and other inconveniences including loss of sleep due to protecting crops at night and even direct threats to human life as a result of this interaction ,

EFFECTS OF HUMAN –WILDLIFE INTERACTION**➤ REPORTED CASES OF HUMAN –WILDLIFE CONFLICT IN KWALE**

Over the years, there has been an upward trend of human-elephant conflict incidences, with the highest number of cases being reported in 2009. There was a notable decline of reported cases between 2004 and 2006 as shown below. The situation however started changing as from 2007 in which the number of reported cases started to increase. This trend is seen to have continued for a period of three years until the end of 2009 when the human elephant conflict cases started to drop again (Kenya wildlife service –report occurrence book). This situation could be attributed to the good prevention strategies adopted during this period i.e. rehabilitation of Shimba national reserve and Mwaluganje Elephant Sanctuary electric fence. The status of this fence had deteriorated completely before the rehabilitation exercise. This might have contributed considerably to the declining human elephant conflict cases noted as from year 2010.

FIGURE 1: GRAPH ON HUMAN – ELEPHANT CONFLICT CASES IN SHIMBAHILLS (KWS REPORT)

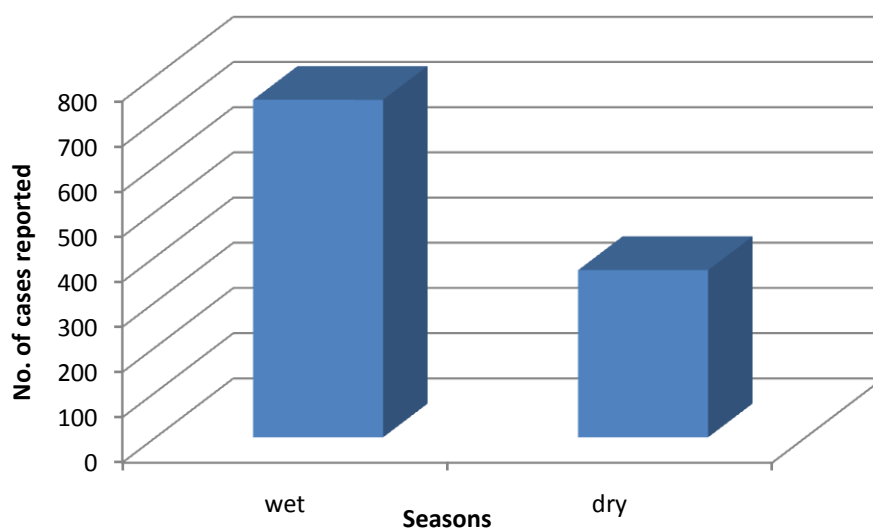
Human-Elephant Conflict Cases within Shimba Hills Ecosystem (2000-2011)



Shimba hills experiences two rainy seasons in a year. One in between August to March commonly known as the long rains season (wet) and the other in between February and September commonly referred to as the short rains (dry) since most of the months within this period are always dry with very little rainfall. From the bar graph below, conflicts distribution is quite irregular across the two seasons with most conflict cases falling within the wet season of the year. This therefore means that human elephant conflict incidences around the ecosystem are not necessarily triggered by the absence of water resources, but majorly by the availability of forage materials in the surrounding farms especially food crops. This is clearly illustrated by the high conflict cases reported during the wet seasons as compared to the dry seasons in the period under review.

FIGURE 2: GRAPH-COMPARISON OF THE HUMAN ELEPHANT CONFLICT CASES IN THE TWO SEASONS IN SHIMBAHILLS

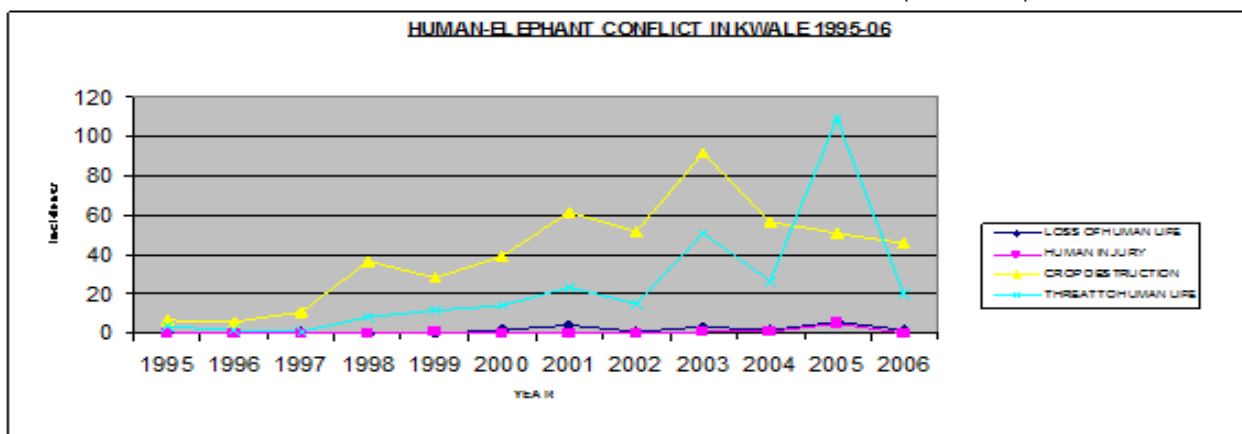
Human elephant conflict cases within the two seasons in Shimba Hills



There were 1,213 cases reported between 1995 and 2006 in total. Within the same period, there were 29 (2.3%) cases of human death and injury caused by elephants, 448 (36.9%) reported cases of crop destruction and 285 (23.4%) cases of threat to human life by the same. The rapidly expanding agricultural activities and an increasing and mobile population of elephants are the perfect conditions for human-elephant conflict to occur. This has greatly resulted in regular farms raids and injuries and / or deaths to people. The elephant is responsible for most of the reported cases of HWC in the general area. Reports of crop destruction by elephants, children barred from attending school, destruction of /or damage on infrastructure by elephants are common occurrences. Mtsangatamu village, which borders the reserve to the north-west has suffered most with Golini (north), Magwasheni (south west) , Lunguma (north east), Mkongani (west), in that order. In an effort to address this, the Kenya Wildlife Service (KWS) has embarked on management approaches which could help mitigate the conflicts. Relocation of elephants from SHNR to the Tsavos and erection of artificial barriers (electric fence) have been the major management tools that have been employed with varied success.

Between the years 2005 and 2006, 228 elephants were moved to the northern section of the Tsavo East National Park. Before then, the conflicts were on the rise and after relocation exercise (2005) where 228 elephants were relocated, the general trend of conflict begun to drop. In 2005, six people lost their lives compared to two in 2006. This translates to roughly a 66.6% drop in deaths caused by elephants. During the same period human injuries dropped from five to naught. Crop raiding, however, remained almost the same. In 2005, there were 51 cases reported compared to 46 in 2006. Meanwhile threats to humans dropped by 68%. The results however should be treated with a little caution since other management options could as well have contributed to the downward trend in HEC, for instance a good working electric fence among others. (Kimuttai, 2007)

FIGURE 2.3: CATEGORY OF HUMAN –ELEPHANT CONFLICT FOR 1995-2006 (KWS REPORT)



➤ METHODS AND MATERIALS

The study involved household heads in the two divisions in Kwale County, Coast Province, Kenya. The two divisions were chosen because they border the wild life habitat. 2 divisions in Kwale County were selected. 2 locations from each of the selected divisions was selected, 2 villages from each location was then selected and 5 households from each selected village were selected using multistage sampling technique making a total of 40 household heads. Multi stage sampling was chosen because, it was easier to administer than most single stage designs mainly because of the fact that sampling frame under multi-stage sampling is developed in partial units; a large number of units can be sampled for a given cost under multistage sampling because of sequential clustering, whereas this is not possible in most of the simple design (Kothari, 2003). Each household head was chosen using census method. This was so because each household is headed by a head hence making a total of 40 household heads.

The questionnaire was the best instrument to be constructed. Wiersma (1985:142) defines a questionnaire as a list of questions or statements to which the individual is asked to respond to.

This Survey research comprises a cross-sectional design in relation to which data was collected predominantly by questionnaire on quantitative data in connection with two or more variables, which were then examined to detect patterns of association. Needless to say, such a design was advantageous in that the researcher was able to collect data quickly and generate research results in a timely manner

➤ RESULTS

FIGURE 3.1

Households Heads' Gender

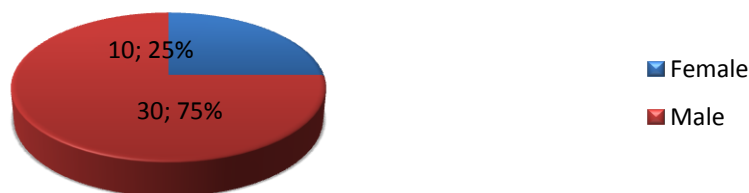


FIGURE 3.2: COMMUNITY RESPONSES ON THE CAUSES OF HUMAN –WILDLIFE CONFLICT

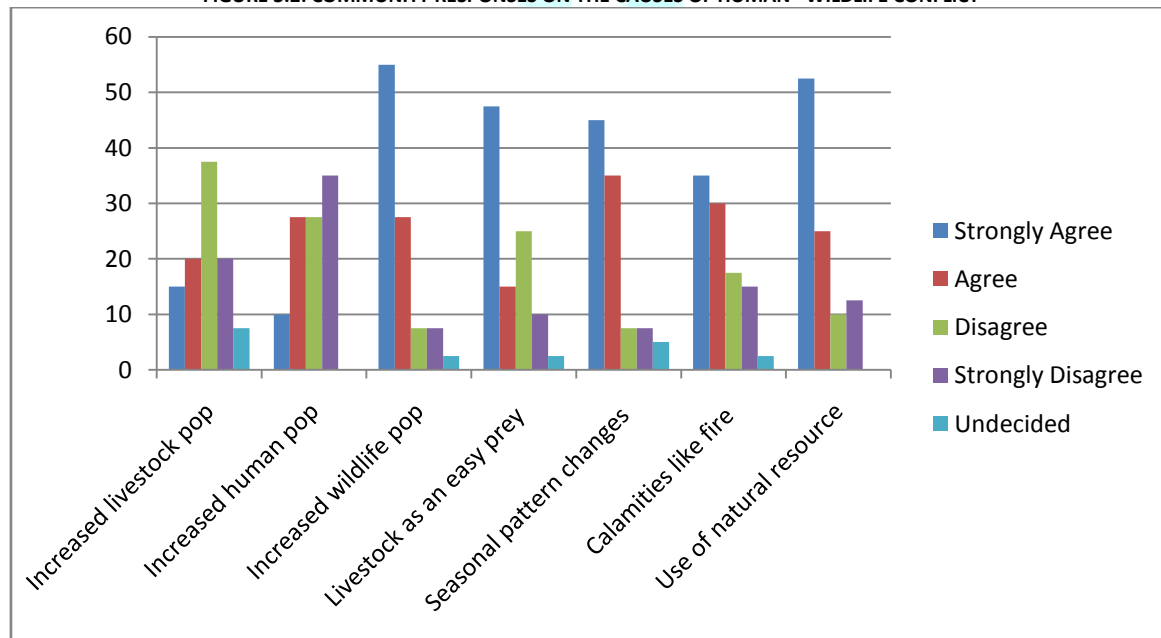


FIGURE 3.3 COMMUNITY RESPONSES ON LAND PRACTICES AROUND THE WILDLIFE HABITAT

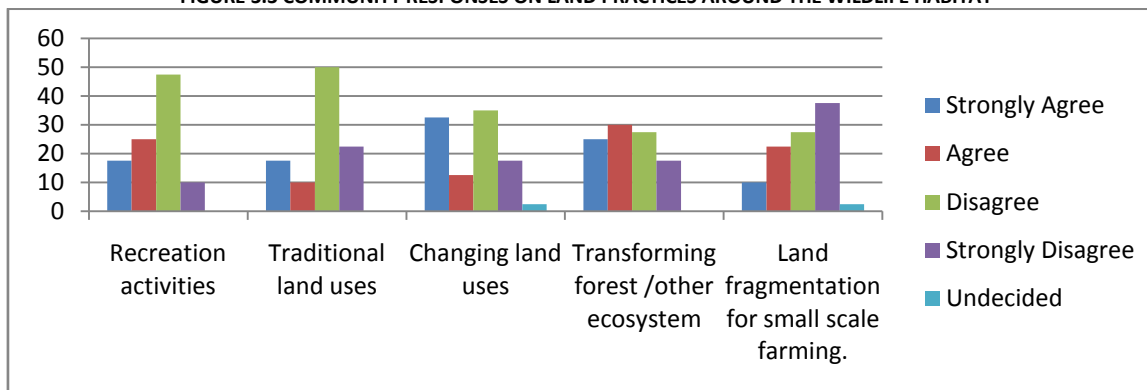


FIGURE 3.4: COMMUNITY RESPONSES ON EFFECTS ON FOOD SECURITY

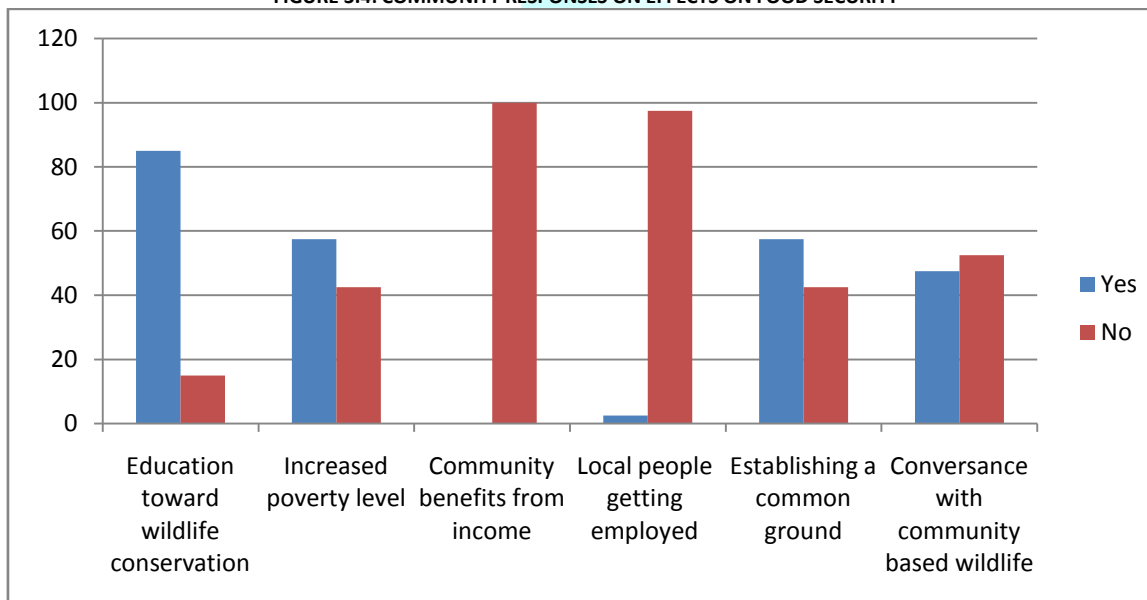
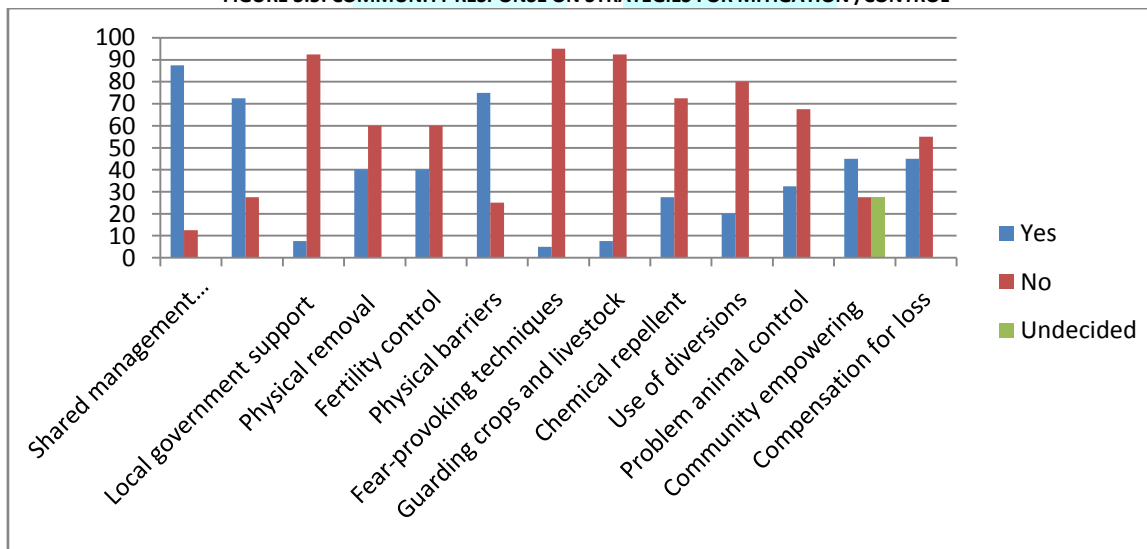


FIGURE 3.5: COMMUNITY RESPONSE ON STRATEGIES FOR MITIGATION /CONTROL



DISCUSSION

Figure 3.2 above shows that 52.5% strongly agreed that use of scarce natural resources mainly water and pasture is major causes of conflict. 37.5% disagreed on the increased livestock population resulting to overgrazing causing problems. 55% strongly agreed that increased wildlife population causes conflict. 35% strongly disagreed that increased human population leads to encroachment into wildlife habitats. 47.5% strongly agreed that Easy prey of livestock encourages carnivores to shift their diet to livestock. 45% strongly agreed that Seasonal showing changes encourages wildlife to invade the villages. 35% strongly agreed that Calamities like fire make wildlife seek refuge in the villages. Early preparations should be done to encounter any calamities.

Figure 3.3 above shows 50% disagreed that Land use policies undermine traditional land use practices. It is only a matter of education that will guide the locals well. 35% disagree that Changing land use areas surrounding protected areas affect wildlife. 30% agreed that transformation of forests, savannah and other ecosystem into agrarian areas affects wildlife. 37.5% strongly disagree that land use fragmentation and development of small scale farming interferes with

wildlife. 27.5% agree that selling of state and truck ranches as small holdings and cultivated with commercial horticultural crops disturbs wildlife and human beings.

Human-wildlife conflict can be reduced, or mitigated by changes to land use of communities neighboring this habitat. This can be achieved through changes to the surrounding landscape so that the problem-causing animal is more vulnerable, easier to spot by people and dogs, and generally less at ease in the area (Muruthi, 2005). Little research exists on wildlife preferences for particular crops, but some crops are less palatable to wildlife. There are some crops that elephants appear not to eat. For this reason alternative crops such as ginger and chilli have been encouraged in some areas. Small islands of crops scattered across a landscape inhabited by wildlife are more vulnerable to destruction than those that are clustered together. A landscape approach to reducing human-wildlife conflict might therefore involve growing crops in large communal fields with straight edges, fences or thorny or spiny hedges, and also removing nearby cover and habitat for wildlife (Muruthi, 2005). Livestock raids can be minimized through good husbandry practices, such as herding during the day, keeping livestock in a predator-proof enclosure at night. Livestock herders avoid taking livestock to water points which are known to be inhabited by Predator.

The figure 3.4 above shows that 19 (47.5%) were conversant with community based wildlife conservation policy while 21 (52.5%) were not conversant with community based wildlife conservation policy. 85% said community education is important toward wildlife conservation. 57.5% said this conflict contributes to high poverty levels. 100% said they did not benefit from income from this wildlife. 2.5% said the local are employed in wildlife industry. 57.5% said it is necessary to establish common ground for human wildlife interaction

Food security is precarious in many communities, relying on a single cropping season or on a sale of livestock. Although on a national scale, the loss of two or three hectares of maize to elephants in a single night means nothing, to a family, it means destruction of their livelihood for the year. This consequence is particularly acute where governments do not have the capacity to pay compensation for losses. The capacity of smallholder subsistence farmers to cope with these losses varies in many cases.

In some semi-arid rural farming areas of Zimbabwe and Kenya, elephant damage to food crops accounts for 75 to 90 percent of all damage caused by large mammals. It has been estimated that the annual cost of elephant raids to crops ranges from US\$60 (Uganda) to US\$510 (Cameroon) per affected farmer (Naughton, Rose and Treves, 1999). Elephants can also damage food stores during the drier months following the main harvest. The loss of this stored food is considered far more disruptive to farmers than the raiding of crops while they are still growing in the fields, because so much damage can be done to a concentrated food source and can only be replaced in the following growing season.

Likewise, the loss of a family's small herd of cattle to lions can effectively destroy that family's wealth and way of life. For rural populations, domestic animals are not only their main resource through production of manure, milk, meat, and livestock sales, but are also their only source of wealth (means of saving, source of income, social role). Predators such as lions often kill numerous domestic animals such as cattle in one raid, and can devastate a household's food security

Figure 3.5 above shows 87.5% said shared management responsibilities is the strategies to manage human –wildlife conflict .92.5% said the local government do not assist in managing this conflict .60% said physical removal of human or wildlife will not solve this.5% and 7.5% said yes to use of fear provoking techniques and guarding of crops/livestock respectively.45% said yes while 27.5% remained undecided to community empowering as a strategy to mitigate this conflict.55% said no to compensation of loss as a strategy while 45% said yes if all losses incurred are paid for. The crop destroyed is basically the livelihood for family then and therefore immediate intervention kitty should be created instead of compensation schemes which take long. The failure of most compensation schemes is attributed to lack of funds, bureaucratic inadequacies, corruption, cheating, fraudulent claims, time and costs involved, moral hazard that less literate farmers must overcome to generate a compensation claim.

Compensation rates were set at such low rates that they could not address social opportunity costs borne by people who were affected by wildlife. For example, compensation for loss of human life has been pegged at Ksh 200,000, which is not enough to even meet funeral expenses

Crop damage is the most prevalent form of human-wildlife conflict. The occurrence of crop-raiding is dependent upon the availability, and type of planted food crop compared to natural food sources. A wide variety of vertebrates conflict with farming activities are birds, rodents, primates, antelopes, buffalos, hippopotamuses, bush pigs and elephants. Elephants are identified as the greatest threat to African farmers (Parker *et al.*, 2007). Elephants can destroy a field in a single night raid. Most peasant farmers are unable to deal with the problem of elephant damage themselves and governments rarely offer any compensation

A series of measures are available to prevent or mitigate human-wildlife conflict. Well-designed human-wildlife conflict management plans which integrate different techniques and are adapted to the nature of the problem can be successful. Potential solutions can be selected based on their effectiveness, cost, human and social acceptability. The most sensible approach in addressing human-wildlife conflict is to implement a combination of short-term mitigation tools alongside long-term preventive strategies.

CONCLUSION/SUMMARY

Negative Human-Wildlife interaction is becoming a threat to many endangered wildlife species in the world. Many studies demonstrate the severity of the conflict and suggest that more in-depth studies on the conflict need to be done in order to address the conservation of these biodiversity.

This research project provides an insight into the HWC issue and its effects on food security in Kwale county, the study is a comprehensive review on the available literature on this conflict. It highlights common problems and mitigations across regions in order to provide a better understanding of the HWC. It also shows that HWC have similar causes and impacts, and that accurate and detailed information, scientific research and stakeholder commitment are key to the development of sustainable strategies to solve the problem.

HWC conflict is not restricted to certain regions but occur in all areas where wildlife and human populations coexist and share limited resources, however the level of vulnerability differs, for instance a Small subsistence farmers can lose an entire season's crop production in one single raid by a wild animals compared to large scale farmer who can employ wildlife preventing strategies. There is no single solution to the conflict and all preventatives and mitigative strategy should be tested for its cost effectiveness and impact on the habitat. Most sustainable approach should ensure improvement of local livelihood from revenues collection from natural reserves.

Protected wildlife habitat and presence of large wild life populations inflict costs on local population, thus can erode local support and tolerance. The people neighboring this habitat can develop a negative perception towards reserves and wildlife, exacerbating the conflict and undermining conservation efforts. In order to curb this menace, there is a need to protect rural livelihoods, reduce their vulnerability, and balance losses with benefits while promoting community-based conservation. Both people and wildlife suffer tangible consequences and different stakeholders involved should commit themselves to tackle and resolve the conflict very soon. In order to enhance protected area effectiveness, conservation should be based on sound scientific knowledge, practical local indigenous knowledge and participation.

Considering the human population growth rate, increasing demand for resources and access to land, it is clear that human wildlife conflicts will not be eradicated very soon and On the contrary, it will continue to grow as African economies continue to be driven by the production of resources for supply to more industrialized nations (Friedman, 2007). This is particularly true in African countries where subsistence agriculture will continue to play a dominant role in supporting the continent's burgeoning populations. But it is also true for countries that have developed a modern agricultural sector, such as Zimbabwe and South Africa, and where recent government policies have favored a switch from modern commercial agricultural practices to a return to subsistence agriculture. In this way immediate problems are addressed while the rapid development of innovative approaches is fostered to address future issues and eradicate the problem in the long term.

The study reveals mitigating HWC is multifaceted in that some approaches are ineffective; others are expensive and complex for communities to embrace. However, this can be minimized through good practices and education A number of mitigation strategies, such as electric fencing, compensation systems, community managed natural resource management programmes and insurance programs should be put in place. When low environmental impact strategies and traditional low-cost deterrents are not successful, some invasive approaches, such as regulated harvesting, wildlife translocation or human relocation may

need to be implemented. Of the various strategies available, settlement of rights, benefit sharing, Community Based Natural Resource Management, insurance programmes and land-use planning seem to be the most sustainable

Though mitigation to negative human-wildlife conflict has no panaceas, and both wildlife and people are in conflict. The goal is thus to enable coexistence and sharing of resources at some level. This is best achieved by addressing both sides of the equation and finding a balance between conservation priorities and the needs of people who live alongside wildlife. Increasing tolerance levels of local communities for wildlife and adapting the human landscape are essential goals, but will always be the most difficult. A well developed human-wildlife conflict strategy which encompasses different techniques based on the nature of the problem can boost co-existence. It may be necessary to develop a long-term policy to manage the main problem animals.

Solutions considered to address this conflict should be based on its effectiveness, cost and acceptability by the stakeholders. Reducing conflicts between wildlife and human will likely erode the negative attitudes that many communities have towards the protected habitat and wild animal species. Furthermore, reducing wildlife destruction on crops and livestock will improve food security and also curb the community's destructive action like hunting.

It is of paramount importance that an international forum be set up to promote information sharing on human-wildlife conflict issues and that a Web-based portal be developed to provide conflict databases, remediation technologies, good management practices, and innovative solutions and their outcomes. Furthermore, community members want a role in managing human-wildlife conflicts. Respondents recognized the need to forge partnerships to achieve long-term management of human-wildlife conflicts. This suggests that, the local community are more than willing to utilize whatever resources they have so as to benefit from wildlife resource

Finally, in order to reverse the negative attitudes towards the protected habitat and wildlife, there is great need to protect community livelihoods, reduce their vulnerability, balance losses with benefits and encourage community-managed conservation programs.

RECOMMENDATIONS

1. Damages caused by wildlife and the attempts to prevent it affect many interest stakeholders such as crop farmers, livestock keepers, and wildlife conservation institutions. Ideally, a precise study should be undertaken. This would serve to identify the actual measure of wildlife damage, evaluate the effects of preventive measures and assess the costs incurred through this vice for the purpose of compensating the affected group. This should be done by Kenya wildlife service in collaboration with wildlife conservation entities.
2. Strategies for addressing the HWC issue are often constrained by local, national or international regulation (falls and Jackson 2002). In some countries existing wildlife policies are outdated. Policies on land tenure, controlled utilization of wildlife and trade of wildlife products, game farming, tourism development and compensation schemes should be strengthened and made to conform to the present community /other stakeholder needs
3. Wildlife in many countries is one of the most significant sources of national revenue through tourism. The tourism industry can offer employment within local communities by creating job opportunities. This approach would compensate the damage caused by wildlife and contribute changing local people's negative attitudes of wildlife conservation.
4. Education and training for communities either through adult classes or farmer field schools will build local capacity in conflict mitigation and increase their understanding of HWC. This would result in behavioural change amongst local populations, thus reduced risks, vulnerability and improve their livelihoods.
5. The success of wildlife conservation and HWC reduction largely depends on the ability of managers to recognize, embrace and incorporate differing stakeholder values, attitudes and beliefs (Messmer, 2000). The commitment and coordination of these stakeholders will enhance the participation, contribution and support. Encouraging stakeholders' collaboration will make any strategy more successful, hence easy to resolve the HWC.
6. Participatory wildlife management through involving local communities is considered crucial in successful wildlife conservation. In Kenya, participation of local communities in wildlife conservation and management has been promoted through: (i) Tourist viewing; (ii) Safari hunting; (iii) Game cropping; and (iv) Capture of live animals. Recent initiatives to facilitate involvement of local communities include: (i) Conservation of biodiversity resource areas (COBRA) through which classrooms, water dams, cattle dips, health centres, and boreholes have been constructed, and (ii) Conservation of resources through enterprises (CORE) that supports setting up business enterprises in rural localities.

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COST OF CAPITAL, CAPITAL STRUCTURE AND VALUE OF FIRM**DR. H. J. GHOSH ROY****PROFESSOR****INSTITUTE OF MANAGEMENT STUDIES AND RESEARCH****MAHARSHI DAYANAND UNIVERSITY****ROHTAK****DR. A. S. BOORA****PROFESSOR****INSTITUTE OF MANAGEMENT STUDIES AND RESEARCH****MAHARSHI DAYANAND UNIVERSITY****ROHTAK****DR. GARIMA DALAL****ASST. PROFESSOR****INSTITUTE OF MANAGEMENT STUDIES AND RESEARCH****MAHARSHI DAYANAND UNIVERSITY****ROHTAK****DR. SONIA****ASST. PROFESSOR****INSTITUTE OF MANAGEMENT STUDIES AND RESEARCH****MAHARSHI DAYANAND UNIVERSITY****ROHTAK****ABSTRACT**

The basic objective of the study was to find the relationship between cost of capital, capital structure and value of firm. Bivariate correlation technique, t-test and F-test was applied to test the significance of difference in capital structure. 30 companies listed on BSE Index were selected in the sample. The data for a 10 year period (2001-02 to 2010-11) are used. The main source of secondary data is Capitaline plus database. Primary data was collected through a questionnaire, mailed to the sample companies through post and e-mail. The difference in capital structure of different companies whether they belong to the same industry group or different groups, was found to be statistically significant. Co-efficient of correlation between cost of capital and capital structure was found to be negative. The results support the view that increase in leverage decreases the cost of capital because debt is a cheaper source than equity. But the results are not statistically significant.

KEYWORDS

cost of capital, equity, debt, capital structure, value of firm.

INTRODUCTION

Corporate finance was considered a part of economics till 19th century. The role of financial management has undergone a tremendous change during the last century. The word 'Finance' was used in the same sense as the word 'Capital' by the economists. But in the early part of 19th century, corporate finance emerged as a separate field.

Initially, it dealt with only the instruments, institutions and procedural aspects of the capital markets. Technological innovations and establishment of new industries, resulting in industrial revolution sweeping the world over, created a need for more funds. This prompted the study of finance to focus on liquidity and financing of the firm. During this period, the capital markets were primitive and the investors were reluctant to purchase stocks and bonds. So finance concentrated heavily on legal issues related to the issuance of securities only. This trend continued till 1920s.

The great recession of 1930s, caused a large number of business failures in the USA. So, the focus of finance shifted to bankruptcy or reorganization of capital market. Emphasis shifted from expansion to a descriptive, institutional subject viewed from the outside rather than the inside. These developments led to significant contributions from financial researchers and academicians. Harry Markowitz (1952) developed the portfolio theory which is widely applied even today. This theory deals with the risk and return characteristics of a security and advocates that an investor can reduce his /her overall risk by having securities of different risk and return characteristics in his / her portfolio. Thus given one's risk aversion level, one can choose a portfolio that gives maximum possible return. In another significant work, David Durand (1959) developed two theories of capital structure viz., Net operating income (NOI) and Net Income (NI) theories. These theories were based on the assumptions of (i) Perfect capital markets, (ii) No growth in operating income, (iii) 100% dividend payout ratio, (iv) Debt and stock can be sold to repurchase the other security, (v) Constant Business risk (vi) Homogeneous expectations of investors, and (vii) Cost of debt, K_d , remains constant. In NOI theory, he suggested, cost of equity capital increased with leverage, but keep the Weighted Average cost of Capital (WACC) remained constant. Thus, both the value of a firm and its cost of capital were independent of its capital structure.

The NI theory suggested that costs of debt and equity remained constant irrespective of change in degree of leverage. Since cost of debt is less than cost of equity, increase in leverage will gradually decrease the WACC. As a result, the value of a firm increases with increase in leverage.

Late 1950's witnessed significant developments in the field of corporate finance. Financial analysis techniques were designed to help the firms in maximizing their profits. Growth of stock markets, development of computers, valuation models and models for managing inventories, cash, accounts receivable and fixed assets, played an important role in shifting the focus from outside to inside point of view. Financial decisions within the firm were recognized critical issues in corporate finance.

These developments completely changed the role of a financial manager. Instead of playing a secondary role in the organization, he was required to play a more important, positive and responsible role. He was confronted with the problem of how to maximize the value of the firm. So the scope of his activities increased significantly. At the time of these rapid changes in corporate finance, came the most stunning, controversial and path breaking works of Franco Modigliani and

Merton Miller (M-M). They can rightly be called the fathers of modern finance. Their path breaking articles transformed the study of finance from an institutional orientation to an economic orientation.

RESEARCH METHODOLOGY

OBJECTIVES OF THE STUDY

The basic objective of the study was to find the relationship between cost of capital, capital structure and value of firm.

HYPOTHESES

Based on the objectives, following hypothesis have been framed and tested.

HYPOTHESIS-1

H_{o1} = There is no significant relation between cost of overall capital and capital structure.

HYPOTHESIS-2

H_{o2} = There is no significant relation between cost of overall capital and value of firm.

HYPOTHESIS-3

H_{o3} = There is no significant relation between capital structure and value of firm.

STATISTICAL ANALYSIS

In their works, M-M asserted that when the capital market is perfect, value of a firm is independent of its capital structure. When corporate taxes exist and interest payments are tax exempted, there exists an optimal capital structure which is determined by the trade off between tax advantages of debt and the disadvantages associated with.

Some empirical studies have been done to find out the effect of capital structure on cost of capital. However not much systematic work has been done on the proposed topic so far. The present study is a humble attempt to determine an optimal capital structure in an imperfect market.

It should, however, be noted at the outset that there are many statistical problems that make the determination of optimal capital structure a formidable task. The first and major problem is to identify those explanatory variable which, in one way or other, influence the market value of the firm. The second problem relates to the measurement of variables.

The market value of a firm is influenced by a number of factors many of which are not measurable as they are qualitative in nature. It is not possible to measure the magnitude and effects of factors like reputation of promoters, management of the company, economic and political conditions, roles of bulls and bears in the stock market and government policies etc.

The third problem is the statistical problem. Since the value of a firm is dependent upon a number of factors whose effects cannot be segregated, so a model showing the exact relationship between capital structure and value of a firm can't be developed.

So, in the absence of a well defined model on optimal capital structure, bivariate correlation technique was used to find the nature of relationship between (i) capital structure and cost of capital, (ii) cost of capital and value of the firm and (iii) capital structure and value of the firm. Then, t-test was applied to test the significance of coefficient of correlation.

MEASURE OF VARIABLES

The variables used in this study are as follows:

1. MARKET VALUE OF EQUITY (E):

$E = \text{No. of shares outstanding at the end of an accounting year} \times \text{Average market price per share}$

Where No. of share = total equity capital/face value per share

Average price = mean value of monthly high and low price/share during the accounting year.

2. TOTAL MARKET VALUE (V): IT IS GIVEN BY

$V = \text{Market value of equity} + \text{Book values of preference share capital and debt}$. Preference shares and debt are taken at book value because there is no significant yearly fluctuations in the prices of these sources of capital.

3. COST OF CAPITAL (K_a)

As we know that K_a represents the weighted average of all the component costs, so it is determined as

$$K_a = \frac{K_p \cdot P + K_d \cdot D + K_e \cdot E}{P + D + E}$$

Where

K_p , K_d and K_e are costs of preference capital, debt and common stock (equity) respectively,

P , D and E are the market values of preference capital, debt and common stock respectively.

The various costs were calculated as follows:

(i) Cost of preference capital (K_p)

$$K_p = \frac{\text{Preference dividend}}{\text{Price of preference share}}$$

(ii) Cost of debt (K_d)

$$K_d = \frac{\text{Interest paid}}{\text{Total debt}} + (1 - t)$$

$$= \frac{I}{D} (1 - T)$$

Where T is the corporate tax rate.

(iii) Cost of equity (K_e)

K_e was calculated, using capital asset pricing model, as follows:

$$K_e = R_f + \beta (R_m - R_f)$$

Where β = Beta Co-efficient

R_f = risk free rate

β represents the systematic risk associated with security. It's value is calculated as

$$\beta = \frac{\text{Cov.}(R_j, R_m)}{\text{Var}(R_m)}$$

R_m = Return on the market portfolio

4. LEVERAGE

The most commonly used measures of leverage are:

(i) ratio of debt to equity (L_1)

(ii) ratio of debt to total capital (L_2)

Thus $L_1 = D/E$ and $L_2 = D/(D+E)$

Their relationship can be shown as:

$$L_1 = \frac{L_2}{1 - L_2} \text{ and } L_2 = \frac{L_1}{1 + L_1}$$

Out of the two measures, shown above, L_2 will be used for empirical analysis, because when all debt situation reaches, L_1 will not have any meaningful value but L_2 will have as shown below:

When $D=0$ ($E=100\%$) $L_1 = 0$ and $L_2 = 0$

When $D=100\%$ ($E=0$) $L_1 = \infty$ and $L_2 = 1$

SAMPLE SELECTION

In order to test the hypotheses, 30 companies listed on BSE Index were selected in the sample. The study is not limited to a particular industry group. So they have different characteristics. The data for a 10 year period (2001-02 to 2010-11) are used. The main source of secondary data is Capitaline plus database. The criteria for selecting the sample firms were;

- (1) Availability of data on the market price of share and other financial data for all the 10 years;
- (2) The company must be listed on BSE.

So, on this basis, seven companies have been excluded. Four of them are banks and three are excluded due to non-availability of data for the last 10 years.

Primary data was collected through a questionnaire, mailed to the sample companies through post and e-mail. The questionnaires were sent to all 30 companies but since their response was poor, so the officials were contacted personally. In this manner, the data could be collected for a total 12 companies. Thus the response rate works out to be 40%.

The industry wise breakup of the companies is as follows:

Sr. No.	Type of Industry	No. of Sample companies	Nos. of Companies
1	Telecom	1 each	1
2	Capital Goods, FMCG, Healthcare, Power	2 each	8
3	Information Technology, Oil & Gas	3 each	6
4	Metal, Metal (Products & Mining), Transport Equipment	4 each	8
	Total Companies		23

The market value equity, total market value, cost of capital, debt to total capital ratio, debt equity ratio, cost of debt, cost of equity capital have been computed for each year from 2001-02. The hypotheses have been tested using the information obtained from this analysis.

DISCUSSION

OVERALL COST OF CAPITAL AND CAPITAL STRUCTURE

The bivariate correlation between cost of capital and capital structure is shown in table 1. Cost of capital, in general, has been found to be negatively related with capital structure thus supporting the theory that cost of capital decreases with increase in debt to total capital ratio because cost of debt is less than that of equity and interest payments are tax exempted.

63% of the companies have shown a negative relationship between cost of capital and capital structure. Out of 63%, 73% show that relationship is not statistically significant whereas 27% of the companies show a positive relationship, though the relationships are not statistically significant in case of 89%. It means that changes in cost of capital are not of high degree when a company changes its capital structure. The results are shown in table no 1. Figure no 1 depicts their relationship. The statistically insignificant value of 'r' can be explained by the following reasons:

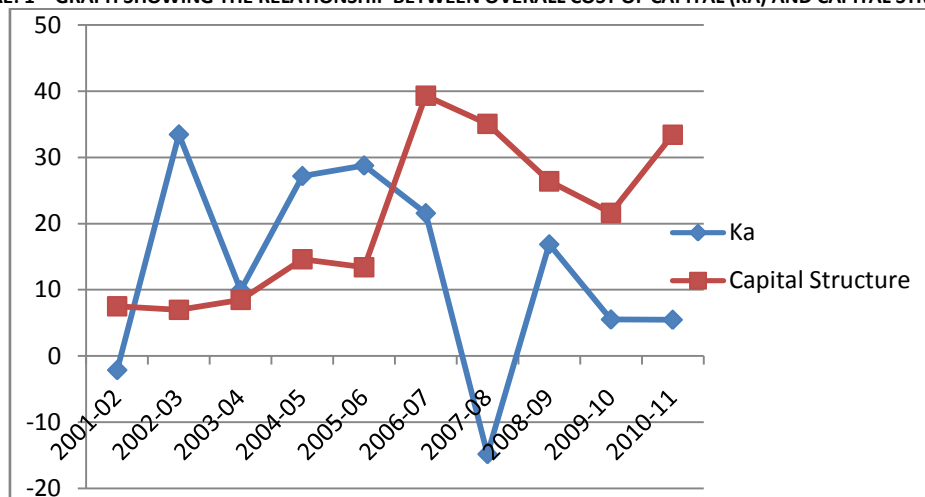
- (i) Indian companies have no specific mechanism or model to compute the specific costs of capital, particularly the cost of equity capital and the average cost of capital. This became apparent when in responses to a question, "How do you compute the costs of capital"? none of the companies suggested a definite/specific mechanism to compute these costs.
- (ii) Cost of capital is not the only determinant of capital structure, though it is one of the most important factors affecting the capital structure decisions. Since the effects of other factors cannot be segregated, so an exact relationship between cost of capital and capital structure could not be established.
- (iii) Cost of debt in India is quite high in comparison to developed countries.

TABLE 1: BIVARIATE CORRELATION BETWEEN COST OF CAPITAL AND CAPITAL STRUCTURE

Company number	R
1	0.142599
2	0.096455
3	-0.01507
4	0.030811
5	-0.67732*
6	0.309329
7	-0.0306
8	0
9	0.535481
10	0.554209*
11	-0.20073
12	-0.60712*
13	-0.45839
14	-0.34489
15	0.356532
16	-0.2713
17	-0.12421
18	0.110034
19	-0.45784
20	-0.65812*
21	-0.27674
22	-0.36459
23	-0.58717*

** and * indicates significance at 1% and 5% level of significance respectively.

FIGURE: 1 – GRAPH SHOWING THE RELATIONSHIP BETWEEN OVERALL COST OF CAPITAL (KA) AND CAPITAL STRUCTURE



These results are supported by the response in the questionnaire. The question asked was, "Are cost of capital and capital structure related?" All replied that they are related. When asked "How are they related?" 83% replied that they are negatively related up to some level, while 8% replied that they are positively related. This difference of opinion was on account of different interpretation of cost of capital. The later respondents opined that cost of capital represents investor's expected rate of return. So as D/C ratio increases, this value increases. The former respondents accepted traditional view that initially increase in D/C ratio will decrease cost of capital. And since except Jindal steel and power Ltd, none of the sample companies was found to be highly leveraged, so cost of capital and capital structure show a negative relationship. Jindal steel and power Ltd. has a high D/C ratio (mean value 0.56).

The other main findings on cost of capital, based on the responses to questionnaire, are as follows:

(i) Cost of capital plays an important role in deciding the source of finance (Q 12). The selection of source is done on the following order:

Sources	Responses
1. Selecting a cheaper source	10
2. Which has a longer maturity period	10
3. Source ensuring higher ROI	7
4. Which provides the required capital	4
5. Which changes the leverage	4
6. Source giving greater premium on security	3

The table clearly shows that for selecting a source of finance, cost of capital is the most important factor.

(ii) All the companies have unsecured debt in their capital structure, whose cost of capital is more than that of secured debt. This is because of the fact that unsecured debt is borrowed for short term and raised from money markets. The rate prevailing in these markets is higher than that in the capital markets.

To conclude it should be said that if the interest rates are lowered in the Indian debt market, the companies employ a scientific model to determine the cost of capital and the stock markets are made more efficient, a significant relationship between cost of capital and capital structure could be established.

OVERALL COST OF CAPITAL AND VALUE OF THE FIRM

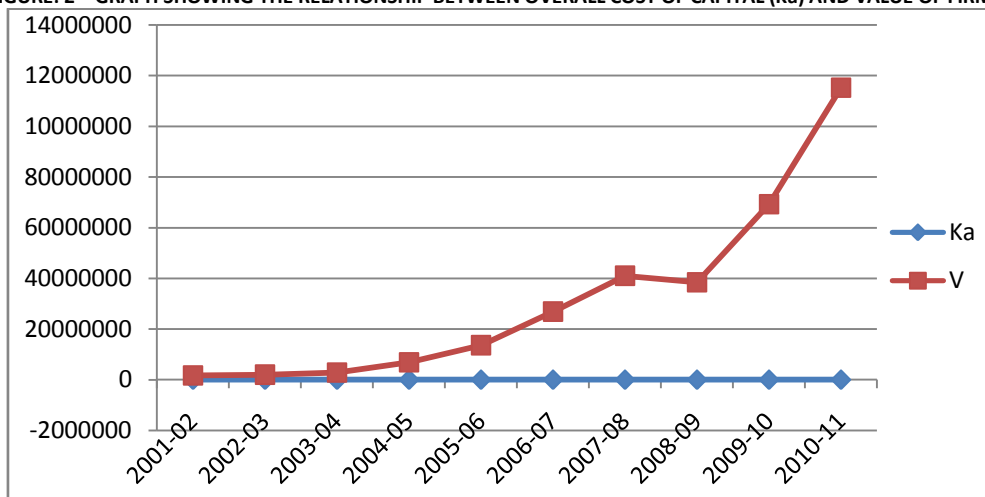
The correlation coefficient between cost of capital and value of the firm is positive in case of 17% companies and negative in case of 83%. All are statistically insignificant as shown in table no. 2. Thus, our null hypothesis is accepted that there is no significant relationship between the two. Figure no. 2 shows the relationship between overall cost of capital and value of the firm. In response to a question about the relation between cost of capital and value of firm, 92% respondents are in favour of the response that there exists a relationship between them while 8% said vice-versa. The former respondents are of the opinion that value of firm increases when cost of capital decreases and 9% said that value of firm increases when cost of capital increases. It can be said that cost of capital and value of firm are negatively related upto some extent yet it is not the only determinant affecting value of firm. There are other external factors also as shown in Table no. 4 which affects value of firm besides cost of capital.

TABLE 2: BIVARIATE CORRELATION BETWEEN COST OF CAPITAL AND VALUE OF THE FIRM

Company number	R
1	-0.20408
2	-0.11133
3	0.491211
4	-0.11174
5	-0.44403
6	-0.09713
7	-0.26435
8	-0.13808
9	-0.0974
10	-0.14653
11	-0.17077
12	0.002276
13	-0.04718
14	-0.26681
15	-0.35985
16	-0.17647
17	-0.01185
18	0.01145
19	-0.20593
20	-0.10227
21	-0.23473
22	-0.04583
23	-0.17513

** and * indicates significance at 1% and 5% level of significance respectively.

FIGURE: 2 – GRAPH SHOWING THE RELATIONSHIP BETWEEN OVERALL COST OF CAPITAL (Ka) AND VALUE OF FIRM (V)

**CAPITAL STRUCTURE AND VALUE OF FIRM**

In the absence of a well defined and universally accepted model on capital structure for an imperfect capital market, co-efficient of correlation was calculated between capital structure and market value of a firm. The results, obtained, are shown in table no 3 and their relationship is also depicted in Fig. 3.

From the results, it is clear that no definite relationship exist between capital structure and market value of equity. 18 companies show a negative relationship and 6 show a positive relationship. The results are statistically significant in case of 10 companies only (2 positive and 8 negative).

From the above discussion, one result could be safely inferred "though Capital structure significantly affects the market value of both equity and of firm, yet it is not the only determinant". There are other factors also which affect this value. The same is confirmed by the views of the respondent companies shown in tables 4 and 5.

TABLE 3: BIVARIATE CORRELATION BETWEEN CAPITAL STRUCTURE AND VALUE OF THE FIRM

Company number	R
1	-0.09355
2	-0.77304**
3	-0.05347
4	-0.72937**
5	-0.17163
6	-0.15918
7	-0.69723*
8	0
9	-0.80454**
10	-0.11557
11	-0.53799
12	-0.55589*
13	-0.44878
14	0.959717**
15	0.206728
16	-0.74331**
17	-0.68702**
18	-0.29236
19	-0.29334
20	0.424856
21	0.152491
22	-0.28938
23	0.678553*

** and * indicates significance at 1% and 5% level of significance respectively.

FIGURE: 3 – GRAPH SHOWING THE RELATIONSHIP BETWEEN CAPITAL STRUCTURE AND VALUE OF FIRM (V)

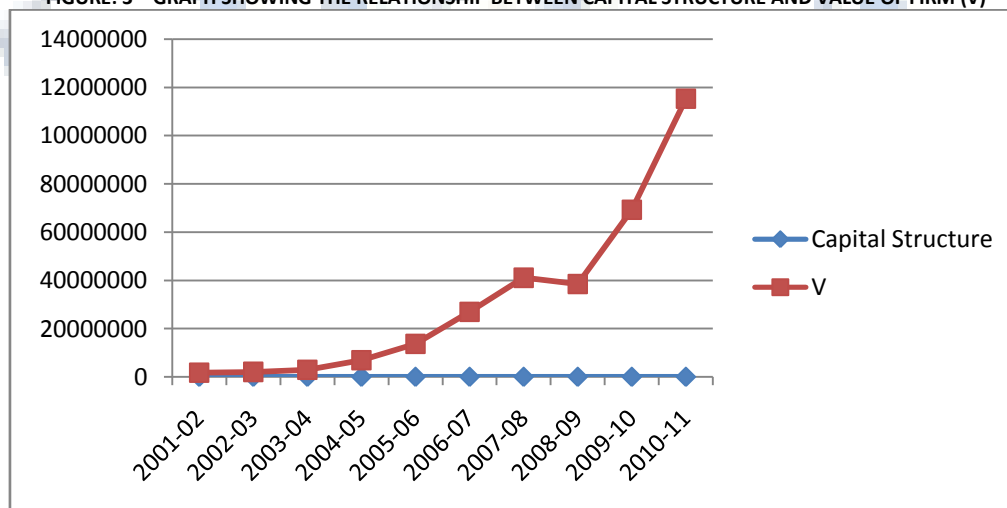


TABLE 4: FACTORS (OTHER THAN COST OF CAPITAL AND CAPITAL STRUCTURE) WHICH AFFECT THE VALUE OF A FIRM

Rank	Factor	Responses
1.	Operating results	11
2.	Business risk	11
3.	Economic conditions	11
4.	Promoters	11
5.	Govt. Policies	11
6.	Tax rates and structure	9
7.	Political conditions	11

TABLE 5: DETERMINANTS OF SHARE PRICE

Rank	Determinant	Responses
1	Dividend yield	11
2	Capital structure	11
3	Dividend policy	11
4	Cost of capital	9
5	Management of the company	8
6	Role of bulls and bear	8
7	Govt. policies	8
8	Take over bid by others	7

These two tables show the major factors which influence the market price of shares and value of a firm. In other words, the value of a firm is affected by a multiplicity of causes, many of which are not measurable as they are qualitative in nature. Since, it is not possible to segregate their effects, an exact relationship between capital structure and value of the firm cannot be established.

This conclusion is further strengthened by the highly volatile behaviour of the stock markets. In this study, it was found that 22 out of 26 companies showed coefficient of variation (C.V) of market value greater than 50%. The C.V. of total market values for all companies was found to be 63.3%, which is quite high. The variations in value were not found to be significantly associated with the financial performance of the companies. In other words, market price of stock is not true index of a company's performance.

Other findings on capital structure are as follows:

1. TARGET CAPITAL STRUCTURE

The companies were asked the question (a) "what is your target capital structure and (b) how you plan to achieve it?" The response was very poor as only 17% answered the first part. The target capital structure (D/E ratio) ranged from 0:1 to 1.4:1 which is well below the mean value of D/E ratio obtained (2:1). It means that the sample companies may not avail full advantage of debt as they will be under leveraged. Response to the second part was still poorer and none of the respondents suggested any systematic mechanism to achieve it. So we can say that Indian companies have, in general, no target capital structure and the companies

In response to the question, "what are the determinants of your existing capital structures?" Reply of question in brief the relative importance of different factors that affect the capital structure decisions are given in table 6.

TABLE 6: DETERMINANTS OF CAPITAL STRUCTURE

Rank	Factor	Responses
1.	Mgt. decisions and policies	12
2.	Cost of Capital	9
3.	Size of the company	7
4.	Dividend Policy	6
5.	Market Conditions	6
6.	Earning Stability	6
7.	Nature of Industry	6
8.	Govt. rules	6
9.	Restrictions by F.I.'s	6
10.	Industry norm	4
11.	Any other (please specify)	Nil

The table 6 shows the factors to be considered while changing the existing capital structure. The most important factor is management decisions and policies. These changes must result in lower cost of capital and higher value of the firm. Prevailing market conditions also affect these decisions. When the stock market is in boom a company may issue equity because the probability of under subscription is very small. In the period of recession, a company may opt for the issuing of debt. When the earnings are fairly stable, a company can have higher D/C ratio with very little probability of default in interest payments. Nature of industry is also a very important determinant of capital structure. The utilities and service organizations usually have a large amount of debt because their fixed assets make good security for mortgage bonds and their sales and earnings are relatively stable. The same is true for capital intensive industries like steel plants, petrochemical etc. Government and Financial institutions also sometimes put ceiling on the maximum value of D/E ratio. Over the years, a D/E ratio of 2:1 was fixed by both as the norm for all types of industries with a few exceptions like big size plants and capital intensive industries. As a company grows in size, it will have higher D/E ratio because the additional capital cannot be raised by internal financing or stock market.

Since the values of these factors differ from one company to another, so we find significant variations in their capital structure even if they belong to the same industry group.

2. CAUSES OF CAPITAL STRUCTURE CHANGES

In response to this question, different choices were marked, which are shown in the table 7.

TABLE 7: FACTORS THAT CAUSE CHANGE IN CAPITAL STRUCTURE

Rank	Factor	Responses
1.	To raise additional capital	11
2.	For controlling the management	10
3.	To increase the firm's value	9
4.	Follow Govt. rules	9
5.	To change leverage	8
6.	To reduce current liabilities	7
7.	To reduce Ka	6
8.	To improve earnings	6
9.	To make use of mkt. conditions	5
10.	To distribute retained earnings	5
11.	Any other	Nil

Table 7 shows various factors that cause a change in the capital structure. Though the factors are interrelated (e.g. reduce Ka and increase the value of firm), yet the ranks show that most important of all is to raise additional capital to be invested for expansion, growth or diversification. This factor affects the other factors also. But the basic objective is only one – to maximize the stock price of the company through these changes.

CONCLUSIONS

The difference in capital structure of different companies whether they belong to the same industry group or different groups, was found to be statistically significant. This is because of the fact that qualitative values of the determinants of capital structure and their effect on value of the firm vary from company to company. The companies, under study, in general have no scientific and systematic mechanism to determine the target capital structure and if a company has set a target capital structure, it has no specific plans to achieve it. Co-efficient of correlation between cost of capital and capital structure was found to be negative. The results support the view that increase in leverage decreases the cost of capital because debt is a cheaper source than equity. But the results are not statistically significant. This is because this relationship is affected by a number of factors, both quantitative and qualitative, whose effect on this relationship could not be isolated. Indian companies have no specific model to compute the cost of specific components of capital, particularly the cost of equity capital and average cost of capital.

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A CONCEPTUAL STUDY ON BLUE OCEAN STRATEGY

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ABSTRACT

This paper throws light on the Blue ocean strategy its essence and the various differences between the contemporary scenario and concept of the Blue ocean strategy. The fast pace of discovery and change in latest years has commanded scholars and executives to search for an approach to a strategy that is more dynamic. The phrase "Blue oceans" is new, but the concept is not new. Believe of what industries lived in 1900. Some of them might be...automotive, aviation, health care, plastics, DVDs, computers, individual amusement devices (iPods, for example). All of these industries created new market space. The premise is easy: To win in the future, companies must stop competing with each other. The only way to beat the competition is to stop trying to beat the competition. The Objective of the Blue Ocean strategy is How to Create Uncontested Market Space and Make the Competition Irrelevant. Blue ocean strategy challenges companies to break out of the red ocean of bloody competition by creating uncontested market space that makes the competition irrelevant. Instead of dividing up existing—and often shrinking—demand and benchmarking competitors, blue ocean strategy is about growing demand and breaking away from the competition. Blue Ocean Strategy is a way to make the competition irrelevant by creating a leap in value for both the company and its customers. Prospects in most established market spaces—red oceans—are shrinking steadily. Technological advances have substantially improved industrial productivity, permitting suppliers to produce an unprecedented array of products and services which is blue ocean Strategy.

KEYWORDS

Blue ocean strategy, Red Ocean, Market, Competition.

INTRODUCTION

Blue Ocean Strategy is a business strategy publication first released in 2005 and in writing by W. Chan Kim and Renée Mauborgne The Blue Ocean Strategy Institute at INOCEAND. The book shows what the authors accept as true are the best organizational strategy to develop development and earnings.



W. Chan Kim

Renée Mauborgne

Blue Ocean strategy suggests that an organization should conceive new demand in an uncontested market space, or a "Blue Ocean", rather than compete head-to-head with other suppliers in an existing commerce. This book shows that an organization should conceive new demand in an uncontested market space, or a "Blue Ocean", rather than to compete head-to-head with other suppliers in a current market.

The publication of Blue Ocean strategy is been split up into various components

- 1) The Key concepts of Blue ocean strategy, encompassing Value Innovation – the simultaneous pursuit of differentiation and reduced cost – and key analytical tools and structures such as the strategy canvas, the four activities structure and the eliminate-reduce-raise-create grid.
- 2) This part recounts the four values of Blue ocean strategy formulation: how to create uncontested market space by reconstructing market boundaries, focusing on the big picture, coming to after existing demand and getting the strategic sequence right. These four formulation values address how an organization can conceive Blue ocean by looking over the six conventional boundaries of competition (Six routes Framework), decrease their designing risk by following the four steps of visualizing strategy, create new demand by unlocking the three tiers of noncustomers and launch a commercially-viable Blue ocean idea by aligning unprecedented utility of an proposing with strategic charge and goal costing and by overwhelming adoption hurdles. The publication values numerous demonstrations across industries to illustrate how to shatter out of customary comparable (structuralist) strategic conceiving and to augment demand and earnings for the business and the commerce by utilising Blue ocean (reconstructionist) strategic conceiving.
- 3) Final part describes the two key implementation principles of Blue ocean strategy including tipping issue authority and equitable process. These implementation values are absolutely vital for managers to overcome the four key organizational obstacles that can avert even the best strategies from being performed. The four key obstacles comprise the cognitive, asset, motivational and political obstacles that prevent persons involved in strategy execution from comprehending the need to shatter from rank quo, finding the assets to apply the new strategic shift, holding your people pledged to applying the new strategy, and from overcoming the mighty vested concerns that may block the change.

The publication examines the know-how of companies in areas as varied as watches, wine, cement, computers, automobiles, textiles, coffee manufacturers, airlines, retailers, and even the circus, to response this fundamental inquiry and builds upon the argument about "Value Innovation" being the cornerstone of a blue ocean strategy. Value Innovation is inevitably the alignment of discovery with utility, price and cost Considerations. This conceives uncontested market space and makes competition irrelevant.

BACKGROUND**THE PRESENT INDUSTRIES ARE FUNCTIONING IN RED OCEAN**

Red ocean represent all the industries in existence today – the renowned market space. In the red oceans, commerce boundaries are characterized and accepted, and the comparable directions of the game are known. Here businesses try to outperform their competitors to catch a larger share of product or service demand. As the market space gets congested, prospects for profits and growth are reduced. Goods become products or niche, and cutthroat competition turns the ocean bloody; hence, the period red ocean.

Blue ocean demand is conceived rather than battled over. There is ample opportunity for development that is both profitable and fast. In Blue oceans, competition is irrelevant because the rules of the game are waiting to be set. Blue ocean is an analogy to describe the broader, deeper promise of market space that is not yet explored. The foundation of Blue ocean strategy is 'Value Innovation'. A Blue ocean is conceived when a company accomplishes worth innovation that conceives worth simultaneously for both the buyer and the business. The discovery (in merchandise, service, or consignment) should raise and create worth for the market, while simultaneously reducing or eradicating features or services that are less treasured by the current or future market.

DISTINCTION BETWEEN RED OCEAN AND BLUE OCEAN**RED OCEAN**

Kim and Mauborgne contend that while traditional competition-based strategies (red ocean strategies) are essential, they are not adequate to maintain high performance. Businesses need to go beyond vying. To seize new earnings and development opportunities they also need to conceive Blue ocean. The authors contend that competition founded strategys suppose that an industry's structural conditions are given and that companies are forced to contend within them, an assumption founded on what academics call the structuralist outlook, or environmental determinism. To maintain themselves in the marketplace, practitioners of red ocean strategy aim on building benefits over the competition, generally by assessing what competitors do and striving to do it better. Here, grabbing a larger share of the market is glimpsed as a zero-sum game in which one company's gain is accomplished at another company's loss. companies principally seek to capture and redistribute Wealth rather than of conceiving wealth. They aim on dividing up the red ocean, where development is progressively limited.

BLUE OCEAN

Blue ocean strategy, on the other hand, is founded on the outlook that market boundaries and commerce structure are not given and can be reconstructed by the actions and beliefs of Industrial players. This is what the authors call "reconstructionist view". Presuming that structure and market boundaries exist only in managers' minds, practitioners who hold this outlook do not let living market organizations limit their conceiving. To them, extra demand is out there, mostly untapped. The crux of the problem is how to conceive it. This, in turn, needs a move of attention from provide to demand, from a aim on competing to a aim on worth innovation – that is, the creation of innovative value to unlock new demand. This is accomplished by the simultaneous pursuit of differentiation and low-cost. As market structure is altered by breaking the value/cost tradeoff, so are the directions of the game. Competition in the old game is thus rendered irrelevant. By increasing the demand edge of the finances new wealth is created. Such a strategy thus permits firms to mostly play a non-zero-sum game, with high payoff possibilities.

Kim and Mauborgne investigated industries included inns, movies, retail stores, airlines, power, construction, announcing, automotive and iron alloy. They sought for convergence amidst the more and less thriving players a widespread pattern over all the apparently idiosyncratic achievement tales and first called it value discovery, and then Blue ocean strategy.

Red Ocean Strategy	Blue Ocean Strategy
Compete in existing market space.	Create uncontested market space.
Beat the competition.	Make the competition irrelevant.
Exploit existing demand.	Create and capture new demand.
Make the value-cost trade-off.	Break the value-cost trade-off.
Align the whole system of a firm's activities with its strategic choice of differentiation <i>or</i> low cost.	Align the whole system of a firm's activities in pursuit of differentiation <i>and</i> low cost.

CRITISM OF BLUE OCEAN STRATEGY

The authors have been criticized on several grounds. Criticisms include claims that no control group was used, that there is no way to know how many companies using a Blue Ocean Strategy failed and the theory is thus unfalsifiable, that a deductive process was not followed, and that the examples in the book were selected to "tell a winning story."

Brand and communication are taken for granted and do not represent a key for success. Kim and Mauborgne take the marketing of a value innovation as a given, assuming the marketing success will come as a matter of course.

HOW BLUE IS YOUR OCEAN:- INTROSPECTION CRITERIA

These are the following relevant criteria for introspection to be done for diverse kinds of commerce:

THE PUBLIC SECTOR

- Do you find that anticipations of public services are rising while allowances are being compressed?
- Are there parts of the community that don't appear to derive worth from your services and offerings?
- Have you skilled that large-scale tasks often encounter major hold ups and cost overruns?

TECHNOLOGY

- Do you concern that your latest merchandise offerings only represent little incremental improvements?
- Have your merchandises become progressively complex both to design and use?
- Are the terms you use to characterise your firm's strategy hefty with technological jargon?
- Do you glimpse outsourcing to reduced cost companies or nations as a principal prerequisite to gain competitiveness?

LEARNING

- Are you worried about your business form with the development of online education?
- Do you think the worth of learning is being unduly commoditized?
- What noncustomers are underserved when it arrives to education?

MEDIA & TELECOMMUNICATIONS

- Is your company facing intensified affray from domestic and international competitors?
- Has the growth of free content online made it more tough for you to consign a merchandise or service that people are willing to pay for?
- Has cost chopping become your main preoccupation?
- Does your commerce contend on functionality or emotional apply? How can you shatter away from the competition by changing the functional-emotional orientation of your offering?

ENERGY

- Do you suffer from a lack of brand commitment?

- Has increased affray strike your market share and earnings?
- Are mergers and acquisitions the primary means your business sees to augment?

FINANCE & INSURANCE

- Do you occasionally labour to interpret your charges to purchasers?
- Are you adept to articulate the value you are offering in a clear and compelling way?
- Has the rise of comparison websites commanded you to focus more solely on costs?

HEALTHCARE

- Are rising charges eroding your earnings?
- Do you offer the same products and services as your competitors and at alike charges?
- Who in the purchaser chain do you gear your offering in the direction of? Is there a way you can move that aim?

CREATIVE PURSUITS & AMUSEMENT

- Do you find your advertising and trading programs are evolving more creative but not developing expanded sales?
- Are you labouring to understand which consumer tendencies are the ones to pay attention to?
- Does your commerce compete on functionality or emotional appeal? How can you break away from the affray by altering the functional-emotional orientation of your proposing?

TRAVEL & HOSPITALITY

- Do you consider the industry to be polarized into allowance and high-end segments with little in-between?
- Do you marvel how to exploit tendencies that you see within the commerce?
- Does your industry contend on functionality or emotional appeal? How can you shatter away from the affray by changing the functional-emotional orientation of your proposing?

FOOD & BEVERAGE

- Are you concerned about increasing charges of products?
- Is worldwide affray evolving a bigger topic for your firm?
- Are you finding you need to advertise more to get noticed in the marketplace, yet the impact of each advocating dollar spent is falling?

AGRICULTURE

- Are you finding it tough to mitigate diverse industry risks?
- Do your sales representatives increasingly argue they need to offer deeper and deeper cost discounts to make sales?

HUMAN ASSETS

- Is your recruitment and keeping strategy based largely on economic inducements?
- Are you spending more time endeavouring to slash costs rather than add new worth?
- Which processes at your association might be made stronger by expanded commitment, interpretation, and expectation clarity?

EXAMPLES OF BLUE OCEANS

- Ford
 - Model T
- General Motors
 - Styled cars to emotions
- CNN
 - 24/7 News Channel
- Cirque Du Soleil
 - Sophisticated Entertainment

CONCLUSION

"Creating blue oceans is not a static achievement but a dynamic process. Once a company creates a blue ocean and its powerful performance consequences are known, sooner or later imitators appear on the horizon. The question is, how easy or difficult is your blue ocean strategy to imitate?" Copyrights, patents or other legal blocks are in place. Reach out for another blue ocean when your value curve begins to converge with those of the competition.

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A STUDY ON THE INFLUENCE OF ORGANIZATIONAL CULTURE ON EMPLOYEE WORK BEHAVIOR IN NESTLE, CHENNAI, INDIA

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ABSTRACT

This research work tries to examine the influence of organisational culture on employee work behaviour and in this study try to ascertain the influence that organisational culture has on employee work behaviour, and to formulate recommendations regarding organisational culture and employee work behaviour. The objectives of studies were questioned (1) Does organisational culture have any influence on employee work behaviour? (2) In what way does organisational culture affect employee work behaviour? (3) Does organisational culture affects organisational productivity? (4) Will a change in organisational culture affects employee work behaviour? The study uses survey research method. Our respondents were selected by using stratified and simple random sampling techniques. Primary data were collected through questionnaire. The findings of the study are revealed that a large number of respondents 84.0% of the respondents agree that organisational culture influence employee work behaviour and 72.0% of the respondents agree that organisational culture is a determinant of productivity level of the organisation. The 84.0% of the respondents agree that a change in culture will cause a change in employee work behaviour. In addition, the result of the findings shows that organisational culture i.e. norms, artifacts, values, traditions, assumptions and belief influences employee work behaviour.

KEYWORDS

Employees, Employee Behaviour, Organizational Culture, Organizational Productivity.

INTRODUCTION

An organization is a collectivity with a relatively identifiable boundary, a normative order (rules), ranks of authority (hierarchy), communications system, and membership coordinating systems (procedures); this collectivity exists, on a relatively continuous basis in an environment, and engages in activities that are usually related to set of goals; the activities have outcomes formal organizational members, the organization itself, and for the society (Hall, 1999). The essence of organisations revolves around the development of shared meanings, beliefs, values and assumptions that guide and are reinforced by organisational behaviour. Employees are important asset to the organisation.

They serve as human capital to the organisation. Organisations make use of their employees' skills, knowledge and abilities in carrying out and fulfilling their objectives. Culture is the environment that surrounds employees at work all of the time. Culture is a powerful element that shapes employees work enjoyment, work relationships, and work processes. However, culture is something that one cannot actually see, except through its physical manifestations in work place. The culture of the organisation should be developed to support continuous improvement, improve employees' style of performing their job and thus develop quality awareness. Organisational culture has influenced employee work behaviours as a result of the acceptable behaviours and attitudes to various jobs in the organisation.

Organisational culture is a major determinant of an employee's efficiency and effectiveness in carrying out their jobs. That is, organisational culture is one of the major key determinants of how employees perform or behaves in his job. Academic interest in organisational culture is evidenced by the level of attention it has received over the last few decades. The relationship between organisational culture and employee work behaviour has been the subject of abundant research in several fields. While this topic is rich in studies, many researchers concur on the fact that there is no agreement on the precise nature of the relationship between organisational culture and employee work behaviour.

LITERATURE REVIEW

Conceptual Framework of Organizational Culture the subject of organizational behavior has been studied from a variety of perspectives ranging from disciplines such as anthropology and sociology, to the applied disciplines of organisational behaviour, management science, social sciences and organizational communication. The study of organizational culture has been widely accepted and explained by different scholars but there is no one definition of organisational culture that is generally accepted (Ojo, 2008). Organizational culture permeates organisational life in such a way as to influence every aspect of the organization (Hallett, 2003). Organisational culture also has effect on the productivity level of the organisation in the sense that it influences employee's behaviour to work and it is the input of the employees to the organisation that determines the organisational productivity level. It has been suggested that organizational culture affects such outcomes as productivity, performance, commitment, self confidence, and ethical behaviour (Buchanan and Huczynski, 2004; Shani and Lau, 2005; and Ojo, 2009). Organisational culture is one of the core determinants of every organization's success as it influences employee work behaviour. Organisational culture is one of the metaphors used for organisational analysis (Morgan, 1997). In this metaphor, the essence of organisation revolves around the development of shared meanings, beliefs, norms, values and assumptions that guide and are reinforced by organisational behaviour. Organisational values are important because they have effects on important individual and organisational outcomes. Organisational values are expected to produce higher levels of productivity (Jehn, 1994; Hall, 1999), job satisfaction (Jehn 1994), and commitment (Pettinger, 2000).

Organisational values are also important because the fit between organisational and individual values affects important individual and organisational outcomes. Values-fit has been shown to affect application decisions (Cable and Judge, 1996; Cable and Judge, 1997; Scott, 2000a), job satisfaction (Bretz and Judge, 1994), and job tenure (Bretz and Judge, 1994; Ritchie, 2000).

Organisational culture has been seen as the pattern or way a given group has invented, discovered or developed in carrying out a particular task or solving a particular problem or useful and effective in learning. This pattern must have worked well enough for the group to be considered valid and therefore must be taught to new members or entrants as the correct way to perceive, think and feel in relation to those problems. Organisation culture is a set of values that help organisational members know that which is acceptable and that which is unacceptable within the organisation (Ojo, 2010).

DIMENSION OF ORGANISATIONAL CULTURE

Jones, Chine and Ryan (2006) in some compare active works published said that seven dimensions could be used to compare culture across organisations. • Innovation and risk taking – willing to experiment, take risks, encourage innovation • Attention to detail – paying attention to being precise vs. saying its “good enough for chopped salad” • Outcome orientation – oriented to results vs. oriented to process • People orientation – degree of value and respect for people. Are people considered unique talents, or is an engineer an engineer an engineer. • Individual vs. Team orientation – are individuals most highly noted, or are collective efforts • Aggressiveness – taking action, dealing with conflict Stability – openness to change Deal and Kennedy (1999) also identified four key dimensions of culture:

1. Values – the beliefs that lie at the heart of the corporate culture. 2. Heroes– the people who embody values. 3. Rites and rituals – routines of interaction that have strong symbolic qualities. 4. The culture network – the informal communication system or hidden hierarchy of power in the organization.

TYPES OF ORGANISATIONAL CULTURE

Handy (1993) identify four main types of culture to be found in organizations, which are summarised in Figure 1 below.

FOUR TYPES OF CULTURE IN ORGANISATIONS

Type	Meta phor	Characteristics
Power Culture	A web	Control/power emanate from the centre; very political and entrepreneurial; resource power and Personal power predominate. This culture serves the figure head and the leader.
Role Culture	A Greek temple	Classical structure; bureaucratic nature; roles more important than the people who fill them; position power predominates, and expert power tolerated. This culture serves the structure.
Task Culture	A net	The focus is on completing the job; individuals' expertise and contribution are highly valued; expert power predominates, but both personal and position power are important; the unifying force of the group is manifested in high level of collaboration.
Person culture	A Cluster or galaxy	A loose collection of individuals – usually professionals – sharing common facilities but pursuing own goals separately; power is not really an issue, since members are experts in their own right. This type of culture serves the individual.

Source: Handy, 1993: Understanding Organizations.4thEdition, Penguin Business

Handy (1993) suggests that the culture within an organisation affects the way that it operates and its members behave. One type of culture is not necessarily better than another; although one type of culture might be more appropriate than others in particular circumstances. For example, a role culture could be appropriate when the organisation exists in a fairly stable environment. A role culture could have difficulty in adapting to change. In contrast, power culture or task culture are probably more effective in conditions of change.

Management in an organisation might take the view that to be successful; the organization must be innovative, and continually look for new markets, new and better products and improved processes. Innovation is often associated with the task culture. It can therefore be tempting for management to try to change the culture of their organisation, so that it's become more task-oriented. Cascio (2006) also outlined four types of organisational culture and termed them as 'Organizational Ideologies'. These are: i. Power-oriented – competitive, responsive to personality rather than expertise ii. People-oriented – consensual, rejecting management control iii. Task-oriented – with a focus on competency, dynamic iv. Role-oriented – with a focus on legality, legitimacy and bureaucracy

CONCEPT OF BEHAVIOUR

Behaviour is something psychologists have been trying to define for ages. Several theories have come up and each has been right in a way. But we still don't have an exact definition for human behaviour. We probably never will have one, because human beings change and each individual is different from one another. It might be possible to have a few generalizations but the truth is that each one of us does things differently. The operant conditioning model is one such model used to explain human behaviour.

Conditioning is a “systematic procedure through which associations and responses to specific stimuli are learned” (Hollinshead, Nicholls and Tailby, 2003). Operant conditioning is defined as “a type of learning in which the desirable or undesirable consequences of behaviour determine whether the behaviour is repeated” (Sorensen, 2002). It is also known as instrumental conditioning. The probability of an event occurring depends on its consequences. Much of the research on the operant model was done by B. F. Skinner and E.L. Thorndike.

But the basic principle that governs operant conditioning is known as the law of effect. The law states that behaviours followed by desirable outcomes are more likely to recur than behaviours with unpleasant outcomes and vice versa. Rewards and punishments do affect our behaviour. Shaping is an operant conditioning procedure in which “closer and closer approximations of the desired behaviours are reinforced, as a way of eventually producing the desired behaviour” (Osland, Kold and Rubin 2001; McShane and vonGlinow, 2008).

METHODOLOGY

The survey research design was used in this study. Survey research design was chosen because the sampled elements and the variables that are being studied are simply being observed as they are without making any attempt to control or manipulate them. The theoretical population of the study consists of the entire workers of Nestle Chennai, India. For effective coverage and lower cost, stratified sampling technique was used to select the participating respondents.

The workers were stratified into junior, intermediate, and senior cadres. Thereafter, a total of 55 employees were selected using simple random sampling method. However, only 50 out of 55 respondents returned filled questionnaire and were used for final analysis in this study. It is the believe of the researcher that the sampled elements for the study have significant understanding of the concepts and terminologies used in the study and contained in the questionnaire they completed. This premise was based on the educational background of the respondents in which only 8% of them have General Certificate of Education “Ordinary Level” while the remaining 92% of the respondents possessed higher educational qualification. Primary data collected through the administration of questionnaire were used for this study. The questionnaire was titled “Organisational Culture and Employee Work Behaviour Questionnaire” One important way of ensuring that we have used the right instrument and have taken correct measurement is that our outcome must be in consonance with two major criteria for measuring quality known as validity and reliability (Ojo, 2003).

To ensure the validity and reliability of the questionnaire used for the study, even number of experts were consulted to look at the questionnaire items in relation to its ability to achieve the stated objectives of the research, level of coverage, comprehensibility, logicity and suitability for prospective respondents. Data collected from the questionnaire were analysed, summarised, and interpreted accordingly with the aid of descriptive statistical techniques such as total score and simple percentage. Chi-square was used to measure the discrepancies existing between the observed and expected frequency and to proof the level of significance in testing stated hypotheses.

ANALYSIS AND DISCUSSIONS

In this section we shall be concerned with two things; hypotheses testing and discussion of results. There are various statistical tools that can be use for testing of hypotheses but this research work will be limited to the use of chi-square (χ^2) statistical tool.

HYPOTHESIS 1

H0

Organisational culture has no significant influence on employee work behaviour

H1

Organisational culture has a significant influence on employee work behaviour

TABLE 11: ORGANISATIONAL CULTURE INFLUENCES EMPLOYEE WORK BEHAVIOUR

Particular	Observed(O)	Expected (E)	Residual (O-E)	(O-E) ² 2
Strongly Disagree	2	10.0	-8	64.0
Disagree	2	10.0	-8	64.0
Undecided	4	10.0	-6	36.0
Agree	27	10.0	17.0	289.0
Strongly Agree	15	10.0	5.0	25.0
Total	50			

Source: Primary Data

TEST STATISTICS

Particular	organizational culture influences employee work behaviour
Chi-Square (a)	47.800
Df	4
Sig.	.000

0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 10.0.

Decision rule: Reject H₀, where $\chi^2_{\text{calculated}}$ is greater than $\chi^2_{\text{tabulated}}$, otherwise, accept H₁

$$\text{Calculated } (\chi^2) = \frac{\sum (O - E)^2}{E}$$

$$\frac{478}{10} = 47.8$$

Degree of freedom "d.o.f" = n - 1

Where n = number of rows

Therefore, d.o.f = 5 - 1 = 4

Tabulated (χ^2) = At 0.05% level of significance, the tabulated value of χ^2 for 4 degrees of freedom is 9.488

Decision: Since the calculated χ^2 is greater than the tabulated χ^2 , we reject the null hypotheses (H₀) and accept the alternative hypotheses (H₁).

This indicates that organisational culture has a significant influence on employee work behaviour.

HYPOTHESIS 2

H₀

Organisational culture has no significant influence on organisational productivity

H₁

Organisational culture has a significant influence on organisational productivity

TABLE 12: ORGANISATIONAL CULTURE IS A MAJOR DETERMINANT OF ORGANISATIONAL PRODUCTIVITY

Particular	Observed(O)	Expected (E)	Residual (O-E)	(O-E) ² 2
Undecided	9	16.7	-7.7	59.29
Agree	24	16.7	7.3	53.29
Strongly Agree	17	16.7	0.3	0.09
Total	50			

Source: Primary Data

TEST STATISTICS

Particular	organisational culture is a major determinant of organisational productivity
Chi-Square (a)	6.760
Df	2
Sig.	.034

0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 16.7.

Decision rule: Reject H₀, where $\chi^2_{\text{calculated}}$ is greater than $\chi^2_{\text{tabulated}}$, otherwise, accept H₁.

Calculated is greater than $\chi^2_{\text{tabulated}}$, otherwise, accept H₁.

$$\text{Calculated } (\chi^2) = \frac{\sum (O - E)^2}{E}$$

$$\frac{112.67}{16.7} = 6.76$$

$$16.7 = 6.76$$

Degree of freedom "d.o.f" = n - 1

Where n = number of rows

Therefore, d.o.f = 3 - 1 = 2

Tabulated (χ^2) = At 0.05% level of significance, the tabulated value of χ^2 for 2 degrees of freedom is 5.991

Decision: Since the calculated χ^2 is greater than the tabulated χ^2 , we reject the null hypotheses (H₀) and accept the alternative hypotheses (H₁).

This indicates that organisational culture is a major determinant of organisational productivity.

HYPOTHESIS 3

H₀

A change in organisational culture will not cause a change in employee work behaviour

H₁

A change in organisational culture will cause a change in employee work behaviour

TABLE 13: CHANGE IN ORGANISATIONAL CULTURE WILL CAUSE A CHANGE IN EMPLOYEE WORK BEHAVIOUR

Particular	Observed(O)	Expected (E)	Residual (O-E)	(O-E) ²
Disagree	3	12.5	-9.5	90.25
Undecided	5	12.5	-7.5	56.25
Agree	24	12.5	11.5	132.25
Strongly Agree	18	12.5	5.5	30.25
Total	50			

Source: Primary Data

TEST STATISTICS

Particular	change in organizational culture will cause a change in employee work behaviour
Chi-Square (a)	24.720
Df	3
Sig.	.000

Decision rule: Reject H₀, where $\chi^2_{\text{calculated}}$ is greater than $\chi^2_{\text{tabulated}}$, otherwise, accept

$$H_1. \text{ Calculated } (\chi^2) = \frac{\sum(O - E)^2}{E}$$

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$$12.5 = 24.72$$

Degree of freedom "d.o.f" = $n - 1$

Where n = number of rows

Therefore, d.o.f = $4 - 1 = 3$

Tabulated (χ^2) = At 0.05% level of significance, the tabulated value of χ^2 for 3 degrees of freedom is 7.815

Decision: Since the calculated χ^2 is greater than the tabulated χ^2 , we reject the null hypotheses (H₀) and accept the alternative hypotheses (H₁).

This implies that a change in organisational culture will cause a change in employee work behaviour. Based on analysed data, the findings in this study include the followings:

(i) A large number of respondents 84.0% of the respondents agree that organisational culture influence employee work behaviour. (ii) 72.0% of the respondents agree that organisational culture is a determinant of productivity level of the organisation. (iii) 84.0% of the respondents agree that a change in culture will cause a change in employee work behaviour. (iv) 54.0% of the respondents agree that organisational norm is a major determinant of organisational culture. (v) Majority of the respondents (56.0%) agree that organizational artifact is a major factor of organisational culture. (vi) Organisational values influence employee work performance as 50.0% of the respondents agree to this. (vii) Adequate motivational factors improve employee work behaviour. 46.0% of the respondents agree to this. From the hypotheses tested, we are able to discover the following:

(i) In testing the first hypothesis, the calculated χ^2 is greater than the tabulated χ^2 , we therefore reject the null hypotheses (H₀) and accept the alternative hypotheses (H₁). This indicates that organisational culture has a significant influence on employee work behaviour. (ii) When the second hypothesis was tested, the calculated χ^2 is greater than the tabulated χ^2 , we therefore reject the null hypotheses (H₀) and accept the alternative hypotheses (H₁). This indicates that organisational culture is a major determinant of organisational productivity. (iii) Finally, when the third hypothesis was tested it was also discovered that the calculated χ^2 is greater than the tabulated χ^2 , we reject the null hypotheses (H₀) and accept the alternative hypotheses (H₁). This implies that a change in organisational culture will cause a change in employee work behaviour.

CONCLUSION

In this study, the researcher tried to look at the analysis of the influence of organisational culture on employee work behaviour with evidence drawn from Nestle, Chennai, India. Questionnaires were administered to respondents who are employees at Nestle, Chennai India. To find out their opinions and views about organisational culture and its influence on employee work behaviour. The main focus of this study is to make recommendations that will help managements to create, maintain, sustain and otherwise modify culture in a way that it will help improve employee work behaviour. The conclusions we can deduce from the study among other things are that: (i) organisational culture influence employee work behaviour in the organisation. (ii) Organisational culture is a determinant of the productivity level of the organisation in the sense that it influences employee's behaviour to work and it is the input of the employees to the organization that determines its productivity level. (iii) a change in organisational culture will lead to a change in employee work behaviour in the sense that it is not what has been identified with the organisation from time past. Therefore, organisations should make the changes in their culture easy for their employees to learn and adapt to. (iv) Organisational culture has a significant influence on employee work behaviour.

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ORIENTATIONS: A CAPACITY BUILDING TOOL FOR IMPROVING KNOWLEDGE AND PERCEPTION OF HEALTH WORKERS REGARDING NON SCALPEL VASECTOMY

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ABSTRACT

India was the first country in the world that started family planning program after recognizing the seriousness and ill effects of population growth. Despite of this India failed to control the population explosion. Community health workers are the backbone of any program and solely responsible for programs success and failure. If they have proper knowledge and clarity of concepts they can easily mobilize the community. So the aim of the study is to assess the current knowledge of community health workers regarding non scalpel vasectomy and effect of orientation in improving their knowledge. The study was conducted in tribal district of Jharkhand, India. And pre and posttest non experimental study design was used to assess the knowledge and improvement in knowledge of community health worker. Purposive sampling technique was used for the selection of participants. Before the orientation majority of the health worker have misconception about the ejaculation, losing strength etc. which significantly improved ($p = 0.05$) after the orientation. So it was suggested that for success of any public health program there community level health worker should have complete and proper knowledge and their capacity can be built by giving them such small on site trainings.

KEYWORDS

capacity building, family planning, health worker, NSV, orientation.

INTRODUCTION

Family planning enables couples and individuals to plan desired number of children and the timing and spacing of their births. It can be achieved through use of family planning methods [1]. The vision of WHO/RHR is the attainment of the highest possible level of sexual and reproductive health by all people. It strives for a world where all women's and men's rights to enjoy sexual and reproductive health are promoted and protected, and all women and men, including adolescents and those who are underserved or marginalized, have access to sexual and reproductive health information and services [2].

India was the first country in the world that recognized the need of population stabilization for development and sustainability for a good quality of life in 1951 and launched National Family Planning Programme in 1952. In third five year plan, the approach changed from clinic to extension education approach and later on it became an integral part of Maternal and Child Health activities but it failed to make much impact. Program suffered a setback in 1976 due to element of coercion introduced in the program and its political fallout; the political support was lost [3].

The Population Policy 1977 clearly underscored that "compulsion in the area of family welfare must be ruled out for all times to come," and emphasized the need for an educational and motivational approach to make it a completely voluntary acceptance of family planning. As a result of that in 1996, the Government of India initiated the target-free Community Needs Assessment Approach, which involved formulating plans in consultation with communities [4].

In 2000, the National Population Policy was reformulated to achieve long-term population stabilization by 2045 and replacement level of fertility by 2010. The policy ingeminates the commitment to voluntary, informed choice and to citizens' consent while accessing reproductive health care, including contraception. The immediate objective was to address the unmet need for contraception [5].

Despite of these efforts from the government, acceptance of family planning methods is very low. According to Population Stabilization Fund report only 54 per cent are using any of the family planning methods out of which male participation is only 7 per cent (male sterilization - 1 percent and condom use - 6 percent). Rest of the methods are female oriented i.e. 34 per cent female sterilization, 4 per cent oral contraceptive pills and 2 per cent IUD. Remaining 7 per cent uses any traditional method of contraception for limiting their family size [6]. According to DLHS - III, female sterilization is one of the most accepted contraceptive methods with 74 per cent among currently married women whereas male participation is only 2 percent [7].

According to the latest National Family Health Survey (NFHS-3), two out of three (66 percent) married Indian women aged 15–49 years who practice family planning method still use female sterilization. In rural areas, this proportion is even higher, with 70 per cent of contraceptive users relying on female sterilization. Overall, 37 per cent of all married Indian women of reproductive age are sterilized [8].

RATIONALE

In India, gender inequalities favor men and reproductive - sexual health decisions are usually made by them as a result of which male participation in family planning is very poor. According to Ringhieu et al and Raju S et al stated in their studies that Indian men have a mentality that family planning is the responsibility of females of the family. Some of the main reasons for this disproportion between male and female participation in family planning are gender sensitive strategies and, to a larger extent, family planning programs are female oriented [9,10], men feel that the sterilization operation is easier to perform on women than on men [11].

The main reasons cited by men who said their wives would adopt female sterilization were that “only women undergo sterilization and not men” “Male sterilization is very unpopular”. Due to inadequate information, people talk of various side effects of the method like “Men become weak, men cannot do any heavy work, limbs become weak and painful, and men get cold and fever” [11,12].

Some reproductive health practitioners have recognized that the failure to target men has weakened the impact of family planning programs, because men can easily influence their partners’ reproductive health decisions and use of health services especially in societies where women do not possess the same decision-making powers as men [13]. Therefore, there is a growing realization that unless men are reached, the Reproductive and Child Health Program, including family welfare efforts, will have limited impact [14].

Despite the introduction of “no-scalpel” vasectomy and campaigns to promote male involvement in family planning and reproductive health, the acceptance of vasectomy remained negligible- 2 per cent of currently married couples nationally [6]. A major effort has been made to train trainers for this procedure in the medical colleges at the district level.

Although “No-Scalpel” vasectomy is in fact a safer and less invasive procedure than tubal sterilization, NSV is poorly accepted due to fear of loss of libido, strength, failure of the method and an attitude that makes birth control as a responsibility of the woman at large because of the limited knowledge and awareness about the simplicity and safety of the procedure.

Knowledge of contraception, as usually measured in national surveys, is unlikely to reflect a familiarity with and understanding of contraceptives adequate to lead to use. Of equal importance as awareness of contraceptive methods is knowledge of where these methods can be obtained, what are the main side effects are and how to use the selected method correctly [15].

Evidence from a number of small-scale studies in various parts of the country indicates that inadequate knowledge of contraceptive methods is a reason for not accepting family planning [16]. Incomplete or erroneous information on where to obtain methods and how to use them is strongly associated with unmet need [17]. Findings from the 2005–2006 National Family Health Survey show that mass media were men’s primary source of family planning information. Television and radio may be major sources of information, as they are very popular among the rural population; however, mass media messages tend to be rather generic, and viewers are unable to ask questions and have their doubts clarified. Even though few men receive information from health workers [18] one to one communication is effective only when the community health workers have complete and right knowledge about the NSV. Community based small scale orientation and trainings of health workers will be useful in enhancing their knowledge about non scalpel vasectomy and indeed male participation in family planning. So this study aimed to assess the knowledge and perception of community health workers regarding non-scalpel vasectomy and to assess the effect of orientation on their knowledge and perception. So that in long run, it will increase the male participation in family planning.

RESEARCH METHODOLOGY

Study Design: Pre-test-Post-test non experimental study design

Study area: This study was conducted in Simdega district of Jharkhand, India

Population: Community based workers i.e. SAHIYA who were the substitutes of accredited social health activists (ASHA) in Jharkhand. So the target population for the study was the community based health workers of Simdega district.

Sampling Technique and Sample Size: Purposive sampling technique was used to select the two best performing and two least performing blocks out of total seven blocks in the district on the basis of previous performance in non-scalpel vasectomy.

After selection of blocks, simple random sampling technique was used to choose two groups of 25 community based health workers from each block i.e. 50 from each block. In total 200 participants were chosen from selected four blocks

Orientation: Four sessions were held in the primary health centers where NSV orientation was given to the participants by the medical officer of the facility and basic points like eligibility criteria, procedure, precaution, myths and perceptions related to NSV were discussed. Role play was the part of orientation in which one health worker played role of community health worker and five other played role of head of the family and family member. After the role play points of misconceptions where the health workers faced problem in explaining the facts about NSV and male participation were discussed.

Data Collection Technique: As the study was based on Pre & Post-test non experimental study design, data was collected before and after the orientation on NSV, with the help of self-administered questionnaire.

Data Analysis: Data analysis was done with the help of SPSS - 16.

RESULTS

A total of 200 community health workers in 8 groups from four blocks of Simdega district of Jharkhand were recruited in the study. Average age of the study group was 29.53 years. Qualification of the study group was divided into five group i.e. primary, middle, secondary, higher secondary and graduate and distribution of health workers according to their educational qualification was shown in table – 1

TABLE – 1: QUALIFICATION OF PARTICIPANTS

Qualification	Frequency
Up to Primary	4 (2%)
Primary to Middle	34 (17%)
Middle to Secondary	117 (58.5%)
Secondary to Higher secondary	38 (19%)
Higher secondary to graduate	7 (3.5%)
Total	200

Average score obtained by the community health workers before the orientation was 6.23 out of 10 and the same score improved to 8.90 after receiving an orientation on non-scalpel vasectomy. There was statistically significant improvement in the knowledge of community health worker from high performing blocks (P value – 0.007) as well as least performing blocks (P value – 0.002) after receiving orientation. But before and after the orientation there was no significant difference in the knowledge of health workers in best and least performing blocks (table – 2). Question wise performance of the community health workers from both groups in pre & post orientation test is given in table 3. Initially 61.5% of health workers had misconceptions that after NSV one will face problem of ejaculation, 70.5% were unaware of the fact that minimum time period of contraception use is three months after NSV procedure is done, also 77%

had misconception that one has to rest for long after non scalpel vasectomy and 45.5% thought that this is not a stitch free technique for sterilization and after orientation these figures reduced to 31.5%, 16.5%, 21.5% and 4.5% respectively. Overall performance of the health workers improved in comparison to previous score.

TABLE – 2: PRE AND POST TEST SCORE OF THE BEST AND LEAST PERFORMING BLOCKS

Questions on Knowledge and Perception	Pre - Test Responses			Post - Test Responses		
	Best Performing	Least Performing	Total	Best Performing	Least Performing	Total
Eligibility criterion	74	82	156	96	91	187
No. of stitches	56	53	109	96	95	191
Duration of operation	84	78	162	97	95	192
Reasons for painless procedure	88	83	171	92	91	183
Use of other contraception	32	27	59	81	86	167
One can return to home	86	62	148	97	98	195
Change in strength	86	78	164	97	96	193
Effect on ejaculation	38	39	77	72	65	137
Effect on sexual performance	78	76	154	90	88	178
Resume to normal work	23	23	46	80	77	157
Total score	645	601	1246	898	882	1780
Percentage	6.45	6.01	6.23	8.98	8.82	8.9

DISCUSSION AND RECOMMENDATION

It is clear from the study that after the orientation there was an improvement in the knowledge and clarity of perception about NSV in the community based health worker. There is 43 per cent increase in the knowledge regarding NSV after orientation. And the community based health workers were more or less aware of the NSV procedure i.e. who is eligible for the NSV, what is the procedure, how many stitches are applied in the operation, why it is painless etc. The main issues which came into picture are post-operative care and misconception about ejaculation, erection, weakness, sexual performance and the minimum days of rest after NSV. From the earlier studies it was found, men feel that sterilization operation is easier to perform on women than on men [9] in current study also health workers believed that NSV need stitches and require longer duration to resume to normal work.

Another factor according to men is that NSV affect the labor intense work [11] while from the study it was found that 97 per cent community based workers agree on the point that physical strength doesn't change after the operation as well as one can resume to normal work only after two days of NSV by 23 per cent SAHIYAs before the orientation and by 79 per cent SAHIYAs after the orientation. Evidence from a number of small-scale studies in various parts of the country indicates that inadequate knowledge of contraceptive methods is a reason for not accepting family planning [16] and from the current study it was found that community based health workers did not have the correct and full knowledge about the NSV procedure that is the reason why males are not accepting NSV because their myths and misconceptions are not addressed by the community based health workers.

Mass media messages tend to be rather generic, and viewers are unable to ask questions and have their doubts clarified [18, 19], community based health workers are the only source of information for the tribal population living in the tribal areas of Simdega where mass media is not accessible. So it becomes necessary that SAHIYA have complete and right knowledge of the procedure/services.

It is clear from the analysis that most of them were lacking in the knowledge about ejaculation after non scalpel vasectomy, duration of post-operative contraception use, use of stitches and the time required to resume to normal work. And these are the basic issues which create hindrance in motivating the client for the NSV because one will not agree for the NSV if he has doubt about the ejaculation, application of stitches and time required to resume to normal work. Apart from these, duration of post-operative contraception use also plays an important role in NSV acceptance in community. If client did not know that it is necessary for him to use other contraceptive methods for three months to avoid unwanted pregnancy, in that case his wife conceives then there is a bad impression about the technique and the acceptance for the NSV decreases drastically.

After the orientation it was noticed that knowledge of community based health workers has improved which enables them to communicate the right information and remove the wrong perception from the community regarding NSV.

So it is very important that community based health workers who have direct contact with the community should have right and complete knowledge about NSV. So that, they are able to resolve the myths and misconceptions of community regarding NSV and can increase in the acceptance for NSV and male involvement in family planning which is the prime need of the time.

LIMITATIONS

Study was carried out with a small group of health workers in only one district so we cannot generalize the status of the knowledge and their perception to the whole population. Secondly, due to time constraint improvement in the knowledge was assessed only on the bases of pre and post-test score, impact of the orientation was not assessed by increased male participation in family planning programs after the intervention.

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WILLINGNESS TO PAY FOR TANK MAINTENANCE: A STUDY ON TANK IRRIGATION IN THE DRY ZONES OF WEST BENGAL IN INDIA

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ABSTRACT

The optimal management of available water resources has become a major issue world over. Tanks can play a vital role to conserve water. Sustainability of irrigation systems is very important from perspectives of both farmers and government. Developing countries like India are facing tremendous budgetary pressure arising from the need to defray irrigation costs. Quite often, farmers do not receive adequate service owing on to an insufficient O & M budget. This undoubtedly affects crop productivity and farming income. It is therefore important to decrease the budgetary burdens of government through local control and support. Willingness to Pay (WTP) is an economic concept, which aims to determine the amount of money a consumer is willing to pay for the maintenance of tanks. The present paper attempts to find the determinants of WTP for tank maintenance and estimates the total willingness to pay based on the primary survey of 533 households in the three districts of West Bengal namely Bankura, Purulia and Paschim Medinipur in the dry zones of West Bengal.

JEL CODE

Q25

KEYWORDS

Irrigation, Tank, Willingness to pay, Dry zones.

1. INTRODUCTION

The optimal management of available water resources has become a major issue world over. Global warming has made the monsoon more variable and unpredictable. The predicted increased variability of precipitation with longer drought periods would lead to an increase in irrigation requirement even if the total rainfall remains the same. Water storage to conserve flood water due to climate change will be an important agenda in the future (Palanasami 2000, Palanasami et al 2010). Tanks can play a vital role to conserve water (Sreedhar 2007, Shah 2009, Sengupta 1985, Sakthivadivel 2004, Shah 2003, Vaidyanathan 2006, Jana 2010, Jana 2012, Balasubramanian 2003, Anbumozhi 2007, Bardhan 2000 and Chakravorty 2006). Tank irrigation, in certain parts of India particularly in the dry zones, provides a good alternative for irrigation development. Tank means a reservoir or place which is used for the storage of water. Tanks can have a wider geological distribution than large-scale projects. Income distribution and employment generation effects are not limited to one area in case of tanks. Tank investments tend to be less capital intensive, have fewer negative environmental impacts and offer a good scope for adaptation to climate change through rain water harvesting. In spite of the advantages of irrigation development, development of tank irrigation deteriorated in almost every state in India including West Bengal. The share of tank irrigated area in India has declined from 13.2% in 1970-71 to 3.5% in 2003-04 (Central Water Commission). There are various causes behind this phenomenon. One of the main causes of degradation of traditional methods is lack of public fund of tank renovation (Agarwal 2009, Dhawan 1986, Shah 2009, Narayanmoorthy and Deshpande 2005).

Sustainability of irrigation systems is very important from both farmers' and government perspectives. Conversely, developing countries like India are facing tremendous budgetary pressure arising from the need to defray irrigation costs. Quite often, farmers do not receive adequate service owing on to an insufficient O & M budget. This undoubtedly affects crop productivity and farming income. It is therefore important to decrease the budgetary burdens of government through local control and support. Willingness to Pay (WTP) is an economic concept, which is used here to determine the amount of money a consumer is willing to pay for the maintenance of tanks. The consumers' WTP is becoming increasingly popular and is one of the standard approaches that is used by market researchers and economists to place a value on goods or services for which no market-based pricing mechanism exists (Chandrasekaran et al 2012). The approach, involves taking a survey through a structured questionnaire of consumers' WTP specified prices for hypothetical services, also referred as Contingent Valuation Method (CVM). The WTP is defined as the amount that must be taken away from person's income while keeping his utility constant. The CVM still have serious methodological and theoretical shortcomings when used to assess WTP for non-market based goods and services, such as format bias, embedding effect, ordering problem, starting bid effects, strategic bias, information bias, non-response bias, payment vehicle, free rider problem, warm glow effect (Chandrasekaran 2009, Koss et al 2001, Mitchell et al 1989, Raju et al 2002, Chandrasekaran 2009, Venkatachalam 2004, Griffin 1995). In this study, the CVM method is used to determine the economic value of tank maintenance for the dry zones in West Bengal.

2. STUDY AREA AND RESEARCH FRAMEWORK

We have selected three districts namely Bankura, Purulia and Paschim Medinipur for our study as high proportions of these regions fall in the dry zones. Fluctuating rainfall with intermittent drought spell between two successive rainfalls makes the crop, generally the Khariff crop, very vulnerable in these regions. Though the average annual rainfall in the districts is about 1500 mm, the districts suffer from vagaries of rainfall which seriously affect the crop yield. As the geology of the regions is not favourable to ground water irrigation, the option of tank irrigation should be explored further. It may be pointed out that the area irrigated by Tank in Bankura, Purulia and Paschim Medinipur were 20.8, 22.4 and 26.4 thousand hectare respectively in the year 2001-02. The primary objective of the paper is to judge the importance to the farmer-households through willingness to pay of the households for renovation/reconstruction of the tanks. For the willingness to pay analysis we have used Tobit Model. The data used for this paper has been collected both primary and secondary sources, though the work is mainly based on primary data. The primary data used in this study has been collected using the structured questionnaire meant for primary survey and the survey had been conducted during the period of 2008-09. The precondition for dry zones in the three districts of Purulia, Bankura and Paschim Medinipur did not allow us to adopt random sampling. We used purposive sampling procedure for the selection of blocks and villages. The blocks have been selected with the discussion of the officials of the departments of irrigation, Principal Agricultural Officer and other officials in the districts. The villages have been selected in consultation with GP offices. But for the selection of households we have used random sampling procedure. Table- 1 presents the number of districts, blocks, villages and households selected in West Bengal for our survey.

TABLE 1: NUMBER OF DISTRICTS, BLOCKS, VILLAGES, TANKS AND HOUSEHOLDS SELECTED IN WEST BENGAL

Districts	No. of blocks selected	No. of GPs /Municipality selected	No. of villages selected	No. of tanks selected	No. of Households selected
Bankura	2	5	26	52	155
Purulia	3	8	27	60	198
Paschim Medinipur	6	14	49	69	180
Total Sample	11	27	102	181	533

Source: Based on Primary Survey

3. SOCIO-ECONOMIC CHARACTERISTICS OF THE HOUSEHOLDS

As we have already stated we have collected data on different socio-economic characteristics from 533 households in our study area. Some socio-economic characteristics of the households are mentioned below:

- (1) The percentage of female is 46%.
- (2) The percentage of households belonging to different land classes are as follows: marginal - 54.8%, small - 27.2% and medium - 18%.
- (3) The average family size is 6.
- (4) The caste-wise percentage of households is as follows: General - 38%, OBC - 32%, SC - 11%, ST - 19%.
- (5) The average level of education of the head of the household is calculated as five.
- (6) Out of 533 households surveyed 345 households have Kachha houses.
- (7) Percentage of NREGS job card holder is 76% and average working days from NREGS per family is calculated as 27.
- (8) The average of percentage of irrigated land out of total agricultural land for the sample households is calculated as 55.8%.

4. WILLINGNESS TO PAY (WTP) AND ITS DETERMINANTS

We had asked each household about their willingness to pay (WTP) if the new tank/new bund is constructed or tank/bund is renovated and the water supply is ensured for them. The question was open-ended one. We have different responses about their willingness to pay. Some of the respondents are willing to pay zero amount or they avoided to answer the question. From the willingness to pay behavior of households, we have tried to measure the Total Willingness to Pay (WTP) of the tank maintenance for three districts under consideration.

Firstly, we have used the TOBIT regression model to identify the determinants of willingness to pay for improving the Bund condition. Then we have estimated the total willingness to pay. The persons who are not willing to pay or have not expressed anything about their willingness are assumed to have 0 WTP. The negative value of WTP is not observable. The dependent variable is censored at the value 0. Thus in this analysis, the Tobit model can be written as

$$WTP = WTP^*, \text{ if } WTP^* > 0$$

$$= 0, \text{ otherwise}$$

It should be mentioned that method of estimation procedure depends upon the structure of the bidding game. If the bidding game is closed ended type, the relevant estimation procedure would be logit/probit. For open-ended question like ours, censored regression like Tobit is more appropriate. We have taken the following model to find the determinants of WTP.

The model is $WTP^* = b_1 + b_2 \text{ HEADED} + b_3 \text{ FAMEXP} + b_4 \text{ TANKQUAL} + b_5 \text{ WATERDD}$

HEADED: Education of the head of the household

FAMEXP: Family Expenditure (Rs./month)

TANKQUAL: Score value of the quality of tank as judged by the households out of 100 based on different quality parameters

WATERDD: Water requirement (Acre-mm) calculated from the area cultivated by households for different crops and water requirement for those crops.

We have tested the WTP model with the whole sample of 533 households in three districts. The estimated results are shown in the table 2.

TABLE 2: TOBIT ESTIMATION RESULT OF WTP

	Coefficient	Std. Error	z-Statistic	Prob.
C	82.49120	145.3455	0.567552	0.5703
HEADED	9.543463	4.420112	2.159100	0.0308
FAMEXP	0.030330	0.013190	2.299378	0.0215
TANKQUAL	-4.867150	2.852038	-1.706551	0.0879
WATERDD	0.038641	0.007326	5.274484	0.0000

Source: Own Estimation

The above results indicate that the decision of the individuals to contribute or not to contribute for tank maintenance depends significantly upon education of the head of the family (HEADED), family expenditure (FAMEXP), and Water demand for crops cultivated (WATERDD) and negatively with Quality of the tank (TANKQUAL).

5. ESTIMATION TOTAL WILLINGNESS TO PAY FOR TANK MAINTENANCE

Demand for a resource depends upon total economic value (TEV). TEV consists of both use value and non-use value. As water for the tank is used for irrigation, bathing and fishery purposes, it has certainly use value. Contingent valuation method (CVM) has been used here for the valuation of use value though CVM is generally used for valuation of non use value. We have already stated our sample consists of 533 households. We have collected information about their annual willingness to pay for tank maintenance. Total willingness to pay has been calculated by median WTP multiplied by the relevant population. Total willingness to pay reflects the demand for Bund/tank. In the Table 3 we have reported the number of holdings for different size classes for the three districts we have surveyed. There are 13.48 lakh holdings in total in the three districts in 2010 as per the reports of District Statistical Handbooks of Government of West Bengal.

TABLE 3: DISTRICT WISE NOS. OF HOLDINGS FOR DIFFERENT LAND CLASSES, 2010

	Marginal	Small	Semi-medium	Medium	Large	Total
Bankura	2,39,365	84,960	36,870	5,827	20	3,67,042
Paschim Med	5,77,469	82,262	19,001	1,478	23	6,80,233
Purulia	2,13,085	63,750	22,455	2,197	27	3,01,514
Total	10,29,919	2,30,972	78,326	9,502	70	13,48,789

Source: District Statistical Handbook, Government of West Bengal

Out of 13.48 lakh land holdings in the three districts, we have tried to estimate the number of households those who are willing to pay on the basis of our sample observation. Out of 533 households surveyed we have observed that 121 households are not willing to pay for the renovation/reconstruction of Bund. The distribution of 121 households by size classes are presented in the third row of the table 4. In the next row we have estimated the number of households in the district not willing to pay given the proportion of households not willing to pay in the sample. Then we have estimated the number of households willing to pay in the three districts.

TABLE 4: ESTIMATION OF NOS. OF HOLDINGS WILLING TO PAY IN THE THREE DISTRICTS

	Marginal	Small	Semi-medium	Medium	large	Total
0 WTP (Nos. in sample)	46	28	30	11	6	121
0 WTP (proportion in sample)	0.380	0.231	0.248	0.091	0.050	1.000
0 WTP (Population)	3,91,539	53,448	19,420	864	3	4,65,274
Estimated no of holdings Willing to pay	6,38,380	1,77,524	58,906	8,638	67	8,83,515

Source: Own Estimation Primary Survey

We have collected the data of willingness to pay for all the 533 households in the district. Out of these 121 households have 0 willingness to pay (WTP). So the rest of 412 households have some amount of willingness to pay. From these 412 households we have calculated the median willingness to pay for different categories of farmers, which has been reported in the third row of the following table. In the last row, we have reported the population wtp for the three districts. The total willingness to pay is calculated as 6.07 crores.

TABLE 5: ESTIMATION OF TOTAL WILLINGNESS TO PAY IN THE LAND CLASSES

	Marginal	Small	Semi-medum	medium	Large	Total
No of holdings Willing to pay	6,38,380	1,77,524	58,906	8,638	67	
Median WTP (Rs.)	50	100	150	250	1,000	
Total WTP (Rs.)	319,18,977	177,52,393	88,35,950	21,59,545	66,528	607,33,395

Source: Own Estimation Based on Primary Survey

6. CONCLUSION

Sustainability of irrigation is an important agenda both from the point of view of farmers and the Government, particularly in the context of climate change. Our study is based on the primary data collected from some dry zones in West Bengal. Poor maintenance of tanks in the study area is affecting the crop productivity and farming income of the farming households. Local support is essential to ease the budgetary pressure on government for operation and maintenance. We have tried to estimate the economic value of tank maintenance through contingent valuation method and have found out some of its important determinants. The study reveals that if proper institutional mechanism could be developed then farmers are willing to pay for the maintenance of the tanks. The fees will bring an ownership feeling to the farmers so that the co-operation among the farmers for conservation gets enhanced.

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MGNREGA: A BOON TO RURAL WOMEN IN HIMACHAL PRADESH

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ABSTRACT

Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) Act 2005 was launched on 2nd Feb, 2006 from Anantapur in Andhra Pradesh and initially implemented in 200 rural poorest District and later on extended throughout the country. It was started with the objectives of 100 days of wages employment in a financial year to any rural adult household willing to do unskilled work, strengthening the rural women employment by enforcing that 33 percent of the total work force should be women and equal wages to men and women. In the present paper attempt has been made to study the role of MGNREGA on the socio-economic conditions of rural women, their participation and percentage of women person days in all the Districts of Himachal Pradesh and its comparison at the national level. The primary and secondary data has been taken to draw the conclusion.

KEYWORDS

Employment, MGNREGA, Respondent, Rural area, Women.

INTRODUCTION

 r. Jean Dreze, a Belgian born economist at the Delhi School of Economics has been the major influence on the project of Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) 2005. The Act was enacted by legislation on 25th August 2005 got the assent of the President on Sept 5th and modified on Sep 7th, 2005. It was launched on 2nd Feb, 2006 from Anantapur in Andhra Pradesh and initially implemented in 200 rural poorest Districts extended to an additional 113 rural districts on 1st April, 2007, 17 more districts were notified on May 15, 2009 and remaining districts were covered under the scheme from 1st April 2008. It was renamed on the birthday of the father of the nation on 2nd October, 2009 as Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

OBJECTIVES OF MGNREGA

MGNREGA the poverty alleviation programme of the Govt. is a tool of economic and social change in rural areas under which equal wages are paid to all workers without any discrimination of caste or gender. It has following main objectives.

- To enhancing the livelihood security of the people in rural areas by guaranteeing 100 days of wages employment in a financial year.
- Empowering of rural women, SC and ST.
- Poverty alleviation and promoting social security.
- To create durable assets and strengthening the livelihood base of the rural poor people, stopping soil erosion, increasing land productivity and solving water shortage problem.
- Strengthening natural resource management.
- Restoration and maintenance of ecological infrastructure
- To reduce rural-urban migration.
- Strengthening grass root process of democracy, transparency and accountability in governance.
- To have multiplier effects in the overall development of the rural economy.

OBJECTIVES OF THE STUDY

- To study the socio-economic impact of MGNREGA on women in rural area in Kangra District of H.P.
- To study the women participation and their share in total person days generated under MGNREGA in H.P.

METHODOLOGY

In the present study primary and secondary data has been used. The primary data has been collected through the questionnaire by direct interactions with the respondents. A sample of 200 women from the 10 panchayat in Kangra District has been taken.

LIMITATIONS

There is some variation in the official data in the different official reports that can lead to very little variation in the percentages. The education level of the women at work site also stand upto some extent in the way of understanding the question properly and due to which sometime the desired level of detail information could not be obtained.

H.P. AT A GLANCE

Himachal Pradesh is a beautiful land and inhabited by people of various caste, creed and religions group. H.P. came into being on April 15, 1948 as a centrally administered territory by integrating of 30 erstwhile provincely states and attained statehood on 25th Jan. 1971 as 18th state. H.P. is the composition of 12 districts, 82 tehsils, 35 sub-tehsils, 77 blocks, 3243 panchayats. Out of the total population of the state 6856509, 50.67 percent are males and 49.33 percent are females. The literacy rate of the state is very high i.e. 83.78 percent of which 90.83 percent males and 76.60 percent females.

MGNREGA IN HIMACHAL PRADESH

MGNREGA was implanted in HP in three stages. In the first phase MGNREGA was introduced in Chamba and Sirmour Districts on 2nd Feb. 2006 along with 200 districts on national level. In the second phase it was extended to Kangra and Mandi Districts from April 1, 2007 and in the third phase it cover all the districts of the state from April 1 2008.

In the first year of the scheme 99446 job cards were issued out of which 67187 households demanded work and number of household provided employment was 63514 and there were only 16815 household who has completed 100 days of employment in a financial year. There is more than 11 times increase in the number of job card issued and increase in women, SC and ST person days but there is decrease in the average person days from 47 in 2006-07 to 40 in 2012-2013. It shows that scheme is not able to achieve the desired goals, but it is true that it has provided jobs to many households in rural area which is an impressive achievement.

TABLE NO. 1: OVERVIEW OF MGNREGA IN HP

	2006-07	2012-13
Job card issued	99,446	11,26,008
Job demanded	67,187	5,00,991
Job provided	63,514	4,49,581
No. of household completed 100 days of employment	16,815	13,842
Average person days per household	47	40
Women person days	3.66 lacs	103.41 lacs
SC person days	9.09 lacs	51.07 lacs
ST person days	6.70 lacs	12.48 lacs
Disabled persons	14,999	1737
Centre release (Lakh)	4207.04	32,13.4
No. of work started	8726	35093
No. of work completed	4722	6203

Source: MGNREGA Annual Reports 2006-07 to 2012-13.

ENCOURAGING FACTORS

There are various factors which encourage the rural women to make their presence in maximum in MNREGA such as:-

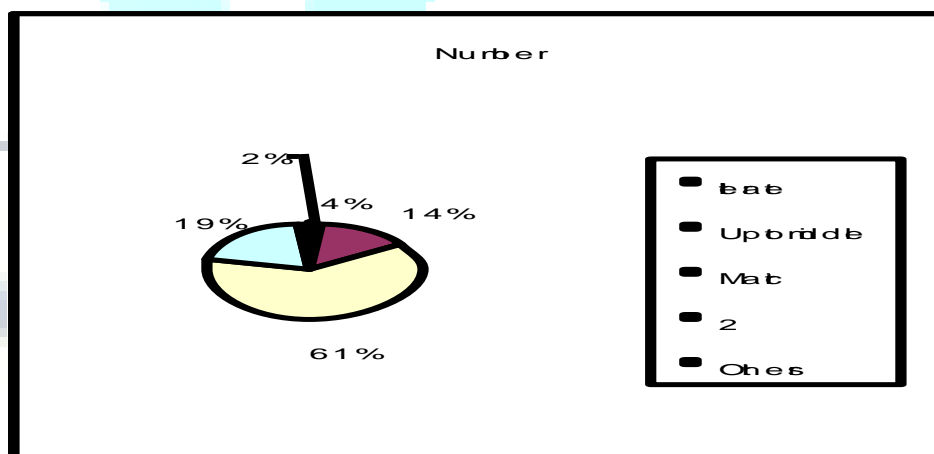
- Work not required technical and managerial skill and special knowledge.
- Employment opportunities with in small radius of local panchayat or at door-step.
- Equal wages to men and women.
- Opportunity of economically empowerment of women of rural area especially in marginalized group.
- Internal motivation to raise the standard of living of the family and self status in the society.
- Timely payment.
- Encouragement and mobilization by SHG, NGO, social movements and involvement of active youth groups.
- Increase in the wages with price index.
- Higher wages than market wages for women.
- Absence of contractors.
- Weak financial position.
- Delay/cut in payment of wages by contractors or land lords.
- Support from the family members i.e. husband and elders.
- Free hours at home.
- Flexibility in choosing period and months of employment.
- 50 percent woman panchayat representatives.
- Exploitive working condition in the private labour market.
- Free from caste and community based restrictions.
- Feasible, safe, socially acceptable and dignified work at work place.
- No migration from one place to another and humiliating conversation for work..

EDUCATION LEVEL OF THE WOMEN RESPONDENTS

The literacy rate of the women in the Kangra district is 80.62 percent as per the 2011 census. It is clear from the table that only 3.5 percent of the women respondents are illiterate and all of them are of the age group above 50 years. More than 75 percent respondents are in the age group of 30-50 years. 12 percent are above 50 years and remaining is in the age below 30 years. Majority of the respondents are married. The socio-economic conditions of the women in the sample study is relatively better as compare to the women of the other states as stated in the various studies of MGNREGA.

TABLE NO. 2: EDUCATIONAL QUALIFICATION OF WOMEN WORKERS

Sr.No	Standard	Number	%age
1	Illiterate	7	3.50
2	Upto middle	28	14.00
3	Matric	123	61.50
4	+2	38	19.00
5	Others	4	2.00
	Total	200	100.00



Source: Data through Questionnaire.

WOMEN WORKERS RESPONSE REGARDING MGNREGA

India's star programme MGNREGA has raised the confidence of the rural women who now works outside their home and enjoy equal status with their fellow men workers in the field. It has increased the scope of independent earning and they spend their self earned amount for their own needs. MGNREGA has increased the choice of women to use their earnings such as saving, better education to their children and cope up with illness. The table shows that 86 percent of the sample women workers reveal that MGNREGA has increased their confidence level and 56.5 percent felt that the act has played very important role in improving their standard of living and managing the family expenditure. It is also clear from the table that 24 percent of the sample respondents have meaning full saving after joining MGNREGA.

TABLE NO. 3: WOMEN WORKERS RESPONSE REGARDING MGNREGA

	Yes %	No %
MGNREGA has increase their confidence	172 (86.00)	28 (14.00)
MGNREGA has improve their standard of living	113 (56.5)	87 (43.5)
MGNREGA has increase their saving	48 (24.00)	152 (76.00)
MGNREGA helps provide better education to children	63 (31.50)	137 (68.50)
MGNREGA has increase their purchasing power	108 (54.00)	92 (46.00)
Delay in payment of wages	52 (26.00)	148 (72.00)
Need of crèche at workplace	08 (4.00)	192 (96.00)
Knowledge of RTI	36 (18.00)	164 (82.00)
Knowledge of minimum wages	71 (35.50)	129 (64.50)
Knowledge of unemployment allowance	73 (36.50)	127 (63.50)
No. of women bring their infants children along with them.	0	200 (10.00)
MGNREGA has affected the school going of minor children.	0 (0.00)	200 (100.00)
Whether your husband/elders stop from going to MGNREGA work	29 (14.50)	171 (85.50)
Are you receiving your wages themselves	168 (84.00)	32 (16.00)
Do you face any problem from male workers	16 (8.00)	184 (92.00)
Due you get the work with in 15 days	132 (66%)	68 (34%)
Do you got the unemployment allowance	0 (00)	68 (100.00)
Do you attend the Gram Sabha Regularly	141 (70.5)	59 (29.5)
Before MGNREGA do you have bank account in your name	48 (24.00)	152 (76.00)
Are you satisfied with wages rate provided under MGNREGA	129 (64.5)	71 (35.5)
Normal distance women workers require traveling for MGNREGA work.	Maximum 3 KM	

Source: Data through Questionnaire

There are only 4 percent women workers who have raised the problem of crèche at the work place. The level of full knowledge and awareness about the RTI, unemployment allowance and operational guidelines is low. The full knowledge/awareness about the rules and procedure of the MGNREGA among the rural women can lead to minimize the corruption and irregularities and help in realizing the true and fundamental potential of MGNREGA. On the other hand majority of the respondents have the knowledge regarding the minimum 100 days of work in a year. More than 85.5 percent of the respondents reveal that the decision to work at MGNREGA worksites was their own and supported by the family members i.e. husband and elders. Only 14.5 percent women disclose that they were denied at the earliest stage by the family members but with the passage of time their feeling towards scheme has changed.

None of the women with children under the age of five brought them at work place but left them with the elders or at anganwari which is functioning in each gram. The study of school going minor children also not affected as reported by the respondents. Before the introduction of MGNREGA the percentage of the women respondents having bank account in their own name was dismally very low i.e. only 24 percent. By opening the bank account in their own name it has encourage the rural women to take the decision to enter the sphere of cash economy. By putting cash income of their own earnings into their hands has made them more assertive and confident about their space in the public sphere. Their choice and freedom to use their earnings has increased, earliest it was restricted and very limited. Their earning now has the influence on the spending and investment decision that empower them to have their hold in the family matters. MGNREGA income may be small but it has made them independent, less dependence on spouse or family members and raised their social status and self esteem. Another important finding which has emerged from the survey that majority of the women workers receiving their wages from the counter of the bank themselves rather then through their spouse. The banking facility is easily available in the Kangra district. Only 10 percent respondents disclose that they were accompanied by their family members for receiving the payment from the bank. The self collection of the wages from the counter by the women leads to better income consumption ratio and better control. The delay in the payment of wages was also reported by 26 percent of the respondents and discloses that it become difficult for them to sustain for so longer without money. Sometime they have to make several visits or phone enquiry to the banks only to find out whether their wages have been credited into their account or not.

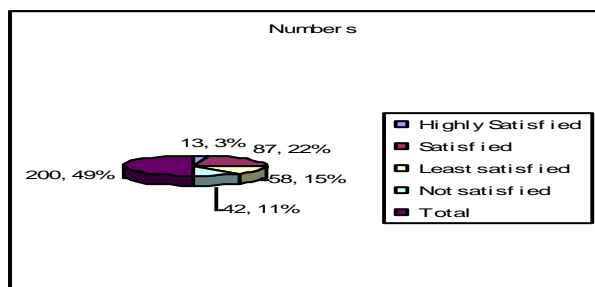
It is also disclosed by some workers that MGNREGA has provided them an opportunity to mix up with other and share their problem which leads to reduce their stress. It has made them more punctual in performing all the house hold activities before and after MGNREGA hours. 8 percent of the women also reported that they have to listen the comments of the male workers in certain works which requires more physical force or in digging work. It is also disclosed by the majority of the women respondents that they make their presence in almost all the gram sabha and raise their problem and ask the question but their involvement in management is not acceptable to the males.

There is a provision in the MGNREGA act that employment is provided with in 15 days from the date of application for employment. It is clear from the table that 66 percent of the respondents got the employment with in the stipulated period and remaining got it later. It may be the violation of the norms of the act for the short period. None of the respondent got the unemployment allowance as they were not aware of the depth of such provision in the beginning. 93 percent of the women stated that they prefer to work under MGNREGA mentally and heartily where as 7 percent disclose their disinterest may be due to their own personal reasons. 64.5 percent of the respondents are satisfied with the rate of wages under MGNREGA as something is better than nothing, where 35.5

percent stated that it is not sufficient in the present scenario of inflation. The normal distance which the women workers requires to travel for MGNREGA work is 3 KM in certain cases otherwise majority of them get the work in their own village or in adjoining village.

TABLE NO. 4: SATISFACTION LEVEL OF RESPONDENTS (ARE YOU SATISFIED WITH MGNREGA)

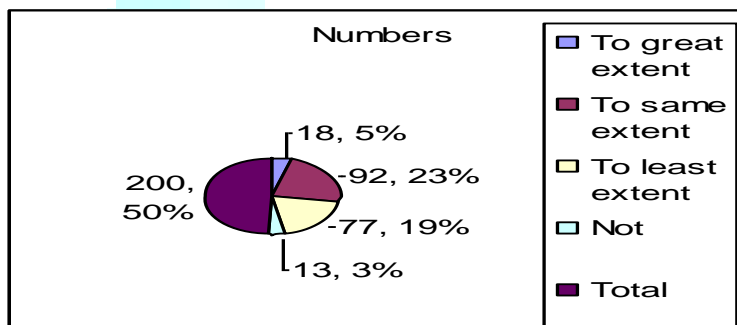
Opinion	Numbers	Percentage
Highly Satisfied	13	6.50
Satisfied	87	43.50
Least satisfied	58	29.00
Not satisfied	42	21.00
Total	200	100.00



Source: Data through Questionnaire

TABLE NO. 5: OPINION REGARDING SOCIO-ECONOMIC STANDARD OF WOMAN (WILL MGNREGA IMPROVE SOCIO ECONOMIC STANDARD OF WOMEN)

Opinion	Numbers	Percentage
To great extent	18	9.00
To same extent	92	46.00
To least extent	77	38.50
Not	13	6.50
Total	200	100.00



Source: Data through Questionnaire

From the table 4 it is clear that 6.5 percent of the respondent is highly satisfied. These are those respondents whose financial position was not upto the mark earlier and with the introduction of MGNREGA now they are earning something. 43.50 percent of the respondent has shown their response as satisfied followed by 29 percent least satisfied and 21 percent not satisfied. It is observed during the survey that the main reason behind the least or not satisfied are less number of days and lack of continuity in the working day in the era of high inflation.

It is also disclosed by the respondent that there is lot of change in the socio economic standard of the women workers and their families. It has not only increase their income, saving, standard of living etc. but also change the look of the village by developing the assets which has now started paying the dividend to the society as a whole.

6.50 percent respondent have the opinion that scheme will not have the positive impact on the socio-economic standard of the women, because of the income earned by the women from the MGNREGA activities but not allowed to spent for fulfilling their requirement or taken by the husband for drink/gambling then it is not the sign of empowering rural women.

WOMEN PERSONDAYS IN HP

The table no.6 presents the female population, literacy rate, sex ratio and percentage of women persondays through MGNREGA in the different district of H.P. The share of women in total persondays in HP was relatively low from 2006-07 to 2009-10 as compare to national average. The percentage share of the women in Kinnaur District in 2008-09 was 61.90 percent; it was bit higher as compare to other districts. But there are six districts where the average share of the women persondays was below the average. In 2009-10 Lahaul and Spiti is at the top of the ladder followed by Mandi and Kinnaur. On the other hand the share of women in total person- days was less than state average in Chamba, Sirmour, Kullu, Shimla and Solan. The highest percentage of women person days can be seen in 2010-11 in Mandi district with 66.00 percent. This is followed by Hamirpur 64.13 percent, Kinnaur 60.03 percent and Lahaul-Spiti 58.10 percent. The least percentage is shown by Sirmour with a meager 12.74 percent followed by Chamba 32.72 percent.

The figure of 2011-12 indicates an impressive participation of women in MGNREGA activities. The highest percentage of women person- days can be seen in Kinnaur 77.09 percent and this is followed by Mandi 74.69 percent and Hamirpur 74.36 percent. The lowest percentage of women persondays is represented by Sirmour again with 23.79 percent. The data pertain to 2012-13 indicates that the average women persondays in HP has increased to the national average. This is sharply a higher percentage in terms of women person days as compare to the first year of the scheme in 2006-07.

One of the remarkable conclusions that can be drawn from the data is that Chamba and Sirmour are the two districts of the state where MGNREGA was started in the beginning along with 200 districts of the country in 2006-07, the percentage of the share of the women persondays is below the average of the state in all the years.

TABLE NO. 6: FEMALE POPULATION, FEMALE LITERACY, SEX RATIO AND %AGE OF WOMEN COMMUTATIVE PERSONDAYS OUT OF TOTAL GENERATED UNDER NREGA IN HP

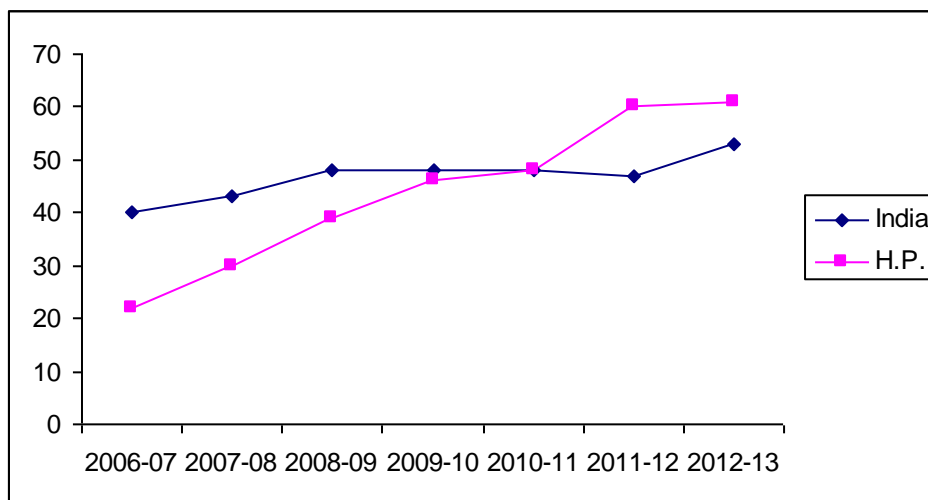
Name of the Distt.	Female population	Female literacy	Sex ratio	Percentage of Women person days				
				2008-09	2009-10	2010-11	2011-12	2012-13
Chamba	48.73	62.14	989	20.68	31.35	32.72	42.83	45.90
Sirmour	47.79	72.55	915	1.31	13.78	12.74	23.79	28.09
Kangra	50.34	80.62	1013	53.09	54.37	50.57	66.87	69.68
Mandi	50.30	74.33	1012	49.71	61.56	66.00	74.69	74.06
Bilaspur	49.53	78.70	981	28.30	43.44	51.02	56.02	55.89
Hamirpur	52.29	83.44	1096	32.85	45.08	64.13	74.36	74.11
Kinnaur	45.04	71.34	818	61.90	57.89	60.03	77.09	75.40
Kullu	48.72	71.01	950	37.72	42.96	42.17	58.36	55.79
L & S	47.81	66.50	916	39.04	64.86	58.10	68.29	65.22
Shimla	47.81	77.80	916	27.19	33.17	46.34	47.18	49.61
Solan	46.91	78.02	884	19.12	32.67	38.56	41.30	40.77
Una	49.24	81.67	977	35.41	49.29	48.73	57.74	60.55
Total	49.33	76.60	974	39.01	46.08	48.25	59.581	61.08

Source: Census 2011 and MGNREGA Annual Reports 2006-07 to 2012-13

TABLE NO. 7: WOMEN AVERAGE PERSONDAYS IN INDIA AND HP UNDER MGNREGA

Name/Years	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
India	40	43	48	48	48	47	53
HP	22	30	39	46	48	60	61

Source: MGNREGA Annual Reports 2006-07 to 2012-13



The reason may be low percentage of female population, low percentage of literacy and sex ratio, geographical conditions, lack of awareness etc. Solan and Sirmour districts where the cash crops plays very important role in the income of the household and the women may prefer to remain in their own field to nurture cash crops. On the other hand Shimla and Kullu districts are famous for their different varieties of apples and women prefer to work in the orchards rather than in MGNREGA. In the Kinnaur district where the women population percentage is least in the state but the percentage of women person days is bit higher in all the years from 2006 to 2013. Kangra and Mandi are the two leading districts of HP where the female population, literacy rate and sex ratio is above the average and percentage share of the women persondays is also higher than the average in all years.

CONCLUSION

Earlier the main reason of subjugation of the women in rural India was their economic dependence on their spouse or family members or elders. But MGNREGA has been proved as a boon for the rural women in certain ways. It has begun to make a difference in the life style of the women and their family. It has increase their income, saving, confidence level, purchasing power, standard of living self respect, command in family matter decisions, presence in queue at bank and in the gram sabha.. The unrecognized and unaccounted hours spent by the women on the unpaid work has been converted into paid hours after the introduction of MGNREGA. The impressive participation of the women in the MGNREGA has made lot of change in the traditional male dominant bishop society. Thus overall impact of MGNREGA on the life style of women is quite impressive and positive in many ways and in order to enhance it in future number of working person days for women specially may be increased to 150.

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EXAMINATION AS A DETERRENT: A CASE STUDY ON EXAMINATION PHOBIA AMONG HIGHER AND SENIOR SECONDARY LEVEL STUDENTS OF MORADABAD CITY

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ABSTRACT

Almost everyone has a crazy fear or two. Some get panicky at the thought of needles. Others screech at the sight of a mouse. Still others get unsteady when they look down from tall buildings. For most people, these fears are negligible. But for some, these fears are so brutal that they cause tremendous concern and hamper with normal day-to-day life. But here it is about another phobia which is a big concern for present and future of new generation, i.e., the fear of examination among the students of higher and senior secondary, viz., the board fever. The study was an effort to assess the thinking and opinion about the board examination and to analyze the problems and causes of examination fear among them. The data was collected from the students and the teachers of higher and senior secondary level students of Moradabad City through questionnaire. The findings of the study accounted that the fear of the examination affects the efficiency and feelings of the students. The study found several obstacles faced by students, such as time pressure, annoyance of teachers on poor performance, over expectations of the parents and punishment from them, forgetting the answers after seeing the question papers, etc. At the same time it was also identified that some students were familiar with importance of examination and taking the exam as positive chance for checking their abilities

KEYWORDS

phobia, annoyance, punishment, performance, obstacles, fear, examination, expectations, students.

INTRODUCTION

Beware the ides of March" said Shakespeare and "April is the cruellest month" wrote T.S. Eliot. For students preparing for exams has never been truer. Efforts which are made to change the thinking and behavior of individual in desired direction is termed as education process. Education now a day is becoming a regular practice for learning how to achieve the desired goal setup. Education is the process of change. It includes all those activities that make an individual to become a useful member of the society. Education system consists of different parts and all these parts together their functions a system. Curriculum, Teacher, Students and Examination are its major parts. From ancient times till date, examinations have remained a part of the educational system. It has been the only source of measuring the abilities of the students. Education is the process of analysis, identification, evaluation and interpretation in any academic evolution conducted to measure and assess the students' academic performance. Examination plays a vital role in order to assess the abilities of students through which teachers can also analyze the strengths and weaknesses of students. It is the only tool for the evaluation of different aspects related to teaching learning process. It is a source of inspiration for students to do well in examination and get praise from the teachers and parents.

Although examinations are necessary and no educational system can be complete without examination, at the same time it is an admitted fact some students get fearful of examination. Some fall ill before starting of examination due to fear of examination. For students' fear of examination psychologists use different terms like Examination Phobia, fear of exams, anxiety etc.

Phobia is a fear or anxiety disorder which gives birth to panic and avoidance. Exam phobia is a self damaging factor which negatively affects the performance as well as the students. The student is not able to give the productivity as desired and results in critical. It is generally believed that phobia occur when the fear is resulted by an original threatening situation is transmitted to another similar situation. There are number of factors, which lead to examination phobia among the secondary and senior secondary levels of students. Most of the students fear that examination may cut down their efficiency and they cannot perform well in examination according to their knowledge and abilities. They suffer from exam fever which makes failing and contemptuous against exam. Some students experience genuine, deep-rooted problems in examination such as their mind goes blank, they gets the shakes, their hands go numb etc.

STATEMENT OF THE PROBLEM

The problem under investigation was to find out the problems and the causes of fear in the examination which leads to examination phobia among the students of secondary and senior secondary level in Moradabad City.

OBJECTIVES OF THE STUDY

The objectives of the study were:-

1. To find out the causes and problems faced by the students for fear of examination
2. To find out the effects of examination phobia among the students.
3. To find out the effect of fear of punishment by parents for not getting good marks in performing well
4. To find out the perception of teachers towards the examination phobia among the students.
5. To analyze the causes relating to fear of examination among the students.

HYPOTHESIS

H1: There are no problems faced by the students for fear of examination.

H2: There is no effect of examination phobia among the students.

H3: There is no effect of punishment pressure in performing as per efficiency.

H4: Teachers perception is negative towards the effect of examination phobia among the students.

H5: There are no causes related to the fear of examination in students.

METHODOLOGY

The study is descriptive in nature.

Population of the Study: - 20 Schools of Moradabad City

Sample Unit: - Students and Teachers of Secondary and Senior Secondary Level.

Sample Size: - Total 400 (300 student respondents and 100 teacher respondents).

DATA COLLECTION METHODS

Through questionnaire prepared by the researchers and got it filled by the respondents.

STATISTICAL TOOLS APPLIED

Chi-square Test (for testing the hypo) through SPSS

ANALYSIS OF RESPONSE OF RESPONDENTS ON THE SUBJECT OF THE EFFECT OF EXAMINATION PHOBIA ON PERFORMANCE**TABLE 1: DO THE FEAR OF EXAMINATION EFFECTS THE PERFORMANCE OF YOU/STUDENTS?**

Answers * Respondents Cross tabulation					
			Respondents		Total
			Students	Teachers	
Answers	At All Times	Count	120	20	140
		Expected Count	105.0	35.0	140.0
	Frequently	Count	75	26	101
		Expected Count	75.7	25.3	101.0
	Not At All	Count	58	34	92
		Expected Count	69.0	23.0	92.0
	Occasionally	Count	47	20	67
		Expected Count	50.3	16.7	67.0
Total		Count	300	100	400
		Expected Count	300.0	100.0	400.0

Chi-Square Tests		
	Value	d.f.
Chi-Square	16.456	3

Table 1 shows that the table value of χ^2 is 7.82 at d.f. 3 and 5% significance level is less than the calculated value of χ^2 that is 16.456 which states the hypothesis that the fear of examination does not effects the performance of the students is false and fear of examination causes phobia proves true.

TABLE 2: DO YOU/STUDENTS ALWAYS FEEL NERVOUS BEFORE TAKING EXAMS?

Answers * Respondents Crosstabulation					
			Respondents		Total
			Students	Teachers	
Answers	At All Times	Count	49	29	78
		Expected Count	58.5	19.5	78.0
	Frequently	Count	92	27	119
		Expected Count	89.3	29.8	119.0
	Not At All	Count	64	20	84
		Expected Count	63.0	21.0	84.0
	Occasionally	Count	95	24	119
		Expected Count	89.3	29.8	119.0
Total		Count	300	100	400
		Expected Count	300.0	100.0	400.0

Chi-Square Tests		
	Value	d.f.
Chi-Square	8.055	3

Table 2 shows that the table value of χ^2 is 8.055 at d.f. 3 and 5% significance level is less than the calculated value of that is 46.07 which states that the hypothesis that students does not feel nervous before taking exams is false and nervousness causes exam phobia proves true.

TABLE 3: DOES THE LIMITED TIME PRESSURE TO ATTEMPT AN EXAM QUESTION CAUSES TO DO WORST?

Answers * Respondents Cross tabulation					
			Respondents		Total
			Students	Teachers	
Answers	At All Times	Count	44	29	73
		Expected Count	54.8	18.3	73.0
	Frequently	Count	85	27	112
		Expected Count	84.0	28.0	112.0
	Not At All	Count	64	20	84
		Expected Count	63.0	21.0	84.0
	Occasionally	Count	107	24	131
		Expected Count	98.3	32.8	131.0
Total		Count	300	100	400
		Expected Count	300.0	100.0	400.0

Chi-Square Tests		
	Value	d.f.
Chi-Square	11.671	3

Table 3 shows that the table value of χ^2 is 7.82 at d.f. 3 and 5% significance level is less than the calculated value of that is 11.671 which states that the hypothesis of time pressure does not causes to do worst proves wrong and time pressure to attempt an question causes exam phobia proves true.

TABLE 4: YOUR/STUDENTS EFFICIENCY IS EFFECTED BY FEAR OF PUNISHMENT THAT WILL BE IMPOSED BY PARENTS ON NOT GETTING GOOD MARKS?

Answers * Respondents Cross tabulation					
			Respondents		Total
			Students	Teachers	
Answers	At All Times	Count	51	32	83
		Expected Count	62.3	20.8	83.0
	Frequently	Count	78	21	99
		Expected Count	74.3	24.8	99.0
	Not At All	Count	91	23	114
		Expected Count	85.5	28.5	114.0
	Occasionally	Count	80	24	104
		Expected Count	78.0	26.0	104.0
Total	Count	300	100	400	
	Expected Count	300.0	100.0	400.0	

Chi-Square Tests		
	Value	df
Chi-Square	10.510	3

Table 4 shows that the table value of χ^2 is 7.82 at d.f. 3 and 5% significance level is less than the calculated value of that is 10.510 which states that the hypothesis the students efficiency of students by fear of punishment that will be imposed by parents does not causes fear proves wrong and the fear of punishment by parents causes exam phobia proves true.

TABLE 5: DO YOU/STUDENTS HAVE FEAR THAT TEACHER'S WOULD BE ANNOYED ON GETTING LOW GRADES?

Answers * Respondents Cross tabulation					
			Respondents		Total
			Students	Teachers	
Answers	At All Times	Count	107	19	126
		Expected Count	94.5	31.5	126.0
	Frequently	Count	76	38	114
		Expected Count	85.5	28.5	114.0
	Not At All	Count	45	14	59
		Expected Count	44.3	14.8	59.0
	Occasionally	Count	72	29	101
		Expected Count	75.8	25.3	101.0
Total		Count	300	100	400
		Expected Count	300.0	100.0	400.0

Chi-Square Tests		
	Value	df
Chi-Square	11.629	3

Table 5 shows that the table value of χ^2 is 7.82 at d.f. 3 and 5% significance level is less than the calculated value of that is 11.629 which states that the hypothesis the students efficiency is not effected by fear of teacher's annoyance on getting low grades proves wrong and the fear of annoyance of teacher's causes exam phobia proves true.

TABLE 6: DOES TOUGH COMPETITION AMONG CLASS FELLOWS CAUSES FEAR OF EXAM?

Answers * Respondents Cross tabulation					
			Respondents		Total
			Students	Teachers	
Answers	At All Times	Count	44	29	73
		Expected Count	54.8	18.3	73.0
	Frequently	Count	83	18	101
		Expected Count	75.8	25.3	101.0
	Not At All	Count	84	26	110
		Expected Count	82.5	27.5	110.0
	Occasionally	Count	89	27	116
		Expected Count	87.0	29.0	116.0
Total	Count	300	100	400	
	Expected Count	300.0	100.0	400.0	

Chi-Square Tests		
	Value	df
Chi-Square	11.511	3

Table 6 shows that the table value of χ^2 is 7.82 at d.f. 3 and 5% significance level is less than the calculated value of that is 11.511 which states that the hypothesis the students efficiency is not effected by tough competition among class fellows proves wrong and the fear of competition causes exam phobia proves true.

TABLE 7: IN EXAM YOU/STUDENTS FORGET THE ANSWERS OF SOME QUESTIONS DUE TO FEAR OF EXAMINATION?

Answers * Respondents Cross tabulation					
			Respondents		Total
			Students	Teachers	
Answers	At All Times	Count	84	26	110
		Expected Count	82.5	27.5	110.0
	Frequently	Count	84	27	111
		Expected Count	83.3	27.8	111.0
	Not At All	Count	49	29	78
		Expected Count	58.5	19.5	78.0
	Occasionally	Count	83	18	101
		Expected Count	75.8	25.3	101.0
Total	Count	300	100	400	
	Expected Count	300.0	100.0	400.0	

Chi-Square Tests

	Value	df
Chi-Square	9.083	3

Table 7 shows that the table value of χ^2 is 7.82 at d.f. 3 and 5% significance level is less than the calculated value of that is 9.083 which states that the hypothesis the students does not forgets answers due to fear of examination proves false and the fear of exam causes phobia proves true.

TABLE 8: DO THE FEAR OF BEING RETAIN IN THE SAME CLASS CAUSES FEAR OF EXAM?

Answers * Respondents Cross tabulation					
			Respondents		Total
			Students	Teachers	
Answers	At All Times	Count	81	17	98
		Expected Count	73.5	24.5	98.0
	Frequently	Count	77	29	106
		Expected Count	79.5	26.5	106.0
	Not At All	Count	51	33	84
		Expected Count	63.0	21.0	84.0
	Occasionally	Count	91	21	112
		Expected Count	84.0	28.0	112.0
Total		Count	300	100	400
		Expected Count	300.0	100.0	400.0

Chi-Square Tests

	Value	df
Chi-Square	14.852	3

Table 8 shows that the table value of χ^2 is 7.82 at d.f. 3 and 5% significance level is less than the calculated value of that is 14.852 which states that the hypothesis the students do not fear of being retain in the same class due to fear of examination proves false and the fear of retaining causes phobia proves true.

TABLE 9: DOES POOR PREPARATION FOR EXAMINATION UPSETS YOU/STUDENTS?

Answers * Respondents Cross tabulation					
			Respondents		Total
			Students	Teachers	
Answers	At All Times	Count	122	34	156
		Expected Count	117.0	39.0	156.0
	Frequently	Count	88	32	120
		Expected Count	90.0	30.0	120.0
	Not At All	Count	21	19	40
		Expected Count	30.0	10.0	40.0
	Occasionally	Count	69	15	84
		Expected Count	63.0	21.0	84.0
Total		Count	300	100	400
		Expected Count	300.0	100.0	400.0

Chi-Square Tests

	Value	df
Chi-Square	14.118	3

Table 9 shows that the table value of χ^2 is 7.82 at d.f. 3 and 5% significance level is less than the calculated value of that is 14.118 which states that the hypothesis poor preparation does not causes fear of examination proves false and poor preparation causes phobia proves true.

TABLE 10: DO YOU THINK EXAM IS NECESSARY FOR ASSESSMENT OF ABILITIES OF YOU/STUDENTS?

Answers * Respondents Cross tabulation					
			Respondents		Total
			Students	Teachers	
Answers	At All Times	Count	134	36	170
		Expected Count	127.5	42.5	170.0
	Frequently	Count	83	31	114
		Expected Count	85.5	28.5	114.0
	Not At All	Count	19	17	36
		Expected Count	27.0	9.0	36.0
	Occasionally	Count	64	16	80
		Expected Count	60.0	20.0	80.0
Total		Count	300	100	400
		Expected Count	300.0	100.0	400.0

Chi-Square Tests

	Value	df
Chi-Square	12.166	3

Table 10 shows that the table value of χ^2 is 7.82 at d.f. 3 and 5% significance level is less than the calculated value of that is 12.166 which states that the hypothesis exam is not necessary for assessment of abilities of students false and exam is the vital source of assessing the students ability proves true.

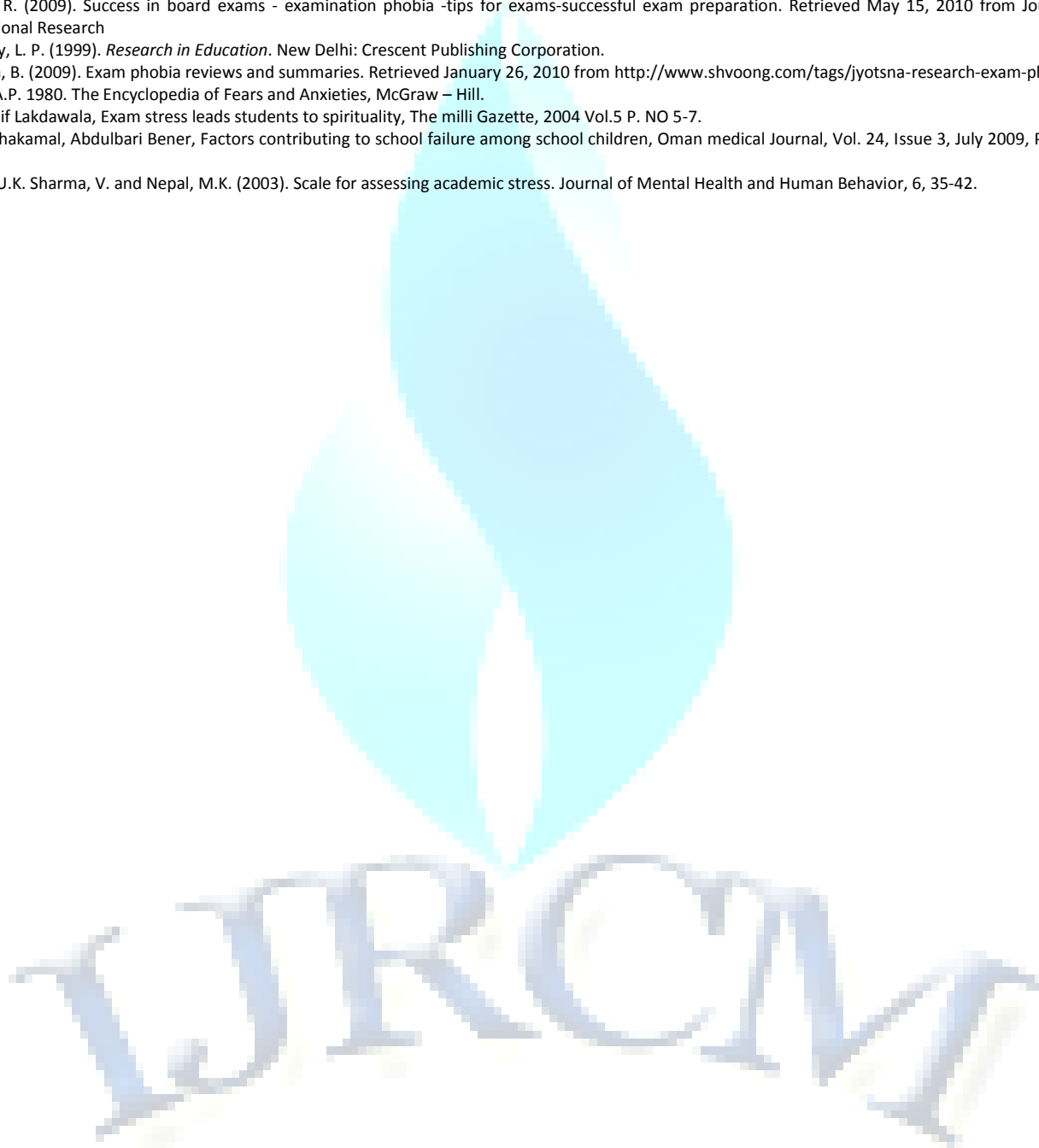
CONCLUSION & SUGGESTIONS

As per the research which resulted in having great effect of examination fear and its phobia due to various reasons cited above the tables, students are advised that a month or two before exam will not suffice for right preparation for the final examination. Here are some tips to help those students who suffer from such phobia. Prepare a time chart including all subjects. Shed unwanted things. Identify most important topics. Discuss with your teacher, your parents about your strengths and weaknesses. Concentrate on your weaknesses by allotting more time in your time chart for the subjects of importance. At the same time strengthen your strong areas, don't loose confidence on yourself. Develop your self-esteem. Do not postpone your studies. Prepare a time management schedule. Prepare your strength and weaknesses record. Concentrate on your weaknesses strengthen your strong areas. Aware of the blue print of the question paper-number of questions, types of questions, nature of questions and marks allotment. Don't entertain the horrible fear of 'I can't'. Develop positive attitude 'I can' and 'I will'. Start learning, build confidence, and destroy fear. "EXAM—BHOOT-is nothing but a syndrome. It has no place in students who have self confidence. So what are you afraid of? Doubts lead to failure. So, develop a positive thinking & succeed". Don't go on the rumors spread by others about what they had gone though. Don't be shy of expressing your doubts with parents and teachers. Make yourself comfortable by analyzing the things around you. Read

the question paper thoroughly and then start writing the answers. Forget about the result while attempting examination which will relax you most. Don't get shattered by those questions for which you are not prepared and just go on with your answers confidently. Leave the previous practice faults behind and think positively. Tell yourself that you are doing right and your answers will match at the end. Overcome your fear by your way. It will come but don't let it be so strong that it may lead you to worst situation, once you start gaining confidence in yourself then no fear can get pass through you.

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SOCIO-ECONOMIC SEGMENTATION OF THE HOUSEHOLDS OF AUTO RICKSHAW OWNERS: A CASE STUDY OF TRIPURA

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ABSTRACT

This paper is an attempt to segment the family of the auto rickshaw owners in Tripura based on The New Socio-Economic Classification where Education of the chief wage earner of the household and Number of Consumer Durables (from a pre-determined list of eleven items ranging from 'Electricity Connection' and 'Agricultural Land' to cars and air conditioners) are the basis for segmentation. A total 2750 (10% of registered under all vehicle registration office) numbers of auto rickshaw owners in Tripura are selected as samples and they were approached for the purpose of collecting data. Data analysis reveals that, majority of the auto rickshaw owners in Tripura are in the socio-economic segment C, followed by segment B and segment E. Majority of the households of the auto-rickshaw owners in Tripura own three durables named electricity connection, ceiling fan and color TV. Except these, other two most penetrated durables are LPG Stove and Refrigerator.

JEL CODE

M31

KEYWORDS

Marketing, Segmentation, Socio-Economic classification, The New Socio-Economic Classification System, Auto-rickshaw Owners in Tripura.

INTRODUCTION

Over the years, the process of carrying out marketing activities has undergone a sea change. From the practice of mass market targeting with the help of standardized product, marketing practices now shifted to segment targeting with customized offerings. Even some companies have moved from segment marketing to individual marketing. Thus the practice of marketing activity becomes more and more customer focused. Socio-economic segmentation divides the heterogeneous market composition into various somehow homogeneous composition based on social and economic parameters of the consumers. This paper is an attempt to further segment the auto rickshaw owners in Tripura to get finer and precise sub-segments based on socio-economic parameters. The tools that is used for this purpose is the New Socio- Economic Classification (SEC) given by Media Research Users Council (MRUC) and the Market Research Society of India (MRSI).

REVIEW OF LITERATURE

ABOUT CONSUMER SEGMENTATION

Market Segmentation is the grouping of consumer with similar needs and buying behavior into various strata, each of which can be reached by unique marketing programme. Segmentation tries to reconcile differing customer needs with limited company resources and allows product and market offerings to be adjusted to suit different customer groups (Wind, 1978). Economic pricing theory (profits can be maximized when the set prices discriminates segments) forms the basis of market segmentation (Frank et al, 1972). According to Kotler (1994), companies across industries are gradually moving towards target marketing. As a result, marketing practice is shifting from "Mass Marketing" (where one product is produced and sold to all buyers) to "product differentiated marketing" (where more than one product with different features, styles, and characteristics are produced to offer to a variety of buyers). The logic behind target marketing is that customers are heterogeneous in their buying requirements and behavior and therefore companies will be in a stronger position to serve certain customer segments rather than mass market.

The marketing literatures (Kotler, 1994; Wind, 1978 ;) suggest that segmentation leads to more satisfied customers because it offers practitioners a number of clear benefits including:

- Improved understanding of customer needs
- More appropriate resource allocation
- Clearer identification of market opportunities
- Better turned and positioned marketing programmes.

The concept of market segmentation was first introduced by Wendell Smith (1956, p.7) with the logic that goods would find their markets of maximum potential as a result of recognition of differences of market segments. Since then, market segmentation has become a core concept both in marketing theory and real-world applications (Dibb, 1995; Rao & wang, 1995). Market segmentation can be defined as the "process of sub-dividing a market into distinct subsets of customers that behave in the same way or have similar needs. Each subset may conceivably be chosen as a market target to be reached with a distinctive marketing strategy" (Bennett, 1995; pp.165-166). Segmentation helps to homogenize market heterogeneity by means of dividing a heterogeneous market into relatively homogeneous segments and designing a marketing mix for each of the segments that is attractive to the firm with the aim of better meeting these customers' needs (McDaniel, 1982).

ABOUT SOCIO-ECONOMIC CLASSIFICATION

The Socio-Economic Classification is the classification of Indian consumers on the basis of certain parameters. Traditionally the two parameters used to categorize the consumers were: Occupation and Education of the chief wage earner (Head) of the households. The Socio-Economic Classification, created in the year 1988, was ratified by Market Research Society of India, is used by most media researchers and brand managers to understand the Indian consuming class. Originally developed by IMRB International as a way of understanding market segments and consumer behavior it was standardized and adopted by MRSI in the

mid-1980 as a measure of Socio-economic class and is now commonly used as a market segmentation tool in India. The older Socio-Economic Classification consists of two grids:

- The urban SEC grid, which uses education levels and occupational criteria of the chief wage earner (CWE) of a household as measures to determine socio-economic classification and segments urban India into seven groups (A1 to E2).
- The Rural SEC Grid, which uses education and the type of house (Pucca, Semi-Pucca, Katcha) as measures of Socio-Economic class, and segments rural India into four groups (R1, R2, R3 and R4).

This classification is based on the assumption that higher education leads to higher income thus higher consuming potential which may not be true always.

The new SEC system to classify households in India is based on two variables: 'Education of the chief wage earner of the household' and 'Number of Consumer Durables (from a pre-determined list of eleven items ranging from 'Electricity Connection' and 'Agricultural Land' to cars and air conditioners. The new SEC system, aimed at sharper classification of consumer households, brings both the Urban and the Rural consumers on one table and classifies households by using two parameters – education of the chief wage earner in the household and the number of assets owned (out of a pre-specified list of eleven assets). Based on these parameters each household will be classified in one of the twelve (12) SEC groups. The new SEC categorizes the households into twelve grades based on education of the chief wage earner of the household and the number of consumer durables (from a specified list of durables) ranging from A1 to E3. "The new SEC system promises to be more accurate, a lot of marketers felt that SEC system built in the 1980's has changed as the consumers have greatly evolved since then. This new system based on the two additional parameters will bring sharper discrimination and the much desired single system for the country" – said Lloyd Mathias, Chairman, MRUC (also president, corporate training, TATA Teleservices. "It is a significant step forward in the way we look at consumers. The older system no longer captures the consumer patterns as robustly" – said R.Gowthaman, MD, Mindshare India. "A Uniform yardstick for urban and rural landscape is a good step. While the team must have done enough permutation and combination to include education and durable ownership, I am curious why occupation was eliminated from the equation, as it would have created a more granular segmentation. The concern here is that mix of durables will keep changing and then the samples will not be strictly comparable," – opines Nandini das, COO, Lodestar UM. The new SEC system categorizes the households of India into A1 (.4%), A2(1.8%), A3(3.2%), B1(4.3%), B2(5.3%), C1(7.5%), C2(7.9%), D1(11.4%), D2(14.7%), E1(18.4%), E2(15.3%) and E3 (9.7%)...(by using data from IRS 2008 round20, while drawing a sub-sample of 39,441. The current Urban SEC System has 8 grades and it is based on occupation and education of the chief wage earner. The Urban classification as per current SEC is A1 (2.8%), A2 (6.6%), B1 (7.9%), B2 (8%), C (20.5%), D (24%), E1 (11.9%) and E2 (18.2%). Whereas the new SEC ensures, A1 (1.1%), A2(5.1%), A3(7.6%), B1(8.6%), B2 (10.2%), C1(12.9%), C2(11.6%), D1(13.2%), D2(12.6%), E1(9.8%), E2(4.7%), E3(2.6%). The current rural SEC System has four grades and is based on education of the chief wage earner and the materials used in construction of dwelling. Based on current rural SEC System the rural categorization of households are R1 (4.3%), R2 (12.3%), R3 (40.3%) and R4 (43%). The new SEC classification categorizes the rural consumers as A1(.04%), A2(.4%), A3(1.3%), B1(2.3%), B2(3.2%), C1(5.1%), C2(6.2%), D1(10.7%), D2(15.6%), E1(22.2%), E2(20.1%) and E3(12.8%).

The new SEC system has following advantages over the current SEC system:

- More discrimination as compared to the current SEC system.
- Less subjectivity – as occupation is no longer used.
- It's simple, easy to answer, not very time consuming and easy to classify.

A minor problem that can appear with the new SEC system is to handle minor changes to the system because 'consumer durables' penetration will change faster than education or occupation.

The new SEC system was created from extensive analysis based on the data from the IRS, made available by the MRUC-various rounds, from 2005 to 2008 along with data from Market Pulse, IMRB's Household Panel, supplemented by a special survey.

NEW SEC CATEGORIZATION ENDS URBAN-RURAL DIVIDE IN CONSUMER PROFILING

"The small town and rural India becomes an important contributor to the consumption story of India over the last two decades. There is a need for a single classification for both urban and the rural" – says Thomas Puliyl, President, IMRB International. "The new SEC System will measure the consumption pattern of households more sharply as a result of which there will be better delivery of products" – an HUL official stated while welcoming the new SEC Categorization. "Marketers were already taking account the changes in the demography such as the shift from saving to spending, especially among the affluent consumers. The new generation of affluent consumers has the propensity to spend today and the industry is aware of these changes. The New SEC Classification will help in bringing about a sharper focus to the whole demographic change" – says Saugata Gupta, CEO (consumer products business) of Marico.

IMPORTANCE OF THE STUDY

This work tries to create a segmentation of the auto-rickshaw owners in Tripura based on their socio-economic profile. This segmentation of the auto-rickshaw owners will help various stakeholders to assess the socio-economic condition of the auto-rickshaw owners in Tripura. It will be a great help for the government and other public institution to formulate necessary policy and strategy for the upliftment of the auto-rickshaw owners. Again, from, marketing perspective, it will be a great source of information for various international, national and local organizations to target respective segments and position their offerings as per the requirement of the respective segments. This study also gives a clear idea regarding the number and types of durables owned by the family of the auto-rickshaw owners and the education level of the auto-rickshaw owners in the state of Tripura. Thus, this study will be a great help in assessing the durables consumption pattern by the auto-rickshaw owners family in Tripura.

STATEMENT OF THE PROBLEM

Various research agencies, consultancy companies and individual researchers have carried out their work in segmenting various consumer groups based on variables like demographic, psychographic, geographic and behavioral. These types of work were carried out across the world including India. But, no such attempt is made in micro segmenting the family of the auto-rickshaw owners in Tripura based on Socio-Economic Criteria. Thus, this report will add a fresh bunch of knowledge in the area of consumer segmentation.

OBJECTIVE OF THE STUDY

The major objective of the study is

- To segment the households of the auto-rickshaw owners in Tripura based on their socio-economic condition by using the new socio-economic classification system.

RESEARCH METHODOLOGY

RESEARCH PROCESS AT A GLANCE

At the beginning the total number of registered three wheelers under vehicles registration office, Tripura for the last ten (10) years (1.1.2002-1.5.2013) is taken into consideration for the purpose of sample selection and data collection. As of 1.5.2013, total number of registered three wheelers in Tripura stood at 27,616 no's with a further composition of 52% registered under Agartala vehicles office, 13% under Kailasahar, 20% under Udaipur, 6% under Ambassa and 9% under Dharmanagar. An overall 10% (approx.) is taken into consideration (2750) for sampling purpose. Then, as per registration percentage samples size is determined from various vehicle registration offices in Tripura. Thus total sample size from Agartala was 1435 no's, Kailasahar 341no's, Udaipur 555 no's, Ambassa 172no's and Dharmanagar 247 no's. After determining the sample size, the samples were selected by applying simple random sampling procedure from the jurisdiction of various vehicles registration office. After selecting the samples, the samples were approached with the simple questionnaire developed by MRSI & MRUC for

the purpose of categorizing the households of the auto-rickshaw drivers in Tripura. After collecting data, data were tabulated and categorized under various sub-segments i.e. A1, A2... E3 given by the new SEC System.

DESCRIPTION OF THE SAMPLE

- Total sample size: 2750
- Selection of samples:
 1. Agartala Vehicle Registration Office: 1435
 2. Kailasahar Vehicle Registration Office: 341
 3. Udaipur Vehicle Registration Office: 555
 4. Ambassa Vehicle Registration Office: 172
 5. Dharmanagar Vehicle Registration Office: 247.

- Sample selection procedure:

Simple random sampling procedure is applied for the purpose of selecting samples.

AGE PROFILE OF SAMPLES

	Below 20	20-30	30-40	40-50	Above 50
Agartala	179	535	344	205	152
Kailasahar	39	150	48	58	46
Udaipur	27	201	254	40	33
Ambassa	17	69	47	18	21
Dharmanagar	27	72	83	47	18
Total	289	1027	776	368	290
% of samples	10.5%	37.4%	28.2%	13.4%	10.5%

EDUCATION PROFILE OF THE SAMPLES

	Illiterate	Literate but no formal schooling/school up to 4 years	School 5-9 years	SSC/HSC	Some college (including a diploma not degree)	Graduate/post-Graduate (general)	Graduate/post-graduate (professional)
Agartala	118	107	227	531	324	28	Nil
Kailasahar	52	47	67	72	89	17	Nil
Udaipur	31	68	103	303	37	13	Nil
Ambassa	32	17	51	42	23	7	Nil
Dharmanagar	23	56	72	44	21	31	Nil
Total	256 (9.3%)	295 (10.7%)	520 (18.9%)	992 (36.1%)	491 (17.9%)	196 (7.1%)	0 (0%)

CATEGORY WISE COMPOSITION OF SAMPLES

	Agartala	kailasahar	Udaipur	Ambassa	Dharmanagar	Total
Tribe	446	139	186	96	125	992 (36%)
Non-Tribe	989	201	369	76	122	1757 (64%)

- Gender: Male
- Occupation: Auto rickshaw owners.
- Marital Status:

	Below 20	20-30	30-40	40-50	50 and above	Total
Married	78	589	513	319	272	1771 (64.4%)
Un-Married	211	438	263	49	18	979 (35.6%)

DATA ANALYSIS TOOLS

Data were analyzed with the help of simple statistical tools and techniques like bar diagram, percentage calculation, pie chart, simple mean calculation etc.

DATA ANALYSIS AND FINDINGS

FIG 1: OVERALL SEGMENTAL COMPOSITION OF THE HOUSEHOLDS OF AUTO-RICKSHAW OWNERS IN TRIPURA

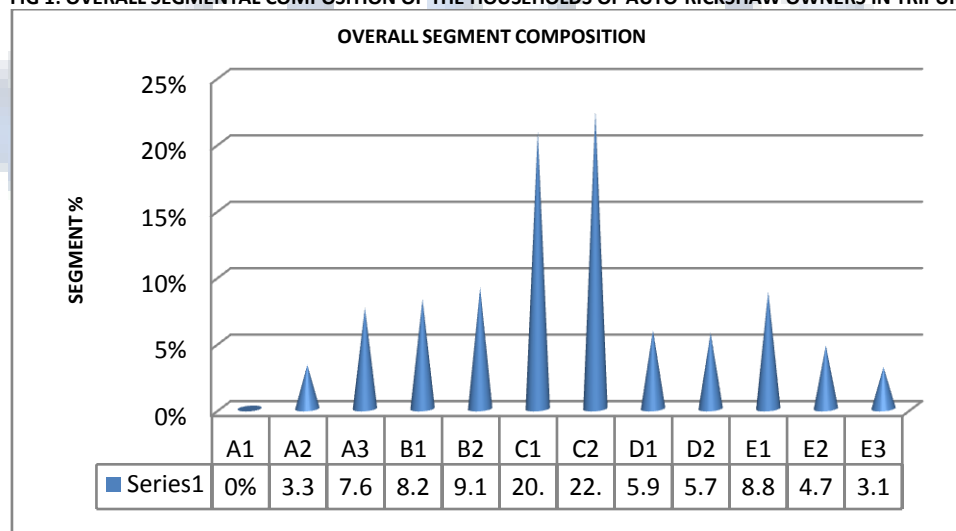


Figure1 reveals that, majority of the households of the auto-rickshaw owners lie in the segment C ($C1+C2=43.3\%$) followed by segment B ($B1+B2=17.37\%$), E ($E1+E2+E3=16.71\%$), D ($D1+D2=11.62\%$), and segment A ($0+7.60+3.30=10.9\%$).

FIG 2: SEGMENTAL COMPOSITION OF THE HOUSEHOLDS OF AUTO-RICKSHAW OWNERS REGISTERED UNDER AGARTALA VEHICLE REGISTRATION OFFICE

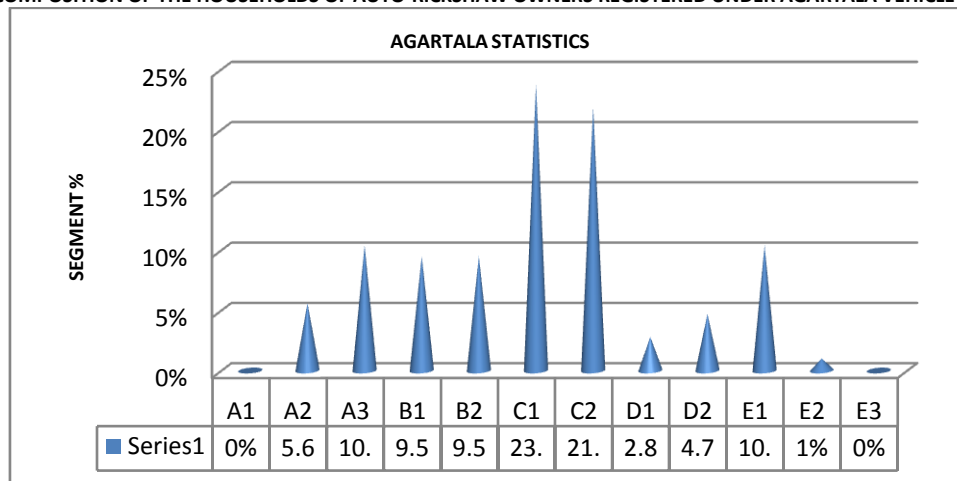


Figure2 reveals that, in case of auto-rickshaw owners registered under Agartala vehicle registration office, category C ($C1+C2=45.7\%$) has maximum number of households followed by category B ($B1+B2=19\%$), category A ($A1+A2+A3=16\%$), category E ($E1+E2+E3=11.4\%$), and category D ($D1+D2=7.5\%$). In case of agartala, no households were found in the sub-category A1 & E3. Agartala has maximum number of auto rickshaw owners in the category A2&A3 i.e. the advanced socio-economic segments.

FIG 3: SEGMENTAL COMPOSITION OF THE HOUSEHOLDS OF AUTO-RICKSHAW OWNERS REGISTERED UNDER KAILASAHAR VEHICLE REGISTRATION OFFICE.

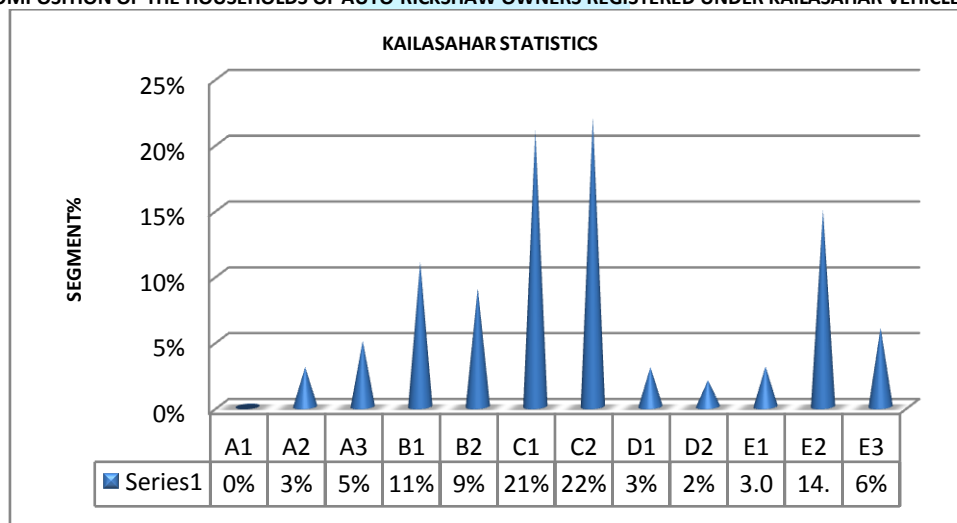


Figure3 reveals that, in case of auto-rickshaw owners registered under Kailasahar vehicle registration office, category C ($C1+C2=43\%$) has maximum number of households followed by category E ($E1+E2+E3=23.95\%$), category B ($B1+B2=20\%$), category A ($A1+A2+A3=8\%$), and finally category D ($D1+D2=5\%$). In case of Kailasahar, no households were found in the sub-category A1. Agartala has maximum number of auto rickshaw owners in the category A2&A3 i.e. the advanced socio-economic segments.

FIG 4: SEGMENTAL COMPOSITION OF THE HOUSEHOLDS OF AUTO-RICKSHAW OWNERS REGISTERED UNDER UDAIPUR VEHICLE REGISTRATION OFFICE

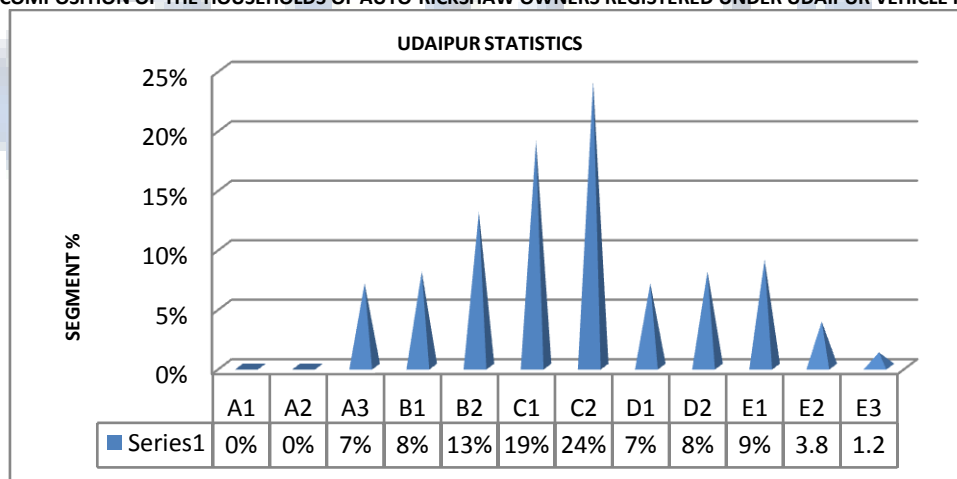


Figure4 reveals that, in case of auto-rickshaw owners registered under Udaipur vehicle registration office, category C ($C1+C2=43\%$) has maximum number of households followed by category B ($B1+B2=21\%$), category D ($D1+D2=15\%$), category E ($E1+E2+E3=14\%$), and finally category A ($A1+A2+A3=7\%$). In case of Udaipur also, no households were found in the sub-category A1&A2.

FIG 5: SEGMENTAL COMPOSITION OF THE HOUSEHOLDS OF AUTO-RICKSHAW OWNERS REGISTERED UNDER AMBASSA VEHICLE REGISTRATION OFFICE

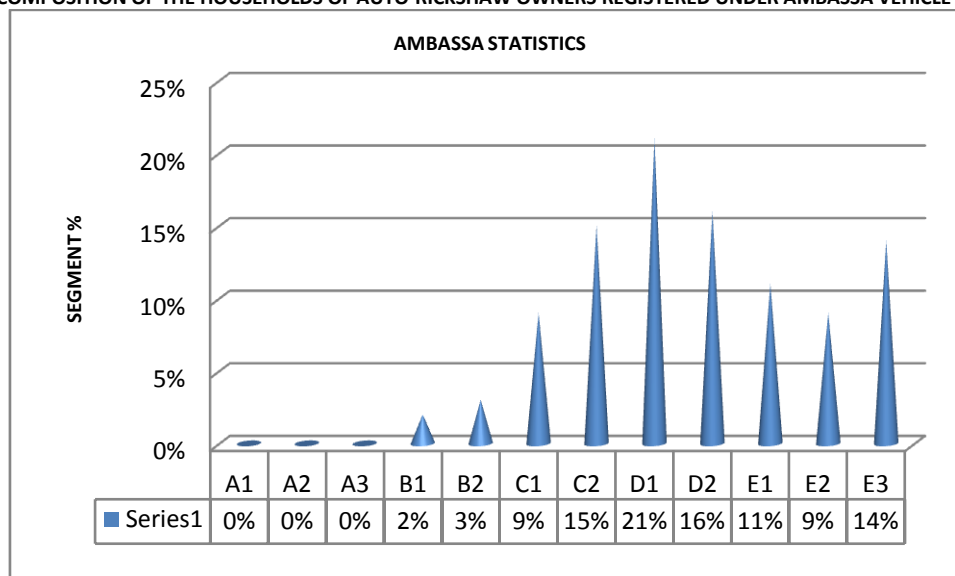


Figure5 reveals that, in case of auto-rickshaw owners registered under Ambassa vehicle registration office, category D ($D1+D2=37\%$) has maximum number of households followed by category E ($E1+E2+E3=34\%$), category C ($C1+C2=24\%$), category B ($B1+B2=5\%$). In case of Ambassa, no households were found in the category A.

FIG 6: SEGMENTAL COMPOSITION OF THE HOUSEHOLDS OF AUTO-RICKSHAW OWNERS REGISTERED UNDER DHARMANAGAR VEHICLE REGISTRATION OFFICE

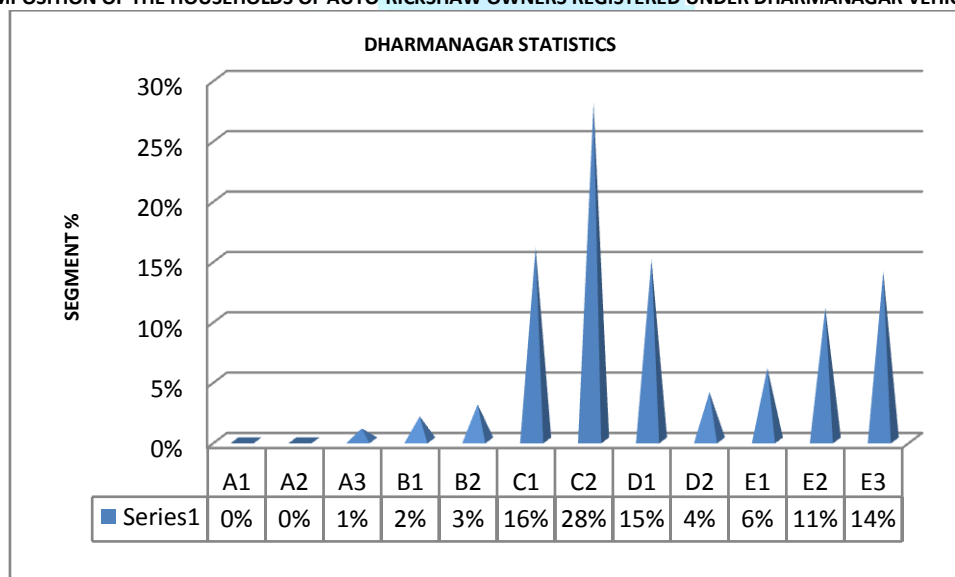


Figure6 reveals that, in case of auto-rickshaw owners registered under Dharmanagar vehicle registration office, category C ($C1+C2=44\%$) has maximum number of households followed by category E ($E1+E2+E3=31\%$), category D ($D1+D2=19\%$), category B ($B1+B2=5\%$), and finally category A ($A1+A2+A3=1\%$). In case of Dharmanagar also, no households were found under sub-category A1&A2.

OVERALL FINDINGS

- Among 2750 households, majority of the sample households in Tripura falls in the socio-economic segment C with a sub-segment composition of C1 (20.9%) and C2 (22.4%). Socio-economic segment B has maximum number of households after Segment C with a sub-segment of B1 (8.25%) and B2 (9.12%). After segment C and Segment B, next segment is segment E with sub-segment composition of E1 (8.83%), E2 (4.76%) and E3 (3.12%). Segment E is followed by Segment D with sub-segment composition of D1 (5.92%) and D2 (5.70%). In segmental composition, segment A has minimum number of households with a sub-segment composition of A1 (0%), A2 (3.3%) and A3 (7.6%).
- On the educational profile, no auto-rickshaw owners were found post-graduate general degree holders or graduate/post-graduate professional/technical degree holders. Majority of the auto-rickshaw owners were in the category of educational qualification up to SSC/ HSC (36.07%), followed by schooling 5-9 years (18.9%), followed by some colleges including a diploma but not a degree (17.85%), then literate but no formal schooling/schooling up to 4 years (9.3%) and finally general graduate degree holders (7.12%).
- Majority of the owners of auto-rickshaw belongs to non-tribe community in Tripura (64% of overall samples) followed by Tribal community (36%).
- On marital status, 64.4% of the auto rickshaw owners are married. Majority of the auto rickshaw owners above age 20 years or more are married. The marital status composition of the sample is below 20 years (26.98%), 20-30 years (57.35%), 30-40 years (66.13%), 40-50 years (86.68%), and 50 & above (94.82%).
- Majority of the households of the auto rickshaw owners own three to five numbers of durables with them having maximum households with four durables. Maximum penetrated durables among the households of the auto rickshaw owners are electricity connection, ceiling fan, color TV, and LPG Stove and refrigerator.

CONCLUSION

This study concludes that, majority of the family of the auto-rickshaw owners in Tripura falls into the socio-economic segment C, followed by segment B and segment E. Majority of the households of the auto-rickshaw owners in Tripura own three durables named electricity connection, ceiling fan and color TV. Except these, other two most penetrated durables are LPG Stove and Refrigerator. On education front, majority of the auto rickshaw owners have educational qualification up to SSC/HSC.

LIMITATIONS OF THE STUDY

This study has some limitations associated with it as follows:

- Some households were found where the owner rented the auto rickshaw and also involved in other sources of income generation. Again, some families were found where there are multiple sources of income. These situations may work as limitations for the study.
- A fear from the respondents in disclosing the actual number of durables owned by them in some cases may work as limitation in segmenting the households of the auto rickshaw owners (though possible measures have been taken during collection of data from the respondents).

SCOPE OF FUTURE RESEARCH

Some of the future scopes of the research work are

- Application of the work to segment other categories like teaching professionals, self-employed people in the same state or other states in India. The same work may be undertaken in other states of India.
- The detailed study of various segments of auto-rickshaw owners in parameters like FMCG (fast moving consumer goods) consumption pattern, decision criteria while purchasing durables, life-style spending and other areas to determine whether the evaluation criteria differs based on segments or they are somehow similar.

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A STUDY ON THE ROLE OF PERFORMANCE AND IMAGE OUTCOME EXPECTATIONS ON INNOVATIVE BEHAVIOUR IN THE WORKPLACE

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ABSTRACT

The importance of innovation for organizational effectiveness is widely accepted. In particular, employee innovative is an important asset that enables an organization to succeed in a dynamic business environment. A variety of factors have been studied as important antecedents to individuals' innovation, such as organization culture and climate relationship with their job characteristics social/group context and individual differences. The theories of efficiency-oriented perspective and the social-political perspective, this study examines how an employee's innovative behavior is affected by his or her expectations for such behavior's potential influence on job performance and his or her image inside the organization. Further, it examines how these performance and image outcome expectations as intermediate psychological processes are shaped by distal contextual and individual difference antecedents. The major contributions of this study is to directly theorize and test the major outcome expectations associated with innovative behavior in private sector insurance companies. Second, by testing the relationship between distal antecedents and outcome expectations, this study sheds light on how contextual and individual difference factors could affect employee innovation indirectly by shaping these intermediate psychological processes.

KEYWORDS

Innovative behavior, Image expectation, Performance expectation, Image risk.

INTRODUCTION

Innovation is the new raga for modern industries in this century as companies are trying to bring innovation to different process for increasing the efficiency of overall process. The most important asset for the company is human resource which is considered as building block of the industries. Now companies are looking for developing innovative behavior among the employees in organization. Innovative behavior of employee can be seen as the intentional introduction of new ideas, process and procedure adopted by the individual during their work role which will enhance efficiency of organization. The primary examples for innovative behavior of employees are searching for new technologies and process for timely completion of work, applying new work methods, and investigating and securing resources to implement new ideas.

Innovation is now considered as important tool for enhancing effectiveness of organization and companies looking this aspect as important asset for getting success in this competitive and dynamic business environment.

With an annual growth rate of 15-20% and the largest number of life insurance policies in force, the potential of the Indian insurance industry is huge. The insurance industry in India backed by innovative products, smart marketing, and aggressive distribution has enabled fledgling private insurance companies to sign up Indian customers faster than anyone expected. Indians, who had always seen life insurance as a tax saving device, are now suddenly turning to the private sector and snapping up the new innovative products on offer.

An agent is a primary source for procurement of insurance business and as such his role is the corner stone for building a solid edifice of any insurance organization. To effect a good quality of insurance sale, an agent must be equipped with technical aspects of insurance knowledge, he must possess analytical ability to analyze human needs, he must be abreast with up to date knowledge of merits or demerits of other instruments of investment available in the financial market, he must be endowed with a burning desire of social service and over and above all this, he must possess and develop an undeterred determination to succeed as an insurance salesman.

REVIEW OF LITERATURE

Innovative behavior of employee is defined as the new ideas, process, and product which are introduced by the employees in their work role, unit or the organization on larger level for enhancing working of individual West and Farr (1989, 1990b). Innovative behavior is always considered as collection of activities like introduction, generation, realization and implementation of new ideas which makes it a complex proposition to understand Kanter (1988), Janssen (2000), and Scott and Bruce (1994). The most likely frame work which can be associated with innovative behavior is creative behavior which concentrates on generation of the ideas which are novel and useful for organization (Amabile, 1988; Oldham & Cummings, 1996). Creative behavior can be considered synonym for innovative behavior as the basic objective of both behavior are to implement process idea and process which are useful for organization. Further both this behavior are always ready to incorporate process which can be adopted from different levels (Shalley et al. 2004; Zhou, 2003). Innovation studies are carried out on bases of two different perspectives these perspectives are efficiency oriented and social political processes. Efficiency oriented perspective is based on the assumption that innovations are only mend for increasing profits for organization. Abrahamson [1991] and Rogers [1983] have worked on this perspective and found out that it is the dominant over other principles presumed by different scientist. Different studies were conducted on innovation behavior taking efficiency oriented perspective with different modification in names and models (Farr & Ford, 1990; Kimberly, 1981; Van de Ven, 1986). In each case, the underlying assumption is that innovations serve the economic function of improving efficiency and that innovation decisions are based on expected positive performance outcomes. In present studies as the theories involved then researcher are concentrating on social political perspective which provides a difference in the approach for completion of innovation in industries. In certain studies image and performance of the employee plays an important role in influencing the innovation adaptation decision processes (Dean, 1987; Dyer & Page, 1988; Wolfe, 1994). In further studies conducted by Abrahamson (1991) found that organization are taking innovation as for both long time and short span of time which shows that it is not completely related to profit but as a social political perspective. It emphasizes the symbolic function of innovative acts and the influence of image considerations on innovation decisions beyond an efficiency calculation.

Wolfe (1994), in his review of the innovation literature, pointed out that one important barrier to knowledge accumulation in innovation research is that researchers have limited their scope of inquiry by working within a single theoretical perspective. He noted that "the adoption of a single perspective, whatever that might be, limits the scope of a researcher's inquiry and thus limits the extent to which he/she can capture the innovation process, one which is complex, nonlinear, tumultuous, and opportunistic" (Wolfe, 1994). Abrahamson (1991) suggested that one way to overcome this barrier is to combine multiple perspectives so that each captures some aspect of the complex innovation process. Following this approach, both the efficiency-oriented perspective and the

social-political perspective have been used to theorize about the outcome expectations associated with innovative behavior. The efficiency-oriented perspective provides insight into the effect of expected positive performance outcomes; the social political perspective provides insight into the effects of expected image risks and expected image gains on innovative behavior.

DISTAL ANTECEDENTS

The study conducted by West and Farr's (1989) has provided a theoretical framework for the individual innovative behavior in the organization. These five factors were selected as organizational factors, relationship at work with one's supervisor, job characteristics, group or social factors, and individual characteristics. From the efficiency-oriented perspective, these five factors capture, from different angles, how organizational values and beliefs, supervisor support, the specific nature of an employee's job, his or her personal reputation, and his or her dissatisfaction with the performance condition of an organization could affect the employee's belief that his or her innovative behavior will bring performance gains. From a social-political perspective, these antecedents depict major social and political factors in the employee's work environment that define what is appropriate, what is desirable, and what resources and opportunities the individual has to both protect and advance him or herself in the organization, all of which influence the employee's assessment of the potential image risks and image gains associated with innovative behavior. In keeping with these conceptual angles, how the following contextual and individual difference factors

- Organization support
- Supervisor relationship quality
- Innovativeness as a job criteria
- Reputation
- Individual dissatisfaction with status

Two similar constructs, supervisor relationship quality and perceived organization support for innovation, are examined in Feirong Yuan and Woodman's study. The major focus of the current study is based on testing of the relationships among these antecedents.

A). ORGANIZATION SUPPORT FOR INNOVATION

Pre requisite of innovation can be formed based on organizational support for innovative practices in employee. In social political perspective of study organization values and ethics will influence the innovative behavior adaptability of employees (Amabile, 1988; Kanter, 1988; Scott & Bruce, 1994). If organization values and rules are targeted for betterment of work condition and change in present status, rather than primary objective of profit making, then employees will initiate innovative practices (Farr & Ford, 1990). An organization climate will always influence with the expectancies of employee at individual and organizational level (Scott & Bruce, 1994). These expectancies for innovative behavior are influenced by expectation of image and performance of individual. Members in an organization with strong support for innovation will also perceive their innovative behavior as more beneficial in bringing performance gains. From an efficiency-oriented perspective, a favorable organization climate for innovation communicates the need for change and demonstrates the belief that innovation will make the organization more efficient and successful. These values and beliefs, ingrained in the culture of the organization, will be transmitted to and become internalized by employees through the organization's socialization processes (Chatman, 1991; Harrison & Carroll, 1991).

B). SUPERVISOR RELATIONSHIP QUALITY

Organization climate is not only factor which can bring in innovative behavior in employee but relationship between supervisor will also help to enhance innovation in individual level. The most important theory used for this is leader member theory, where high performance of individual in the organization is always influenced by high quality relationship with their supervisor. This type of relationship will provide higher freedom for decision making, using resources for higher leverage which will provide motivation to improve work efficiency theory (Graen, 1976; Graen, Novak, & Sommerkamp, 1982; Graen & Uhl-Bien, 1995). Greater resources and support from a supervisor increase the odds that innovative behavior will be successful. From an efficiency-oriented perspective, therefore, employees with high-quality relationships with their supervisors are likely to be more confident that their innovative behavior will result in performance and efficiency gains (Gilbert, 1998; Markus & Zajonc, 1985). When a supervisor trusts and respects an employee, she or he is more likely to evaluate this employee's new ideas favorably (Zhou & Woodman, 2003) and believe these ideas are meaningful and significant, resulting in greater possibilities of image gain. Moreover, research on attribution biases suggests that when a supervisor likes or empathizes with an employee, he or she is more likely to attribute positive behavior outcomes to the employee's disposition and negative outcomes to the employee's situation (Green & Mitchell, 1979; Regan & Totten, 1975). Therefore, employees who are trusted and liked by their supervisors will feel more secure when engaging in innovative behavior and expect less image risk because their supervisors are less likely to hold them responsible for a failed innovative attempt.

C). INNOVATIVENESS AS A JOB REQUIREMENT

According to Kanter (1988) if innovativeness is communicated as primary obligation for job then individual will be motivated to adapt for innovative work behavior. The importance of innovativeness is being specified by efficiency oriented perspective where this is influenced by perceived performance gains of individual. More new ideas will be generated when innovativeness is considered as prerequisite of job completion. At the same time, from a social-political perspective, a job requirement for innovativeness also represents external demand and expectations for innovativeness, which legitimize the job incumbent's innovative behavior. Moreover, research has suggested that an audience tends to evaluate change-initiated behaviors more favorably when they are conducted by people whose functional background or job position supports their behavior (Ashford et al., 1998; Daft, 1978). Therefore, when perceiving innovativeness as part of their job requirements, employees will both feel it is more appropriate to engage in innovative behavior (i.e., have less concern for image risks) and feel more confident that managers and coworkers will consider their new ideas valid and well grounded (i.e., have higher expectations for image gains).

D). REPUTATION

The impression management literature suggests that the impressions people try to create are affected by how they think they are currently regarded by others (Leary & Kowalski, 1990). In particular, people are inclined to present themselves in ways that are consistent with their existing social image (Schlenker, 1980) because people are considered as more socially appropriate and legitimate when their behaviors match others' categorizations and expectations (Zelditch, 2001). From a social-political perspective therefore, when an employee regarded as innovative engages in innovative behavior, image risk is lower, because the behavior is consistent with the employee's existing social image, which serves to legitimize the behavior and reduce concerns about inappropriateness. A reputable innovative person, though, may not necessarily expect being innovative to further improve her or his image because behaviors that are consistent with one's existing image are likely to maintain the latter (Schlenker, 1980) rather than change it.

E). DISSATISFACTION WITH STATUS

Dissatisfaction is an important individual attitude that makes people aware of the need to change (Farr & Ford, 1990) and the value of introducing new ideas. Dissatisfaction with the status quo is defined here as an employee's dissatisfaction with the current performance condition of his work unit or organization. From an efficiency-oriented perspective, dissatisfaction with the status quo undermines the value of maintaining the current condition and strengthens people's beliefs that new ideas, products, or processes will bring performance gains, resulting in more innovative behaviors.

At the same time, from a social-political perspective, a less satisfactory performance condition of a work unit or organization also serves to justify innovative action, reducing image risks and increasing the chances of image gain. Change is often more legitimized when performance is below a targeted level or perceived as a failure (Lant & Mezias, 1992). Moreover, poor unit or organizational performance provides an opportunity for self-enhancement. When their work unit or organization is less effective, people are more likely to get credit for introducing new technologies and suggesting new ways to achieve objectives. Employees who demonstrate these behaviors are more likely to be considered as conscientious and competent (if not heroic), increasing the potential for image gain.

MODERATORS IN THE STUDY

In organizational context employee is always influenced by the results or benefit from innovative behavior of the employee, this leads to affect the relationship between different factors which are influencing innovative behavior of employee.

A). EXPECTED PERFORMANCE GAINS

One major reason people innovate in the workplace is to bring performance gains. New technologies are introduced and new work methods are applied because these are “better” than the existing ones and are expected to bring performance improvement and efficiency gains. Such a belief in performance gains reflects the dominant efficiency oriented perspective in the innovation literature according to which the goal of technical efficiency guides innovation, adoption and diffusion (Abrahamson, 1991; Rogers, 1983; Wolfe, 1994). Although the efficiency-oriented perspective has been the dominant perspective in the field, the effect of expected performance gains on innovation has been mostly implicitly assumed rather than explicitly studied in the literature. In particular, little research evidence exists to explain whether and how the expectation for positive performance outcomes affects employee innovative behavior in the workplace.

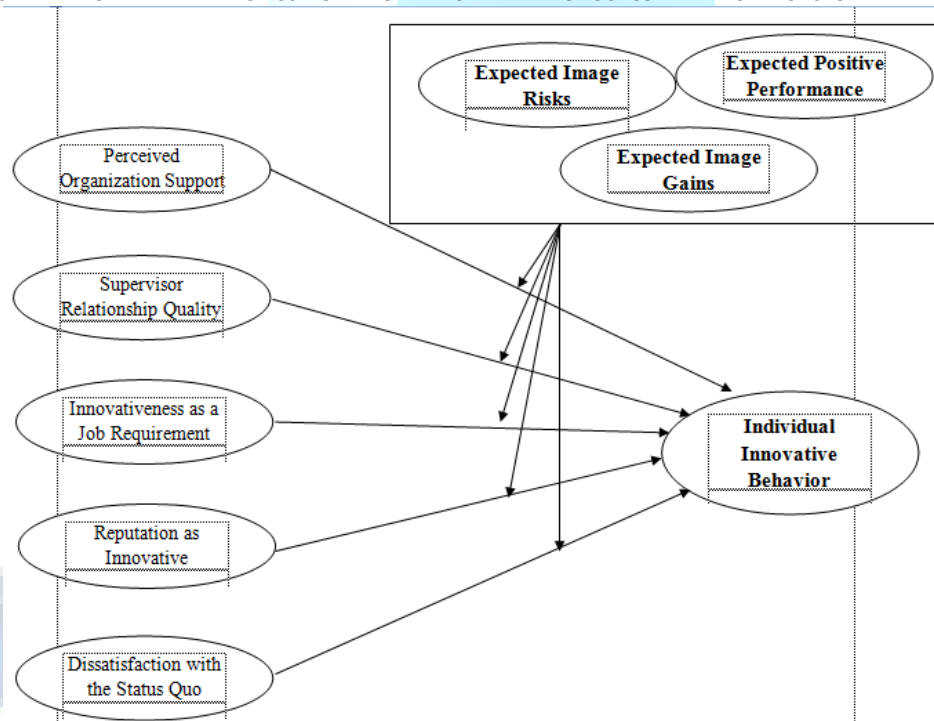
Expected performance outcomes are positive when employees believe that their innovative behaviors will bring performance improvement or efficiency gains for their work roles or work units. The concept of efficiency usually refers to an input- output ratio or comparison (Ostroff & Schmitt, 1993; Pennings & Goodman, 1977). Feirong Yuan and Woodman, 2010 defined efficiency broadly and use the term synonymously with “performance” to describe objective or actual task performance. Specific examples of positive performance outcomes include increased productivity and work quality, decreased error rate, increased ability to achieve goals and objectives, and improved general job performance. Obviously, relevant performance dimensions vary across different job positions, and people weigh various aspects of performance in different ways. What constitutes positive performance outcomes, therefore, is subjectively defined by each particular employee.

B). EXPECTED IMAGE GAIN AND IMAGE RISK

The literature in impression management supports the importance of image considerations in influencing a variety of behaviors in organizations, such as feedback seeking (Ashford & Northcraft, 1992), organizational citizenship behaviors (Rioux & Penner, 2001), and issue selling (Ashford, Rothbard, Piderit, & Dutton, 1998). Although image and impression management issues have been addressed less in research undertaken at the individual level, anecdotal evidence suggests these issues affect employee innovative behavior at work. One basic distinction in the impression management literature is that between defensive and assertive impression management (Arkin, 1981; Schlenker, 1980). Tetlock and Manstead argued that Defensive impression management is designed to protect an individual's established social image; it is triggered by negative affective states. Assertive impression management is designed to improve an individual's social image; it is triggered by self-enhancing motives activated by perceived opportunities for creating favorable impressions on others. The difference between avoiding image risks and pursuing image gains, therefore, is not a matter of degree. They represent different affective states and individual (Wolfe Lennox, & Cutler, 1986).

Following the social-political perspective in understanding innovation, and in keeping with the impression management literature, Feirong Yuan and Woodman, 2010 contend that both types of impression management may affect employee innovative behavior. First, potential image risks will constrain employee innovativeness. This tendency to avoid image risks represents the self-protective or defensive impression management motive. Secondly, employees may engage in innovative behaviors as a deliberate effort to improve image. An employee may suggest new ideas to a supervisor in order to appear competent and conscientious. Engaging in innovative behavior to pursue image gain represents the acquisitive or assertive impression management motive.

Based on the review of literature and diagnosis of relationship based on different researchers conducted on the topic, these researchers have failed to look into the moderating effect of expected performance gains and expected image gains on innovative behavior of employees.

FIGURE 1: INNOVATIVE BEHAVIOR USING PERFORMANCE AND IMAGE OUTCOME EXPECTATIONS: OBTAINED MODEL**RESEARCH METHODOLOGY****A). RATIONALE OF THE STUDY**

With an annual growth rate of 15-20% and the largest number of life insurance policies in force, the potential of the Indian insurance industry is huge. The insurance industry in India backed by innovative products, smart marketing, and aggressive distribution has enabled fledgling private insurance companies to sign up Indian customers faster than anyone expected. Indians, who had always seen life insurance as a tax saving device, are now suddenly turning to the private sector and snapping up the new innovative products on offer. Most products available in the insurance industry are similar and offer the same benefits. It is hence very important for the insurance salesman to be innovative in his approach towards selling. He must generate new ideas for selling and creating a strong product differentiation. For this, he requires good support from his supervisor as well as the organization. Many psychological processes, such as his image in the organization also have an effect on him and his work. Substantial attention needs to be paid to the individual motivation and innovativeness of the insurance salesman. This suitable environment with timely provision of the necessary resources to the insurance salesman will also facilitate employee retention as the attrition rate in the insurance industry is found to be very high at 35-40 percent. So agents in insurance sector has primary need to innovative

continuously and be competitive in the market. Researcher have considered different variables which may influence the innovative behavior of individual but innovation of ideas and process when related to human resource is a psychological process. So this research study the influence of expectation of different outcomes can influence the relationship between different factors which are considered as major predictors. These predictors which are enlisted in the previous studies may be influenced by the different expectation level of the employees. Although prior research has suggested that expected outcomes of innovative behavior can be important psychological considerations behind individual innovation, studies that directly theorize and test the effects of these outcome expectations are conspicuously missing. Scholars still lack a good understanding of what consequences are important for innovative behavior and how the expectations for these consequences affect employee innovation in the workplace.

B). OBJECTIVES

Based on the conceptual focus highlighted in the above section the study proceeds to inquire into the set of objectives and test the hypothesis framed as under. Major objectives

To explain and establish the influence of social and efficiency perspective on relationship between distal antecedents of innovative employee behavior

Specific objectives

1. To study the distal antecedents of innovative behavior in workplace
2. To study the effect of efficiency-oriented perspective in the relationship between the distal antecedents and innovative behavior in workplace
3. To study the effect of social-political perspective in the relationship between the distal antecedents and innovative behavior in workplace

C). HYPOTHESIS

Hypothesis 1: Perceived organization support for innovation is positively related to expected positive performance outcomes of innovative behavior

Hypothesis 2: Supervisor relationship quality is positively related to expected positive performance outcomes of innovative behavior

Hypothesis 3: Innovativeness as a job requirement is positively related to expected positive performance outcomes of innovative behavior

Hypothesis 4: Reputation as an innovative person is positively related to expected positive performance outcomes of innovative behavior

Hypothesis 5: Dissatisfaction with the status quo is positively related to expected positive performance outcomes of innovative behavior

Hypothesis 6: Expected positive performance outcomes moderates the relationship between independent variables and innovative behavior

Hypothesis 7: Expected image risks moderates the relationship between independent variables and innovative behavior

Hypothesis 8: Expected image gains moderates the relationship between independent variables and innovative behavior

D). BASIC RESEARCH DESIGN

Methodologically the study falls into a descriptive cum explanatory framework. The study is descriptive in that it seeks to depict the distribution of employees who have differential levels of perception regarding innovative behavior and antecedents influencing it. Study further tries to find out the moderating effect of social perspective and efficiency oriented perspective. Further the data were used to achieve the most appropriate fit among the factors of the independent and dependent variables using Structural Equation Modeling (SEM) and is thus explanatory in character.

E). TOOLS FOR DATA COLLECTION

The data for this study was collected from the structured questionnaire that was set out to the insurance agents from private sector insurance companies in Thrissur, Cochin and Trivandrum.

The questionnaire was adapted as follows:

TABLE 1: DESCRIPTION OF DATA COLLECTION TOOL

Variable	Author	Items	Alpha value
Expected positive performance outcomes	House and Dessler	3	0.77
Expected image risks	Ashford	3	0.77
Expected image gains	Ashford	4	0.86
Perceived organization support for innovation	Scott and Bruce	13	0.92
Supervisor relationship quality	Graen	7	0.90
Innovativeness as a job requirement	Feirong Yuan and Woodman	5	0.85
Reputation as innovative	Feirong Yuan and Woodman	2	0.78
Dissatisfaction with the status quo	Feirong Yuan and Woodman	3	0.75
Individual innovative workplace behavior	Scott and Bruce	6	0.93

DATA ANALYSIS

The results show that the dissatisfaction with status quo perceived organization support, innovation as a job requirement, reputation as innovative and supervisor relationship quality has a significant relationship with individual innovative behaviour. Coefficient of determination value shows that the 17.1% change in the independent variable is explained by these independent variables and 'r' value shows a low positive relationship as the value is lesser than 0.5.

TABLE 2: MODEL SUMMARY

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.414(a)	.171	.137	.33254

TABLE 3: COEFFICIENTS (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.449	.346		9.963	.000
	Per_Org_Sup	.052	.068	.063	.764	.046
	Sup_Rel_Qly	.179	.087	.224	2.060	.042
	Inn_Job_Req	.122	.094	.161	1.303	.019
	Rep_As_Inn	.006	.016	.035	.400	.008
	Diss_Wit_Sta_Quo	.135	.048	.341	2.802	.006

a Predictors: (Constant), Diss_Wit_Sta_Quo, Per_Org_Sup, Rep_As_Inn, Sup_Rel_Qly, Inn_Job_Req

a Dependent Variable: Ind_Inn_Beh

The results show that the dissatisfaction with status quo, reputation as innovative, innovative as job requirement, supervisor relationship quality and perceived organization support for innovation has a significant relationship with expected positive performance outcomes. There are lots of similar observations in different studies which support the results obtained by the study. The study conducted by West and Farr's (1989) has provided a theoretical framework for the individual innovative behavior in the organization. These five factors were selected as organizational factors, relationship at work with one's supervisor, job characteristics, group or social factors, and individual characteristics. From the efficiency-oriented perspective, these five factors capture, from different angles, how organizational values and beliefs, supervisor support, the specific nature of an employee's job, his or her personal reputation, and his or her dissatisfaction with the performance condition of an organization could affect the employee's belief that his or her innovative behavior will bring performance gains.

From a social-political perspective, these antecedents depict major social and political factors in the employee's work environment that define what is appropriate, what is desirable, and what resources and opportunities the individual has to both protect and advance him or herself in the organization, all of

which influence the employee's assessment of the potential image risks and image gains associated with innovative behavior. Pre requisite of innovation can be formed based on organizational support for innovative practices in employee. In social political perspective of study organization values and ethics will influence the innovative behavior adaptability of employees (Amabile, 1988; Kanter, 1988; Scott & Bruce, 1994). If organization values and rules are targeted for betterment of work condition and change in present status, rather than primary objective of profit making, then employees will initiate innovative practices (Farr & Ford, 1990). An organization climate will always influence with the expectancies of employee at individual and organizational level (Scott & Bruce, 1994). Organization climate is not only factor which can bring in innovative behavior in employee but relationship between supervisor will also help to enhances innovation in individual level. The most important theory used for this is leader member theory, where high performance of individual in the organization is always influenced by high quality relationship with their supervisor. This type of relationship will provide higher freedom for decision making, using resources for higher leverage which will provide motivation to improve work efficiency theory (Graen, 1976; Graen, Novak, & Sommerkamp, 1982; Graen & Uhl-Bien, 1995). Greater resources and support from a supervisor increase the odds that innovative behavior will be successful. From an efficiency-oriented perspective, therefore, employees with high-quality relationships with their supervisors are likely to be more confident that their innovative behavior will result in performance and efficiency gains (Gilbert, 1998; Markus & Zajonc, 1985). According to Kanter (1988) if innovativeness is communicated as primary obligation for job then individual will be motivated to adapt for innovative work behavior. The importance of innovativeness is being specified by efficiency oriented perspective where this is influenced by perceived performance gains of individual.

More new ideas will be generated when innovativeness is considered as prerequisite of job completion. At the same time, from a social-political perspective, a job requirement for innovativeness also represents external demand and expectations for innovativeness, which legitimize the job incumbent's innovative behavior. The impression management literature suggests that the impressions people try to create are affected by how they think they are currently regarded by others (Leary & Kowalski, 1990). In particular, people are inclined to present themselves in ways that are consistent with their existing social image (Schlenker, 1980) because people are considered as more socially appropriate and legitimate when their behaviors match others' categorizations and expectations (Zelditch, 2001). From a social-political perspective therefore, when an employee regarded as innovative engages in innovative behavior, image risk is lower, because the behavior is consistent with the employee's existing social image, which serves to legitimize the behavior and reduce concerns about inappropriateness.

Dissatisfaction is an important individual attitude that makes people aware of the need to change (Farr & Ford, 1990) and the value of introducing new ideas. Dissatisfaction with the status quo is defined here as an employee's dissatisfaction with the current performance condition of his work unit or organization. From an efficiency-oriented perspective, dissatisfaction with the status quo undermines the value of maintaining the current condition and strengthens people's beliefs that new ideas, products, or processes will bring performance gains, resulting in more innovative behaviors.

EXPECTATION OF IMAGE AND EXPECTATION OF PERFORMANCE GAINS

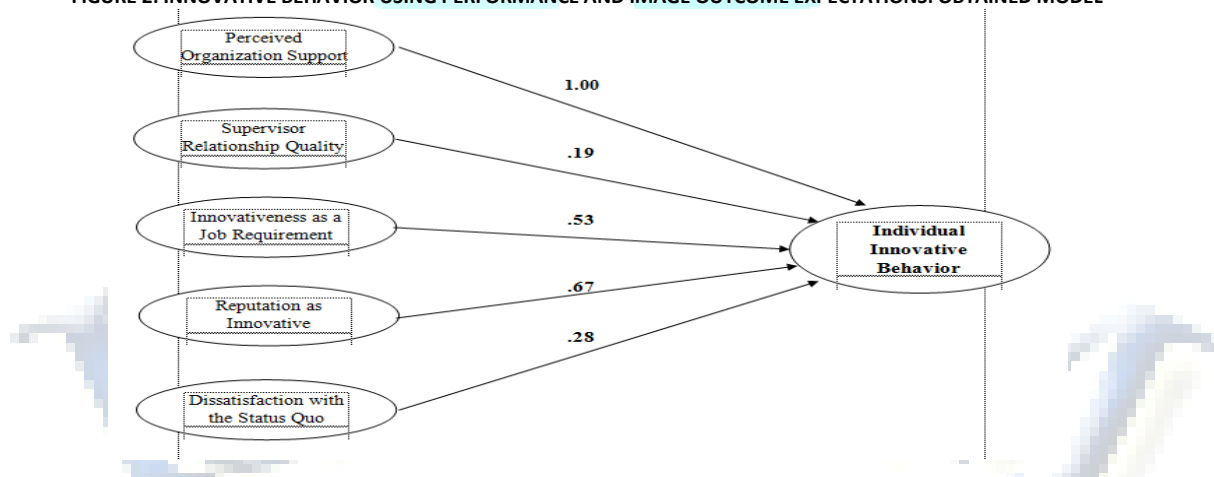
The moderating influence of the these two factors are studied by dividing the sample based on the high and low groups then structural modeling analysis is conducted by the researcher to compare between the model to find what are the influence of different expectation of employees.

TABLE 4: DESCRIPTION OF DATA COLLECTION TOOL

Indicators	Values	Fitness
Normed Chi-Square	1.466	Very Good
GFI	0.739	Moderate
AGFI	0.711	Good
CFI	0.834	Good
RMSR	0.057	Good
RMSEA	0.042	Very Good
PRatio	0.925	Very Good

The fit indices of the structural modeling shows that the model is best fit and relationship is showing significant relationship which is in accordance with the results we go from earlier regression analysis.

FIGURE 2: INNOVATIVE BEHAVIOR USING PERFORMANCE AND IMAGE OUTCOME EXPECTATIONS: OBTAINED MODEL



The figure above shows that all the antecedents of the innovative behavior is significantly influencing the innovative behavior of the individual. The regression weights of different group where group 1 denotes the high expectation of image employees, group 2 denotes low expectation of the image employees, group 3 denotes the high expectation of performance and final group denotes low expectation of performance.

TABLE 4: DETAILS OF REGRESSION WEIGHTS

	Group	Regression weight			
		1	2	3	4
1	Perceived Organization Support → Individual Innovative Behavior	.151	.205	.122	.081
2	Supervisor Relationship Quality → Individual Innovative Behavior	.489	.035	.086	.103
3	Innovativeness as a Job Requirement → Individual Innovative Behavior	.266	.121	.225	.112
4	Reputation as Innovative → Individual Innovative Behavior	.412	.000	.311	.019
5	Dissatisfaction with the Status Quo → Individual Innovative Behavior	.274	.045	.161	.057

Further the fit indices of all the four groups has shown a considerable moderate to good fit indices which shows that our model is consistent to all the assumptions of the SEM. So the moderating influence of the social perspective and efficiency perspective are maintained and proven by the model. This result can be interpreted as higher the expectation of performance and image in the individual the innovative behavior will be influenced by different antecedents of innovative behavior.

CONCLUSION

This study is an attempt to directly theorize and test major outcome expectations associated with employee innovative behavior. Drawing from both the efficiency-oriented and social-political perspective on innovation, the model tested here provides a theoretical framework for understanding why employees engage in innovative behavior in the workplace and how different contextual and individual difference factors affect employee innovation indirectly by shaping these intermediate psychological considerations.

Firms that highly require innovation at work must encourage their employees to innovate by providing them with the right kind of resources and support from the supervisor from an efficiency-oriented perspective. Suitable appreciation and recognition also should be provided at the right time from a social-political perspective.

This study proves that only the perceived organizational support and Dissatisfaction with the status Quo of the distal antecedents of innovative workplace behavior have a significant relationship with individual innovative workplace behavior, while Supervisor Relationship Quality, Innovativeness as a Job requirement and Reputation as Innovative do not have a significant relationship with individual innovative workplace behavior. These distal antecedents have a significant relationship with Individual innovative workplace behavior when taken as independent variables along with Expected positive performance, Expected image risks and Expected image gains. This further proves that Expected positive performance, Expected image risks and Expected image gains have a mediating effect between the distal antecedents and Individual innovative behavior. Thus, Individual innovative workplace behavior is influenced by both the efficiency-oriented perspective and the social-political perspective.

SUGGESTIONS

The use of longitudinal designs to explore the relationships posited in the model and the possible reciprocal relationships are highly recommended. Data on innovative behavior can be collected from supervisors as an alternative to employee self-reports to prevent self-reporting bias. Findings from this study suggest organization support and job requirements as two areas to focus on to reduce the image risks associated with innovative behavior. Although the importance of building a culture supportive of innovation (e.g., by establishing special rewards for innovation and establishing forums for diverse ideas) is widely accepted, the relevance of job requirements has been less emphasized. In private sector insurance companies, such job requirements must be made clear and employees must themselves be willing to be innovative owing to a high attrition rate in this sector. It is important to provide positive social recognition for innovative employees and increase the extent of employees' self-views as innovative. Companies with histories of successful performance need to take steps to break psychological comfort with the status quo and sensitize employees to opportunities for further improvement.

LIMITATIONS

A major limitation of this study is that the items on individual workplace behavior were made self-reporting. Thus, self-reporting bias could not be avoided. It could have produced better results had supervisors given their feedback on individual employee innovativeness. It is possible, for example, that the relationships between some distal variables and innovative behavior are reciprocal. For instance, reputation and dissatisfaction affect an employee's innovative behavior as theorized in the model. Yet at the same time, a person's innovativeness might also influence his or her reputation and dissatisfaction level in the future which in turn will affect future outcome expectations and innovative behavior from this employee. The symbolic function of innovative behavior is relatively under-addressed in the existing literature. More future research needs to be done to examine the role of image outcome expectations in the innovation process.

SCOPE FOR FURTHER STUDY

Future research needs to examine the viability of different interpretations. Whether an image-enhancing motive has a significant impact on innovative behavior, in addition to performance and image risk considerations should be looked into. When supervisors provide their feedback on employee innovativeness, suitable measures can be installed further in the theoretical model to exclude supervisor bias toward them. Future studies are also recommended to extend the research by examining the impact of performance and image outcome expectations in different situations and contexts. For example, individual innovation can be viewed in terms of different stages, such as idea generation, promotion, and implementation. Specific antecedents of these subcategories of innovative behavior can also be assessed. Several recent reviews have suggested the necessity of taking a cross-cultural perspective for understanding innovation and creativity (Anderson, De Dreu, & Nijstad, 2004; Shalley et al., 2004). Future studies need to examine whether the effects of performance and image outcome expectations also vary across cultures.

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MEASURING STUDENTS' EMOTIONAL INTELLIGENCE IN PUBLIC UNIVERSITIES: A CASE ON OMAN AND BAHRAIN

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ABSTRACT

Emotional intelligence is proving to be more popular today and many organizations are incorporating Emotional intelligence training. EI is used in many areas such as education, police force, the army and other sectors. Emotional intelligence is the analysis, thinking and planning of how our emotions influence others and how we can manage emotions to achieve better communications and healthier relationships. Students need to understand each other and communicate with each other and with staff members and instructors which makes emotional intelligence very important and vital. This paper looks at emotional intelligence of students in one of Oman's reputable national university. Comparisons are then made with a previous research by the author to investigate the role of culture in both settings, drawing on similarities and differences between the two cultures. The results revealed no strong correlation between emotional intelligence and academic achievement, as students who scored high in the survey were not high achievers. However, the study revealed a relationship between age and emotional intelligence, where students between the ages of 22 and 25 had higher scores than those within the age category of 18 and 22. When compared to Bahrain, almost similar results, however there were subtle cultural differences at the national level.

KEYWORDS

Emotional Intelligence – Emotions – Feelings - Culture – National culture – Oman culture – Gulf Region

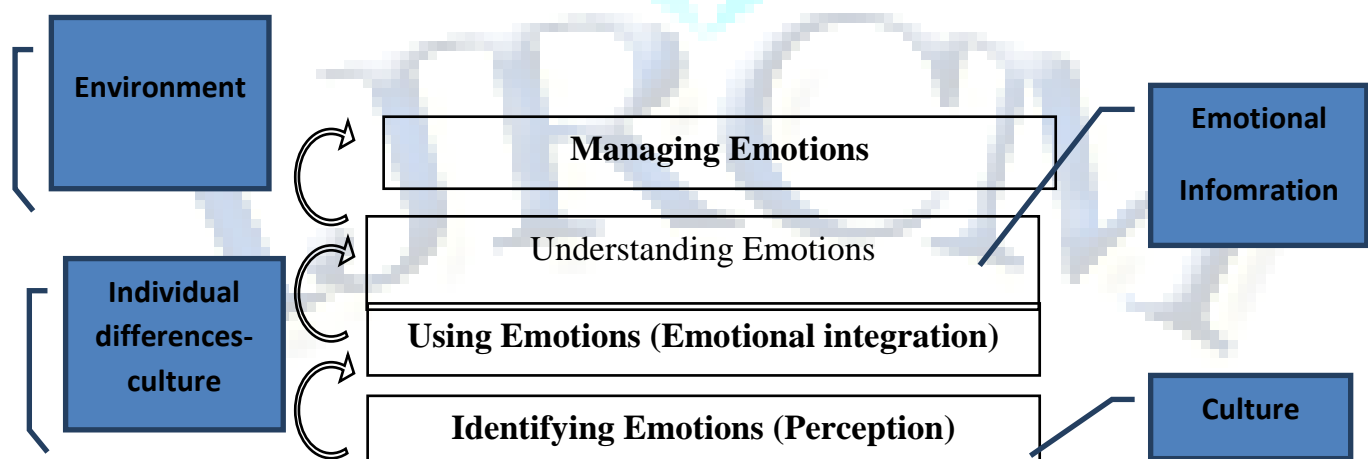
INTRODUCTION

Emotions and feelings have become the blood vessels of every organization today, whether educational or non educational, profit and non-profit. It is an element of high ranking that cannot be underestimated. Looking into emotional intelligence in an educational institution would perhaps give an indication of problems, lack of emotional intelligence that can be treated and dealt with before students graduate from the university and carry with them unresolved emotions and low levels of emotional intelligence which would effect their relationships at work, productivity and many other work-related issues. Hence, emotional Intelligence is the ability to work well with people and people's emotion both on and off the job. Consequently it would affect human relations at work, where many authors have stressed on the importance of emotional intelligence at work (Bar-On, Maree & Maurice, 2007; Lussier & Achua, 2007; Ashforth & Kreiner, 2002; Mayer & Salovey, 2000). According to Kerr, Garvin, Heaton & Boyle (2006), successful management of emotions plays a vital component in an individual's social effectiveness. This research investigates the level of emotional intelligence among students at one of Oman's leading and reputable public university, testing out instruments used and constructed in China verify its applicability and draw on cultural differences with China and with another study conducted in a national and highly reputable university in Bahrain.

WHAT IS MEANT BY EMOTIONAL INTELLIGENCE

Emotional intelligence refers to "an ability to recognize the meanings of emotion and their relationships and to reason and problem solve on the basis of them" (Marques, 2007, p. 645). Mayer, Salovey & Caruso (2000a) state that emotional intelligence can be interpreted as societal practices that integrate emotion as with thought and blends it together. (Mayer et al, 2000a p.96). They view emotional intelligence as a set of cognitive abilities (where a person's actual mental ability is believed to be directly related to standard definitions of intelligence), as well as emotional aspects. The authors believe that those two aspects could determine the level of emotional intelligence of an individual. Their model of emotional intelligence argues that emotional intelligence is a form of intelligence and can be seen as a set of skills or abilities, where such abilities are considered to be like other abilities and can therefore be measured (look at Fig. 1). The researcher added some factors that influence the branches and reflecting the research objectives.

FIG. 1: FOUR BRANCHES OF EMOTIONAL INTELLIGENCE - ADOPTED FROM THE MAYER-SALOVEY



Identifying or perceiving emotions entails the ability to correctly identify how people are feeling. This necessitates paying attention to, and accurately decoding, emotional signals in facial expressions, as well as listening to the tone of voice and looking for artistic expressions. This is coupled with being aware of one's own feelings and emotions to avoid being blinded by one's emotions. Mayer, Salovey & Caruso (2004) emphasise the importance of starting with this branch. They argue that if an individual has good emotional perception to begin with (by perhaps sensing others' behaviour towards oneself and making use of mood

changes), then one would be able to get feedback from others to better understand emotions. With such understanding, a person may have the knowledge that would enable the individual to possibly better manage and cope with feelings.

Using emotions (emotional facilitation of thought), according to Mayer *et al* (2000a), calls for the ability to create emotions, integrating feelings into how we think by being creative as well as having feelings and empathy towards others. They indicate how the emotional facilitation of thought focuses on emotions entering the cognitive system, altering cognition to assist thought, enabling a person to employ his/her feelings in order to enhance the cognitive system. Such is possible due to the nature of the process itself, where cognitive thinking is involved in labelling emotions. This is said to hold given the individual is normal; in a sense that he/she is not suffering from any psychological disorders that may alter his/her thinking and henceforth emotions.

Understanding and reasoning with emotions implies an understanding of the causes of emotions, knowing to a certain extent, what motivates others, attempting to understand their points of view and handling team interactions. Understanding what leads to various emotions is thought to be a critical component of emotional intelligence (Mayer *et al*, 2000a). This is presumed to lead to managing one's own emotions. The process is considered to be a gradual link from one state (understanding) to another (managing). People would be more knowledgeable here, which may ultimately help them in better understanding of how to balance their emotions.

Managing emotions necessitates figuring out effective strategies that use one's emotions to help in achieving intended goals and solving problems, rather than being used by one's emotions. Managing emotions also means that a person would remain open to emotional information that would perhaps assist an individual in better managing and coping with his/her emotions. Mayer *et al* (2000a) show how they hope that the outcome of this branch leads to enabling people to somehow get rid of troublesome emotions in human relations.

On the other hand, other authors link emotional intelligence to personality (Goleman, 1996), whereas others believe it does not fit with current perspectives on personality psychology (Mayer, Salovey & Caruso, 2000b; Mayer & Geher, 1996).

According to Low and Nelson (2003), the EI system has five steps: Step 1: (Self Assessment: Explore) requires the development of an intentional self-assessment habit, which includes discovering as well as questioning. Step 2: (Self-Awareness: Identify) involves the process of identifying one's experience as either a thought or a feeling. Being aware of one's own feelings and inner thoughts and how such feelings would influence others and how others feel (Goleman, 2003; 1996). Step 3: (Self-Knowledge: Understand) involves "insight" and an understanding that allows an individual to make choices about how to behave. Step 4: (Self-Development: Learn) involves learning various ways to improve one's behavior. Step 5: (Self-Improvement: Apply and Model) requires the individual to apply and model an emotionally intelligent behavior to achieve personal, career, and academic goals.

THE ROLE OF NATIONAL CULTURE

According to Schein (2004), demands, expectations, and constraints originate from, and are shaped by socio-cultural values, norms and mores, which have roots in a long history of traditions, religion, and popular belief systems. AlHashemi (1996) points out to other pressures from the business and social community including: difficulties in separating business affairs from social or personal life; reputation in the community; the inability to escape the insistence by clients; social visits during working hours at the office and in many cases without appointment; and high expectations for success. Although deep-rooted values still remain, such as personal ties and relationships whether in business or in the society as a whole, it can also be acknowledged that the way of life has changed dramatically over a short period of time (Al Ismaili, 2004).

THE GULF STATES: The Arabic culture, as put forward by Moran & Harris (1982), has a denominator influenced by religion and historical factors, with each aspect of their life depending on one another. It is useful to note here that deep-rooted values and norms are somewhat slow to change. Social values, norms and attitudes are known to change at a pace far slower than technology, a fact that has given rise to the term 'cultural lag' (Schein, 1992).

OMAN: Omanis are tolerant of the beliefs of different Muslim division as well as believers of other faiths, who are allowed to practice their religion in churches and temples. Historically Omanis were seafarers and traders who dominated regional commodity trading in the Indian Ocean, East Africa and the Arabian Gulf. Since the 1970s, Oman has strived to modernize through oil revenues and tourism. The country has witnessed further developments in all sectors, with the establishment of new projects and economic development from the 1990s till now. The Personal Status Law guarantees Omani women equal rights in both education and employment and are encouraged to take part in contributing towards the process of economic and social development. The number of women holding senior positions has risen steadily since 2003 and are also making strides in the legal profession (Ministry of information, 2011).

ROLE OF EMOTIONAL INTELLIGENCE FOR STUDENTS

From the perspective and experience of the author, she found emotional intelligence to play a vital role in teaching and maintaining career success at the same time. Carl Rogers (1995) emphasized the role and importance of emotional intelligence in classrooms, he found understanding their feelings and allowing them to interact with each other is very important for students. Such an understanding enables the whole experience becomes more meaningful and valuable for him. This is in line with what the researcher experienced in the classrooms over the 22 years of teaching experience. The classroom environment becomes a comfortable, learning and interactive when emotional intelligence is practiced and applied.

SCOPE AND LIMITATIONS OF THE STUDY

Emotional intelligence is a vast topic; various perspectives of emotional intelligence, variety of research conducted linking EI with different areas in business, education, military and other organizations. This research focuses on public education and more specifically the emotional intelligence levels among university students in Oman with a look at cultural aspects as an important dimension and making comparisons with Bahrain. The research also aims at examining the correlation between the grades, age and levels of emotional intelligence. Due to the nature of the topic as well as being the first study to be applied in the Gulf Region, the researcher's focus was limited to specific universities and sample size to enable testing out its applicability before a large scale research is undertaken.

HYPOTHESIS AND RESEARCH QUESTIONS

Evidence from much research work (Hofstede, 1991; AlHashemi, 1987; AlHashemi, 2006; AlIsmaili, 2004) proved that national culture has an impact on organizations and individuals which leads to the following hypothesis:

Hypothesis 1: Culture has an impact on EI instruments

To test out the relationship between the cumulative grades of students and their age, the following hypothesis:

Hypothesis 2: There is a relationship between the age, and Academic Achievement (Grade Point Average: GPA) of students

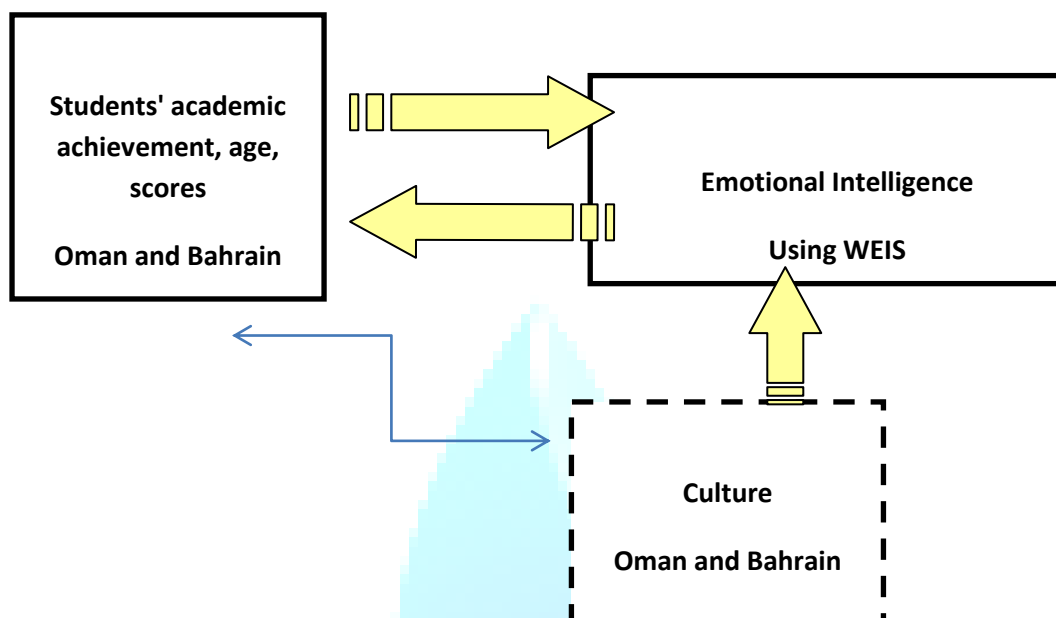
The research identified the following questions: (refer to Fig 2):

- 1) What are the levels of emotional intelligence of students at the University of Sultan Qaboos?
- 2) What are the levels of emotional intelligence of students at the University of Bahrain?
- 3) Is the WEIS applicable to the culture in Oman?
- 4) Is there a relationship between the academic achievement of students, their ages and the level of EI?

What are the similarities and differences between the culture in Oman and Bahrain?

FIG. 2: THE EMOTIONAL INTELLIGENCE COMPONENTS UNDER INVESTIGATION

1) Bahrain



METHODOLOGY

This research used quantitative and qualitative methods through Wong's Emotional Intelligence Scale (WEIS) for measuring emotional intelligence. Wong, Law and Wong (2004) developed a 40-item forced intelligence Scale for Chinese respondents. The scale consists of two parts, the first part contains 20 scenarios and respondents are asked to choose one option that best reflects their most likely reaction for each scenario. The second part of WEIS contains 20 ability pairs and respondents are asked to choose one out of the two types of abilities that best represent their strengths. Wong, Wong & Law (2007) explain that for each ability pair, one is considered as EI-related and the other is related to other intelligence dimensions (Look at Appendix A for details of the 40 items). Therefore respondents have to evaluate their relative strength between handling emotional issues and other types of ability. Responses to these items according to Wong et al (2004) may be affected by social desirability that concerns the ability to handle emotional issues. Wong et al (2004) showed that WEIS has acceptable reliability, convergence and discriminant validity. They also found that the scale successfully predicted the job satisfaction and sales performance when applied to insurance agents in Hong Kong. Interviews took part randomly with students to look at their opinions and feedback regarding WEIS.

RESULTS OF THE STUDY

SAMPLE SIZE

The total number of respondents both in Oman and Bahrain was 308; including males and females with ages between 19 and 28 (look at figure 3.1 and fig 3.2). Average age of the students in Oman and Bahrain was 22, with the majority being between ages 21 and 23. Age groups were similar in both cultures. The sample size in Oman was 201 students from the following Colleges: Economics and Political Science (100 students), Art and Social Sciences (52 students) and Engineering (50 students). The sample size in Bahrain was 136 from the College of Business Admin as it is the largest College at the University with over 5000 students. The researcher focused on a small sample size because the questionnaire is administered for the first time in the Gulf Region, and the researcher wanted to test its applicability before applying the questionnaire on a large scale.

FIGURE 3.1: PERCENTAGE OF PARTICIPANTS' AGES - OMAN

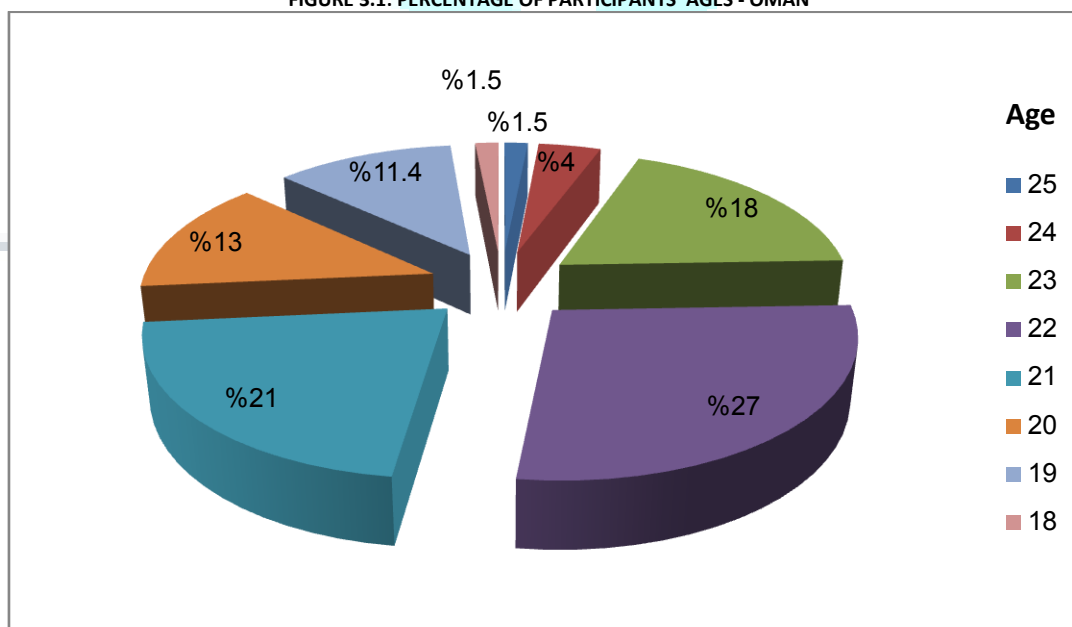
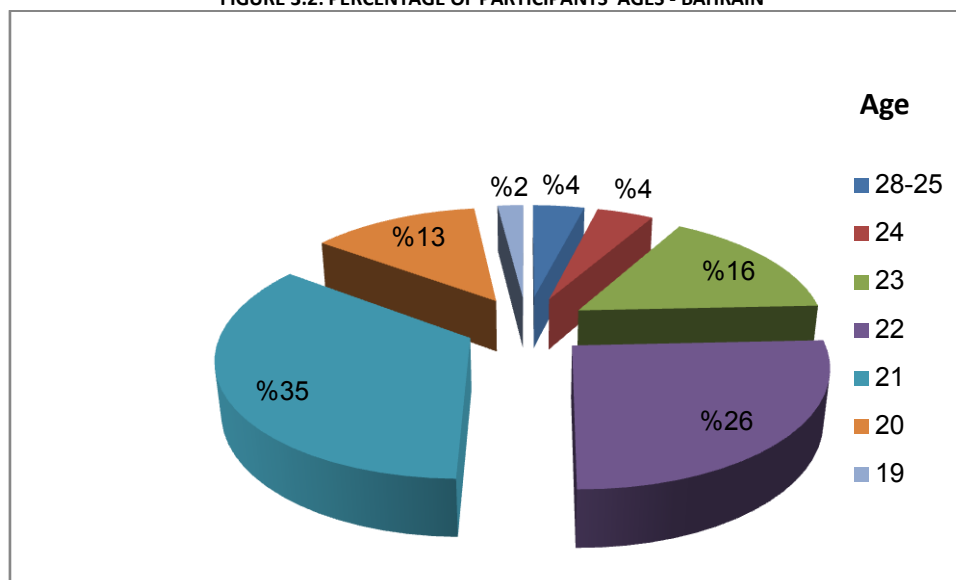


FIGURE 3.2: PERCENTAGE OF PARTICIPANTS' AGES - BAHRAIN



SUMMARY OF RESULTS

The total scores were out of 40, and the average scores of the participants in Oman and Bahrain is 24. Regarding academic achievements of students, this is reflected in their Grade Point Average (GPA). The majority of the students' GPA in Oman was 2.6, and minimum Grade Point Average (GPA) ranged between 2 and 3.4 out of 4. (refer to Appendix B for details). Whereas the minimum

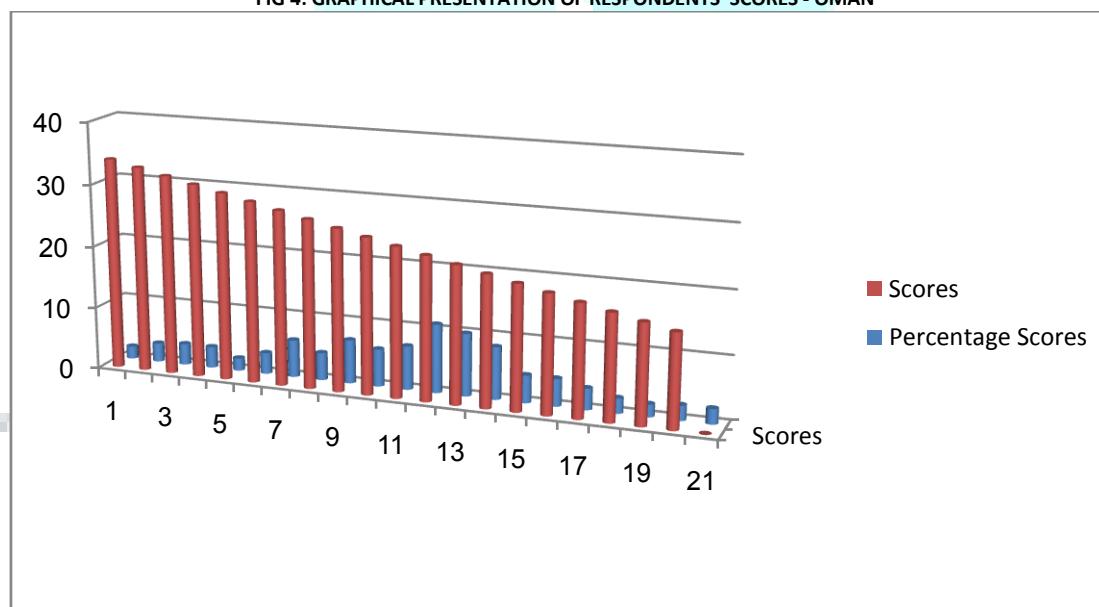
The findings revealed a relationship between scores and age, where participants that fell in the age group of above 21 scored higher than those in the 18-21 category. The reason being is that students from the age of 22 onwards are exposed to different experiences and they take internship (training) outside the University which enables them to gain more knowledge and experience in dealing with people, their emotions and being able to manage their feelings. Also, students over the age of 22 are more mature. This applied to both Oman and Bahrain, as cultural differences were similar in this case. However, cultural differences was evident in the behavior of students and their attitudes towards their achievement. Students in Oman find it very difficult and uncomfortable in revealing their GPA especially if it is on the low side, whereas in Bahrain, students don't have a problem with reporting their achievements on the questionnaire. Details of the findings are explained in the paragraphs that follow.

To answer the first question

What are the levels of emotional intelligence of students at Sultan Qaboos University?

The overall level of emotional intelligence of students was moderate with average total scores in the questionnaire were 24 out of 40. The highest and lowest scores attained in both cultures was the same (refer to Table 1.1 and Table 1.2 in Appendix C). The respondents' scores are presented graphically in Fig 4.

FIG 4: GRAPHICAL PRESENTATION OF RESPONDENTS' SCORES - OMAN



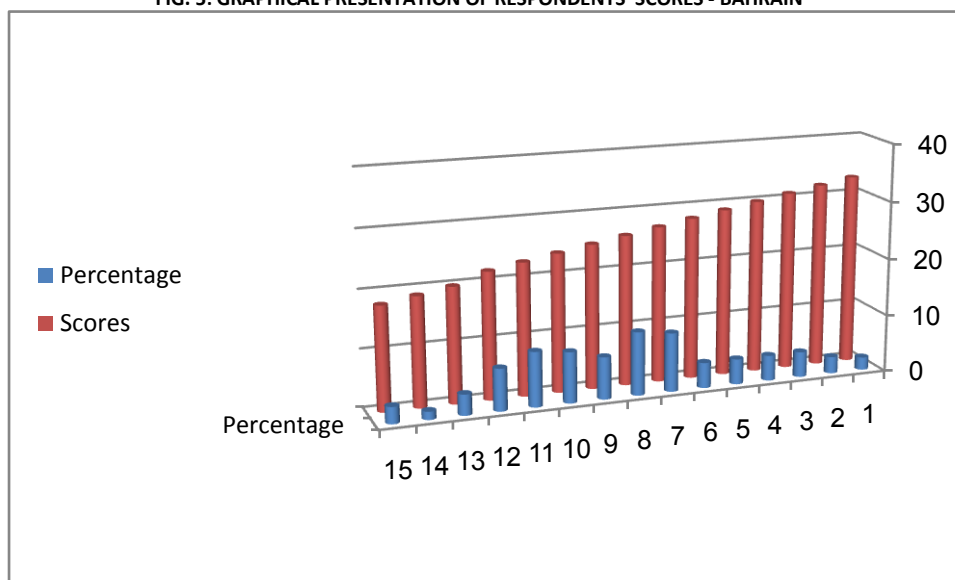
The first part (Part A) of the WEIS questionnaire, respondents are asked to choose one option that best reflects their most likely reaction for each of the 20 scenarios, the average scores were 13 which is a moderate level. The highest score for this part was 19 and the lowest was 6. The second part of WEIS (Part B) contains 20 ability pairs and respondents are asked to choose one out of the two types of abilities that best represent their strengths. The highest scores attained here were 19 and lowest score was 5 with an average of 11 out of 20, which is again moderate level of emotional intelligence abilities (refer to the above figure).

To answer the Second research question:

What are the levels of emotional intelligence of students at the University of Bahrain?

The overall level of emotional intelligence of students was moderate with average total scores in the questionnaire were 24 out of 40. The highest scores were 35 and 36 and only 2 students reached those scores, and lowest attained is 11 and 12 out of 40. More than half of the students (54%) scored between 22 and 27 out of 40 (refer to Table 1.1 and Table 1.2 in Appendix C). The respondents' scores are presented graphically in Fig 5. 23% of the students attained scores between 28 and 33 which are reasonably well and above average scores.

FIG. 5: GRAPHICAL PRESENTATION OF RESPONDENTS' SCORES - BAHRAIN

**To answer the Third research question:****Is the WEIS applicable to the culture in Oman and Bahrain?**

When compared with the Emotional Competency Inventory and MSCEIT, the WEIS is more in line with the culture in the Gulf Region. A previous research conducted by the researcher (AlHashemi, 2006), where the researcher carried out a pilot study on ECI and MSCEIT and found that ECI was more acceptable and easy to fill out by the respondents. However, after carrying out the research on a sample of 109 respondents occupying managerial levels, the researcher received feedback regarding some of the items as being culture bound by both Bahrainis and some of the non-Bahrainis. From that study, the researcher decided to utilize a questionnaire that is similar to the culture in the Middle East and more specifically Gulf Region and at the same time easily understood by students. The WEIS was first tested on 5 respondents and the feedback was positive, the questionnaire was easy to understand and not complicated and it took the respondents between 10 to 15 minutes to answer. Therefore, the researcher conducted the study in two cultures, Bahrain and Oman and specific Colleges were chosen to test out the questionnaires further before taking a bigger step of a larger and expanded population.

In the WEIS, the questionnaire is much easier to understand when comparing with other EI measures such as MSCEIT (Mayer, Salovey, Caruso, Emotional Intelligence Test) or the ECI (Emotional Competency Inventory). The researcher interviewed 10 students; they had very few comments, such as one item needed modification to suite the culture in the Gulf Region such as using local names instead of Western names.

To answer the Fourth question:**Is there a relationship between the academic success of students (GPA), their ages and the level of EI?**

There was no relationship between EI and academic success of students (Grade Point Average: GPA). The correlation between Scores and academic success was -0.07. Students who had high GPA had lower scores and some of the students with low and moderate level of academic success had higher scores. There were few cases where the students had high GPA (above 3 out of 4) and they also scored high in the questionnaire. The same applies to the research conducted in Bahrain, where no relationship was found between academic success and total scores. This supports many studies carried out to test and investigate the relationship between academic success and emotional intelligence. It is in line with Wong et al (2004) research. Wong et al (2004) state that researchers have argued that one's emotional intelligence should have little relationship with one's mental intelligence. They refer to the following researchers: Ciarrochi, Chan and Caputi (2000) as well as Pellitteri (1999) found a low correlation between EI and mental intelligence in their Western colleges student samples. Wong et al also refer to Wong & Law (2002) and Wong, Wong & Chau (2002) who found small correlations between EI and mental ability. Here national culture plays a minor role in terms of education and emotional intelligence. Its role appears in the behaviors of students and their attitudes and way of thinking. In Bahrain, students are more liberal in their thinking and behavior due to the open culture and freedom. Boys and girls are not segregated like in Oman. Students in Oman are more understanding and courteous when compared to Bahrain.

According to Wong et al (2004), researchers have argued that one's emotional intelligence should have little relationship with one's mental intelligence. They refer to the following researchers: Ciarrochi, Chan and Caputi (2000) as well as Pellitteri (1999) found a low correlation between EI and mental intelligence in their Western colleges student samples. Wong et al also refer to Wong & Law (2002) and Wong, Wong & Chau (2002) who found small correlations between EI and mental ability. This is in line with this research paper, where lower level intelligence scored higher in some and in others it was vice versa. With few of the participants, the higher level intelligence did score higher in the EI, but it was very few and not an overall concluding results.

However there was a relationship between age and scores (0.24), though not strong, but it indicates that age is somewhat correlated with scores. The older students above 21 had higher scores than the ages of 18 to 21. This supports studies that suggested emotional intelligence increased with age (Drago, 2004; Mayer, Salovey, and Caruso, 2004). They documented that as emotional intelligence increased, academic accomplishments also increased in number and enabling the smooth ability to communicate inspirational and motivational thoughts. On the other hand, as emotional intelligence decreased, oppositional behavior rose. Higher emotional intelligence skills were associated with greater ability and capacity to manage one's own emotions as well as the emotions of other people (Mayer et al, 2004).

To answer the Fifth question**What are the similarities and differences between the culture in Oman and Bahrain**

The results of the study when compared to a study conducted in Bahrain revealed some similarities in terms of academic achievement and scores but the difference were in terms of correlations. In both studies the results revealed there is not relationship between scores and levels of EI. However, the study conducted in Oman revealed a moderate level of correlation between age and scores, where in the study conducted in Bahrain the correlation was not significant (look at Table 1). There are some similarities in culture in terms of religion, values, beliefs and behavior. The issues that were different was the attitudes of students towards university life. In Oman, due to restrictions on students regarding dress code, behavior, some separation between gender in certain places at the University, students in Oman are exposed at different levels of experiences than the students in Bahrain. The students in Bahrain especially at the College of Business, are more outgoing and they explore and gain experience from the first year. There are no restrictions on dress codes and mixing is allowed between males and females whether in classrooms, eating areas, study or the clubs at the university. In addition to the society and background that students come from. In Oman, its more towards a conservative society, whereas in Bahrain the young generation are very open and are not restricted by certain traditions.

In the study conducted in Oman, most of the students were reluctant to reveal their academic achievement (Grade Point Average) and this is due to the culture, where individuals feel shameful if they are not very successful and find it difficult to talk about their failures or underachievement. In Bahrain, the students had

no difficulty in revealing their GPAs even the low achievers. Upon interviewing students and staff at the University in Oman, the author concluded that it was the culture in Oman that was noticeable among students in not showing or revealing their low achievements even among themselves as students.

TABLE 1: COMPARISON BETWEEN BAHRAIN AND OMAN

Comparison between Bahrain and Oman		
	n= 136	n=201*
	Bahrain	Oman
Correlation		
Scores & Age	0.038	-0.23
Age & GPA	-0.307	-0.07
Scores & GPA	0.102	0.22
GPA		
Below 2	2.9%	-
2-2.5	25.7%	29%
2.5-3	33.8%	37%
3-3.5	33.6%	21%
Average GPA	2.9	2.67
Average		
Total Scores	24.8	23.7
Maximum Scores	36	35
Minimum	11	12
Average Age	22	21
Max Age	28	25
Min Age	19	18

* there are missing information in some categories, for GPA n=188

CONCLUSION AND RECOMMENDATIONS AND SCOPE FOR FURTHER RESEARCH

Emotional intelligence is the life blood of every organization, and is a vital element in human relationships and success at work and in life. Understanding our feelings and emotions, being able to manage them effectively and in turn understanding others' emotions and responding to their concerns is what emotional intelligence is all about. Understanding the levels of emotional intelligence at the university and investigating the role of culture, helps to understand and detect problems and intervene to assist the flow of communication and relationships. That would in turn enable students to better prepare themselves for the future and in dealing with others. The results of the study conducted in Oman revealed a moderate level of emotional intelligence and abilities of students. When comparisons were made to a previous study conducted in Bahrain, subtle cultural differences were uncovered. The students in Bahrain are exposed to different experiences than students in Oman. This proved the existence and influence of culture at the national level though the two countries are part of the Gulf Cooperation Council and within the same region and geographical coverage. However, in both studies, it was further supported that academic success is not directly related to emotional intelligence, where higher achievers had low scores on EI and low achievers had moderate levels of EI.

The study recommends that further extended studies should be carried out to other students in Private universities and in schools to further explore and support this research and make comparisons with other similar studies carried out in the region and elsewhere. Furthermore, it is suggested to also cover the schooling population within the Gulf Region.

MANAGERIAL IMPLICATIONS OF THE STUDY

The results of the study contributes towards research on culture and adds value to the theory on national culture and cultural differences and similarities within the same region. There is no study conducted within the Gulf Region and specifically on government-owned universities, and that makes it unique on its own and adds to the understanding of cultural settings and context within such institutions. This would contribute towards development in the area of emotional intelligence for the future and develop further studies within the area on other institutions taking this study as a case study. Further, this study will used as a case teaching study by the author and others in the area of organizational behavior.

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APPENDIX

APPENDIX A

The Selected 40 Forced Choice Items developed by Wong

Part I. Reactions to Various Scenarios

For each of the following 20 situations, there are two possible reactions. Please circle the alphabet of the action (i.e., either A or B) that you will have a greater chance of taking.

(1) When you are very down, you will:

- A. Try to do something to make yourself feel better.
- B. Just ignore it because you know your emotion will be back to normal naturally.

(2) When you are upset, you will:

- A. Talk to someone who is close to you about your feeling.
- B. Concentrate on some matters (e.g., work, study, or hobby) so that you can get away from your bad feelings.

(3) Your supervisor assigns a task that is not included in your job responsibility and you do not have any interest in doing it. You will:

- A. Persuade yourself that the task is not that bad and perform the task.
- B. Tell your boss that you don't like the task and ask him to find some other suitable person to do the task.

(4) Johnny was working in Hotline Department and his job was to handle complaint and answered customer enquiry. However, he did not like his job and so he found another job in a hotel, serving walkin customers. He again found that he was sick and tired in handling unreasonable customers. If you were Johnny, you will:

- A. Try to get more training and education in customer service skills.
- B. Talk to some experienced people in customer service and seek their advice.

(5) Two managers in your company were hostile and very competitive with each other. You were the head of a department. You were caught at the middle of these two managers because both of them wanted to gain control of your department. This made your department difficult to function normally because there was a lot of confusion in rules and regulations for your department. You will: A. Pretend that you do not know about the competition between the two managers because politics is always unavoidable. You will led them fight and follow the finalized rules and regulations.

B. Try your best to make the rules and regulations clearer so that your department can function normally.

(6) When a friend comes to you because s/he is not happy, you will:

- A. Share his/her feeling.
- B. Takes him/her to do something s/he likes.

(7) When someone keeps on arguing with you on some unimportant topics, you will:

- A. Do not respond to him/her and wait for him/her to stop.
- B. Pretend to agree with his/her views and switch the discussion to other topics.

(8) Your friend has a rough relationship with his/her boy/girl friend because your friend has a bad temper.

When your friend talks to you about the rough relationship, you will:

- A. Pretend to agree with him/her that his/her boy/girl friend is not good enough.
- B. Point out that it is your friend's own fault and hope that s/he will improve.

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(9) Joyce is the only daughter of her parents. She is very close to her parents and is a very responsible person. Her job performance is excellent and colleagues like her. Recently her mother had a very serious traffic accident and is in coma. Although Joyce worries a lot, she does not take her leave and tries to do her best at work. If you were Joyce's supervisor, you will:

A. Let her come to work as usual because she can have her work to distract her worries.

B. Assign less work to her so that she can go to the hospital in a more flexible way.

(10) One of your subordinates has just come back to work after giving birth to her first baby girl for one month. You know that her baby girl's health condition is not very good. Thus, you found out that in this month she had been making careless mistakes and took sick leave frequently. She had good performance before the baby was born. However, you are certainly not satisfied with her performance in this month. You will:

A. Tell her directly that you did not satisfy with her work and discussed with her how she could improve the situation.

B. Assign less work to her or transfer her to other position with lighter work load.

(11) Suppose you get an important award, you will:

A. Tell everyone and share your happiness with them.

B. Tell and celebrate only with your family and closest friends.

(12) When you have to do something you don't like, you will:

A. Try to find some interesting stuff from it.

B. Try to finish it as soon as possible and forget about it.

(13) Your boy/girl friend is a fan of a particular pop music star. You spend two hours to buy two tickets for this star's concert. You asked him/her to meet you at 7:30 p.m. After one hour s/he did not show up. You therefore went to the concert yourself. After the concert, you found your boy/girl friend. Before you said anything, s/he kept on scolding you seriously. You will:

A. Let him/her continue. After s/he finished, tell him/her that you have already waited for him/her for one hour.

B. Stop him/her immediately. Tell him/her that s/he should consider his/her lateness before scolding others.

(14) Today you go to work as usual. After getting off the MTR, you found out that you lost your wallet. Soon after arriving the office, your boss complained about your work. When you started to work, your computer was broken. It is clear that today is very unlucky for you and you are not happy about it. You will:

A. Never mind, try to find another computer to start your work.

B. Talk to a colleague or friend to release the bad feeling before starting your work.

(15) Your colleague, Peter, is a very smart person and seems to know a lot. He is able to respond effectively and sensitively towards the people who are in high positions. Your boss asked you to work with him in a project. Peter has many flashing ideas but he leaves you to handle all the dirty and donkey tasks. You will:

A. Discuss with Peter and insist to share your tasks with him.

B. Tell your boss about the situation and see if s/he can offer any advice and/or help.

(16) When you face problems regarding your career or study, you will:

A. Talk to your friends to seek advice.

B. Handle the problem yourself because everyone should deal with his/her own life.

(17) You have very little chance to get the offer of a job which you like very much. You will:

A. Still apply for this job and try to prepare well for it.

B. Concentrate your efforts on jobs that you have better chances to get offer.

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(18) One day, you represent your company to welcome two important investors from Russia. According to Russian custom, people will kiss each other the first time they meet. However, you feel very uncomfortable to kiss unknown people, especially for those with the same gender as yours. You will:

A. Take the initiative to shake hand with them immediately when they appear to avoid the kissing.

B. Kiss them to show your respect.

(19) One Sunday in summer, you and your boy/girl friend drove to the beach to enjoy the sunshine. On the way you had a minor accident. The door of your car was damaged and it would cost some money to repair it. You will:

A. Drive the car to a familiar mechanic and take the bus to the beach.

B. Go to the beach as planned and fix the car later.

(20) You have an important examination tomorrow and you are studying hard in your room. Your family is watching a television program which you like very much as well. Since your house is small and so the noise of the television annoys you. You will:

A. Ask your family to turn off the television but videotape the program so that you and your family can watch it together tomorrow after your examination.

B. Although a little bit uncomfortable, you put a headphone on (to reduce the noise) so that you can concentrate on your study.

Part II: Relative Strength of Abilities

The following are 20 pairs of abilities. In each pair, please judge which ability is stronger for you. Then circle the alphabet (i.e., either (a) or (b) that represents this ability. (note: you may be strong or weak on both abilities. However, what you need to choose is the relatively stronger one)

Ability concerning: Ability concerning:

1 (a) Comprehend the reasons of being happy or unhappy

(b) learn how to repair a new electric appliance

2 (a) mental arithmetic (b) control one's emotions

3 (a) learn how to sing a new song (b) concentrate on achieving one's goal

4 (a) understand others' true feelings by observing their behaviors

(b) tolerate physical pain when compared to others

5 (a) Comprehend one's changes in emotions (b) learn how to dance some new steps

6 (a) run faster than others (b) calm down faster than others from angry feeling

7 (a) encourage oneself to work hard in unfavorable situations

(b) learn how to draw or paint

8 (a) observe details of things (b) observe others' emotions

9 (a) having a better ability in sport activities than other people

(b) having a better ability in understanding one's own feeling than other people

10 (a) use mechanical instruments (b) control one's temper

11 (a) Comprehend the rhythm of a song (b) set objectives and work hard towards them

12 (a) understand others' emotions from their behaviors and language

(b) having better physical endurance than other people

13 (a) physically more energetic than others (b) understand one's emotions better than others

14 (a) memorize new phone numbers quickly (b) not losing temper when angry

15 (a) motivate oneself to face failure

(a) positively

(b) learn to create an artistic object (e.g., china, painting)

16 (a) Comprehend the rationale of complicated problems

(b) understand others' emotions

17 (a) evaluate one's own bad emotions (b) evaluate others' singing abilities

18 (a) keep emotionally calm when facing disguised people or situations

(b) memorize strangers' names

19 (a) encourage oneself to do the best (b) learn a new sport activities (e.g., soccer)

20 (a) Comprehend others' emotions quickly and accurately

(b) appreciate the creativity of a movie or a drama

APPENDIX B

Age	GPA	Total	Part B	Part A
21	2.4	27	10	17
19	2.8	22	12	10
23	2.9	26	13	13
23	2.62	33	15	18
19	2	14	5	9
22	2.4	25	10	15
22	2.2	26	12	14
22	2.4	23	11	12
20	2.9	23	10	13
22	2.3	34	15	19
22	3	27	13	14
22	2	28	11	17
21	2.7	26	12	14
21	3	20	8	12
23	2.5	32	16	16
21	2.3	21	10	11
22	2.3	29	11	18
22	2.5	27	13	14
21	3.1	22	9	13
23	2.6	31	17	14
23	2	32	15	17
22	2.4	30	14	16
22	2.6	16	7	9
19	3.4	15	7	8
21	2.6	28	15	13
23	3.2	29	13	16
20	3.3	24	11	13
22	2.7	34	16	18
21	2.5	24	10	14
23	2.2	33	15	18
19	2.5	33	19	14
23	2.1	28	13	15
19	2.6	23	10	13
21	2.4	26	11	15
20	3	15	5	10
21	2.3	22	10	12
23	2.7	35	17	18
20	3.1	26	12	14
21	2.8	17	5	12
22	2.3	29	13	16
21	2.9	19	9	10
21	2.6	20	8	12
23	2.4	30	16	14
23	—	34	12	18
22	—	32	16	16
23	—	30	13	17
19	—	13	6	7
22	—	34	18	16
21	—	33	15	18
20	—	14	6	8
20	—	15	6	9
20	2.4	15	8	7
21	2.5	15	5	10
21	2.6	16	8	8
19	2.2	17	9	8
20	3.7	18	11	7
20	—	18	8	10
21	—	18	9	9
20	—	19	9	10
22	2.7	19	13	6

19	3.2	20	11	9
19	3.47	20	8	12
20	2.9	20	6	14
20		20	11	9
19	3.2	21	9	12
21	2.62	21	8	13
21	2.98	21	14	7
23	3	21	14	7
		21	12	9
19	2.67	22	10	12
20	3.4	22	9	13
22	3.2	22	13	9
23	2.3	22	11	11
		22	11	11
18	2.5	23	11	12
19	1.98	23	12	11
19	2.6	23	15	8
21	3.27	23	11	11
21	2.85	23	13	15
21	3.5	23	12	11
	3.85	23	12	11
20	2.1	24	11	13
21	3.1	24	12	12
23	2.7	24	13	11
19	3.1	25	12	13
21	3	25	13	12
22	2.8	25	10	15
19	3.1	26	12	14
20		26	15	11
22	2.5	26	11	15
		26	13	13
19	3.2	27	13	14
21	2.5	27	13	14
23	3.47	28	10	18
23	2.4	28	10	18
22		29	12	17
23	2.3	29	14	15
22	3.3	31	17	14
22	3.57	32	15	17
23	3.3	32	13	19
22	2.43	33	15	18
22	2.39	23	9	14
22	2.4	24	12	12
23	2.4	16	9	7
25	2.2	23	12	11
24	2.4	32	15	17
23	2.19	19	10	9
23	2.14	31	12	19
22	2.5	19	7	12
22	2.52	26	13	13
18	2.8	30	14	16
21	3.4	25	9	16
22	2.8	21	11	10
19	2.68	24	10	14
21	3.65	22	10	12
22	3	31	13	18
22	2.5	22	12	10
22	2.5	24	13	11
23	2.7	23	13	10
21	2.8	19	12	7
20	2.6	18	10	8
25	2.9	21	12	9
22	3	26	13	13
24	3.5	29	15	14
22	2.28	27	12	15
22	2	21	9	12
22	2.7	18	7	11
23	2.8	25	13	12
24	2.6	23	10	13
20	2.74	28	13	15
19	2.7	32	15	17
22	3.2	16	7	9

23	2.7	19	7	12
22	3	26	14	12
22	2.4	18	8	10
20	2.2	23	12	14
19	2.5	24	10	14
23	2	25	10	15
22	2.8	28	13	15
21	2.6	26	14	12
23	2.3	27	13	14
20	2.5	21	12	9
21	2.6	17	9	8
20	2.5	22	9	13
22	2.7	23	11	12
21	2.35	19	9	10
22	3	24	10	14
20	2.85	17	10	7
24	2.8	21	10	11
21	2.4	23	13	10
22	2	23	10	13
20	3.09	25	10	15
21	3.01	21	10	11
23	2.42	20	9	11
20	2.33	23	9	14
20	3.58	21	11	10
19	3.45	17	9	8
19	3.73	22	13	9
22	2.5	22	9	13
21	2.3	28	15	13
22	2.64	22	10	12
22	2.7	19	8	11
23	2.4	22	11	11
21	2.1	28	14	14
23	2.4	25	14	11
21	2.4	21	10	11
22	2.5	22	13	9
22	2.3	23	11	12
21	2.4	22	12	10
22	2.3	24	14	10
23	2.67	28	15	13
22	2.5	31	16	15
18	3.08	33	15	18
21	2.7	29	15	14
22	2.7	25	15	10
21	—	22	11	11
21	—	0	0	0
24	2.9	27	12	15
22	—	20	9	11
22	2.8	22	8	14
24	2.4	12	12	0
25	3.21	21	11	10
23	2.61	31	16	15
23	2.5	20	8	12
23	2.1	24	14	9
21	2.61	21	12	9
22	—	13	0	13
22	2	23	11	12
23	—	25	12	13
21	2.5	24	11	13
23	2.3	28	11	17
19	3.8	27	16	11
24	2.14	24	8	16
23	2.5	25	14	11
22	2.2	31	12	19
21	—	18	9	9
19	2.6	26	12	14
22	2.5	22	10	12
20	2.4	28	13	15
20	2.2	23	10	13
24	2.8	21	9	12

APPENDIX C

TABLE 1.1: PERCENTAGE OF STUDENTS' SCORES IN BAHRAIN

Score	% of respondents
36	1
33	2.2
32	2.9
31	4.4
30	4.4
29	4.4
28	4.4
27	10.2
26	11
25	7.3
24	8.8
23	9.5
22	7.3
20	3.6
19	1.4
18	2.9
17	1.4
13	1.4
12	1
11	1

TABLE 1.2: PERCENTAGE OF STUDENTS' SCORES IN OMAN

Total Scores	% Respondents
34	1.9%
33	2.9%
32	3.4%
31	3.4%
30	1.9%
29	3.4%
28	5.9%
27	4.4%
26	6.9%
25	5.9%
24	6.9%
23	10.9%
22	9.9%
21	8.4%
20	4.4%
19	4.4%
18	3.4%
17	2.4%
16	1.9%
15	2.4%
(12-14)	2.4%

DETERMINANTS OF FOREIGN DIRECT INVESTMENT INFLOWS INTO INDIA: A FACTOR ANALYSIS

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ABSTRACT

The purpose of this paper is to incorporate institutional measures to determine foreign investment inflows into India and use factor analysis to determine the underlying factors that influence FDI into India. It also attempts to examine the influence of institutional factors in determining foreign capital inflows. This study is based on the data collected from World Development Indicators, World Bank. The period of analysis is from 1980 to 2011. This study employs factor analysis to identify the main components of foreign capital inflow into the country. Among the different methods of foreign capital inflow, the FDI channel is considered for the study. Twelve indicators were used to depict India's investment environments. Instead of single variable measurement of the complex aspects of India's investment environments, this study uses factor analysis to provide measures of the country's investment environments. Regression results have found that institutional quality, infrastructure development significantly influence the flow of foreign direct investment into India. However this study did not find significant relationship between size and stability and foreign direct investment.

JEL CLASSIFICATION

F21, F23.

KEYWORDS

FDI, Factor Analysis, Government effectiveness, Institutions, Regression.

INTRODUCTION

Although in the economics and business literature, there is a large body of theory and research to determine the main factors influencing the choice of foreign direct investment (FDI) decisions, most of these studies have been confined to the classical theories of comparative advantage to build models for determining FDI location. It is only very recent that researchers have extended the variables in their models beyond the traditional factor endowments distinguishing hard components or physical factors such as natural resources, energy and infrastructure from soft components (Li and Li, 1999) or "created assets" (Narula and Dunning, 2000) such as, knowledge based assets, economic, legal, political and cultural factors. On the other hand, recognizing the benefits of FDI such as transfer of technology, augmenting domestic savings and investment, increasing competition, increasing exports, foreign exchange earnings, skill development, and other spillover many of the Less Developed Countries (LDC) have carried out institutional reforms with the specific intention of attracting foreign direct investment.

Almost all the countries are interested in finding out the aspects that would make their country an attractive destination for FDI. It is little surprising that emerging markets farewell in recent times in attracting FDI, considering the economic turbulence in the developed world. India's ever-expanding markets, liberalization of trade policies, development in technology and telecommunication, and loosening of diverse foreign investment restrictions, have further collectively made India, the apple of investors' eye, for most productive, profitable, and secure foreign investment. According to a recent survey by the United Nations Conference on Trade and Development (UNCTAD, 2010), India has conspicuously emerged out as the second most popular and preferable destination in the entire world, after China, for highly profitable foreign direct investment. Very few of the existing empirical studies on FDI have incorporated the institutional reforms into their models. Even for empirical studies incorporating institutional measures, their methods have mainly be confined to using single indicators set by theory rather than exploring the data to determine the underlying factors. The main purpose of this paper is to incorporate institutional measures to determine foreign direct investment inflows into India and use factor analysis to determine the underlying factors influencing FDI in India.

REVIEW OF LITERATURE

Vast pool of literature is available on various aspects of FDI inflow. There are some region specific studies, which helps in understanding what are the FDI drivers at a very disaggregate level and has useful implications at policymaking level (Na, 2006). Others talk about development of successful FDI strategies at national level (Musila, 2006). Some simplistic papers look at just the trends of FDI in various countries- what they expect to measure is the general perspectives without exploring in detail what are the implications of these investments on the national growth and other parameters. There are studies pertaining to firm level analysis of the determinants (Pantelidis, 2005), and country level studies (Balasundram, 1998).

Ana Mar (1997) reviews the recent evidence on the scale of FDI to low-income countries over the period 1970-96 and major factors determining foreign companies' decision to invest in a particular country. The study concludes that large market size, low labor costs and high return in natural resources are amongst the major determinants in decision to invest in low income countries. Mucchielli and Soubaya (2000) investigated the determinants of the volume of trade of the French Multinational Corporations (MNCs). The major findings suggest that inward FDI has a positive influence on Foreign trade (including exports and imports), and this positive influence is stronger for exports compared with imports. Kumar (2001) analyzed the reform process of India and attempted to verify whether India's relative attractiveness as a host of FDI has improved over the years. He concluded that the magnitude of FDI inflows into India have displayed impressive growth, but they were very small compared to the country's potential. Burak Camurdan and Ismail Ceviz (2009) developed an empirical framework to estimate the economic determinants of FDI inflows by employing a panel data set of 17 developing countries and transition economies for the period of 1989-2006. Seven independent variables were taken for this research namely, the previous period FDI, GDP growth rate, wage, trade rate, inflation rate and economic investment. The empirical results conclude that the previous period FDI is important as an economic determinant. Besides, it is also understood that the main determinants of FDI inflows are Inflation rate, the interest rate and trade (openness) rate. Nirupam Bajpai and Jeffrey D. Sachs (2006) attempted to identify the issues and problems associated with India's current FDI regimes, and more importantly the other associated factors responsible for India's unattractiveness as an investment location. Despite India offering a large domestic market, rule of law, low labor costs, and a well working democracy, her performance in attracting FDI flows have been far from satisfactory. The conclusion of the study is that a restricted FDI regime, high import tariffs, exit

barriers for firms, stringent labor laws, poor quality infrastructure, centralized decision making processes, and a very limited scale of export processing zones make India an unattractive investment location. Charkraborty and Basu (2002) explore the co-integration relationship between net inflows of FDI, real GDP, unit cost of labor and the proportion of import duties in tax revenue for India with the method developed by Johansen (1990). They find two long-run equilibrium relationships. The first relationship is between net inflow of FDI, real GDP and the proportion of import duties in tax revenue and the second is between real GDP and unit cost of labor. They find unidirectional Granger Causality from real GDP to net inflow of FDI. Sapna Hooda (2011) analyzed the impact of FDI on economic growth of Indian economy for the period 1991-92 to 2008-09. She used OLS method for this purpose. The empirical results found that foreign Direct Investment (FDI) is a vital and significant factor influencing the level of growth in Indian economy. She also estimated the determinants of FDI inflows and found that trade GDP, Research and Development GDP, Financial position, exchange rate, Reserves GDP are the important macroeconomic determinants of FDI Inflow. A.T.Kearney, (2011) a global Consulting Firm conducted a foreign investor's Survey between July and October 2011. The survey cites that one quarter of respondents are increasing investment in emerging markets. According to the respondents, size and growth of the consumer markets, sourcing needs for talent and quality issues, need to diversify to improve supply chain resilience and sourcing needs for cost reasons are the most important factors affecting their investment decision. Hussain (2012) attempted to look into common characteristics of poorer regions that have successfully attracted more capital flows. Using panel data for 57 low and lower middle income countries from different regions of the world viz., sub-Saharan Africa, Eastern Europe, Asia and Latin America. He tried to find how much of these characteristics are due good policy. Mottaleb and Kalirajan (2010) established that FDI is helpful for effective technology transfer in their comparative study of developing countries. Girchamo (2012) tried to identify the determinants of FDI inflow in sub Saharan Africa. The study employed panel data Analysis: pooled ordinary least square method, fixed effects and random effects methods. The analyzed data covered a period 1986-2010. The study findings shows that trade openness, GDP, inflation and lag of FDI inflows are the most significant determinant of FDI inflow to sub-Saharan Africa. Kalirajan et al., (2012) concluded that India and China are yet to take full advantage of FDI inflows. Panigrahi and Panda (2012) attempted to find out factors which are significantly related and influence the FDI inflow into China, India and Malaysia during 1991-2010. They found that GDP, Gross capital Formation and trade are the major factors that influence foreign capital inflow to India and China whereas Gross domestic capital formation is significantly related to FDI inflows into Malaysia. Mottaleb (2007) found that countries with larger GDP and high GDP growth rate and maintain business friendly environment with abundant modern infrastructural facilities can successfully attract FDI. He also found that FDI significantly affect economic growth. Hess (2000) also identified inefficient bureaucracy and lack of transparency among the most important barriers to FDI in Africa. Quality of institutions has also been found to be an important influence of FDI inflows in the economies of East and Central Europe (Bevan et al. 2004). In their study of US foreign direct investment outflow, Globerman and Shapiro (2002) conclude from results of their study that countries that fail to achieve a minimum threshold of effective governance are unlikely to receive any US foreign investment. In a study on foreign investment in China Ng and Tuan (2002) found institutional factors including legal system, government bureaucracy, corruption, and efficiency of government administration to be a major concern shared by foreign investors in the Guangdong province. It was not until the mid 1990's after Douglas North was awarded his Nobel prize in 1993 that research in international business began to address the role of institutions as an important dimension in the determinants of foreign direct investment. Institutions have been defined as formal and informal constraints on political, economic, and social interactions (North, 1990).

Using factor analysis Ruthinda (2005) explored factors influencing the choice of foreign direct investment in less developed countries. Results show significant relationships between foreign direct investment and institutional quality, infrastructure development, market size, availability of natural resources, and quality of human capital. However, the study found no significant relationship between foreign direct investment inflows and economic stability. (Ruthinda 2005). A number of studies reached broad consensus about the importance of institutional variable and location of FDI. The studies by Wernick (2009), Biglaiser (2009), Daniele et.al (2009) can be cited as examples. Ali (2009), after reexamining the effect of corruption on FDI inflows over a period 1984-2004, concluded that the country's quality of institutions is more important than the level of corruption in encouraging FDI inflows into the country. Bissoon (2011) found that the quality of some institutions in the host country has an enormous impact on inward FDI.

IMPORTANCE OF THE STUDY

FDI inflows can affect host country economic growth in several ways. , it has been argued that MNEs have firm-specific advantages allowing them to operate profitably in foreign countries. Examples of firm-specific advantages include superior technology, scale economies and management. It is possible to link the idea of firm-specific advantages to the concept of knowledge capital. Knowledge capital is a broad concept consisting of intangible assets such as brand name, human capital, patents, trademarks and technology. Knowledge-capital is important for MNEs based on the fact that MNEs tend to have large R&D expenditures, a large share of technical workers and produce technically advanced products. It is primarily MNE possession of knowledge-capital that is important for providing firm-specific advantages allowing MNEs to operate profitably in multiple economies. The technology spillovers provide externalities which should have a positive effect on economic growth in the host country. Besides of knowledge-capital, FDI can also generate an inflow of physical and human capital to the host country. As the size of the host country physical capital stock increases the productive capacity of the host country also increases. Unfortunately the growth enhancing effect of an ever growing stock of physical capital is not endless. Even though additional capital can have important effects on economies with a low capital-labour ratio, diminishing returns imply that accumulation of physical capital cannot function as a permanent source of long-run growth. The growth enhancing ability of FDI is affected by the chosen mode of FDI. It is argued that the effects of FDI inflows on variables such as technology spillovers and physical capital are expected to differ between Greenfield and Brownfield FDI. Greenfield FDI implies that the MNE constructs new facilities of production, distribution or research in the host country. The result is an increase in the host country stock of physical capital that can be substantial, especially for capital scarce developing economies. In the case of Brownfield investment, the MNE acquires already existing facilities in the host country. Brownfield FDI should therefore only result in a limited increase in the stock of physical capital since there is a change in ownership rather than an inflow of new capital. Greenfield and Brownfield FDI should affect host country growth differently since Greenfield FDI results in a larger inflow of physical capital. While brownfield FDI results in a small inflow of physical capital, Brownfield FDI in the form of a merger or joint venture could maximize the potential for technology spillovers. Such an important growth engine FDI may be impeded by the local institutional rigidity. Therefore it very important to understand and study the relationship between growth, FDI inflow and institutional environment.

STATEMENT OF THE PROBLEM

There has been a growing interest in the determinants of FDI in developing countries, as FDI is considered one of the most stable components of capital flows to developing countries and can also be vehicle for technological progress through the use and dissemination of improved production techniques. Apart from regular determinants of FDI , the institutions also matter for FDI. Weak institutions seems to be an impediment for FDI. An insecure environment deters foreign firms to invest abroad because of lack of property rights enforcement. Red tape can be strategically reduced by corruption centralization through informal self enforcing implicit contracts that cannot be enforced legally. The multinational enterprises trade the improvement of institutional environment for a reduction in competition by the government. Improvements in bureaucratic behavior can benefit the country through an increase in consumer surplus.

OBJECTIVES

The present study has the following objectives. It aims

1. To identify the factors those influence the FDI inflow into the country during the period under study.
2. To examine the inter relationship between institutional environment and FDI inflow into India.

HYPOTHESIS

The following are the theoretical hypotheses on the basis of which the variables were selected.

SIZE OF THE MARKET

Larger market means larger potential for local sales, because local sales are more profitable than export sales especially in a large country where economies of large scale operation can be reaped. Moreover large economies provide diverse resource as a result of which local sourcing becomes more flexible. The market size hypothesis states that multinational firms are attracted to a larger market in order to utilize resources efficiently and exploit economies of scale. Higher the GDP better is the nation's economic health. It also implies large size markets. Therefore better are the prospects for higher profits. Hence we expect:

H1: less developed country with larger market size will attract greater FDI inflow.

MACROECONOMIC STABILITY

Economic stability reduces the risk for foreign enterprises and the cost of doing business in the country. This variable shows the strength of the economy and provides a degree of certainty being able to operate profitably. Monetary and fiscal policies determine economic stability. Interest rates, inflation rates and the tax rates influence the investment rates. The effect of interest rate on MNC's investment are likely to be smaller than on local investment because MNCs have access to larger capital sources.

A high rate of inflation is a sign of macro-economic instability. It implies the instability of Government to balance the budget and that Central Bank to restrict money supply. Hence it is hypothesized that the inflation rate and FDI inflow are inversely related. Low inflation rate and stable exchange rates are expected to have positive impact on Disinflation rate based on consumer price index is taken as a proxy for macroeconomic stability. It is expected to have an inverse relationship with foreign investment inflow. We can therefore expect:

H2: less developed countries with greater macroeconomic stability will attract greater FDI inflows.

INFRASTRUCTURE

The availability of well developed infrastructure will reduce the cost of doing business for foreign investors and enable them to maximize the rate of return on investment (Morriset 2001). It is common practice to measure infrastructure by the number of telephone lines per 1000 people. Recently most of the communications are carried on with internet and mobiles. In this study the communication growth is measured by number of mobile phone connections the country has. The development roads and other forms of transport growth are proxied by Gross Fixed Capital Formation (GFCF). The communication growth and transport growth is expected to have a positive impact of the inflow of foreign capital. This variable is positively correlated with FDI. We therefore expect:

H3: Developing countries with relatively well developed infrastructure will attract greater FDI inflow.

TRADE LIBERALIZATION

The degree to which a country orient itself with global economy is another factor which will make it attractive destination for export based FDI. Restrictive trade administration is detrimental for its own interest. Liberalisation of trade and FDI regimes are assumed to have positive influence on the inflow of FDI since they facilitate a freer trade and investment in conjunction with repatriation of dividend and profits to home countries. India has been following the policy of liberalization since 1992. It is therefore expected:

H4: Countries with greater liberalization drive will attract greater FDI inflow.

FINANCIAL DEPTH

Even though FDI is supposed to bring capital to the host country, financial innovation and financial engineering are required for their subsequent operations. A developed security and money market adds to the attractiveness of the country. In this study the ratio of M2 to GDP has been used to capture the financial depth. A rising M2/GDP reflect problems in economic and financial structures, such as excessively high savings and less developed direct financing. It further means that financial risks are overly concentrated in the banking sector. Such a financial situation may be less attractive for foreign investors. There it is expected:

H5: Countries with greater financial depth will attract greater FDI inflow.

DEGREE OF GLOBAL INTEGRATION

After the emergence of WTO nations have become highly integrated with one another. Such global integration paves way for free movement of resources between the countries. It also expands the market horizon internationally. Higher the degree of integration more confident the foreign investors are in investing in that country. In this study the ratio of tariff on imports is used as a proxy to measure the degree of global integration. Hence it is expected:

H6: Country with greater degree of Global integration will attract greater FDI inflow.

RESEARCH METHODOLOGY

This study is based on the data collected from World Development Indicators, World Bank. The period of study is from 1980 to 2011. This study employs factor analysis to identify main components of foreign capital inflow in to the country. Among the different ways of foreign capital inflow, the FDI inflow is considered in this study. The dependent variable foreign direct investment was measured using the ratio of FDI to GDP. 12 indicators were used to depict India's Investment environments. They included Gross Domestic Product (GDP), GDP growth rate, Electric Consumption, Gross fixed capital Formation, Financial depth (ratio of M2 to GDP), literacy, Mobile, Inflation, Government Policy, Control of corruption, Government Effectiveness, Rule of law. For institutional variables the average values for the period 1996 to 2002 were used. Data measuring institutional environment was measured using data provided by the World Bank website on Governance indicators. First the principal components were identified by using factor analysis. Then the factors thus identified were regressed to FDI inflow by incorporating institutional variables. Intuition variables were measured by the average value of World Bank data in these variables.

ANALYSIS

The dependent variable foreign direct investment was measured using the ratio of FDI to GDP. Prior to running factor analysis the variables were subjected to univariate statistical analysis. Results of the descriptive statistics are shown in Table.1. The correlation matrix which is presented in Table .2 shows that no variable is having values greater than 0.9. Further majority of the significance values are greater than 0.05. So it can be inferred that no singularity in the data. It may be noticed that determinant value is greater than the required minimum i.e., 0.00001. The Bartlett sphericity test and Kaiser- Meyer- Olkin tests of sampling adequacy was done. Bartlett measure tests null hypothesis that the original correlation matrix is an identity matrix. The Bartlett's test of sphericity is significant 53.148 and hence the null hypothesis that intercorrelation matrix involving these seven variables is an identity matrix is rejected. Thus from the perspective of Bartlett's test, factor analysis is feasible. As Bartlett's test is almost always significant, a more discriminating index of factor analyzability is Kaiser-Meyer- Olkin. For this data set it is 0.641, which is large enough. So the KMO also supports factor analysis.

The method of principal component analysis was used to obtain estimates of initial factor extraction. A factor solution emerged from principal component analysis with Eigen values greater than one. (See Table: 5). The two factors explained nearly 62 per cent of the total variance. All variables except Government policy have high communalities showing robust solution. This is shown in Table: 4. The two factors were then rotated using varimax method. Results of the rotated factor loadings are as shown in Table .7.

In the Factor Rotation the variables are listed in order of size of their factor loadings. The interpretability of factors can be improved through rotation. Rotation maximizes the loading of each variable on one of the extracted factors while minimizing the loading on all other factors. Rotation works through changing the absolute values of the variable while keeping their differential values constant. Since the researcher expects the factors to be independent, the varimax rotation is chosen. The Table .5 showing Total Variance Explained lists Eigen values associated with each linear component (factor) before extraction, after extraction and after rotation. Before extraction, the analysis has identified 7 linear components within the dataset. The Eigen values associated with each factor represents the variance explained by that particular linear component. So, factor 1 explains 42.899 % of total variance. All factors with Eigen values greater than one were extracted. The analysis gave two factors. The Eigen values associated with these factors are again shown in the column labeled 'Extraction Sums of Squared Loadings'. In the final part of the table, the Eigen values of the factors after rotation are displayed. Rotation has the effect of optimizing the factor structure and

one consequence for these data is that relative improvement of the two factors is equalized. Before rotation, factor 1 accounted for more variance (42.899), however, after rotation, it accounts for only 33.258% of the variance, similarly the second factor accounted for 18.608% and after rotation it increased to 28.250%. Kaiser rule of retaining factors with Eigen Values larger than 1.00 was used in this analysis as a default. The first two principal components are with Eigen values 3.003 and 1.303 were retained. Table .4 shows that the Principal Component Communalities range from 0.108 to 0.898. Thus most of the variance of these variables was accounted for by this two dimensional factor solution. The variables that load heavily on factor 1 are Mobile (0.913) and M2/GDP (0.842). The first is the proxy for communication infrastructural growth and the second is the proxy for financial depth of the country. Therefore the researcher labels them as economic overhead factors. In this study, the rotated component matrix elements with value less than 0.5 are not considered. On that criterion the variables that loaded heavily in factor 2 are GDP growth, INFLA and GFCF. The GDP growth rate reflects the size of the market and GFCF (0.735) which again signify the growth process of the nation. Inflation rate (INFLA) measures the macroeconomic stability. Hence the researcher label these variables as "Size of the market and Stability" India's emerging trend in growth and development become an attraction to foreign investors.

The method of Principal Component analysis was used to obtain estimates of factor extraction. A two factor solution emerged from principal component analysis with Eigen values greater than one. Table .5 gives the details. The two factors explained nearly 62 per cent of total variance. All variables except government policy have high communalities showing robust solution. The two factors were then rotated using varimax method. Results of the rotated factor loadings are shown in Table.6. The first factor loaded with variables mobile, M2GDP and tariff on imports. Based on these loadings the first factors measured infrastructure. The factor had loadings GDP growth, gross fixed capital formation, and inflation. It measures size and stability.

In order to determine the factors influencing the choice of FDI location for India, the factor measures infrastructure, size of the market were subject to linear regression analysis,

$FDI = f(INF, MARKET, SIZE, INS)$.

That is, foreign direct investment is influenced by existing infrastructure (INF) Size of the market (MARKET SIZE) and quality of existing institutions (INS). To distinguish the impact of each element of the institutional environment, three other regression were run with the control variables and each of three components of the institutional environment separately, That is

$FDI = f(INF, MARKET, RL)$ eq.1

$FDI = f(INF, MARKET, GE)$ eq.2

$FDI = f(INF, MARKET, CC)$ eq.3

Where RL, GE, CC refers to rule of law. Government effectiveness and control of corruption. This was necessary due to the fact that the institutional variables are highly correlated with each other. Using them in one equation would cause multicollinearity problems,

RESULTS AND DISCUSSION

Regression results of three models are shown in Table.7. Results of the first model show that infrastructural development has a significant positive relationship with FDI inflows. However size of the market does not have significant relationship with FDI inflows. This suggests that, provided India has a well-developed infrastructure and rule of Law, foreign firms are likely to invest regardless of market.

The second model also found significant positive relationship between Government Effectiveness and infrastructural development. This again suggests that institution of Government Effectiveness helps in attracting FDI into India. The third model found significant positive relationship between control of corruption and infrastructural development. This also suggests that control of corruption coupled with infrastructural development is more significant in attracting FDI. In this study the size of the market is not displaying significant relationship suggesting that the FDI firms may use India as an export base. Size of the market, although it was statistically insignificant, its sign was in line with a priori expectations i.e., bigger the size of the market larger is the FDI flows.

FINDINGS

The study finds that infrastructure growth in India is most vital component of factors that makes India relatively more attractive for foreign firms. As against the popular belief, it was found that size of the market is not a crucial one for FDI inflow into India. Macroeconomic stability is also important for getting increased inflow of foreign capital. The Government effectiveness will be a great force to bring more FDI capital into the country.

RECOMMENDATION AND SUGGESTIONS

This study, on the basis of the outcome of the empirical analysis, recommends that more rapid improvements in terms of power generation and distribution, means of transport, communication growth and financial innovation and engineering should be given continuous attention to attract more FDI inflows. Further it is recommended that government effectiveness, elimination of corruption and rule of law would go a long way in making India much more sought after destination for FDI.

CONCLUSION

Instead of single variable measurement of the complex aspects of India's investment environments, this study uses factor analysis to provide measures of the country's investment environments. Regression analysis results have found that institutional quality, infrastructure development significantly influence the flow of foreign direct investment into India. However this study did not find the variable market size to emerge significantly. This suggests foreign firms may enter India without bothering too much about the size of the market because they can export from India, thanks to the liberalization drive of the country. The policy implication is India should continue to concentrate its efforts in building qualitative institutions along with infrastructure development in order to have much more impressive growth of FDI into India.

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TABLE**TABLE 1: DESCRIPTIVE STATISTICS**

Variable	Mean	Standard Deviation	Analysis
GDP growth	6.6136	2.262	22
Inflation	7.0714	2.831	22
GFCF	8.7273	7.032	22
Mobile	12.6608	20.495	22
Tariff on imports	25.2312	6.012	22
M2GDP	1.0319	0.902	22

Source: Computed

TABLE 2: CORRELATION MATRIX

Variable	GDP growth	INFLA	GFCF	Mobile	Tariff on imports	M2GDP	GP
GDP growth	1.000	- 0.364	0.391	0.311	- 0.615	0.061	0.061
INFLA		1.000	- 0.235	0.043	0.333	- 0.108	-0.108
GFCF			1.000	0.022	- 0.444	.023	0.023
Mobile				1.000	-0.682	0.132	0.132
Tariff on imports					1.000	- 0.125	0.125
M2GDP						1.000	0.238
GP							1.000

Determinant: 0.051

Source: Computed

TABLE 3: KMO AND BARTLETT 'S TEST

Kaiser- Meyer-Olkin Measure of Sampling Adequacy	0.641
Bartlett's Sphericity Approximate Chi-Square	53.148
Degrees of freedom	21
Significance	0.000

Source: computed.

TABLE 4. COMMUNALITIES

	Initial	Extraction
GDP growth	1.00	0.616
Inflation	1.00	0.541
GFCF	1.00	0.543
Mobile	1.00	0.834
Tariff on imports	1.00	0.898
M2GDP	1.00	0.765
Government Policy	1.00	0.108

Extraction Method: Principal Component Analysis.

Source: Computed.

TABLE 3: TOTAL VARIANCE EXPLAINED

Components	Initial Eigen Values			Extraction sums of squared loadings			Rotation sums of squared loadings		
	Total	% of Variation	Cumulative %	Total	% of Variation	Cumulative %	Total	% of Variation	Cumulative %
1	3.003	42.899	42.899	3.003	42.899	42.899	2.328	33.258	33.258
2	1.303	18.608	61.508	1.303	18.608	61.508	1.977	28.250	61.250
3	0.994	14.200	75.708						
4	0.738	10.538	86.245						
5	0.600	8.565	94.811						
6	0.240	3.435	98.245						
7	0.123	1.755	100						

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization

FIGURE 1

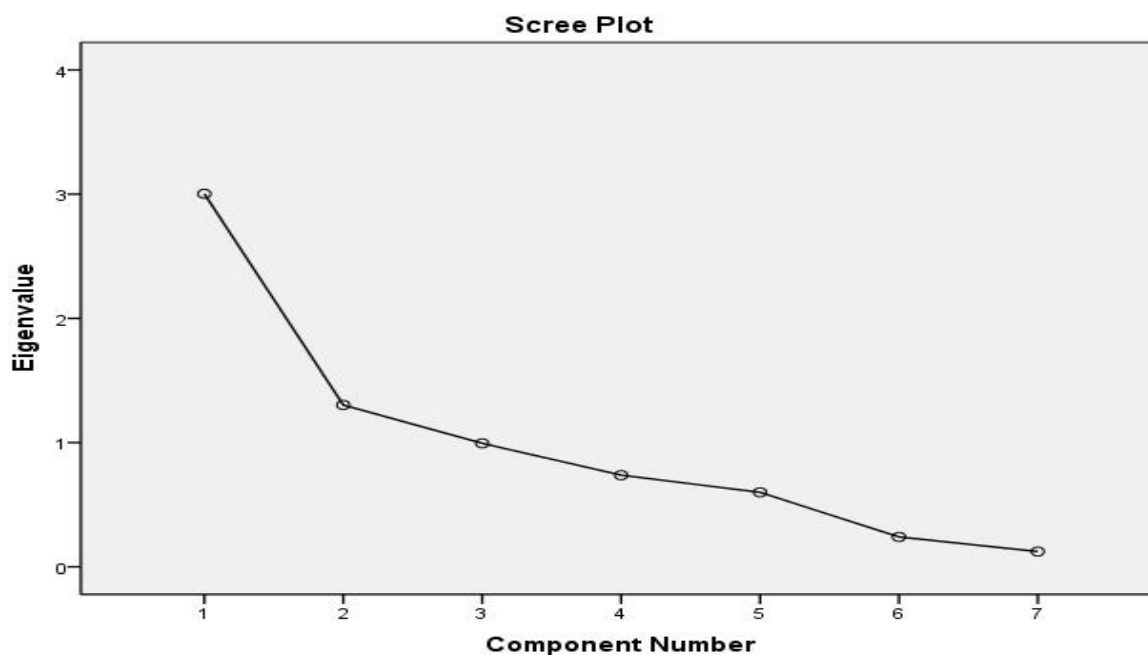


TABLE 6: COMPONENT MATRIX

	Component	
	1	2
GDP growth	0.689	-0.377
INFLA	-0.419	0.604
GFCF	0.509	-0.533
Mobile	0.700	0.587
Tariff	-0.947	-0.045
M2GDP	0.804	0.345
Government Policy	0.250	0.213

Extraction Method: Principal Component Analysis.

Source: Computed.

TABLE 7: ROTATED COMPONENT MATRIX

	Component	
	1	2
GDP growth		0.726
INFLA		- 0.733
GFCF		0.735
Mobile	0.913	
Tariff	-0.764	
M2GDP	0.842	
Government Policy		

Extraction Method: Principal Component Analysis.

Source: Computed.

TABLE 8: REGRESSION RESULTS OF FDI AND INDIA'S INVESTMENT ENVIRONMENT MEASURES

	Model 1	Model 2	Model 3
Constant	1.947	-3.404	-0.828
Size of the Market	0.219 (0.239)	0.014 (0.651)	0.020 (1.122)
Infrastructure	0.750 (6.684)***	0.048 (12.716)***	0.039 (13.720)***
Rule of Law	3.506 (2.143)*	-	-
Government Effectiveness	-	7.762 (2.720)	-
Control of corruption	-	-	3.321 (4.957)**
R ²	0.856	0.872	0.914
Adjusted R ²	0.841	0.858	0.904
F-value	55.576	63.434	98.608
Durbin Watson	1.539	1.987	2.023

*** Significant at 1% level ** significant at 5 % level

Source: Computed.

A CRITICALITY TESTING ON HUMAN RESOURCE AND TOTAL QUALITY MANAGEMENT FACTORS IN HIGHER EDUCATION: A PERSPECTIVE FROM INDIA

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ABSTRACT

The endeavour of this manuscript is to provide substantiation on the scale of criticality and persistence tests for human resource linked critical success factors in TQM implementation. This involves categorization of the HR-related critical success factors from the meticulous resource of literature reviews on quality initiatives. In higher education contexts, the critical success factors in TQM programmes accentuate more management pledge, HR management and quality working attitudes for student satisfaction. Therefore, the HR aspects in the literature review stand as the elementary issue of alarm for organizational management in quality planning and constructing a quality working climate to ensure successful expected performance. Using Statistical Package for Social Sciences 16.0, the HR-related critical success factors that have high mean scores and reliability coefficients are Teamwork Spirit, Competent Staff, Customer-Focus Orientation and Visionary Leadership. The notional dialogue justifies ten HR-TQM critical factors, which are relevant to quality initiatives in the Higher Education context. They are Visionary Leadership, Customer Focus, Effective Communication, Congruent Objectives, Staff Selection and Deployment, Competent Staff, Teamwork Spirit, Training And Education, Recognition And Motivation And Innovation And Creativity. The mean scores suggest that quality team working, competent staff, customer focus orientation, and visionary leadership are the four most important HR-related factors that are critical to ensuring successful TQM implementation. The study provides empirical evidence of how careers are being managed within established employments.

KEYWORDS

Inter Organisational Career Movement, Retention, Restructuring HR policies, Turnover, Traditional compensation plan

INTRODUCTION

TQM is not just an organizational management programme or management initiative package, but a complete change in an organization's culture and the way people behave at work. TQM definitions, philosophy, approaches and models were discussed in many organizational contexts by many quality gurus from various perspectives. However, Oakland (1989, p. 14–15) defined TQM in a general perspective as:

An approach to improving the effectiveness and flexibility of business as a whole. It is essentially a way of organising and involving the whole organization; every department, every activity, every single person at every level. For an organization to be truly effective, each part of it must work properly together, recognising that every person and every activity affects and in turn is affected by others.

This definition focuses on functional integration and employee involvement, but says nothing about the customer. However, it recognises the importance of organizational coordination for quality, which can be enhanced, for example, by conducting departmental purpose analysis – tasks negotiated between organizational members, thus smoothing workflow and inter-departmental coordination. Generally, a study on TQM implementation can be focused on either 'hardware' (especially the tools and techniques) or the 'software' (mainly the human resource aspects).

This study is mainly concerned with the soft or people issues, and usually the more qualitative aspects of a TQM programme consisting of HRM policies and activities to generate commitment to quality and the dissemination of management vision and ideology that may reinforce the maxims of quality working cultural change, continuous improvement and customer orientation. Even though the term 'quality' has broad and subjective meanings, with concepts of standards, excellence and 'fitness for its purpose', there has always been a great relevance and concern for quality in HE.

The phrase 'critical success factors' (CSFs) itself indicates the importance of the concept to ensure the success of any particular process or project. From the perspective of decision management, Ferguson and Dickinson (1982) define CSFs as those internal and external factors that must be identified and reckoned with, as they are capable of supporting or threatening the achievement of a company's objectives. HR-related CSFs in quality initiatives for HE The following sections will define 10 HR-related CSFs that were used in previous research on quality initiatives, and mostly in service organization contexts.

Top managers carry the primary responsibility for commitment to quality and support efforts necessary to achieve the organizational goals, and as the architects of change initiatives who provide a sense of direction for the workers and organization, particularly in successful TQM implementation (Crosby, 1979; Garvin, 1983; Ugboro & Obeng, 2000). In TQM implementation, leaders are responsible for developing and communicating the company vision, and then building organization-wide commitment in the people in order to achieve the specified targets (Kehoe, 1996; Waldman, 1994). Ramirez and Looney (1993), Lewis and Smith (1994) and Thiagarajan, Zairi, and Dale (1996) showed that top management roles belong to the first tier of critical factors in TQM implementation. The literature suggests that visionary leadership in any HE institution's quality initiatives is critical, as personal leadership and involvement of the top executives creates and sustains a customer-focused work orientation and provides clear and visible quality values.

CUSTOMER FOCUS ORIENTATION

Like other industries, customers in HE institutions are the main element for quality initiatives. It is essential to identify them, along with establishing the processes to determine each of their needs to be satisfied (Owlia & Aspinwall, 1998; Spanbauer, 1995). Gap 5 in the SERVQUAL model (Parasuraman, Berry, and Zeithaml, 1990), as shown in Figure 1, shows that it could be a major service deficiency if the organization fails to identify and provide the right specification for customer needs. Therefore, customer focused organizations involved in quality initiatives should believe that business operations would improve by satisfying customers' needs and requirements (Lin, Chow, Madu, Keui, and Yu 2005). The customers' degree of satisfaction will be the main indicator to determine the level of quality performance.

EFFECTIVE COMMUNICATION

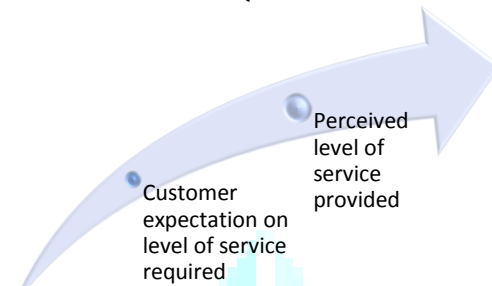
Effective communication ensures employees' clear understanding about the TQM programme, and is also useful to overcome barriers to quality improvement. In TQM, communication should happen at all levels, through all aspects of operations (Dale & Cooper, 1993; Ravichandran & Rai, 2000). However, in the HE context, Lewis and Smith (1994) suggest that effective communication will break down barriers between departments and programmes, and between faculties, administration, staff, and students. Sherr and Lozier (1992) argue that the working culture of most colleges and universities would have to be transformed through effective communication in training and education, and that only top management can only develop the total quality mindset in people throughout the organization (Voehl, 1993). Therefore, in the HE environment, quality communication is indicated within the function to adapt quality programmes to the internal and external customers, and to promote a network of cooperation between staff and students.

CONGRUENT OBJECTIVES

Deming (1986) suggests that congruent objectives in quality management will drive out the fear of uncertainty in people, and that this is the best way to create a quality environment. According to Juran (1974) and Oakland (1993), to keep quality objectives aligned with the employees' efforts, results should be

communicated to every member and be made as a basis for continuous improvement. Meanwhile, Gaps 2 and 3 in the SERVQUAL model by Parasuraman, Zeithaml, and Berry (1988) explain clearly the effect of a lack of congruent objectives between management on the service provided by employees in terms of service perception. Nonetheless, the common objectives in TQM are to increase productivity, maximise resource utilisation.

FIGURE 1: SERVQUAL MODEL GAP 5



Source: Adapted from Parasuraman et al. (1990, p. 39).

(or total cost and capacity management) and, at the same time, ensure customer satisfaction. These objectives need always to be kept in the mind of every organizational member involved in quality initiatives. Staff selection and deployment Employee selection is a HRM decision process that is made on the basis of an assessment on the suitability of a group of potential individuals who might fill job vacancies (Redman & Wilkinson, 2001). Rees and Doran (2001) suggest that, from a TQM perspective, selection processes are designed to identify individuals who possess quality-related competencies. However, according to Ahmed and Schroeder (2002), selection criteria may involve the 'hard' or tangible aspects, such as technical and academic qualifications, and also the 'soft' aspects or behavioural skills. Staffing or staff deployment through the 'rightsizing' and 'ability-job-fit' technique in quality management essentially involves analysing a units' or departments' personnel =needs based on its long-term quality objectives, and the overall company needs, and finding the combination of permanent and temporary employees with the best skills and competencies to meet those needs (Rhinehart, 2000).

COMPETENT STAFF

Woodruffe (1993) defined competencies as 'the set of behaviour patterns that the incumbent needs to bring to the position in order to perform its tasks and functions with competence'. Deming (1986) suggests that TQM requires specific technical knowledge and the ability to maximise the impact from each of the methods applied that would determine the quality of performance. Juran (1974) explains that internal and external failures could be minimised through improved employee competency in quality continuous improvement activities. Meanwhile, Carter, Smeltzer, and Narasimham's (2000) findings suggest there is a need for management staff to have the skills and commitment in key strategic decisions and there is a need for employees to be involved in more tactical decisions. These are both important to the success of TQM. In order for the employees to perform an excellent job as expected, they have to have the knowledge, skills and capabilities relevant to the tasks specified, which are critical to providing quality services.

TEAMWORK SPIRIT

Atkinson (1995) defines teamwork in the TQM perspective as 'everyone in an organization is personally managing and continuously improving their own process, and working together in teams to improve their service to the customers'. Research on TQM and continuous improvement by Seers (1989), Griffin and Hauser (1992), Mohrman, Tankasi, Lawler, and Ledford (1995), and Hoegl and Gemuenden (2001) suggest teamwork as a crucial success factor. Hackman and Wageman (1995) and Behara and Gundersen (2001) find that TQM practices emphasise teamwork and cross-functional relationships that provide many opportunities for social interaction and social reinforcement. These show that the spirit of team working is one of the main features of TQM culture. The Black and Porter (1996) study identifies teamwork structures to represent efforts made to develop organizational structures in support of quality improvement initiatives. The study also explicitly ties teamwork to the importance of integrated management at all levels of service and organization in the overall quality performance. Therefore, a quality working culture of teamwork spirit is an important condition for successful TQM implementation.

RECOGNITION AND MOTIVATION

A reward policy in HRM involves a selection of a range of rewards, designed in a manner in which they need to be administered (such as being linked to performance assessment exercise) and with the ultimate aim of motivating employees to contribute effectively to a set of organizational goals. Hackman and Wageman (1995) claim that among the evidence they reviewed for the discriminate validity of TQM was the fact that TQM explicitly eschews a number of popular motivational devices, including work redesign (e.g. job enrichment), goal setting (e.g. management by objectives), and performance contingent rewards (e.g. pay for performance). The Black and Porter (1996) study addresses employee recognition as one of the elements in the people management core constructs, while Saraph, Schroeder, and Benson (1989) identified the employee relations construct as one of the TQM critical factors. Therefore, the studies suggest that organizations must develop formal systems to encourage, track, and reward employee involvement to maintain a high level of employee motivation towards excellent performance.

TRAINING AND EDUCATION

Deming (1986) explains that what an organization needs in TQM implementation is not just good people, but people who are continually improving with training and education. Dale and Cooper (1993) and Oakland (1999) claim that training is one of the most important factors for continuous improvement. Saraph et al. (1989) and Boltes (1992) suggest that TQM requires technical and attitudinal knowledge, and specific training for employee understanding is necessary. Ramirez and Looney (1993) and Thiagarajan et al. (1996) categorised quality education as the first tier factor, which specifies one of the roles of top management in implementing an excellent quality programme. In a validity survey, ranking the importance of CSFs in TQM implementation, Behara and Gundersen (2001) discovered training as the third in importance, and the Brah, Wong, and Rao (2000) study showed it as the fourth. Moreover, HR development and management examines the key elements of how the HE institutions develop and realise the full potential of their workforce in pursuing the quality and excellent performance objectives.

RESEARCH METHODS

Quantitative research places great emphasis on methodology, procedure, and statistical measures of reliability and validity. A five-point Likert scale (1 ¼ Strongly Disagree; 2 ¼ Disagree; 3 ¼ Neutral; 4 ¼ Agree; 5 ¼ Strongly Agree) was used to measure. The respondents were asked for their perception of the importance of the HR-TQM factors in implementing quality initiatives for the institutions. 237 usable responses were collected, which represented 35% of the selected sample. The quantitative data analysis used the SPSS software. This study made a specific analysis of the average means and the reliability test for each factor. The internal consistency was measured using Cronbach's alpha reliability coefficient.

FINDINGS AND DISCUSSION

The mean score of each HR-TQM critical factor shows that the top three factors rated by the individuals involved in Malaysian HE quality programmes as critically important are: teamwork spirit, competent staff, and customer focus orientation, with means of 4.26, 4.12, and 4.08 (maximum scale of five), respectively. The finding suggests that the quality of service that HE institutions must provide to their customer is always integrated in nature. These processes would involve academic, administration, post-output obligations, and various parties of stakeholders with different requirements and expectations to be put together as a total service quality. The full mean scores of all the factors tested are shown in Table 1 by institution.

Meanwhile, the average score on the importance of HR related factors in TQM CSFs, rated by all institutions, is 4.02. This is equal to 80.4% of five maximum ratings. Generally, this indicates that HR-related factors were recognised as highly important in ensuring successful implementation of TQM programmes in the HE context. The survey suggests that HR-TQM factors are given as independent constructs, which are critical as determinant factors for successful quality initiatives in the Malaysian HE context. Using the SPSS reliability analysis program, an internal consistency analysis was performed separately for the items of each critical factor.

TABLE 1: MEAN AND SD SCORE OF HR-TQM CFS IN INDIA HIGHER EDUCATION

HR-TQM CSFs	Unit 1 N=23	Unit 2 N=50	Unit 3 N=40	Unit 4 N=38	Unit 5 N=43	Unit 6 N=43	Average Mean N=237	Composite Std. Dev
X1	4.30	4.02	4.27	3.63	4.20	3.98	4.07	0.91
X2	4.34	4.06	4.25	3.94	4.03	4.09	4.12	0.74
X3	3.94	3.78	3.91	3.61	3.87	3.66	3.80	0.89
X4	4.32	4.15	4.01	3.66	3.97	4.10	4.04	0.78
X5	4.00	4.11	3.92	3.89	3.89	4.05	3.98	0.82
X6	4.17	4.08	4.03	4.05	3.95	4.27	4.08	0.69
X7	4.37	4.30	4.24	4.24	4.18	4.28	4.26	0.70
X8	4.16	4.01	4.20	3.53	3.85	4.32	4.00	0.81
X9	4.02	4.09	3.93	3.58	3.71	3.92	3.92	0.83
X10	4.06	4.02	4.03	3.70	3.94	3.96	3.95	0.72
Mean of HR-TQM	4.17	4.06	4.08	3.78	3.96	4.06	4.02	

Table 2 shows the values of alpha (i.e. reliability coefficient) computed for each factor. The high alpha coefficients indicate that since inter-item correlations are high, there is evidence that the variables are measuring the same underlying construct of factors specified. The low variance of mean given by the output supports the research evidence that the items used have minimum variability of scores. According to Black and Porter (1996), alpha coefficients above 0.60 are acceptable. Therefore, statistically, all ten factors identified as the critical HR-TQM factors can be used for further analysis.

TABLE 2: INTERNAL CONSISTENCY RELIABILITY ANALYSIS FOR HR-TQM CSFs

HR-TQM CSFs	Cronbach's	α value	Standardised item α	Variance of mean
X1	0.8981		0.8977	0.0025
X2	0.7562		0.7563	0.0261
X3	0.8302		0.8323	0.0210
X4	0.6454		0.6652	0.0850
X5	0.6393		0.6381	0.0460
X6	0.7026		0.7090	0.0358
X7	0.7234		0.7318	0.0928
X8	0.8639		0.8655	0.0097
X9	0.7835		0.7797	0.0465
X10	0.7606		0.7665	0.0062

TABLE 3: IMPROVED INTERNAL CONSISTENCY RELIABILITY ANALYSIS

	Cronbach's	α value	Variance of mean	Standardised item α	Cronbach's	α value
X5	0.6393					
X6	0.7026		0.0363	0.7377	0.7485	
X4	0.6454					
X7	0.7234		0.0914	0.7795	0.7895	

TABLE 4: HR RELATED TQM – DEGREE OF IMPORTANCE

HR-TQM CSFs	Average mean	SD	Degree of Improtance
Quality teamworking	4.16	0.49	1
Customer focus orientation	4.12	0.58	2
Visionary leadership	4.07	0.74	3
Staff selection and competency	4.02	0.48	4
Education and training	3.99	0.72	5
Innovation and creativity	3.95	0.55	6
Recognition and motivation	3.78	0.76	7
Effective communication	3.80	0.71	8
Mean	4.02		

The new factor was renamed as quality team working. This evidence supports the work by Silos (1999) and Wong and Sohal (2002). The summary of the review is shown in Table 3.

The findings testify the degree of criticality of eight HR-related CSFs in ensuring successful TQM implementation, as shown in Table 4. Quality team working, customer focus orientation and visionary leadership are the three most critical factors of implementing successful TQM in the Indian HE context.

CONCLUSION

The theoretical discussions justify ten HR-TQM critical factors, which are relevant to quality initiatives in the HE context. They are visionary leadership, customer focus, effective communication, congruent objectives, staff selection and deployment, competent staff, teamwork spirit, training and education, recognition and motivation and innovation and creativity. The mean scores suggest that quality teamworking, competent staff, customer focus orientation, and visionary

leadership are the four most important HR-related factors that are critical to ensuring successful TQM implementation. The survey suggests that the highly critical HR-TQM factors (at 80.4% mean scores) are the critical determinants of successful quality initiatives in a Malaysian HE context. Furthermore, the reliability internal consistency test suggests that all of those factors are acceptably reliable enough to be used in a similar research context. The improved internal consistency of Cronbach's alpha suggests that if research were to take a relatively high reliability coefficient (that is, above 0.70) the critical HR-TQM factors that can be considered are reduced to eight. It is suggested that staff selection and congruent objective be reviewed, as they carry low mean scores. The other option is to combine those variables and justify on theoretical grounds, and supported with further statistical analysis, with the resulting variable necessarily renamed. The findings suggest that quality teamworking, customer-focus orientation and visionary leadership are the three most critical factors in implementing successful TQM in the Indian HE context. For further research, even though measurement instrument's reliability is necessary, it is not enough, which means that it must really measure the concept or the phenomenon that it was designed to measure. Further analysis using content and construct validity tests are appropriate to test the goodness of measures as a common validity testing. EFA and multiple correlation analysis are the common statistical tools for that purpose. Mediating factor(s) such as employee involvement and commitment can be considered to validate integrated HRM-TQM relationships in the process to produce performance excellence.

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OPERATIONAL IMPLICATIONS OF RECRUITING LESS THAN THE REQUIRED – A CASE OF GSRTC

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ABSTRACT

Procurement of right people is crucial for ensuring organizational wellbeing, as they are the real backbones of any organization. The supply of qualified manpower limits the success of an organization even more sharply than does the supply of money, material or market. Consequently, out of the four major thrust areas of Human Resource Management viz. Acquisition, Utilization, Development and Maintenance of People; attracting and recruiting talented people is posing a serious challenge for most of the organizations. This becomes even more crucial for the Passenger Road Transport Industry wherein the operative level occupies more than 85% of the total manpower strength. Despite this, the Gujarat State Road Transport Corporation (GSRTC) recently adopted a surprising move of recruiting less than the required, perhaps to counterattack the open, loud and frequent criticisms of its inefficiency. Resulting in dearth of staff in various categories, this hiring move has adversely affected the operational performance of GSRTC. By thoroughly analyzing the effects of this hiring practice on various operational performance parameters of GSRTC, this paper discusses the operational implications of this hiring practice. It also throws realistic light on the fact that people should never be the first target for cost cutting, as they are the 'real revenue generators'; and the paper aptly concludes that such so-called smart strategic hiring move has neither paid off to GSRTC nor it would pay off to any other organization.

JEL CODE

O15

KEYWORDS

Employee Hiring, GSRTC, Passenger Road Transport Industry, Procurement of People, State Transport Undertaking (STU).

1.0 INTRODUCTION

From the perspective of Behavioural Science, every organization is dependent on its four key elements for effective functioning. These four key elements are People, Structure, Technology and Environment; and out of these four, people are the most important element, as no organization can exist without people.

From the perspective of Economics, there are four factors of production namely Land, Labour, Capital and Entrepreneur. Here, Labour; being living, thinking and feeling human being; needs to be treated differently.

Similarly, in Management domain, it is said that every organization has four 'M's namely Man, Material, Money and Machine. Out of these four Ms also, it is always suggested that if you can manage your Man well, they will effectively manage the other three Ms.

Thus, the importance of People as Employees or Human Resources in an organization stands unquestionable. It is well known that to ensure an organization's continued survival, growth and prosperity, every organization needs to have competent, committed and motivated people at all levels; as this people dimension can only be a long term competitive advantage for any organization. With increased realization of the importance of people as the nucleus of any sort of organization, the organizations across the globe have realized that all corporate strengths are centered around human resource (Pande, 2003). The same was signaled by Caudron (1994) also when he pointed out that the only thing that will maintain today's source of competitive advantage is high quality personnel instead of merely capital, technology or long-lived products. On the same line, acknowledging the ever increasing importance of the people dimension in today's organizations; Abdeen (2002) went a step further. According to him, the employees, in reality are the soft assets and the hidden value of a company. Thus, the employees, being the basic pillars of any organization, must be treated as assets, and not as liabilities; must be seen as investment, and not as expenditure; must be acknowledged as the revenue/profit centre, and not as the cost/loss centre.

This becomes even more relevant when we talk about the Transport Industry in general, and the Passenger Road Transport Industry in particular; wherein the operative level occupies more than 85% of the total manpower strength of a typical transport unit. Yes, in a typical Public Road Transportation Unit, the Operative Level Staff – the real revenue generators – the frontline staff – represent the single largest cohort. In India, as we have adopted the practice of treating Public Road Transport Service (PRTS) as a part of Social Welfare; we have "State Monopoly" in operating Public Road Transport through Bus services. With the provision of forming State Road Transport Undertakings (SRTUs) under the Road Transport Corporation Act, 1950, and the amended form of the Motor Vehicles Act, 1950; the Passenger Road Transportation System in India has been organized under the broad category of State Transport Undertaking (STU). These STUs are typically the Government owned and operated or Public Sector organizations. Their prime objective is to provide efficient, economic and safe road transport services through buses to the general public; wherein the involvement of staff is a decisive factor for the quality of service being provided to the general public. So, the Gujarat State Road Transport Corporation (GSRTC), being a State Transport Undertaking, needs to have enough number of competent, committed and motivated people at all levels to fulfill its social objectives. But, at present, GSRTC is experiencing acute shortage of manpower in various categories and it is adversely affecting its operational efficiency. So, the present paper strives to analyze the operational implications of this seemingly unpalatable 'understaffed' situation of a typical Government Owned and Operated STU – the GSRTC.

2.0 BACKGROUND OF GSRTC

Gujarat State Road Transport Corporation (GSRTC) is a State Transport Undertaking (STU) operating since 1st May, 1960 with a purpose of providing an efficient road transport facility to the people of Gujarat state. From a modest beginning of 7 divisions, 76 depots and a fleet of 1,767 buses; as on date, it has gone to 15 Divisions, 125 Depots, 226 Bus Stations, 1554 Pick-up Stands and a fleet of over 8,000 buses. As of June, 2012, GSRTC employs 40,670 employees in various categories/cadres, covers over 2.8 million kilometers per day, and transports around 2.7 million passengers daily through 6850 sanctioned schedules every day operated on 15,000+ routes through 8000+ buses on road.

GSRTC is functionally divided into 15 Divisions each headed by a Divisional Controller, followed by 125 Depots headed by respective Depot Managers. The Operational Structure of GSRTC is shown in Table 1.

TABLE 1: OPERATIONAL STRUCTURE OF GSRTC

Gujarat State Road Transport Corporation (GSRTC)					
CENTRAL OFFICE at Ahmedabad (Gujarat)					
15 Divisions: 11 Large + 4 Small					
125 Depots					
6850 Sanctioned Schedules (Trips) and 6607 Operating Schedules (Trips)					
Fleet of 8000+ Ultra Modern Buses					
39598 Employees in 15 Divisions					
Drivers: 14488	Conductors: 15594	Driver-cum-Conductors: 153	Mechanic Staff: 4958	Other Traffic Staff: 2784	Admin. Staff: 1621
1072 Employees in Central Units, viz., Central Office, Printing Press, Central Workshop and Tyre Retreading Plants					
40,670 Total Employees in GSRTC					

Source: Cumulative Costing and Operational Results of GSRTC - 2011-12

3.0 EMPLOYEE HIRING PRACTICE IN GSRTC

Logically the first step in the development of an organization is to acquire the people to operate the organization. It is one of the most critical steps in the establishment and growth of an organization. The supply of qualified manpower limits the success of a business just as sharply as does the supply of money, material or market. Consequently, nearly 80% of HR Managers across the world; are reported to be busy in "attracting and retaining talent" treating it as their top priority item (Prasad, 2007).

Even in a thickly populated country like India, where there is a large pool of technically qualified unemployed persons, yet it is very difficult to find right people for the job. Personnel manager and other senior executives have always experienced difficulty in finding satisfactory candidates (Bansal, 1991). So, in such a situation, employee hiring practice of an organization occupies prime important position in the overall strategic planning.

Employee Hiring Practice predominantly consists of Manpower Planning, Recruitment and Selection processes of an organization. Alternatively, we can say that employee hiring process is the one through which an organization procures/acquires right type of people, optimally matching with its requirements. GSRTC, possibly being the single largest employer in the Government sector in the State (http://www.gsrtc.in/site/chairman_gsrtc.html); should have a well planned and systematic employee hiring process in place. So, let's have a look at its Manpower Planning, Recruitment and Selection process.

3.1 MANPOWER PLANNING IN GSRTC

Manpower Planning or the more polished term "Human Resource Planning", popularly abbreviated as HRP, is believed to have first been introduced in 1676, when Samuel Pepys first became concerned with the provision of careers for officers in the Royal Navy (Sarma, 2009).

Manpower planning basically represents the 'proactive' face of people function in an organization. It is a function aimed at coordinating the requirements for and availability of different types of employees. It is a forward looking function associated with the procurement of right kinds of people by keeping an eye on the strategic goals of the organization. It's an integral part of total strategic planning. Estimating the number and type of people that an organization will require in the nearby future considering its short-term and long-term planning is of paramount importance. This can't be left to mere guesswork; as overestimation of future manpower need leads to avoidable costs to organization and underestimation of future manpower need leads to failure in meeting the customer expectations and thereby losing an opportunity to improve the profit picture. In nutshell, HRP is an indispensable function for any sort of organization, if it wants to achieve its goals effectively and efficiently.

Here, GSRTC is a State Government owned and run State Transport Undertaking (STU); and just like any other STU in the country, GSRTC also functions like a typical Government owned and operated or Public Sector Undertakings.

Further, when we refer to 'People Management' practices in GSRTC, we need to acknowledge the fact that the GSRTC is 52+ years old public sector undertaking working for providing safe, reliable, economical and ultra modern road transport services to the general public of Gujarat. Within a span of more than 52 years, if GSRTC could reach to a stage of 15 Divisions, 125 Depots and a fleet of over 8,000 buses from a modest beginning of 7 divisions, 76 depots and a fleet of 1,767 buses; it is only due to unflagging effort of more than 40,000 workforce of GSRTC. As per the opinion of the present honorable Chairman of GSRTC - Shri B. H. Ghodasara Sir, GSRTC is possibly the single largest employer in the Government sector in the Gujarat State (http://www.gsrtc.in/site/chairman_gsrtc.html accessed on 17th September, 2012).

This mass of committed employees, by working day in and day out – 24*7*365 pattern; covers over 2.8 million kilometers per day, and transports around 2.7 million passengers daily through 6850 sanctioned schedules operated on 15,000+ routes through 8000+ buses on road. Such herculean task requires continuous motivation, commitment, sense of belongingness, service orientation, quality work environment, so on and so forth. Hence, one would certainly expect that GSRTC should have well established sound HR department with various people policies well in place, to take care of their employee related functions.

But, still continuing with the age old traditional outlook, GSRTC has preferred to go with Personnel & Administration Department nomenclature instead of the much needed impressive, progressive, philosophical and people oriented nomenclature of HR or HRD Department. And believe me, it's not only the name of the department that matters in case of GSRTC; if we closely look at the existing policies related to employees; ironically, we need to accept that GSRTC is far away from the complete HRD functions. Similar opinion was given by Dave (1992), while studying the Human Resource Management scenario in GSRTC. Even, Kulkarni (1989), who studied organizational and administrative aspects in passenger road transport in India, has also suggested that major improvements need to be undertaken in the areas of recruitment, selection and training of employees in this sector. However, Padam (1994) highlighted the changing imperatives of Human Resources Development in Passenger Road Transport Industry; and noted that scenario is changing.

But, ironically, not much has changed in GSRTC in terms of its traditional outlook with reference to HR practices. So, despite its far reaching importance, the scenario of HRP practices is not very encouraging in GSRTC. But, as one understands, in our country, everyone is ever ready, or all the time dreams, to have the government job; and GSRTC being a Government organization, is able to attract enough numbers of candidates through recruitment drive. So, procurement of people does not pose a serious problem for GSRTC. Perhaps this is the reason why, GSRTC - even though possibly the single largest employer in the Government sector in the Gujarat State, does not have a Formal Manpower Planning or Human Resource Planning process in place. This is ironical, as HRP, being a sub-system of total organizational planning, is significant, which helps to determine future personnel needs. HRP is a process of forecasting an organization's future demand for, and supply of, the right type of people in the right number. Through systematic HRP, organization strives to ensure that it has the right type and right number of people at the right places at the right time to do the right things (jobs). Surplus or deficiency in staff strength is a sure shot outcome of complete absence of or defective HRP. In our country, almost all public sector undertakings are found to be overstaffed as they never had systematic HRP to forecast and plan their employee requirements. Most of them kept on hiring in the initial phase, off late started realizing the disastrous consequences of increasing salary burden and thereby lowering the operational efficiency of the organization (Aswathappa, 2007). So, off late, these organizations came out with strange looking initiatives like VRS, Hiring Freeze / Hiring-Employment Ban, Long Leave without Pay etc; but that were not enough. But, unlike many of these PSUs being overstaffed, GSRTC, even though a State Government Undertaking, is an understaffed organization. This dearth of staff in various categories is adversely affecting the operational efficiency of GSRTC in variety of ways, which is elaborated with exact facts and figures in the later sections.

3.2 RECRUITMENT AND SELECTION IN GSRTC

In absence of systematic HRP, let's talk about the recruitment and selection process of GSRTC. Recruitment and Selection, mostly referred together, is one of the main functions of the personnel and administration department of GSRTC.

GSRTC follows the recruitment policy of "Preference for Recruiting from Within the Organization", popularly known as Internal Recruitment, especially for higher level posts. This policy serves as a source of motivation to existing employee's familiarity with people, procedure, policies and encourages the employees for better work performance. People work harder if they know that there is an opportunity for upward movement in the same organization. However, if suitable candidate is not available then there is no alternative way, to fill the vacancy from outside. About 75% vacancies are filled in by departmental promotion and

25% vacancies are filled in by direct sector. For the lower categories like Clerk, Helper, Driver, Conductor, Mechanic, Peon and Watchman, 100% recruitment is done from direct source.

In regard to recruitment process and using a particular source of recruitment, depending upon the overall policy, governmental restrictions, union-management relation and agreements, a variety of sources are used. GSRTC uses both internal and external sources of recruitment. Whenever any vacancy appears, GSRTC gives first preference to its existing employees and if they are not suitable it goes for external sources. Here, employees are recruited through open market and employment exchange. For this, GSRTC continued the policy of issuing the advertisement in newspapers and inviting application for filling the vacant positions to be filled in by direct sector, including the officers in class I & II cadres. However, the names from concerned district employment exchanges are also referred. Recently, though off late; keeping pace with the modern era and to bring transparency in all the processes, GSRTC has already implemented "Online Recruitment for staff" for all the categories of employees.

In case of recruitment from within the organization by way of departmental promotion, especially in Class-I and Class-II categories, in addition to experience, employees are recruited on the basis of written examination, which holds 50% weightage. For this, a person must have completed at least 1 year continuous service in GSRTC. Officers who arrange this examination and who are involved in paper setting must have completed at least 3 to 4 years continuous service in GSRTC (Tiwari, 2009).

Adhering in totality with the State Government directive of Reservation System in Jobs, GSRTC has prescribed the percentage of posts reserved for members of Scheduled Caste (SC), Scheduled Tribes (ST) and Socially and Economically Backward Classes (SEBC) for employment in the services; in which the candidates of reserved categories are given benefits as per the roster system on the government lines. At the time of recruitment in few categories of staff, the relaxation in height, experience, age, and education is given to SC/ST candidates as per the government norms. Normally applications of such candidates are not rejected due to small errors and one way free traveling pass is issued to them.

In selection process, personal interview method is used, wherein the focus is on educational qualification, age, experience, and job knowledge parameters. By considering the report of the interview committee, the final list is prepared by the Personnel & Administration Department. This report is forwarded to the higher authority; along with merit list and covering letter stating interview panel composition and any special note issued. On approval of this report, the final authority, generally the Chairman and Managing Director of GSRTC signs it and selected candidates are intimated to join accordingly (Tiwari, 2009).

3.3 STRATEGIC MOVE OF GSRTC IN RECRUITMENT

In the recent times, due to open, loud and frequent criticisms of inefficiency of government sector organizations in general, and various STUs in particular, these government organizations are also under pressure to control their operational costs and improve productivity (Williamson & Alexander, 1986); and thereby justify their existence itself. Considering this, GSRTC recently adopted a surprising move of recruiting less than the required, perhaps to counterattack the criticisms of its inefficiency. Branded as the strategic move of GSRTC in recruitment, this step proved to be a 'self defeating exercise' for GSRTC.

New recruitment and selection is not taking place at the same rate as was previously done by the Corporation. To meet the requirement of staff, it has adopted a strategy of using the existing staff on the basis of over time rate rather than recruiting new staff. Recruitment of new people involves a lot of cost, starting from training up to giving them future benefits in terms of PF/Gratuity etc.

With this so-called strategic move, what has happened is that GSRTC is facing a crunch of staff members in various categories. Yes, an unpalatable and surprising, but true, fact of GSRTC is that contrary to popular misconception that GSRTC being a Government Owned organization, it must be overstaffed; in reality, GSRTC has turned out to be an understaffed organization. Continuing with its so-called smart strategic move, GSRTC has not been recruiting in the same quantum as it did in the past. So, as on date, several posts are vacant in various categories, contrary to popularly held wrong notion that being a typical government organization, GSRTC would have more number of people than required.

4.0 OPERATIONAL IMPLICATIONS OF RECRUITING LESS THAN THE REQUIRED

In order to streamline its operations to increase the efficiency, during the year 2005-06, GSRTC closed down 6 depots and thereby brought the number of depots to 132. With encouraging initial operational results of this initiative, even though resisted and criticized by the employees in number of ways, GSRTC has continued with this strategy and at present, the total numbers of Depots are 125. Clubbing of the functioning of the minor depots with the major depot of the same region was and is certainly a welcome sign - a much needed step to reduce cost. Just very recently, in June 2012, GSRTC even targeted Division, when it historically decided to club the operations of one Small Division into another Large Division. This happened when recently, owing to administrative convenience, GSRTC has merged one of the Small Divisions - Jamnagar into the nearby located Large Division - Rajkot. So, now, they both are represented by one single division - Rajkot. So, as per the latest arrangements, there are total 15 divisions of GSRTC throughout the State - 11 Large & 4 Small, instead of 16.

But, when GSRTC started adopting the policy of "Recruiting Less Than The Required", it adversely affected the operational performance of GSRTC.

Table 2 reveals the clear picture of the operational implications of this so-called smart strategic move of GSRTC. It also shows a continuous downward trend in the total number of staff in GSRTC. As we can see from the Table 2, over a period of time, the overall staff position has declined. Corporation has also reduced few officer level positions. Keeping the pace with reduction in the average number of vehicles on road, the number of staff has also been reduced.

Table 2 represents the operational performance of all the 16 (now 15) divisions of GSRTC on various parameters for the last 12 years from 1999-00 to 2010-11.

These various parameters are as follows:

1. No. of Divisions
2. No. of Depots
3. Total Staff
4. Average No. of Vehicles On Road
5. Effective Kms in Lacs
6. No. of Passengers in Lacs
7. Total EPKM in Ps.
8. Total CPKM in Ps.
9. Margin/Deficit in Lacs Rs.
10. Total O. T. in Lacs Rs.
11. Load Factor in %
12. Vehicle Utilization in Kms. Per Day
13. Fleet Utilization in %
14. Crew Utilization in Kms.
15. Diesel KMPL
16. Oil KMPL top up
17. CNG KMPKg.
18. Total No. of Break Downs
19. No. of Accidents Per Lac Kms.

TABLE 2: OPERATIONAL IMPLICATIONS OF STRATEGIC MOVE OF GSRTC

Performance Measure	1960-61	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
No. of Divisions	7	16* (*As on date, 15 Divisions)											
No. of Depots	76	Data Not Available											
Total Staff	11512	Data Not Available			58324	54523	52043	49956	47759	44557	41667	40073	40670
No. of Vehicles On-Road	1174	8320	8573	8300	7793	7729	7113	6767	6854	6932	6697	6514	6327
Effective Kms in Lacs	728.42	10990.42	11517.21	10935.05	10199.21	10126.16	9250.78	8899.04	9355.97	9970.21	10106.81	9785.95	9485.07
No. of Passengers in Lacs	1463.90	Data Not Available											
Total EPKM in Ps.	97.75	912.92	937.56	1098.13	1120.82	1229.01	1301.95	1285.25	1459.10	1445.40	1506.73	1588.68	1742.26
Total CPKM in Ps.	99.28	1172.01	1293.10	1458.16	1545.76	1493.87	1577.79	1762.62	1752.97	1681.26	1799.15	2039.87	2244.10
Margin/Deficit in Lacs Rs.	-10.11	-	-	-	-	-	-	-	-	-	-	-	-
		28472.53	40950.75	39369.18	43340.85	26818.02	25521.52	42480.71	27494.18	23514.84	29557.36	44150.56	47599.38
Total O.T. in Lacs Rs.	NA	2003.55	1834.23	1563.88	1313.07	1425.17	1137.24	971.17	1335.23	2589.66	3128.29	3746.16	3754.72
Load Factor in %	72.90	63.83	65.61	66.36	67.47	56.75	57.60	58.36	61.19	63.18	65.74	67.34	68.98
Vehicle Utilization in Kms. Per Day	171.40	364.05	370.70	363.71	361.44	360.75	359.03	363.04	376.55	396.16	417.24	416.27	415.56
Fleet Utilization in %	68.90	87.49	88.22	88.00	85.67	86.24	83.93	83.71	85.79	85.91	87.79	85.23	82.26
Crew Utilization in Kms.	116.00	196.10	197.42	194.20	192.00	195.75	193.60	196.05	209.02	229.53	246.61	251.72	254.42
Diesel KMPL	4.19	5.11	5.30	5.30	5.30	5.24	5.19	5.20	5.25	5.37	5.53	5.55	5.53
Engine Oil KMPL Top Up	NA	1714	2977	3223	2391	1420	1047	1100	1558	2264	3244	2862	2999
CNG KMPLKg.	Not Applicable as CNG Buses were not operated/run by GSRTC during this period of time.												
								5.01	4.94	5.00	4.87	4.85	4.78
Total No. of Break Downs	9138	82790	52370	78235	106273	119992	124417	116702	82232	50164	36707	31268	31980
No. of Accidents Per Lac Kms.	723	2335	2002	1800	1601	1618	1387	1352	1264	1161	1079	985	1010

Source: Cumulative Costing and Operational Results of GSRTC from 1999-00 to 2010-11

Table 2 indicates the operational performance of GSRTC as a whole on these parameters with an additional comparison with the inception year 1960-61.

As these table shows, GSRTC has been incurring heavy losses year-by-year. It is caught in the whirlpool of problems with most of the performance measures showing downward trend and GSRTC seems to be not in a position to find out the solution to turn the situation in its favor. If we closely look at the figures in the Tables; the following performance measures of GSRTC have been showing a negative trend:

Effective Kms in Lacs have reduced significantly, as in 1999-2000, GSRTC plied buses for a total of 10990.42 Lacs Kms; while in 2010-11 financial year, this figure has come down to 9485.07 Lacs Kms. So, the effective Kms covered came down by 1505.35 Lacs Kms; and it is very much obvious that its negative impact would be seen on the revenue generation also.

Total No. of Passengers in Lacs have also decreased considerably, as from a healthy figure of 13415.73 Lacs Passengers in the year 2001-02; it has decreased to 8052.57 Lacs in 2010-11. So, a sharp decrease of 5363.16 Lacs Passengers over a period of last 10 years is certainly affecting the bottom line picture negatively. With sharp reduction in both the primary performance measures of Effective Kms. in Lacs and the Total No. of Passengers in Lacs, the main parameter of **"Earning Per Kilo Meter"** represented by **EPKM in Paisa** was expected to suffer much. But, to utter surprise, EPKM in Paisa has surprisingly increased. On the face of it, it is showing a positive trend with a figure of 912.92 Paisa EPKM in the year 1999-00 moving to 1742.26 Paisa EPKM in 2010-11. A rise of 90.84%! Wow! This may be due to the fact that during this period of time, even though it happens on very rare occasions; GSRTC revised (increased) the fares on few occasions. So, the almost double EPKM in Paisa over a span of 12 years can be understood by this way. Even by initiating several passenger friendly schemes, GSRTC could manage to maintain a steady growth in EPKM in Paisa over the years. So, the almost double EPKM in Paisa over a span of 12 years can be understood by this way.

But, this positive feeling quickly vanishes as soon as we look at another deciding parameter of **"Cost Per Kilo Meter"** represented by **CPKM in Paisa**. Compared to rise in CPKM in paisa, the rise in EPKM in Paisa seems to be unsatisfactory. In 1999-00, the CPKM in Paisa was 1172.01 Paisa and in 2010-11, this figure has moved to 2244.10 CPKM in Paisa, recording a hike of 91.47%. So, over this entire period of 12 years, CPKM in Paisa (91.47%) has increased more in comparison to EPKM in Paisa (90.84%). So, CPKM in Paisa has increased more in comparison to EPKM in Paisa. Thus, it is obvious that with increasing cost of service, GSRTC has not been able to increase its earning (revenue) proportionately; and the margin/deficit is also going to be affected negatively. This rise in CPKM in Paisa may be due to two main reasons such as revised (increased) fuel prices on numerous occasions without corresponding increase in fares, and increasing staff salaries. But, what is equally surprising to note is that during this period of 12 years, almost all the cost contributing parameters have shown positive moves. These parameters are

- ✓ **Load Factor in % terms** – 63.83% in 1999-00 to 68.98% in 2010-11
- ✓ **Vehicle Utilization in Kms. Per Day** – 364.05 Kms. in 1999-00 to 415.56 Kms. in 2010-11
- ✓ **Crew Utilization in Kms.** – 196.10 Kms. in 1999-00 to 254.42 Kms. in 2010-11
- ✓ **Diesel KMPL (Kilo Meter Per Liter)** – 5.11 Kms. in 1999-00 to 5.53 Kms. in 2010-11
- ✓ **Engine Oil KMPL (Kilo Meter Per Liter) Top Up** – 1714 Kms. in 1999-00 to 2999 Kms. in 2010-11

Even 2 other negative parameters, adversely affecting the financial health of GSRTC, have shown a significant downward trend. With sharp decrease of nearly 100% in these 2 parameters of Total No. of Breakdowns in a Year and the Total No. of Accidents Per Lacs Kms., the CPKM in Paisa should have come down. The exact decrease in both these parameters is as follows:

- ✓ **Total No. of Breakdowns** – 82790 in 1999-00 to 31980 Kms. in 2010-11
- ✓ **No. of Accidents Per Lac Kms.** – 2335 in 1999-00 to 1010 in 2010-11

In addition to this, it should also be noted that from 2005 onwards, GSRTC has started using CNG operated buses and gradually it is increasing such buses. This should have also lowered the CPKM in Paisa.

During this period of 12 years, only one performance measure has shown negative trend, and that is, the parameter of **Fleet Utilization in %**. From a figure of 87.49% in 1999-00, Fleet Utilization has gone down to 82.26% in 2010-11.

But, despite positive effects of all the above mentioned parameters, the CPKM in Paisa has shown a pinching increase by getting almost double in 2010-11 in comparison to 1999-00.

Obviously, with CPKM in Paisa increasing more than EPKM in Paisa over the last 12 years, there does not remain a question of Margin (Profit). Deficit (Loss) is bound to occur. But, one must note that right from the year 1999-00; GSRTC has been incurring heavy losses, which has increased manifold by the year 2010-11. In 1999-00, GSRTC recorded a deficit (loss) of 28472.53 Lacs Rs., which has gone up to 47599.38 Lacs Rs. in 2010-11. So, GSRTC is incurring heavy losses and unable to take corrective measures by initiating remedial policy measures. And, that's why; it is increasingly emerging as a "White Elephant" in terms of eating public money, even though it is incurring such huge losses primarily because focusing on societal and service orientation instead of pure business orientation. If we look at the operational implications of this strategic move of GSRTC, as indicated in Table 2, the rate of over time has been showing increasing trend. This may be due to reduction in the number of staff. As the number of staff reduces, corporation is trying to utilize the existing employees for getting the work done. By utilizing the existing staff, it can reduce the cost of giving P.F., Pension and Gratuity etc. in future. The policy of recruiting new staff has been stopped or reduced, on account of reduction in number of vehicles and depots also. One can call it a smart strategic move of the corporation for bringing down the total cost of staff. But, in reality, it is proving detrimental to the operational efficiency and progress of GSRTC. This is because of we look at the figures of total Over Time paid to existing employees in a year in Lacs Rs.; this figure was 2003.55 Lacs only in 1999-2000. But, by 2010-2011, this Over Time amount reached to a figure of 3754.72 Lacs – a whopping rise of 87.40%. What is more pinching is that with such a hike in Over Time rate per annum; the other operational indices are not showing positive progress. The Effective Kms in Lacs have reduced significantly, as in 1999-2000, GSRTC plied buses for a total of 10990.42 Lacs Kms; while in 2010-11 financial year, this figure has come down to 9485.07 Lacs Kms. So, the effective Kms covered came down by 1505.35 Lacs Kms; and it is very much obvious that its negative impact would be seen on the revenue generation also; certainly affecting the bottom line picture negatively.

The following Table 3 showing the On Road and Off-Road vehicle (Bus) position of GSRTC also points out to rising CPKM over the years.

TABLE 3: ON ROAD/OFF-ROAD VEHICLES OF GSRTC

Year	Total No. of Buses held	On Road	Off-Road*	Vehicles Utilization (%)
2003-04	9042	7729	1313	85.48
2004-05	8473	7113	1360	83.95
2005-06	8118	6767	1351	83.36
2006-07	7987	6854	1133	85.81
2007-08	8076	6932	1144	85.83
2008-09	7628	6697	931	87.79
2009-10	Data Not Available	6514	Data Not Available	-
2010-11		6327		-

* Off-Road means the vehicle (Bus) is not of that condition which can be used on road.

Source: Cumulative Costing and Operational Results of GSRTC from 1999-00 to 2010-11

According to the data shown in Table 3, the Vehicle Utilization has been less than 90%. Due to shortage of proper maintenance staff and materials, the percentage of off-road vehicles has increased. From the financial point of view, the numbers of Off-Road vehicles held by GSRTC add to the operational cost, i.e., maintenance cost plus the value of the vehicles gets depreciated. So if more number of vehicles is off-road, it naturally adds to the cost. This also has adverse effect on the EPKM in Paisa as well as CPKM in Paisa.

Further, with CPKM in Paisa increasing more than EPKM in Paisa over the last 12 years, there does not remain a question of Margin (Profit). Deficit (Loss) is bound to occur. But, one must note that right from the year 1999-00; GSRTC has been incurring heavy losses, which has increased manifold by the year 2010-11. In 1999-00, GSRTC recorded a deficit (loss) of 28472.53 Lacs Rs., which has gone up to 47599.38 Lacs Rs. in 2010-11. So, GSRTC is incurring heavy losses and unable to take corrective measures by initiating remedial policy measures.

With increasing population, the need of road transportation must have increased, as most of our population still prefers to travel by ST Buses due to its economic services. But, with sharp reduction in staff over the years, the existing people, even though might be getting the benefit of Over Time rate, are not very much able to satisfy the ever growing demand of public from GSRTC. Even, they themselves are complaining of increased burden of workload over a period of time. Most of time, the Drivers and Conductors are forced to do 'double' or even 'triple' duties due to dearth of staff. This leads to adverse behavioural reactions of these employees; who directly come into contact with the real customers – the passengers, in the form of quarreling with passengers, using abusive language, not stopping at the pickup stands, not caring for the condition of the bus, rash driving etc. This further damages the images of GSRTC in the minds of general public and lowers down public's interest in travelling by GSRTC buses.

5.0 RECOMMENDATIONS

Based on the facts and figures indicating the adverse effects of the so-called strategic move of recruiting less than the required staff in GSRTC, the following recommendations can be given. The given recommendations, if implemented in the right spirit, will certainly help GSRTC not only to improve the overall efficiency and effectiveness of GSRTC, but also to foster better Quality of Work Life (QWL) for the employees by having the right number and right types of people at various levels in the organization.

- ☞ Burden of excessive work load in terms of doing double duty, staying at work beyond stipulated work hours etc. is basically the result of under staffed manpower position of GSRTC. In addition to lowering the operational efficiency of GSRTC, this shortage of staff in various categories, is adversely affecting the perceived availability of QWL for these employees in GSRTC. So, systematic Manpower Planning Process must be initiated by GSRTC to ensure the availability of the right number and right types of people at the right places to perform the right duties, and thereby not only taking care of the operational efficiency of GSRTC; but also relieving these employees of the unnecessary burden of additional duties. This will even have positive impact on passengers' satisfaction as the instances of cancellation of routes due to non-availability of Driver &/or Conductor, or frequent breakdown of buses due to poor maintenance, would reduce significantly.
- ☞ If systematic manpower planning can't be started over night, at least systematic evaluation of the entire recruitment process should take place. Lead time, Time Lapsed Data (TLD), yield ratios, cost per hire and such other data should form the base for selecting a particular source of recruitment.
- ☞ Recruitment and Selection must be given strategic importance and should not be handled as an 'ad hoc' function.
- ☞ With scientific methods and correct estimates of future manpower requirements at various levels, well planned efforts should be made to initiate recruitment and selection process well in time.
- ☞ Allocation of work/duties to the employees needs to be reviewed to ensure optimum utilization of the existing manpower in GSRTC. If required, job analysis process should be initiated for major groups of jobs, so as to avoid duplication of efforts, overlapping nature of duties, and consequently wastage of human resources.

6.0 CONCLUSION

Considering the negative operational implications of having less than required people in GSRTC, we can certainly conclude that the so-called smart strategic move of GSRTC to reduce the number of staff has not paid off to GSRTC. With several positions remaining vacant in various categories as on date also, GSRTC is not being able to live up to the expectations of the public. So, GSRTC and for that sake, every organization must accept, respect and appreciate the basic fact that there can be several other options to combat losses or declining financial performance situation. So, instead of targeting your employees for cost cutting either by laying off some of them or by recruiting less than the required, every organization must strive to attain optimum utilization of the available manpower.

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FOREIGN POLICY OF INDIA AND THE STATE OF SIKKIM: WITH SPECIAL REFERENCE OF TRANS-NATIONAL BOUNDARIES IN NATHULA REGION

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ABSTRACT

Trans-national boundaries of India are the determining factor of the Foreign Policy of India. In today's highly competitive and globalize society the foreign Policy of a nation plays pivotal role for the development of the nation and its security as a whole. This study aims to analyze the foreign policy of India with China (Panchsheel: the five principles of peaceful co-existence agreement between India and china) and the role of the boundaries of the state of Sikkim. The Aims and objectives of the above area of study help us to understand the foreign policy of India with china and the security system of India in the trans-national boundaries of Sikkim.

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KEYWORDS

Trans-national, Panchsheel, Foreign Policy, peaceful co-existence, trans-national boundaries of India in the region of Sikkim.

1.1. INTRODUCTION: MEANING OF FOREIGN POLICY

Foreign policy of country is also called "**Foreign relations policy or International Relations or International Politics (relationship between two or more countries)**"; it consists of self-interest strategies chosen by the state to safeguard its national interests, national development, and national security and to achieve its goals within international relations. Foreign policy or international Relation is the struggle for power like international politics according to Hans J. Morgenthau. The various approaches of foreign policy explained that it is the diplomatic relation among the nation to achieve national interest and economic development. Foreign policy strategically employed to interact with other countries. The concept or the idea of foreign policy emerged after the end of two world wars. In recent times, due to the deepening levels of globalization and trans-national activities, the states will also have to interact with non-state actors like non-governmental organization, international institutions, religious institutions, international issues like global warming, human rights, international terrorisms etc.

Foreign policy or international relation plays pivotal role in this present era of globalization. Globalization is the process of world becoming global village due to the development of science and technology. No country is isolated with one another in this era of high-tech technological competitive world. So foreign policy of a country provides that ground where nation can achieve its goals and development.

The aforementioned meaning, aims and objectives of the foreign policy interaction is evaluated and monitored in attempts to maximize the benefits of multilateral international cooperation. Since the national interests are paramount, foreign policies are designed by the government through high-level decision making processes. National interest's accomplishment can occur as a result of peaceful cooperation with other nations, or through exploitation. Usually, creating foreign policy is the job of the head of the government and the foreign minister (or equivalent). In the some countries the legislature also has considerable oversight.

1.2 INDIA'S FOREIGN POLICY [HISTORICAL BACKGROUND]

In the year 1947 India got independence from the colonial rule of Great Britain. When India won her freedom she was backward country in many fields such as industrially and technologically underdeveloped and militarily very weak. Partition of Pakistan was another big challenge before the independent India at the same time world was divided into two power blocs, United Soviet Socialist Republic (USSR) and the United States of America (USA) bloc and there were no choice for the rest of the nations but had to join any of the power blocs. But after the independence, India followed the principle of Non-Alignment Movement [NAM] under the Prime Minister Jawarhar Lal Nehru. India followed the principle of NAM under the leadership of Nehru for:

1. National security, which means the maintenance of the country's territorial integrity and the political sovereignty.
2. National development (particularly raising the living standards of the country's people as whole).
3. To establish friendly relation with both the power blocs and not to join either of the power blocs.
4. To promote industrial and technological development.
5. To promote development of agriculture and economy
6. To promote international peace and harmony.

India's foreign policy has gone through three important phases. In the first phase between the year 1947 to 1967, India established itself as a non-align state. Though being criticized for this step the United States and the Soviet Union, Prime Minister Jawarhar Lal Nehru wanted India to act as a neutral mediator on global issues and a leading proponent of decolonization which gained him exceptional respect from African and Asian countries. Yet the first era of Indian foreign policy was also marked by a defeat against China in 1962 and consequently its first setback.

The second phase from 1967 to 1997 was dominated by Mrs. Indira Gandhi whose idea to bring India back to international relevance included a shift from a global to a regional role, economic development and most importantly the demand for technological innovation. In 1974, India conducted its first nuclear tests, catapulting itself back to top of the international agenda. With the successful intervention in the Bangladesh Independence war in 1971, India became the dominant power in the South Asia. Indira Gandhi's successors, Rajiv Gandhi and Narasima Rao, continued to develop India's Image in the world by improving relations with China and introducing economics reform in 1991.

The most recent period from 1997 to 2007 is said to be the most significant as well as worst episode of Indian foreign policy. In 1998, India once again conducted nuclear tests and was harshly criticized by the international community. The US demanded severe measures which included isolation and sanction. However, by the beginning of the new century India's image has changed positively due to the access to its markets for foreign policy investment and the high reputation of Indian communities abroad.

India's defense and security policy is an integral part of its foreign policy given the unsettled neighborhood in its periphery. India has been global power in the history along with China and the center from where British power emanated into the rest of the region. Hence, from a historical context and in its cultural linkages, India should be seen as a leading power in Southeast Asia. However, External security concerns are linked with a domestic security base, requiring the strengthening of resources within, particularly energy resources essential for national growth and assured deterrent capability against foreign threats. India's defense strategy took a serious turn with the setback suffered in the Chinese aggression of 1962. Presently, India's defense policy is based on the twin pillars of deterrence and discussion. This is to achieve a secure border as well as prevent external aggression. Another pillar of Indian defense policy is its international dimension. This responsibility is enshrined in the Indian Constitution and calls upon the nation to remain actively involved in maintaining international peace. India believes in fulfilling this responsibility entirely through the United Nation Organization (UNO) and therefore, has over the years played a leading role in its

peacekeeping endeavors. A final pillar of its defense policy in the last decade and more is strong partnership with the United States against terrorism and strengthening international security. While not quite an alliance, this strategic partnership is both substantive and meaningful.

1.3. PRINCIPLES OF FOREIGN POLICY OF INDIA

The foreign policy of India essentially was based on the principles that had guided the congress in the pre-independence period.

However, the principle on which India's foreign policy based on may be discussed as follows:

1. First is the promotion on international peace. In fact, Gandhiji's legacy of pacifism lies behind India's continues endeavor for peace. India's mission was to maintain friendly and cooperative relation with all the nations
2. Second principle is the freedom of nations. India was and is a firm believer in the freedom of nations. She opposed to any sort of imposition of one country upon the other.
3. Third, India having suffered all the evils of colonialism and imperialist domination she is committed to this cause. For his reason India has taken a firm stand on racial discrimination and colonial issues in the United Nations [UN]
4. Fourth, another principle of India's foreign policy is to maintain clear distance from two power blocs. India wants to be able to determine her foreign policy independently.
5. Panchsheel [five principles of peaceful co-existence]: the five principles of peaceful co-existence is another important principles of foreign policy of India, the Panchsheel is the peaceful Treaty between India and China which means. [panch means five, sheel means virtues] are the set of principles to govern relations between States. Their first formal codification of the treaty of Panchsheel was signed between India and China in 29th April 1954 at Peking. This agreement stated the five principles as:
 - a) Mutual respect for each other's territorial integrity and sovereignty,
 - b) Mutual non-aggression,
 - c) Mutual non-interference in each other's internal affairs,
 - d) Equality and mutual benefit, and
 - e) Peaceful co-existence.

1.4. OUTLINE OF THE PAPER IN THE LIGHT OF THE FOREIGN POLICY OF INDIA AND THE STATE OF SIKKIM [SPECIAL REFERENCE WITH THE TRANS-NATIONAL BOUNDARIES IN NATHULA REGION]

Currently, the FOREIGN POLICY OF AND THE STATE OF SIKKIM [SPECIAL REFERENCE WITH THE TRANS-NATIONAL BOUNDARIES IN NATHULA REGION] has chosen the area study Nathula region of Sikkim in respect of the foreign policy of India, which is important strategic area for whole of India and its territorial security. State of Sikkim in region of Nathula is chosen as main area of study because Indo-China border is situated in this region which is the strategic area for India while formulating its foreign policy.

The present paper tries to explore the possibilities of implementing the important issues of Sikkim in the region of Nathula in respect of the trans-national border of India and China. Sikkim is the strategic place as far as India's security is concerned, so this paper tries to focus the urgent necessary to look after the area of Sikkim while formulating the foreign policy of India especially with China.

Foreign policy of India and the state of Sikkim [Special reference with the trans-national boundaries in Nathula region] is tried to explain the urgent need to be focused by the foreign policy makers of India.

2.1. INDIA'S FOREIGN POLICY: AREA STUDY OF SIKKIM IN NATHULA REGION

Sikkim is the integral part of India and one of the most peaceful state as well as it is a strategic place. Initially, Sikkim remained an independent monarchical state, however in 16th may 1975, its subjects voted by plebiscite to become a 22nd state of Indian union. Sikkim had retained guarantees of independence from Britain when she became independent, and such guarantees were transferred to the Indian government when it gained independence in 1947. a popular vote for Sikkim to join the Indian Union failed and Indian Prime Minister Jawahar Lal Nehru agreed to give special protectorate status for Sikkim.

Sikkim was to be a tributary of India, in which India controlled its external defense, diplomacy and communication. A state council of India was established in the year 1953 to allow for constitutional government for the Chogyal (king), which was sustained till 1973. Sikkim is strategic area because Sino- Indo border is situated in the area of Sikkim, and China cannot be trustworthy with India. In 1962, India and the china or People's Republic of China (PRC) went to war. Although Sikkim was an independent country, skirmishes occurred at the Nathula Pass between Indian border guards and the Chinese soldiers. After the war, the ancient pass was shut down (it reopened in 6th July 2006). This is how Sikkim needs special attention while making India's foreign policy.

2.2. HISTORY OF THE INDEPENDENT STATE OF SIKKIM

Before 16th May 1975 Sikkim was independent country ruled by and administered by its own Chogyals (kings). The chogyal or divine ruler of independent Monarchical country of Sikkim has absolute power and authority who ruled Sikkim almost four hundred century from 1642 to 1975. Sikkim was ruled by the Namgyal Dynasty (also called the Chogyal Monarchy) from 1642 to 1975, the following are the *Sikkim's chogyal (kings) in chronological order*:

TBALE 1

Name	Year	Name of chogyal [king]
01.	1642-1670	Phuntsug Namgyal
02.	1670-1700	Tensung Namgyal
03.	1700-1717	Chakdur Namgyal
04.	1717-1733	Gyurmed Namgyal
05.	1733-1780	Phuntsug Namgyal-II
06.	1780-1793	Tensing Namgyal
07.	1793-1863	Tshudpud Namgyal
08.	1863-1874	Sidkeong Namgyal
09.	1874-1914	Thutob Namgyal
10.	1914	Sidkeong Tulku Namgyal
11.	1914-1963	Tashi Namgyal
12.	1963-1975	Palden Thontub namgyal

2.3. SIKKIM AS 22ND STATE OF INDIA

In early 1970 the anti-monarchy Sikkim National Congress Party demanded fresh election and greater representation for the Nepalese. In 1973, anti-royal riots in the front of the palace led to a formal request for protection from India. India worried that an unstable Sikkim would invite China to act on its claims that Sikkim was a part of Tibet, and therefore part of China. The Indian government appointed a chief administrator, Mr. B. S. Das, who effectively wrested control of the country away from the Chogyal

Firstly relation between the chogyal and the elected Kazi Lhendup Doajee (first Chief Minister of Sikkim) resulted in attempt to block the meeting of the legislature. The Kazi was elected by the Council of Ministers which was unanimous in its opposition to the retention of the Monarchy.

Indian reserve police were moved in and took control of the streets of Gangtok (the present capital of Sikkim), the borders were closed and little was known until American climber Caril Ridley happened into the capital and was able to smuggle photos and legal documentation out. When confirmed by China, India's actions were brought into the spot light of the world awareness, however history had already been written and matters came to a head in 1975, when the Kazi (first Chief Minister of Sikkim) appealed to the India Parliament for representation and change of the status to statehood. On April 14, 1975, a referendum was held, in which Sikkim voted to merge with the union of India. Sikkim became the 22nd Indian State on 16th April 1975. On 16th May 1975, Sikkim officially

became a state of the Indian Union and Kazi Lhendup Dorjee Khangsherpa became the head of the state i.e. Chief Minister. This was recognized by the United Nations [UN] and all the countries except China.

2.4. NATHU LA PASS: A BRIEF HISTORY

Nathu La is located on the 563 km Old Silk Route, an offshoot of the historic Silk Road. The Old Silk Route connects Lhasa in Tibet to the plains of Bengal to the south. In 1815, the trade volumes increased after the British annexed territories belonging to the Sikkimese, Nepalese, and Bhutanese. The potential of Nathu La was released in 1873, after the Darjeeling Deputy Commissioner published a report on the strategic importance of mountain passes between Sikkim and Tibet. In December 1893, the Sikkimese Monarchy and Tibetan rulers signed an agreement to increase trade between the two Nations. The agreement culminated in 1894 when the trade pass was opened.

Nathu La is a mountain pass in the Himalayas. It connects the Indian state of Sikkim with China's Tibet Autonomous Region. The pass at 4310 m (14,140 ft) above mean sea level [citation needed], forms a part of an offshoot of the ancient Silk Road. Nathu means "listening ears" and La means "pass" in Tibetan. On the Indian side, the pass is 54 km (34 Miles) east of Gangtok, the capital of Indian state of Sikkim on JN Marg and only citizens of India can visit the pass, that too after obtaining a permit in Gangtok.

Nathu La is one of the three open trading border posts between China and India; the other two are Shipkila in Himachal Pradesh and Lipulakh (or Lipulech) in Uttarakhand. Sealed by India after the 1962 Sino-India war, Nathu La was re-opened in 2006 following numerous bilateral trade agreements. The opening of the pass was expected to bolster the economy of the region and play a key role in the growing Sino-Indian trade but that has not happened. Currently, agreements between the two nations limit trade across the pass to 29 types of goods from India and 15 from the Chinese side. The opening also shortens the travel distance to important Hindu and Buddhist pilgrimage site in the region.

2.5. NATHU LA PASS: AN INDO-CHINA BORDER

The Nathula is the connection between the Indian states of Sikkim with China's Tibetan Autonomous Region and it is the place where India shares its border with China. Nathu La is one of the three open trading border posts between China and India; the other two are Shipkila in Himachal Pradesh and Lipulakh (or Lipulech) in Uttarakhand. Sealed by India after the 1962 Sino-India war, Nathu La was re-opened in 2006 following numerous bilateral trade agreements. The opening of the pass was expected to bolster the economy of the region and play a key role in the growing Sino-Indian trade but that has not happened. Currently, agreements between the two nations limit trade across the pass to 29 types of goods from India and 15 from the Chinese side. Until the year 1962, before the pass was sealed, goods such as pens, watches, cereals, cotton, cloths, edible oils, soaps, building materials, and dismantled scooters and four-wheelers were exported to Tibet through the pass on mule-back. Two hundred mules, each carrying about 80 kg of load were used to ferry goods from Gangtok to Lhasa, which used to take 20-25 days. Upon return, silk, raw wool, musk pods, medicinal plants, country liquor, precious stones, gold and silverware were imported into India. Most of the trade in those days was carried out by the Marwari community, which owned 95% of the 200 authorized firms.

Since July 2006, trading is open Mondays through Thursdays. Exports from India exempted from duty include agricultural implement, blankets, copper products, clothes, cycles, coffee, tea, barley, rice, wheat, flour, dry fruits, vegetables, vegetable oils, tobacco, snuff, spices, shoes, kerosene oil, stationary, utensils, milk processed products, canned food, dyes, and local herbs. Chinese exports to India exempted from duty include goat skin, wool, raw silk, yak tail, yak hair, China clay, borax, butter, common salt, horses, goats, and sheep. Restrictions are placed on traders, with permits only given to those who were Sikkimese citizens before kingdom merged with India in 1975.

There were fears among some traders in India that Indians goods would find a limited outlet in Tibet, while China would have access to ready market in Sikkim and West Bengal. The reopening of the pass was expected to stimulate the economy of the region and bolster Indo-Chinese trade but this has not happened. Figures released by the Tibet Autonomous Regional Bureau of Commerce show that in the 51 days of trading in 2006, only US \$ 186250 worth of trade passed through Nathu La.

3. NATHU LA; A STRATEGIC PLACE

Nathu La as far as India's National Security as well as National Development is concerned is a strategic place. It is a strategic place because out here India shares its borders with China which means it is strategic and as we can say it is a war prone zone. At the same time it is the trade centre between two super powers India and China which determines the economic goals.

After the People's Republic of China took control of Tibet in 1950 and suppressed a Tibetan uprising in 1959, the passes into Sikkim became a conduit for refugees from Tibet. During the 1962 Sino-Indian War, Nathula witnessed skirmishes between soldiers of the two countries. Shortly thereafter, the passage was sealed and remained closed for more than four decades. Between 7 and 13 September 1967, China's People's Liberation Army and the Indian Army had six-day "border skirmishes", including the exchange of heavy artillery fire. In 1975, Sikkim acceded to India and Nathu La became part of Indian Territory. China however, refused to acknowledge the accession at that time. So the state of Sikkim is an important area to be focused by the policy makers in respect with China. India's foreign policy makers should take positive steps towards the betterment of its relation with China especially in this region because China already attacked India from this region. Moreover we can say it is a war zone area.

4. MATERIALS AND METHOD USED

Materials and method used in this paper are given in the following sub-headings;

4.1. SAMPLING AND SELECTION

The study is based on practical analysis of the foreign policy of India, Panchsheel [the principles of peaceful co-existence] with China and the resources and utilization pattern survey of the village named Nathu La situated in Sikkim the 22nd state of India. The Nathula is located in the state of Sikkim. The location for the seminar paper that is Nathu La is selected for the present study due to strategic region like it is the place of Trans-National boundaries between India and China; it is also an international trade center and War Prone Zone.

The above study tries to prove the paradigm that the state of Sikkim is an important place [especially the Nathula region where two great nations meet]. It is an important place for India for both security and national economic development. Above study can contribute to the foreign policy makers of India to formulate its foreign policy with China in consideration of above region.

The Nathula region becomes a region of economic development or the region of war in near future. International Relation Management practiced through people's participation in a developing country like India, can contribute to sustainable foreign relation management and hence efficient cooperation prevail in International Relation.

4.2. TOOLS USED

In order to gather the requisite information, the collection of data method was adopted. In this collection of data the sampling intensity was 90%. The information was collected through reading different books related with the Foreign Policy of India and the books related to the state of Sikkim, gathered information by reading various journals, magazines, and various published articles and so on.

Data is also collected from various websites and different administrative Institutions of Sikkim. Data is collected and information are gathered from various press as well as news letters from in and around Sikkim. Collected data is systematically analyzed and explained accordingly.

4.3. LOCATION OF THE SITE [NATHU LA]

As discussed earlier the region of Nathula is the strategic place of India. Nathula is a mountain pass in the Himalayas. It is the place of trans-national border between India and China. It connects the Indian state of Sikkim with China's Tibet Autonomous Region. The pass, at 4,310 m (14,140 ft) above mean sea levels, forms a part of an offshoot of the ancient Silk Road. Nathu means "listening ears", La means "pass" in Tibetan language. On the Indian side, the pass is 54 km (34 miles) east of Gangtok, the capital of Sikkim. Only the citizens of India can visit the Nathula pass, that too after obtaining a permit in Gangtok.

Nathu La is located on the 563 km Old Silk Route, an offshoot of the historic Silk Road. The old Silk Route connects Lhasa in Tibet to the plains of Bengal to the south. In 1815, trade volumes increased after the British annexed territories belonging to the Sikkimese, Nepalese, and Bhutanese. The potential of Nathu La was

raised in 1873, after the Darjeeling Deputy Commissioner published a report on the strategic importance of Mountain Passes between Sikkim and Tibet. In December 1893, the Sikkim's Monarchy and Tibetan rulers signed an agreement to increase trade between the two Nations. The agreement culminated in 1894 when the trade pass was opened.

Nathu La is one of the three open trading border posts between China and India; the other two are Shipkila in Himachal Pradesh and Lipulekh (or Lipulech) in Uttarakhand. Nathu La was sealed by India after 1962 Sino-Indo war, Nathu La was re-opened in 2006 following bilateral trade agreements. The opening of the pass was expected to bolster the economy of region and play a key role in the growing Sino-Indian trade but that has not happened. Currently, agreement between the two nations limits the trade across the pass to 29 types of goods from India and 15 from China. The opening also shortens the travel distance to important Hindu and Buddhist pilgrimage sites in the region. Nathu La pass, Indo-China border played pivotal role in 1903-1904 British expedition to Tibet, which sought to prevent the Russian Empire from interfering in Tibetan affairs and thus gaining a foothold in the region. In 1905, Major Francis Younghusband, serving as the British Commissioner to Tibet, led a successful mission through Nathu La to capture Lhasa. This led to the setting up of trading posts at Gyantse and Gartok in Tibet, and gave control of the surrounding Chumbi Valley to the British. The following November, China and Great Britain ratified an agreement approving trade between Sikkim and Tibet.

After the People's Republic of China took control of Tibet in 1950 and suppressed a Tibetan uprising in 1959, the passes into Sikkim became conduit for refugees from Tibet. During the 1962 Sino-Indian war, Nathu La witnessed skirmishes between soldiers of the two countries. Shortly thereafter, the passage was sealed and remained closed for more than four decades. Between 7 and 13 September 1967, China's People's Liberation Army and the Indian Army had six-day "border skirmishes", including the exchange of heavy artillery fire. In 1975, Sikkim acceded to India and Nathu La became part of Indian Territory. China, however, refused to acknowledge the accession at that time.

In 2003, with the thawing of Sino-Indian relations, Indian Prime Minister Atal Bihari Vajpayee's visit to China led to the resumption of talks on the opening of the border. Later in 2004, the Indian Defense Minister's visit to China led to the formal opening of the pass. The opening, originally scheduled for 2nd October 2005, was proposed due to last minute infrastructure problems on the Chinese side. Finally, after a decade of talks, Nathu La was opened on 6th July 2006. The date of the reopening coincided with the birthday of Dalai Lama. In the years before the opening, the only person permitted to cross the barbed-wire frontier was a Chinese postman with an Indian military escort, who would hand over mail to his Indian counterpart in a building at the border. The event also formally recognizes Tibet as part of China by India and Sikkim's accession.

The opening of the pass was marked by a ceremony on the Indian that was attended by officials from both countries. A delegation of 100 traders from India and 100 Tibetans crossed the border to respective trading towns. Despite heavy rain and chilly winds, the ceremony was marked by attendance of many officials, locals, and internationals and local media. The barbed wire fence between India and China was replaced by a 10 m (30ft) wide stone walled passageway. It was also decided to mark the year 2006 as the year of Sino-Indian Friendship.

5. RESULTS AND FINDINGS

5.1. FOREIGN POLICY OF INDIA AND ROLE OF SIKKIM

In spite of the geographical pressure on the Indian nation, in the site of Nathu La areas of Sikkim show a sustainable growth in its foreign policy relations. Sikkim plays important role for the accomplishing India's Foreign Relations with China through Nathu La Pass which is one of the three connections between India and China.

5.2. FOREIGN POLICY WITH CHINA

The relationship with China is based on Panchsheel the Five Principles of Peaceful co-existence without interfering each other's territorial integrity.

5.3. NATHU LA A DIPLOMATIC PLACE

Nathu La found in above study as a strategic place for both India and China as far as International Trade and International Security is concerned. Nathu La is the connection between India and China where international trade is being happened. It is important place for economic development because it is the international trade center and at the same time it is important place for national security. As far as national security is concerned Nathu La Pass of Sikkim is important area to be focused because we can't trust China. The India's relationship with China is always bitter because history witnessed itself. In the year 1962 China attacked India in spite of having Panchsheel. So it is important for India to consider state of Sikkim as war zone region.

6. CONCLUSION

The "FOREIGN POLICY OF INDIA AND THE STATE OF SIKKIM [SPECIAL REFERENCE WITH THE TRANS-NATIONAL BOUNDARIES IN NATHULA REGION]" deals with the various stages of the Foreign Policy of India right after the independence. India's foreign policy passed through different stages from Non-Alignment Movement [NAM]. It is the main principles of India's foreign policy for almost three decades from its freed. The main principles of the Non-Alignment Movement (NAM) were the National Security and to safeguard its territorial integrity and political sovereignty, National Development (particularly raising the living standards of the people of India as a whole), to establish friendly relation with both the power blocs and not to join either of the power, to promote the industrial and technological development, to promote the development of agriculture and economy of India and to promote International Peace and Harmony as whole.

The foreign policy of India has gone through different phases. In the first phase 1947 to 1967, India established itself as non-align state. The second period from 1967-1997 was by Mrs. Indira Gandhi whose idea to bring India back to International Relevance included a shift from a global to a regional role, economic development and most importantly the demand for technological innovation. The most recent period from 1997 to 2007 is said to be the most significant as well as the worst episode of Indian Foreign Policy. In 1998, India once again conducted nuclear tests and was harshly criticized by the international community. The US demanded severe measures which included isolation and sanctions. However, by the beginning of the new century India's image has changed positively due to the access to its markets for foreign investment and the high reputation of Indian Communities abroad.

However India's defense and security policy is an integral part of its foreign policy. Protection of its national territorial integrity and sovereignty is another important element of the foreign policy of India.

Above area of study in Nathu La region of Sikkim is strategic place while defense and security is concerned. Present paper tries to focus the importance of Nathu La region because it connects India and China. Nathu La connects India and China which will be the area of war and aggression as already took place. Above study explained the urgent need to be focused by the foreign policy makers in the area of Nathu La Pass to maintain cordial relation with China.

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REGULATING NATIONAL HIGHWAYS IN LIGHT OF THE CHANGING SCENARIO

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ABSTRACT

In light of the B K Chaturvedi Committee, set up to recommend ways for prompt completion of the National Highways Development Projects, seems to have been guided by the misconception that infrastructure can be built by simply providing with additional concessions to the investors. This paper tries to introspect into, whether the new rules make inadequate capacity highly rewarding for investors, and offer the entire viability gap-funding grant during the construction phase itself or acts as a progressive step to attract investors. The concern, however, is whether these concessions are necessary and justifiable, given the huge costs they impose on the road user and the taxpayer at large.

KEYWORDS

national highways, development projects.

1. INTRODUCTION

India has an extensive road network of 4.24 million km – the second largest in the world. While highways constitute only 2% of the length of all roads, they carry around 40% of the road traffic. The Government of India has mandated **National Highways Authority of India (NHAI)** to implement **National Highways Development Project (NHDP)**.

Traditionally financing for development of national highways was from the budgetary resources of GOI. Due to the need for augmented growth, loans were also raised from Asian Development Bank (ADB) and Japan Bank of International Co-operation (JBIC), which were expected to be returned from the toll incomes of the projects. After constituting NHDP most the projects have been developed or are under development on Public Private Partnership (PPP), through Built Operate and Transfer (BOT) – annuity or toll modes. Typically in an annuity project the project IRR is expected to be 12%-14% and for toll projects where the concessionaire assumes the traffic risks, the project IRR is expected to be around 14%-16%.¹

Recently government has accepted the recommendations of the B.K. Chaturvedi Committee Report (2009), which has suggested ways for expeditious financing, granting several additional concessions to the investor the highway project in order to woo more investors and make the economically viable projects financially lucrative.

In this paper we try to see of regulations between the parties i.e. the contractual obligations guiding the terms of immobile investment, revenue generation and risk sharing and the impact of amended provisions over the parties to the contract.

2. EXISTING AND THE CHANGING SITUATION

Initially, projects under NHDP were awarded as item rate cash contracts. But almost 90% of these contracts in the first two phases have experienced delays and cost overruns. The problem with these contracts was that neither the authority nor the developer has incentives to prepare for the initial cost and the time estimates carefully. This causes large variations both in scope and quantities used in the project. To overcome this problem the government came up with the BOT (Toll) contracts which instigate stronger incentive to complete the project on time.

BOT (toll) contracts are governed by the rules specified in the Model Concession agreement (MCA) where the developers of the highway projects are granted the rights to charge toll fees² from the users for a period of 20 years extended up to 30 years for unviable projects allowing 100% tax exemptions in any 10 consecutive years within a period of 20 years after completion of the construction, provided the project requires additional capacity expansion, depending on the designed and actual traffic variations. The justifications for promoting these types of contracts is that it alleviates the tax-payers from initially funding the project and the developer is vested with bearing the Construction, O&M, Financial and Traffic risks associated with the project though the land acquisition and approval risks lies with NHAI. In the initial MCA if the actual traffic had exceeded the designed capacity for a consecutive 3 years, then the concessionaire had to widen the road at his cost and the taxpayers would gain from unanticipated traffic risks. But government pressurised by the predominance of unbidden tenders during the recent financial crisis has bend backwards to woo private investments in infrastructure by extending the concession period, if it asks the developer to go for capacity expansion. This can actually mean investors creating inadequate capacity so to achieve unexpectedly high profits and the taxpayers have to foot the bill of capacity expansion along with the underreported capacity losses (traffic risks).

TABLE 1: VARIATIONS IN TRAFFIC

Type of variation	Change in concession period	Cap on concession period variation
Actual traffic < Target traffic	For every 1% shortfall, concession period increases by 1.5%	20%
Actual traffic > target traffic	For every 1% excess, concession period reduction by 0.75%	10%

Viability Gap Funding (VGF) scheme provides financial support in the form of capital grant for PPP projects in various infrastructure sectors to make the non-attractive projects viable by allowing VGF up to 40% of the project cost, half during the construction and the latter during the maintenance phase. Under the new circumstances it is suggested that the entire grant should be given during the construction phase besides 20% of the concessional loans that the investors can avail from the IIFCL (India infrastructure finance company Ltd.) Thus it reduces the VGF to a mere cost-sharing device and thus creates a situation of irrational allocation of the grant (with higher demand and shortage of funds) and project delays. Also it would lead to the problems of moral hazards in terms of quality and design in the construction phase. Lastly the incentives of terminating the contract NHAI's event of default or due to force majeure event is pro-investors as it receives 90% of the due debts.

3. CAUSES & IMPLICATIONS OF SHIFT IN POLICY REFORMS

Arranging funds for financing the highways during the economic slowdown of 2008-09 became a challenge for the developers. Highways are public assets and hence cannot be used as "tangible loan security", as warranted by the RBI. Thus stringent capital-adequacy norms as well as quantitative restrictions in turn increased the lending rates of highway projects. Another cause of shortfall in interest of private developers was RFQ and RFP norms of 2008.

With the problem of negligible private interest in developing highways, NHAI on committee recommendations has incorporated single bids of developers, modifications in standard RFQ, RFP and concession agreement, reduction of technical threshold experience range from 10%-20% to 5%-10% of the estimated

¹ Guidelines for investment in road sector, GOI, Ministry of Roads Transport and Highways

² Details of the toll fee collection and the base rate revision regulation as given in the gazette of India published on 12/01/2011

project in order to claim eligibility, increasing the base premium by 5% every year³ as annualised revision of the rate of fee from 4% where the bids are on a revenue sharing basis and reducing the technical experience score for the purpose of pre-qualification by half, equalling the estimated project cost. These moves may seem to be incentivising enough for bringing back the investors in the post crisis period but this creates more possibilities for adverse selection and also transfer of traffic risks and financial risks over taxpayers.

Provisions are in place where the cost of construction of a permanent bridge, bypass or tunnel exceeds Rs. 50 crores, then such infrastructure shall be excluded from the section of national highway and separate toll taxes shall be levied as specified by the government in the official gazette. Thus if there is lack of vigil in designs and estimation, this can lead to over capitalisation with underutilized capacity which provides the developers with two way benefit of concession period extension and additional toll levy on users.

4. CONCLUSION

The authorities have to be very selective in choosing the right set of contracts that govern the restrictions in the progressive path and certainly should not be distortionary in nature as one can be the problems with annuity payments of BOT (annuity) contracts as it burdens the authorities to compensate the private developers with a higher differential associated with private costs in financing projects, in order to forgo their right to charge toll and thus in turn look out for sources of financing. Thus it should look out for vast untolled segments by collaborating the current O&M contracts with the duties of toll collection along with adopting engineering procurement and construction (EPC) contracts. Differential toll taxes can also be considered taking the freight corridors into consideration.

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³ Applicable Rate of Fee = Base Rate+ Base Rate* $\{(WPI A - WPI B)/WPI B\} \times 0.40$

THE STUDY OF RELATIONSHIP BETWEEN EARNINGS MANAGEMENT AND THE ISSUANCE OF BONDS AND RENT EXCHANGE IN COMPANIES LISTED IN CAPITAL MARKET OF IRAN

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ABSTRACT

In the present research we have investigated about the relationship between earnings management and the issuance of bonds and rent exchange in firms present in capital market of Iran. First we used Pearson's correlation analysis to study the dual relationship between the variables by using SPSS15 software and then by using a multiple-regression analysis we tested the hypotheses. The statistical society for the present research entails all companies which have financed during the years between 2005 and 2011 through the issuance of bonds and rent exchange. To measure earnings management we used Jones's adjusted model. The research results showed that managers manage earnings but there is not any meaningful relationship between current exchange optional accruals and the issuance of bonds and rent exchange in previous year and two years before the issuance of these bonds.

KEYWORDS

Current exchange optional accruals, bonds and rent exchange.

INTRODUCTION

During the recent decades the financial issues in companies has deserved a certain status in financial management field in a way that different exchange methods have been utilized up to now to absorb the surplus liquidity of the people in our society. Regarding the cultural and economic conditions in Iran the design of financial tools should be in a way that first it should not contradict with Islamic principles and then it should accord the financial and economic conditions in Iran. Bonds and rent exchange are among financial tools which observe both market requirements and Islamic aspects of the issue (Ezazi & et al, 2011). In the present research we have chosen companies which have financed through bonds and rent exchange as firms included in our research society.

According to article 16 of the administrative principles of bonds issuance in Iran the companies applying for bonds issuance should have been profitable at least during the two financial periods before the application for partnership bonds issuance. Regarding the above mentioned issues which reveal the high importance of earnings firms may carry out earnings management in the negative side (manipulation in order to overstate the company) to issue bonds. Because the information is not accessible evenly among the users, there exists an information asymmetry between managers and investors. Information asymmetry is a condition in which managers have more information about the operations and different exchange aspects of the company in the future in comparison with the investors. This may create a stimulus and an opportunity among managers for earnings management (Ebrahimi & Hassani-e-Azar, 2006). Thus the main task in the present research is to find some relationships between earnings management through the utilization of current exchange optional accruals as the independent variable and the value of bonds and rent exchanges issued as the dependent variables if the relationships above are investigated the research results may lead to the awareness of the guarantee suppliers, creditors, investors and other users of financial reports to enforce lack of transparency or transparency of the reports related to the earnings of companies issuing those bonds. The high importance of earnings regarding the bonds' issuers, lack of enough knowledge of the users of the information listed in financial reports, lack of researches about all bonds, and the freedom of managers in using different exchange accrual accounting approaches, earnings management can help greatly for more awareness in decision makings of the users and the creditors specially and the stockholders to assess the role of management in earnings management in order to issue bonds and rent exchange and the role of the managers (Baradaren-e-Hassanzadeh & Kamranzadeh, 2009).

REVIEW OF LITERATURE

Earnings management is in fact the intentional efforts of the management in the type of earnings management in order to achieve certain goals in a way that it does not contradict with accepted accounting principles and the related rules. Now we tend to study the relationship between earnings management (through current exchange optional accruals) and the issuance of bonds.

LOCAL RESEARCHES

Mashayekhi & et al. (2005) concluded in a research entitled: "the role of optional accruals in earnings management of the firms accepted in Tehran Stock Exchange" that in companies under investigations in this research, earnings management has been utilized.

Noravesh & et al. (2005) showed in a research paper entitled: "studying earnings management in firms accepted in Tehran Stock Exchange" that big companies in Iran have tried earnings management and the motives to enforce this type of management become more by increasing debts. Also the research findings showed that big companies use accruals to reduce taxes and by enlarging the companies, the tendency of managers for earnings management increases.

Kordestani & Modafee (2012) concluded in a research paper entitled: "studying the model capability based on optional income compared to the model based on accruals for earnings management assessment" that the seasonal optional incomes model has more ability to assess earnings management compared with Jones's models and adjusted Jones's models. Also the research findings do not show a meaningful difference between this model and the integrative model of Dichaw and Dichew.

FOREIGN RESEARCHES

Ion & Miller (2002) studied earnings management in Korean companies in a research and found out that in companies under investigation, earnings management has been carried out by using optional accruals. This is done specifically when cashes resulting from operations show a weak performance of the company. In the present research it has been stated that market reacts positively to changes in net earnings but this reaction is negative considering the changes in accruals.

Hertz et al. (2002) studied the long-period performance of firms in New York bourse which issued bonds. The research results showed that along with the increasing of stock value in supply time and after stock issuance, the performance (yield) has been better compared to the conditions before bonds issuance. Ghosh & Olson (2009) studied the amount of using optional accruals by managers in ambiguity conditions and stated that managers use optional accruals to reduce the fluctuations in the reported earnings.

Liu & et al. (2010) presented in their research entitled: "earnings management in bonds" all American companies issuing bonds during the years between 1970 and 2004. The results of the research were as follows: 1- There is not any evidences showing the utilization of current exchange optional accruals during the two years before the issuance of bonds. 2- During the year before bonds' issuance, DAC became positive and is in %1 level. In other words, the additive earnings management is done for the year before the bonds' issuance in IPO companies a lot more than the companies issuing bonds. 3- Also the results above showed that increasing earnings through the manipulation of current exchange accruals will lead to a reduction in debt cost.

RESEARCH GOALS

The ideal goal of the present research is to try to reduce the information asymmetry in order to present transparent exchange, related, and reliable information for the users by the suppliers of the information. By using the results of the present research the investors and creditors can analyze the financial reports of the companies with more awareness in their decision makings. In other words, this research helps them to get more information about the relatedness of the information. Also the overall goal is to study the relationship between the issuance of bonds and rent exchange and earnings management through testing the hypotheses utilized in the research.

RESEARCHES METHODOLOGY

The present research is post incidental based on the financial data of the companies in the past to study the hypotheses. The goal is to carry out an applied research. Also it is an analytical research by using the data gained and stating some hypotheses and testing them. To discover the relationship between these two variables we have used correlation method.

The information of the present research entail the data gained by financial reports of the companies present in capital market in Iran which have been extracted by referring to data bases, calculating them and estimating research models based on them to prepare a basis for testing the hypotheses. The raw data needed for the companies in order to test the research hypotheses were collected through Rahaward-e-Novin software and in most cases through Tehran Stock Exchange organization's website and they were transferred to SPSS15 software for final analysis after being compared and removing lack of harmony and being transferred into Excel broadsheet.

The statistical population of the present research includes all companies present in capital market in Iran during the time period between 2005 and 2011. Of course, there were some limitations in collecting the data from the statistical society and in identifying the research sample which have been listed below:

1. Due to the specific type of the research those companies were included which had presented bonds and rent exchange bonds.
2. The needed financial information and the financial statements of companies audited should be available completely for the years between 2005 and 2011.
3. The companies in the society should not be among the banks and financial and credit entities (investment companies, leasing companies, financial intermediaries) because in these companies the earnings' manipulation is mainly carried out through investments' sales and other methods.

Regarding the limitations above our sample companies included 10 companies issuing bonds (from among 13 companies) and 4 companies issuing rent exchange bonds (from among 7 companies).

RESEARCHES HYPOTHESIS

H1: There is a relationship between optional current exchange accruals (during two years before issuing bonds and rent exchange) and the value of bonds and rent exchange issued.

H2: There is a relationship between optional current exchange accruals (during the years before issuing bonds and rent exchange) and the value of bonds and rent exchange issued.

INDEPENDENT VARIABLE

The independent variable of the present research is items in optional current exchange accruals. To isolate items in optional current exchange accruals from total items in accruals we have utilized different exchange models such as Healy, Deangelo, Jones, and adjusted Jones and in the present research we have used the adjusted model presented by Jones which was utilized by Dichow & et al. (1998) to discover earnings management. According to information presented by some researchers this model would be the most powerful method for earnings management prediction. Additionally, models of Healy, Di Angelo, and Jones' adjusted model are more in line with the economic atmosphere of western countries (Bahar-e-Moghaddam, 2008).

Also the researchers reasoned that incomes are not free from freedom in activities and manipulation. Thus they proposed to adjust the changes in income through the subtraction of the changes in accounts and notes receivable. Teoh & et al. (1998) showed that most deviations in total accruals are emerged from current exchange accruals. Therefore, we measure earnings management through current exchange optional accruals. In other words, this measurement is carried out through flowing capital of accruals [(current exchange assets-cash)- (current exchange debts-current exchange part of long-term dents)] (Ijhin Liu & et al., 2010).

To do so first we have used Jones's model to calculate the parameters γ_0 and γ_1 .

$$\frac{CA_{jt}}{TA_{j,t-1}} = \gamma_0 \frac{1}{TA_{j,t-1}} + \gamma_1 \frac{\Delta sales_{jt}}{TA_{j,t-1}}$$

CA_{jt} represents current exchange accruals of the industry. $TA_{j,t-1}$ represent total assets in the industry during the previous year. $\Delta sales$ represents changes in industry sales (sales during current exchange year – sales during the previous year). γ_0 and γ_1 are special parameters of the industry. J represents the industry and $t-1$ represents the previous year.

Then we calculated non-optional current exchange accruals through the following formula:

$$NDCA_{it} = \gamma_0 \frac{1}{TA_{i,t-1}} + \gamma_1 \frac{\Delta sales_{it} - \Delta AR_{it}}{TA_{i,t-1}}$$

$NDCA$ represents non-optional current exchange accruals of the company, ΔAR represents the changes in accounts and current exchange notes receivable of the company (current exchange accounts and current exchange year notes receivable of the company - current exchange accounts and previous year notes receivable of the company).

Finally by using the adjusted Jones' model and the estimated parameters, optional current exchange accruals was calculated through the following formula:

$$DCA_{it} = \frac{CA_{it}}{TA_{i,t-1}} - NDCA_{it}$$

DEPENDENT VARIABLE

The dependent variable in the present research is the value of bonds and rent exchanges. To collect the information related to dependent variables of the research first we identify those companies which have issued the bonds during the research period and then we gain the nominal value of the bonds which represent the dependent variables of the present research through the financial statements and finally we calculated the logarithm of the data given to achieve the analyzing capability in the multiple regression determined.

CONTROL VARIABLES

The control variables of the present research are: the ratio of earnings to assets, the ratio of debts to assets, the ratio of long-term debts to assets and the logarithm of assets. The data needed to calculate control variables were collected by using balance sheets and income statements of the companies and were transferred into Excel and were applied in the research models.

RESEARCH FINDINGS

TESTING THE NORMALITY OF DEPENDENT VARIABLES

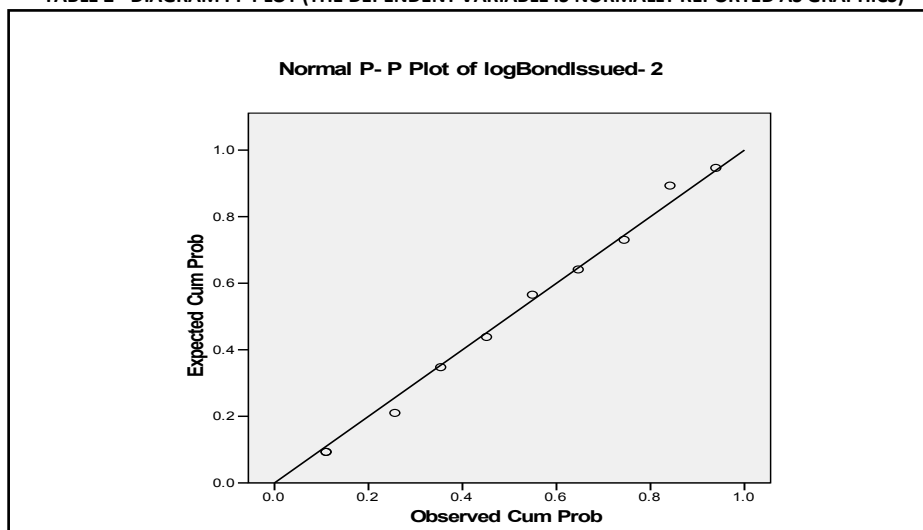
Normality of the residuals of the regression model is one of the regression presuppositions which show the validity of regression tests because normality of the dependent variables results in normality of the model residuals (the difference between the estimated amounts and real amounts).

Now that the companies in our statistical society in the present research is less than 30, the normality of the dependent variables of the research could be studied by using the numerical test of Kolmogorov-Smirnov in p-p plot graph. The results showed that the dependent variable of the research were normal as shown in the dual table below.

TABLE 1- THE RESULTS OF NORMALITY OF THE DEPENDENT VARIABLES OF FIRST AND SECOND HYPOTHESES

Name of test	Amount of statistics	Meaningfulness level	Result
Kolmogorov-Smirnov	0.338	1	Log Bond Issued data are normal.

TABLE 2 - DIAGRAM PP PLOT (THE DEPENDENT VARIABLE IS NORMALLY REPORTED AS GRAPHICS)



THE STATISTICAL ANALYSIS OF THE DATA RELATED WITH FIRST HYPOTHESIS

The basic model to examine the first hypothesis:

$$\text{Log Bonds Issued} = \beta_0 + \beta_1 \text{DCA}_{-2i} + \beta_2 \text{ROA}_{-2i} + \beta_3 \text{Log Assets}_{-2i} + \beta_4 \text{Total Lev}_{-2i} + \beta_5 \text{LtLve}_{-2i} + \epsilon_i$$

In the table below the results of the analysis of multiple regression variances (ANOVA statistics) have been estimated.

TABLE 3 - TESTING FIRST HYPOTHESIS MODEL

Name of test	Amount of F statistics	Meaningfulness level	Result
variance analysis	2.705	0.178	The model posed was not appropriate.

The table above represents testing the variance analysis which proposes the appropriateness of the posed model. The probable amount (meaningfulness level) of F statistics equals 0.178. This amount is more than 0.05 and thus there is not any appropriate model. Therefore, the deletion of some aid variables presents another model and it will be tested afterwards.

The novel model presented is:

$$\text{Log Bonds Issued} = \beta_0 + \beta_1 \text{DCA}_{-2i} + \beta_2 \text{Log Assets}_{-2i} + \epsilon_i$$

In the table below the results of the analysis of multiple regression variances (ANOVA statistics) have been estimated.

TABLE 4 - THE FIRST HYPOTHESIS TEST NEW MODELS

Name of test	Amount of F statistics	Meaningfulness level	Result
variance analysis	3.817	0.046	The model posed was appropriate.

The table above represents testing the variance analysis which proposes the appropriateness of the new model. The probable amount (meaningfulness level) of F statistics equals 0.046. This amount is more than 0.05. Therefore, there exists an appropriate model in an assurance level of %95.

First Hypothesis: There is a relationship between current exchange optional accruals (during the two years before the issuance of bonds) and the participation bonds value issued.

The final model utilized to study the first hypothesis was:

$$\text{Log Bonds Issued} = \beta_0 + \beta_1 \text{DCA}_{-2i} + \beta_2 \text{Log Assets}_{-2i} + \epsilon_i$$

TABLE 5 - THE FIRST HYPOTHESIS REGRESSION

Multiple correlation coefficient	identification coefficient	Adjusted identification coefficient	Estimation criterion error	Watson-Durbin statistics' amount
0.772	0.522	0.385	0.267	1.743

In the table above, the amount of adjusted coefficient equals 0.385, which means %38.5 of the changes in dependent variable can be expressed by the independent variables. This amount of the index shows the amount of severity of the relationship between the variables. The amount of Durbin-Watson statistics equals 1.743. This amount shows the lack of self correlation of the residuals which shows the correctness of another regression hypothesis.

TABLE 6 - FITTING RESULTS OF THE FIRST HYPOTHESIS

Variables	Coefficients not standardized		Standardized β coefficients	t statistics	Meaningfulness level
	β coefficients	Criterion deviation			
Fixed coefficient	3.405	0.854		3.989	0.005
Logarithm of assets	0.348	0.126	0.792	2.762	0.028
Optional current exchange assets	0.242	0.204	0.340	1.187	0.274

As it can be seen in the table above, the meaningfulness level for the DCA variable is more than 0.05 and it shows that the coefficient is not meaningful statistically. The meaningfulness level for log Assets variable is less than 0.05. Thus, regarding the fact that the amount of meaningfulness level of the

coefficients of all variables (except the logarithm of assets) is not meaningful statistically, the individual control variables were extracted from the model and were analyzed again. Although each of the variables was deleted, the primary result of lack of meaningfulness of the coefficients was achieved statistically.

THE STATICAL ANALYSIS OF THE DATA RELATED WITH SECOND HYPOTHESIS

The basic model to examine the second hypothesis:

$$\text{Log Bonds Issued} = \beta_0 + \beta_1 DCA_{-it} + \beta_2 ROA_{-it} + \beta_3 \text{Log Assets}_{-it} + \beta_4 \text{Total Lev}_{-it} + \beta_5 \text{LtLve}_{-it} + \epsilon_i$$

In the table below the results of the analysis of multiple regression variances (ANOVA statistics) have been estimated.

TABLE 7 - THE SECOND HYPOTHESIS TEST MODEL

Name of test	Amount of F statistics	Meaningfulness level	Result
variance analysis	2.93	0.047	The model posed was appropriate.

The table above represents testing the variance analysis which proposes the appropriateness of the posed model. The probable amount (meaningfulness level) of F statistics equals 0.047. This amount is more than 0.05. Therefore, we can tell that there is an appropriate model with an assurance level of 95%.

Second Hypothesis: There is a relationship between current exchange optional accruals (during one year before the issuance of bonds) and the participation bonds value issued.

The final model utilized to study the second hypothesis was:

$$\text{Log Bonds Issued} = \beta_0 + \beta_1 DCA_{-it} + \beta_2 ROA_{-it} + \beta_3 \text{Log Assets}_{-it} + \beta_4 \text{Total Lev}_{-it} + \beta_5 \text{LtLve}_{-it} + \epsilon_i$$

TABLE 8 - RESULTS OF REGRESSION ANALYSIS OF THE SECOND HYPOTHESIS

Multiple correlation coefficient	identification coefficient	Adjusted identification coefficient	Estimation criterion error	Watson-Durbin statistics' amount
0.851	0.723	0.378	0.2689	1.941

In the table above, the amount of adjusted coefficient equals 0.378, which means 37.8% of the changes in dependent variable can be expressed by the independent variables. This amount of the index shows the amount of severity of the relationship between the variables. The amount of Durbin-Watson statistics equals 1.941. This amount shows the lack of self correlation of the residuals which shows the correctness of another regression hypothesis.

TABLE 9 - FITTING RESULTS OF THE SECOND HYPOTHESIS

Variables	Coefficients not standardized		Standardized β coefficients	t statistics	Meaningfulness level
	β coefficients	Criterion deviation			
Fixed coefficient	3.804	1.032		3.686	0.021
Optional current exchange assets	0.144	0.221	0.233	0.653	0.549
Ratio of earnings to assets (ROA)	-2.703	1.763	-0.492	-1.533	0.200
Ratio of debts to assets (Total Lev)	0.319	0.129	0.697	2.480	0.068
Ratio of long-term debts to assets (LtLve)	-0.110	0.624	0.069	-0.175	0.869
Logarithm of assets	0.189	0.686	0.114	0.275	0.797

As it can be seen in the table above, the meaningfulness level for all variables posed in the model is more than 0.05 and it shows that the coefficient is not meaningful statistically. Thus, regarding the fact that the amount of meaningfulness level of the coefficients of all variables is not meaningful statistically, the individual control variables were extracted from the model and were analyzed again. Although each of the variables was deleted, the primary result of lack of meaningfulness of the coefficients was achieved statistically.

RESEARCH LIMITATIONS

As it is the case in most developing countries, one of the limitations in this research was lack of complete access to financial statements through different exchange ways on the contrary to the fact that the data should be presented to the users completely. The highest amount of limitation was the limitation to access data related to earnings management which was generally needed regarding the information before the issuance of bonds of the companies. Also we have used Jones's (1995) adjusted model to calculate optional accruals and the intrinsic limitations of this pattern in estimating earnings management is not deniable. For example, it does not pay attention to the interferences of the management resulted from real events. Finally the capability of Jones's model and Jones's adjusted model in careful isolation of accruals and the constituents of optional accruals and non-optional accruals is still questionable.

SUGGESTIONS RESULTED FROM THE PRESENT RESEARCH

The evidences gained from the research showed that managers manipulate current exchange optional accruals in order to achieve their goals (earnings management through optional accruals). Now it can be proposed that the devisers of accounting standards in accruals should devise standards which do not let earnings management through manipulating these items.

SUGGESTIONS FOR FUTURE RESEARCHES

1. Using other models to isolate optional accruals and total accruals such as: Healy's model, Deangelo's model, and Kizern's model.
2. Regarding the fact that there was not any research found in the field of earnings management and participation bonds and rent exchanges in Iran, doing similar researches during different exchange time periods can foster the industry isolation or the isolation of each of the constituents of bonds can describe these relationships better.
3. Using optional accruals (current exchange and non-current exchange) to study earnings management.

RESEARCH RESULTS

We have dealt with studying earnings management and the issuance of bonds and rent exchange in capital market in Iran. The results of the statistical tests of the research hypotheses showed that there is not a meaningful relationship between the current exchange optional accruals and the issuance of bonds and rent exchanges during the previous year and two years before the issuance of these bonds. But it does not mean that the managers of the companies have not done earnings management through the manipulation of the current exchange optional accruals because the evidences gained from the present research approved this issue that the companies issuing the bonds mentioned have done earnings management but there is not any meaningful relationship between earnings management and the issuance of bonds and rent exchange.

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A CRITICAL EVALUATION OF WOMEN LEADERS OF CIVIL SERVICE ORGANIZATIONS IN AMHARA REGION, ETHIOPIA

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ABSTRACT

Currently, although females constitute half of the total population in our country, only few women take up leadership in middle level and top level positions in public organizations. Ethiopia is a country with large population that have diversified culture and sub-cultures which can influence the women in coming to leadership. The study has been conducted in Amhara Region (one of the regions in Ethiopia) particularly in government organizations explanatory survey method. Mixed data was collected from female managers and their subordinates in different five zones of Amhara Region using questionnaire and interview. Statistical method especially frequency distribution, mean and charts were used to analyse the data collected. The result shows that women are more transformational leaders showing a certain degree of effectiveness. Besides the main causes of underrepresentation of women in leadership positions are found to be gender stereotyping, top management influence, lack of support and mentoring, lack of confidence, cultural influence and incongruent family roles. The result demands that government and other responsible bodies should take measures to minimize cultural and top management influence, overcome lack of competence and skills through short-term and long-term training, develop women confidence through experience sharing and recognition of good performance, and more should be done in creating awareness that women are equally able to assume higher level responsibilities.

KEYWORDS

Gender stereotyping, glass ceiling, leadership styles, Women underrepresentation.

INTRODUCTION TO THE PROBLEM

Currently, females constitute nearly half of the total population in our country. According to CSA projection on its web site, the total Ethiopian population in July 2011 was estimated at 82,102,000 of which 41,431,989 are males and 40,670,009 are females. Because of the affirmative actions taken, universities and schools try to serve equal proportion of female and male students. But the proportion of women in middle and top level leadership positions is very low showing that women in Ethiopia are not well represented in leadership positions. Particularly, only few women take up middle and top level leadership positions in public organizations. The 2008 Catalyst study reports that women continue to be significantly underrepresented in the top leadership positions.

Comparative research using the Multifactor Leadership Questionnaire (MLQ) has been conducted to evaluate the leadership styles of women and men (Eagly & Johannesen-Schmidt, 2003). The results of the research showed that women scored higher as transformational leaders than men and transformational styles are particularly effective in most organizational settings.

It is paradoxical that females showing higher effectiveness in their duties as leaders are underrepresented. According to 2011 statistical reports of Amhara Civil Service Bureau, those who have leadership roles in various zones and districts of the region were 3018 males and 285 females totaling 3303. At the level of regional bureaus, there were 136 male and 10 female process owners or leaders totaling 146. From this data, it is possible to calculate the ratio of female to male leaders 295 to 3154 showing that female leaders constitute only 8.55% of the total leadership positions while about 91.45% were occupied by males. Therefore, this study is intended to identify the major obstacles for females to come to leadership positions and the link between their leadership style and effectiveness which were not addressed by other researchers under different settings and cultures of our country.

In this study, the researcher will try to address the issue of under representation of women in managerial positions, the leadership styles used by female leaders as opposed to male counterparts, and the qualities of women that make them effective as compared to their male counterparts.

LITERATURE REVIEW

UNDERREPRESENTATION OF WOMEN IN LEADERSHIP POSITIONS

Women live in a world in which the standards for what is "normal" have been set by men, so that women's priorities, perspectives and practices are marginalized as "different" and inferior, something to be overcome if women are to be equal as citizens, workers or thinkers. This therefore highlights the need to challenge the underlying "rules of the game" if there is to be meaningful equality between the sexes

The UN Charter recognized the equality of both sexes for the first time and emphasized on the need to ensure gender equality during the inauguration of the new international world order in 1945. At the international level, the United Nations' Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) stands out. It was developed and adopted on December 18, 1979. Essentially a bill of rights for women, CEDAW is seen as a milestone in advancing the rights of women globally. In addition, the African Women's Protocol has been formed to ensure African women equality (UN 2006 as Cited in Rita F.N. Chiejina, 2008).

Ethiopia like many other African countries has adopted and ratified different laws and international conventions. In other words, Ethiopia is signatory to many international conventions that promote and protect women's rights including the CEDAW. The conventions are integral parts of the law of the land by virtue of article 9 (4) of the FDRE Constitution. In 1991 the then Transitional Government of Ethiopia has shown concern for the improvement of the rights of Ethiopian women with the promulgation of the Women's National Policy with national, regional and local institutional and implementation machineries. In September 1993, the National Women's Policy was drafted by the Transitional Government and approved by the Council of Ministers. (The Women's Affairs Office: *Implementing the Ethiopian Policy for Women*, 1998)

LEADERSHIP STYLES

Leadership has been defined as successful influence by the leader that results in the attainment of goals by the influenced followers (Bass, 1990). Drouillard and Kleiner (1996) listed the following descriptors of good leaders: Communicative, integrity, Genuine interest in others, Rewards and recognizes achievement, team orientation, Visionary and idea-oriented, Decisiveness and responsibility and competence. Comparative research using the Multifactor Leadership Questionnaire (MLQ) has been conducted to evaluate the leadership styles of women and men (Eagly & Johannesen-Schmidt, 2003). The results of research conducted appear to favor the position that women tend to be transformational leaders. In this study, women scored higher as transformational leaders than men. Since transformational styles are particularly effective in most organizational settings, various writers assured that women tended to show a more transformational style than men which could reflect the selection of women who have fulfilled the higher standards that are imposed on women leaders. Researchers started to link female characteristics with effective leadership. Researchers discovered a strong correlation between leadership effectiveness and transformational leadership (Lowe, Kroeck, & Sivasubramaniam, 1996; Seltzer & Bass, 1990, Bass 1997, Eagly & Karau, 1991; Eagly & Johnson, 1990, Omar & Davidson, 2001). Despite these views, women continue to be sorely underrepresented in senior leadership positions worldwide (Catalyst, 2008).

BARRIERS FOR UNDERREPRESENTATION OF WOMEN IN LEADERSHIP

Women are significantly underrepresented in corporations. Women continue to be *significantly* underrepresented in the top leadership positions (Jackson, 2001; Segal, 2005; Kottis, 1993). According to Ozlem, Ozakanli and Kate White (2008), women are underrepresented in senior management positions for the following reasons: Lack of support and mentoring, recruitment and selection, role conflict, gender stereotyping and influence of top management. According to Ryan & Haslam (2007), women continue to be noticeably underrepresented in leadership positions in organizations. The reasons for this fact include (1) the invisible barrier of the “glass ceiling” that protects them from getting access to such positions (e.g., Arfken, Bellar, & Helms, 2004; Catalyst, 2000; Maume, 2004; Ridgeway, 2001; Singh & Vinnicombe, 2004; and (2) the corresponding phenomenon of the “glass escalator,” by which means men are accelerated through the organizational ranks (especially in female-dominated professions; Maume, 1999; Williams, 1992).

EFFECTIVENESS OF WOMEN LEADERS

The criterion of leadership effectiveness or successfulness is an ongoing debate and a question that must get answers. Many definitions of leadership have included the idea of effectiveness, such as Yukl's (2002) definition: ‘Leadership is the process of influencing others to understand and agree about what needs to be done and how it can be done effectively, and the process of facilitating individual and collective efforts to accomplish the shared objectives’ (p. 7). The discussion concerning the selection of valid criteria has a long history (Lent, Aurbach and Levin, 1971). Yukl (2002) proposed three types of leadership effectiveness indicators: (a) ‘the extent to which a leader's organizational unit performs its task successfully and attains its goals’ (p. 8), (b) the attitude of followers towards the leader, and (c) the contribution of the leader to the quality of group processes. These types of indicators imply different sources of assessment (e.g. groups, followers, leaders).

IMPORTANCE OF THE STUDY

In this regard, this study will help devise framework for development of female executives in the Region and formulate policies that encourage females to go up in the managerial hierarchies. It also adds to knowledge or literature regarding the link between effectiveness of women leaders and their leadership styles. More over it will help to avoid or reduce barriers that prevent women from climbing the ladder of higher leadership positions so that organizations will benefit the maximum from women leaders who are considered to be highly humanistic. Federal and regional, as well as different nongovernmental organizations will intervene in the empowerment of women in managerial involvement.

STATEMENT OF THE PROBLEM

Women access to leadership positions are significantly affected by a number of factors such as gender stereotyping, discrimination, social and structural factors. In this study, questionnaire will be distributed to women leaders and their subordinates to collect data that will be used to measure the relationship between success factors (factors of effectiveness), leadership styles and level of representation of women in leadership positions. At the same time, the barriers that prevent women from coming to leadership positions and the constraints after climbing to the ladder of leadership will be explored using interview with female leaders in Amhara Region.

OBJECTIVES OF THE STUDY

The study is intended:

- To distinguish the leadership style used by female leaders from male leaders
- To identify the barriers preventing women from entering leadership positions and the subsequent barriers faced by women while working in leadership positions
- To describe the relationship between effectiveness and level of representation of female leaders

BASIC RESEARCH QUESTIONS

This study is intended to answer the following basic research questions:

- ❖ What kind of leadership style is mostly used by women leaders?
- ❖ What are the problems/constraints facing women when coming to leadership positions and subsequent barriers affecting women leaders?
- ❖ How successful are female executives in Amhara region?

RESEARCH METHODOLOGY

The study employed the concurrent mixed approach in order to combine both qualitative and quantitative data. The researcher used explanatory survey research method to get answers why women are underrepresented in senior leadership positions and it tries to investigate the qualities possessed by females that make them different from male counterparts. It also explores the leadership style that is used by female leaders whether it is different from the style used by male.

VARIABLES OF THE STUDY

The dependent variables include the leadership style and effectiveness of female leaders. The independent variables/factors affecting women leaders are composed of challenges, incompetence, biasness, discrimination, social issues, disrespect, low self-esteem, domination, uncertainty, stereotypes, prejudices, insecurity, role conflict and unacceptance (Rene P. Mceldowney, Paula Bobrowski, And Anna Gramberg, 2009). The subjects of analysis are individuals (women leaders and their subordinates).

SAMPLE OR PARTICIPANTS OF THE STUDY

The population of the study includes senior female leaders and their subordinates from civil service organizations in Amhara Region, Ethiopia. The researcher employed snowballing to select 15 female managers and stratified random sampling was used to select 30 sample respondents from subordinates. The researcher believes that 45 respondents would be representative of the study conducted in this region as they are more or less in the same context.

DATA COLLECTION INSTRUMENTS AND PROCEDURES

Primary data was collected using interview and questionnaire. Semi structured Interview was held with women leaders to raise different issues regarding the problems of women when climbing to the leadership positions. Moreover, Multifactor Leadership Questionnaires (MLQ) were prepared for the women leaders and their subordinates to gather relevant information after it was pilot tested. Secondary data had been gathered from review of documents, different articles, and books regarding women leaders.

DATA ANALYSIS

In order to analyze the qualitative data collected from women leaders using interview, the researcher used narration of the key text after coding the data by categorizing them into themes. Quantitative or statistical analysis/descriptive statistics such as frequency distribution including percentage, charts and mean were used for analyzing data collected from women leaders and their subordinates. The researchers made the analysis by coding and entering the data into computers utilizing the Excel program

RESULTS AND DISCUSSION

CHARACTERISTICS OF THE SAMPLE

TABLE 1: BIO DATA/ INFORMATION

Items	Women Leaders themselves		Subordinates of Women leaders	
	Number	Frequency (%)	Number	Frequency (%)
a. Sex				
Female	15	100%	8	26.67%
Male			22	73.33%
b. Age				
<20				
20-30	9	60%	9	30%
30-40	6	40%	18	60%
>40			3	10%
c. Educational level				
Able to write and read				
Grade1-6				
Grade 7-12				
Diploma	3	20%	5	16.67%
First Degree and above	12	80%	25	83.33%
d. Marital status				
Married	13	86.67%	21	70%
Single	2	13.3%	9	30%
Divorced				
Widow				

Source: Author's Survey Results, 2012

Out of the total subordinates of women leaders, only 30 samples were selected for the study based on stratified random sampling and 15 women leaders were found for questionnaire and interview. As can be seen in the above table, regarding the age of the subordinate respondents, 8(26.67%) are females and 22 (73.33%) of them are male. This shows that most of the experts under the supervision of women leaders are male. The majority of the subordinates (60%) of women leaders are between 30 and 40 years where as the majority of women leaders (40%) are between 20 and 30 years of age. On the other hand, 10 % of the subordinates are greater than 40 years of age. It is possible to say that the respondents are matured enough to make decisions on their own. As shown from the table, most of the women leaders (80%) and their subordinates (83.33%) have first degree and the rest are diploma holders. This indicates that leaders and their subordinates have the required educational qualification. Finally, concerning their marital status, most of the women leaders (86.7%) and 70% of their subordinates are married indicating that they can shoulder responsibilities. The rest of the respondents (13.3 of women leaders and 30% of their subordinates) are single.

LEADERSHIP STYLES OF WOMEN LEADERS

TRANSFORMATIONAL LEADERSHIP STYLE

Transformational leadership is a process of influencing in which leaders change their associates' awareness of what is important, and move them to see themselves and the opportunities and challenges of their environment in a new way. The transformational leaders are composed of Idealized influence (attributes and behaviors), Inspirational Motivation (IM), Intellectual Stimulation (IS) and Individual Consideration(IC). The values from the subordinates of women leaders regarding ratings are presented below in the table. The average validated range for transformational leadership style which is between 3.0 and 3.75.

TABLE 2: TRANSFORMATIONAL LEADERSHIP

Transformational Leadership (Four Is)	Rating of subordinates	Self rating of women leaders
1. Idealized Influences	2.52	2.75
2. Inspirational Motivation(IM)	2.416667	2.65
3. Intellectual Stimulation(IS)	2.408333	2.23
4. Individual Consideration(IC)	2.558333	3.1
Mean	2.484867	2.692667



(Source: Computed based on Survey, 2012s)

IDEALIZED INFLUENCE (ATTRIBUTES AND BEHAVIORS)

Idealized influence indicates whether you hold subordinates' trust, maintain their faith and respect, show dedication to them, appeal to their hopes and dreams, and act as their role model. In this regard, the average idealized influence as rated by subordinates is 2.52(2.51+2.53)/2 and it is 2.75 as rated by women leaders.

This averages show that the women leaders gain trust, respect and confidence in carrying out their activities. They provide a sense of both mission and vision that others want to follow. Women leaders consider themselves as those who build trust and act with integrity as shown in table 2 as well as the chart.

INSPIRATIONAL MOTIVATION

Inspirational motivation measures the degree to which leaders provide a vision, use appropriate symbols and images to help others focus on their work, and try to make others feel their work is significant. As indicated in the table 2 above, the mean values of the subordinates and women leaders themselves concerning this variable are 2.42 and 2.65 respectively showing that women leaders inspire and motivate followers. The average universal norm is about 2.5 which is not much different from the mean value of the respondents. The leaders communicate high expectation for performance through image and emotional appeals; the leader inspires the followers to pursue a shared vision over individual self-interests. Women leaders rated themselves better than their subordinates perceived them as shown in the table.

INTELLECTUAL STIMULATION

Intellectual stimulation shows the degree to which one encourages others to be creative in looking at old problems in new ways, create an environment that is tolerant of seemingly extreme positions, and nurture people to question their own values and beliefs and those of the organization. The subordinates' rating of women leaders in terms of creativity and innovative thinking is 2.41 where as their own rating is 2.23 which is lower than subordinates' rating on average. This indicates that women leaders encourage subordinates in creativity and innovative thinking. Even though it is below the validated benchmark which is 2.5, it is paramount in terms of frequency of exercising intellectual stimulation. It is possible to say that the women leaders provide environment fostering experimentation, empowerment and new approaches to problem solving.

INDIVIDUALIZED CONSIDERATION

Individualized consideration indicates the degree to which one shows interest in others' well being, assign projects individually, and pay attention to those who seem less involved in the group. These leaders pay attention to each individual's need for achievement and growth by acting as a coach or mentor. The subordinate respondents said that women leaders give attention to individuals shown by the average value of 2.56 while women leaders rate themselves high on their concern about individual workers which is observed from their own rating of 3.1 on average as indicated in the above table. Both average values are above the average universal norm portraying that women leaders recognize individual differences and coach their followers accordingly to make them effective in undertaking their activities.

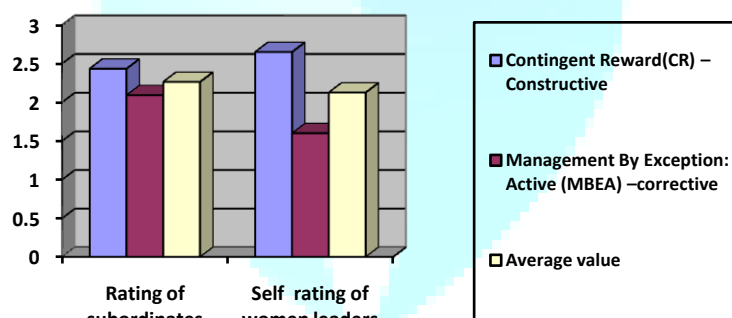
In general, the judgment of women leaders by their subordinates shows that they are more transformational which is near to the validated benchmark. The average value of transformational leadership components is 2.48. Women leaders own rating as transformational leaders is higher than the ratings of their subordinates. As shown in table 2, it is about 2.69 which is nearer to the validated benchmark that is 3.0-3.75. The average of the two ratings is 2.59 which in good record in terms of transformational leadership which is considered to be more effective. This clearly shows that women if they get the opportunity for leadership, they can do it with required performance.

TRANSACTIONAL LEADERSHIP

Transactional leaders display behaviors associated with constructive and corrective transactions. The constructive style is labeled Contingent Reward and the corrective style is labeled Management-by-Exception. Transactional leadership defines expectations and promotes performance to achieve these levels. Contingent Reward and Management-by-Exception are two core behaviors associated with 'management' functions in organizations. The women leaders and their subordinates rated women in terms of transactional leadership behavior as follows:

TABLE 3: TRANSACTIONAL LEADERSHIP

Transactional Leadership	Rating of subordinates	Self rating of women leaders
1. Contingent Reward(CR) – Constructive	2.433333	2.65
2. Management By Exception: Active (MBEA) –corrective	2.091667	1.6
3. Average value	2.2625	2.125



(Source: Computed based on Survey, 2012)

CONTINGENT REWARD

Contingent reward shows the degree to which one tells others what to do in order to be rewarded, emphasize what one expects from them, and recognize their accomplishments. Transactional contingent reward leadership clarifies expectations and offers recognition when goals are achieved. As shown in the above table and chart, women leaders rated themselves more on contingent reward than their subordinates. Women leaders' average rating is 2.65 while subordinates' rating is 2.43. Both groups' ratings are within the research validated benchmark which is between 2.0 and 3.25. Thus, it is possible to say that women leaders are willing to reward workers for better performance and recognize their accomplishments. They use positive reinforcement to encourage followers to achieve outcomes.

MANAGEMENT-BY-EXCEPTION: ACTIVE

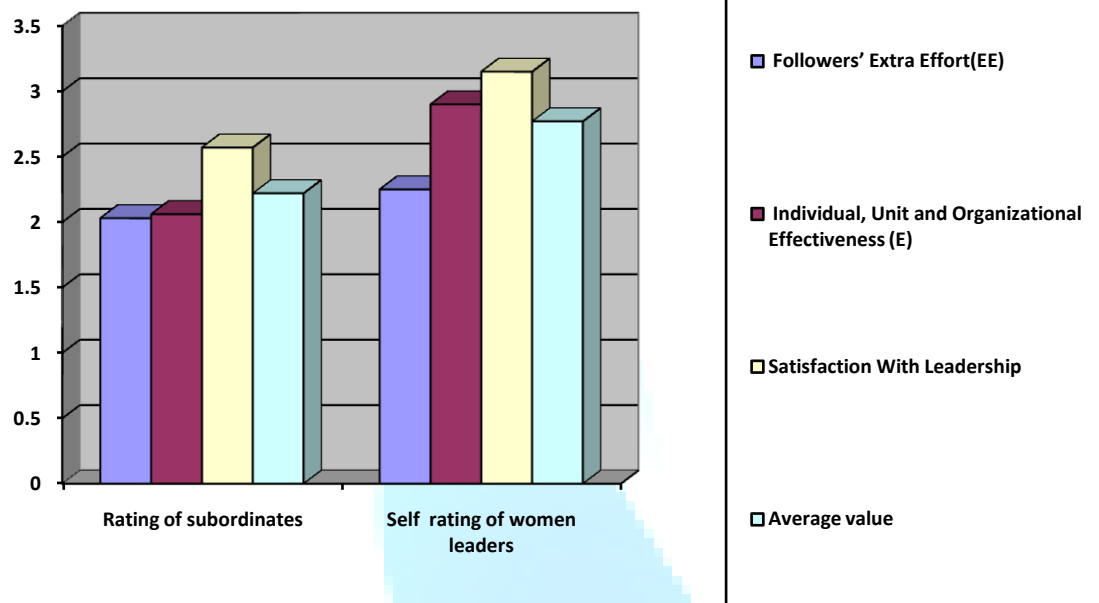
The leader specifies the standards for compliance, as well as what constitutes ineffective performance, and may punish followers for being out of compliance with those standards. This style of leadership implies closely monitoring for deviances, mistakes, and errors and then taking corrective action as quickly as possible when they occur. As shown above, women leaders are not much concerned with punishment. Instead, they focus on correcting mistakes as self rating and subordinates' rating are 1.6 and 2.09 respectively. The research validated benchmark is between 2.0 and 3.25. Subordinates witnessed that female leaders are quick enough to take corrective actions when things go wrong ways requiring expected compliance. They use corrective criticism, negative feedback and negative reinforcement to encourage followers to achieve outcomes.

OUTCOMES OF LEADERSHIP

Transformational and Transactional leadership are both related to the success of the group. Success is measured with the MLQ by how often the raters perceive their leader to be motivating, how effective raters perceive their leader to be as interacting at different levels of the organization, and how satisfied raters are with their leader's methods of working with others.

TABLE 4 OUTCOMES OF LEADERSHIP

Outcomes of Leadership	Rating of subordinates	Self rating of women leaders
Followers' Extra Effort (EE)	2.03	2.25
Individual, Unit and Organizational Effectiveness (E)	2.06	2.9
Satisfaction With Leadership	2.57	3.15
Average value	2.22	2.77



(Source: Computed based on Survey, 2012s)

The average ratings of subordinates and women leaders themselves about the outcome of women leaders are 2.22 and 2.77. Most of the subordinates are not satisfied with the women leaders' output. The women leaders may not win extra efforts of followers and sometimes achieve organizational effectiveness. In this regard, women leaders consider themselves as productive leaders because they rated themselves higher than the rating of their subordinates.

CAUSES OF UNDERREPRESENTATION OF WOMEN IN LEADERSHIP POSITIONS

According to the structured interview, most of the female leaders said that discrimination or inequality still persists. They reported that women do not get equal chance for leadership positions. Some of the positions are given based on political affiliation without considering work performance of workers. Women leaders indicated that influence of top level management, lack of interest on the side of women to take higher leadership positions, incongruity between the family roles and work role of women, lack of confidence in becoming leader, lack of acceptance by their male counterparts and husbands because of gender stereotyping, unequal access to education, skills and mentoring are the major obstacles to come to higher level leadership positions.

CONCLUSION AND RECOMMENDATION

When women are rated on the style of leadership, they scored more on transformational leadership than transactional leadership style. It is possible to say that women are more transformational leaders because they score 2.59 on average on transformational leadership scale where as their score on transactional leadership is only 2.2 on average. Even though their score on transformational leadership is below the research validated benchmark, it is higher than transactional leadership style. In connection with this, the score on outcomes of leadership as perceived by their followers is lower than the perception of women leaders themselves.

Concerning the barriers of women in coming to leadership positions, women and men equally mention many factors such as top management influence (men network), gender stereotyping, cultural influence, family role incongruence, lack of mentoring and support, lack of confidence on the side of women and undermining of women leaders as perceived by men. Most of these factors enable us to make conclusion that there is still discrimination against women in empowering them in higher level leadership positions.

Based on the findings of the study and the suggestions of different respondents, the following recommendations are forwarded.

- ❖ The regional government and other responsible bodies such as bureau of education should provide more opportunities to female education, competence and skills through formal education, short term and long-term training relevant to leadership. Mentoring and support program should also be arranged to develop their experience.
 - ❖ Different civic and public organizations particularly Children, Youth and Women affairs Bureau should arrange a variety of awareness creation activities to reduce or avoid cultural influences by brainstorming using panel discussion.
- Husbands should share the family responsibilities of women leaders because one of the major obstacles of women in coming to leadership is incongruent family and work place roles.
- ❖ Those persons in higher positions need to give encouragement to best workers and identify women who have best performance and skills, committed for success, and then provide them position according to their abilities instead of other criteria such as political affiliation. This will build their confidence because they climb to that position based on their competence so that no one will undermine them. Women should also get chance to participate in organization planning to develop their confidence in communication.
 - ❖ Women should be able to resist top management influence by dealing with women related organizations and bring illegal and unfair practices to law court.

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IMPACT OF PUBLIC DISTRIBUTION SYSTEM ON FOOD SECURITY OF RURAL AND URBAN POOR**SAWALE SANGHARSHA BALIRAM****RESEARCH SCHOLAR****DEPARTMENT OF ECONOMICS****DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY****AURANGABAD****ABSTRACT**

If we see during 1950s India was importing food grains from other countries, but after that India become self-reliant in the production of food grains for the citizens. Public Distribution System (PDS) has been applied in rural and urban areas. As well as PDS has the most important function of a marketing mechanism, as it provides a vital link between the producers and consumers of various goods and services. The PDS encompasses all movements of goods right from transportation of raw material to the delivery of finished products to all consumers. We know that India is a democratic country and objectives of equality and social justice are in the constitution of India. So for that Indian government tries to meet the citizens need for food grains through Fair Price Shops (FPS) aims to protect the the citizens from the impact of rising prices. But the most important purpose of PDS by the governments is to give a legal right to food the both Above poverty line (APL) and Below poverty line (BPL) and other general categories of deprived persons under National Food Security Act. In our research studies we have examined the Buldhana District, which service has the PDS provided to consumers and do they directly benefit? For that purpose we have done a critical study. This study has completed in Buldhana district with selection of a sample of cardholders from urban and rural sector. We have conducted direct interviews going on FPS, from all these to know information about real impacts of PDS. We have also taken interviews Administrative officers of food suppliers.

KEYWORDS

PDS, food security.

INTRODUCTION

Malnutrition and starvation is one of the serious problems in the globalized world. In the year 2009 the people who slept with empty stomach, alarmingly the number of such people was more than are billion. This problem has been analysis by a number of economist. According to Dr. Amartya Sen the hidden cause of this problem is not only because of scarcity of food grains but also lack of entitlements and lack of purchasing power of the people .In India the problem of malnutrition and starvation has posed a serious problems before Government. Recently International Food Policy Research Institute (IFPRI) has published the world index of starvation in 2010. In this report countries taking this issue, India got 67th place among the total 84 countries. India did not fare well in comparison to neighbor countries China and Pakistan.

Food security is a broader term which encompasses malnutrition and hunger. Access by all people to enough food for an active and healthy life. Food security includes at a minimum: (a) the ready availability of nutritionally adequate and safe foods . (b) an assured ability to acquire acceptable foods in socially acceptable ways. For the food security, an efficient and effective mechanism to reach food to all people at all time at affordable prices is an essential prerequisite. It is increasingly coming to be recognized that it is not just energy deficiency but micronutrient deficiencies that limit human growth and development.

In India to fight this issue under the public distribution system a chain of fare price shops are distributing food grains to economically poor section at affordable prices under these a BPL scheme, Aantodaya Anna Yojna, Annapurna yojna. So PDS has become the nations food security system which has been operating as the food access mechanism for several decade.

Indian Public Distribution System started before Independence when people suffered from serious food shortages. The Government of India imported food grains and supplied them through rationing system-sale of a fixed quantity of ration to entitled families in specified cities. The department of food, under the Government of India was created in 1942 to co-ordinate this arrangement. After Independence the Government had to reintroduce rationing in 1950 facing to inflationary pressures of food grains. In the First Plan the system, which was extended to all such rural areas which suffered from chronic food shortages. The creation of the Food Corporation of India and The Agricultural Prices Commission in 1965 consolidated the position of the PDS. The PDS was later expanded under the Revamped Public Distribution System (RPDS) which was introduced on 1 January 1992. But in this system food grain did not often reach the poorest in the society. So in June 1997 introduced Targeted Public Distribution System (TPDS) to directly and effectively benefit those Below the Poverty Line(BPL). Under this programme BPL families were to get an assured supply of 10 kg of food grains a month. Rice and wheat are the two major food grains procured by the central and state agencies for supplied through the Public distribution system and occasionally sugar, edible/vanaspati and gram/dal. Both the Central Government and state Government participate in the procurement and distribution of food grains.

But we know PDS has becoming the nations food security system, functioning for more than four decades. Now there has been no dispassionate review of the system with reference to food security and poverty alleviation. Now a days there are several shortcoming in the functioning of PDS. Such as its ineffectiveness in reaching the poor, misuse of ration cards by cardholders, diversion of food grains from PDS, wrong identification of the BPL families, inadequate supply of food grains to BPL families etc. So many reasons the role of PDS as a guarantor of food security is largely debated. At this backdrop PDS should not play effectively to reduce the incidence of poverty and food insecurity. On one side large number of people are dying due to starvation and malnutrition and on the another side around seven thousand ton food grains has rotten in the Government warehouse and at the same time 1.78 crore bogus ration card are still in operation. So in the context of national food security and poverty alleviation, it is essential to take a look at the efficiency and efficacy of the PDS.

NEED OF THE STUDY

We know that PDS is the most important function of marketing management, as it provides a vital link between the producers and consumers and various goods and services. The distribution system includes all movements right form transportation of raw material to delivery and finished products to the consumers. The distribution system of various goods and services, particularly those essential to human beings are, managed by the government so it is called a public distribution system. PDS has been working in the past and at present also is being operated as a system of controlled and equitable distribution of essential commodities in short supply. It is a system of sale of selected commodities through fair price shops.

The public distribution system is an important and integral part of demand and supply, of goods and services. Therefore, its main aim is and the basic requirements of the public at large in general and the unprotected section of the society in particular, who cannot afford to buy needed goods prices which are determined by the market forces.

India is a democratic country and the objectives of equality and social justice are in the constitution of India. The Indian government tries to meet the citizens' need for food grains through the public distribution system. The markets sections of society are unable to purchase essential commodities at the increased market prices. So the main aim of the PDS is to distribute essential commodities to such persons a reasonable price.

In India the PDS is jointly administered by the Central and State governments. The weak and poor sections of society are supplied with necessary goods at low prices. The supply of goods at a fair price through fair price shops aims to protect the citizens from the impact of rising prices.

The government tried to remove the problems of food and for improved their nutritional status. We can say it aims at improving food security. Food security at the household level is an issue of great importance for a developing country. 'Food security implies access by all people at all times to sufficient quantities of food to lead an active and healthy life'.

The food security problem has many dimensions. It may arise at global, national or household level. It is also true that more availability of food will not ensure food security to all section of society.

So the public distribution system in India has become one of the important economic and social aspects of democratic government. The poor and majority of middle class people have been able to breathe easily to some extent owing to existence of PDS despite several difficulties encountered by both the fair price owners and cardholders.

But the government is supplying essential commodities. This is essential in order to protect the poor and weak sections of the population in particular and all other in general from the continuously and all other in general from the continuously rising prices and some provide food security it is a matter of serious concern that the PDS is not implemented systematically.

In Vidarbha region of Maharashtra state is known one of the most distressed region in India. It also facing severe agrarian distress. Buldhana is the poorest district in Vidarbha region. Keeping in view the poverty and backwardness of Buldhana district, it has been decided to take up an in depth research study on food security and PDS.

REVIEW OF LITERATURE

1) *Economic Survey Government of India. Delhi (2000) "Public Distribution System-TPDS"*

The Economic Division of the Ministry of Finance, Government of India presents a review of developments in the past one year.

The Economic Survey includes prices and food management and important aspects of the publication is related to consumer price index (CPI), whole sale price index, food management, Procurement of food grain for supply in open market through PDS. The stock of food grains to be maintained and its latest position, different schemes including through PDS. And finally the food subsidy provided by the Government as a facilitator state is reflected in the economic survey.

The Economic Survey presents a overall view of infrastructural implementation of central sectors projects. Also are covered poverty alleviation and the report relating to development backward classes and the weaker section of the society.

PDS schemes details are given by the Economic Survey and its distributed each state. This is reported comprehensively in Economic Survey report published by Ministry of Finance.

2) *Mungekar Bhalchandra (2003): The Economy of Maharashtra, Changing Structure and Emerging Issues, Himalaya publishing house, Mumbai*

This book emphasis in context of Maharashtra this are described five sections that at last two section 4 section most important on social sector, poverty food security weaker sections and employment guarantee schemes.

This book including 14 no. poverty and level of living, this paper of surynarayana M.H. in this paper described that on poverty and food security, poverty scenario: Temporal profile, then no. Of 15 chapters describe public distribution system and food security of Mehandra Dev. In this paper, consider poverty as the major determinant of food insecurity there are several ways in which the food security of the poor improved India's strategy in this regard consists of promoting economic growth.

This papers of main objective is to examine the PDS and its impact on food security in Maharashtra and also suggest at the end some measures for restructuring on PDS and its better targeting and successful implementation.

This paper examines the PDS and food security in Maharashtra mainly using the household level data on the PDS. This study also discusses various problems and options available for the restructuring of the PDS.

3) *Pro. Mishra S.K and Mr. Puri V.K.: "Indian Economy its Development Experience" Shyam Lal College Delhi*

This book attempts to analyze the difficult time from which India passing especially after the new economic policy.

The book encompasses the developmental issues facing the Indian economy. It divided into 46 chapters. The present work includes information relating to PDS in the last decade from 1989 to 1999. The new parlance regarding the Public Distribution System in the liberalized economic scenario and the intention of the government to fulfill the targets in the time as regards to production and distribution through PDS are. The book also includes a chapter on the financing of the plans and investment pattern, food security, industrial development during planning period.

4) *Silva Dimitri And Suryanarayana M.H.(2008): Poverty and Food Insecurity in India*

A Disaggregated Regional profile. Indira Gandhi Institute of Development Research, Mumbai. March 2008

This article provides a profile of deprivation with respect to consumer expenditure, cereal consumption and energy intake across demographic and agro climatic regions as defined by the National Sample Survey Organization of India.

It examines this evidence at the disaggregated level to verify whether a Public Distribution System(PDS) targeted with reference to estimate of poverty would end up penalizing the non-poor but insecure. The empirical profiles have also useful policy relevance with respect to decentralized formulation and implementation of the Public Distribution System (PDS).

This article is an attempt to verify the same issues on the basis of the disaggregated national sample Survey (NSS) regional levels by rural and urban sector in context of consumers expenditure, food insecurity, poverty. This article examines economic deprivation and food insecurity as reflected in the rural/urban sectors incidence depth and severity of poverty, food insecurity and severity across region in India.

5) *Khan Amir Ullah (2008): Food Price Stability: Is PDS Working?*

Director of India Development Foundation after a brief stint with the Indian Civil Services. Also work with large UNDP

This article argues on that though the off take per household has shown improvement under Targeted Public Distribution System, only about 57% of the BPL households are covered by it.

This article analyzes PDS and its improvement through targeting system in different states. It examines amount of subsidies during 2007-2008 for food, fertilizers and petroleum.

This article sees PDS as a fulfilling need for a safety net to the poor. It shows that backward regions received higher subsidies. Identification of beneficiaries depends on household characteristics, their occupation, dwelling type and size.

This article at last describes the lacunae of TPDS and recommends distribution of Food stamps which can be used only to purchase food grains. The authors consider this superior to the existing PDS.

OBJECTIVES

- 1) To assess the overall implementation process of the PDS.
- 2) To find out the role of PDS in terms of providing food security of households in Malkapur tahsil in Buldhana District.
- 3) To examine the strength and weakness of the existing PDS.
- 4) To suggest remedial measures for the more effective role of PDS in food security to poor households.

HYPOTHESIS

- 1) PDS does not function as per expectation in either rural or urban areas.
- 2) Targeted PDS has not resulted in better coverage of BPL families.
- 3) PDS is more successful in providing Food Security in urban as compared to rural areas.

RESEARCH METHODOLOGY

The present study is based on both the primary and secondary data. For an effective analysis of the present study and sharp focus on the food security and the role of PDS as a provider of food security. Primary data will be collected from the selected beneficiaries of PDS in the Buldhana district. For the purpose of data collection separate interview of PDS beneficiaries.

The study is limited to the area of Buldhana district. On the basis of random sampling techniques villages will be selected from the list of villages covered in the census reports and then required number of households was chosen in each sample village. The study is limited to around 120 sample households from urban and rural area of Buldhana district. Households are categorized into Antyodaya families (very poor), families below poverty line (BPL families), and families above poverty line (APL families) and the quantity and price of food items supplied to them through the PDS varies according to the category. In the household survey besides information on socio-economic, demographic characteristics of the study population an assessment of nutritional status of children's.

From 1st June 1991 to 2005 is considered as the reference period of the study.

CONCLUSION OF THE RESEARCH

Buldhana District is familiar as an industrial backward district. So there ratio of unemployment is high. In spite of, this in present condition benefits of the Government schemes have been taken by below poverty line families, middle classes, farm labor & labors. Through this they tried elevating their economical level.

In this research we have examined the Buldhana District, which service has the PDS provided to consumers and do they directly benefit? For that purpose we are doing a critical study. This study has completed in Buldhana District with selection of a sample of cardholders from urban & rural sector. For urban Malkapur tahsil town has been chosen and for rural sector village in Malkapur Tahsil Kund (khurd).

We have selected 60 cardholders in Malkapur town of which 20 are APL & 40 BPL cardholders and for rural 60 cardholders of which 20 APL & 40 BPL cardholders. As well as the owner of FPS. We have conducted direct interviews going on FPS, from all these to know information about real impacts of PDS.

For the study in rural and urban areas, we have also taken interviews of Administrative Officers of food suppliers. After our visit, they have expressed their views, their views & Opinions.

Distribution is the most important function of marketing management, as it provides a vital link between the producers and consumers and various goods and services. The distribution system includes all movements right from transportation of raw material to delivery and finished products to the consumers. The distribution system of various goods and services, particularly those essential to human beings are, managed by the government so it is called a public distribution system. PDS has been working in the past and at present also is being operated as a system of controlled and equitable distribution of essential commodities in short supply. It is a system of sale of selected commodities through fair price shops.

The public distribution system is an important and integral part of demand and supply, of goods and services. Therefore, its main aim is and the basic requirements of the public at large in general and the unprotected section of the society in particular, who cannot afford to buy needed goods prices which are determined by the market forces.

India is a democratic country and the objectives of equality and social justice are in the constitution of India. The Indian government tries to meet the citizens' need for food grains through the public distribution system. The markets sections of society are unable to purchase essential commodities at the increased market prices. So the main aim of the PDS is to distribute essential commodities to such persons a reasonable price.

In India the PDS is jointly administered by the Central and State governments. The weak and poor sections of society are supplied with necessary goods at low prices. The supply of goods at a fair price through fair price shops aims to protect the citizens from the impact of rising prices.

So the public distribution is a direct state intervention in the national distribution system of goods. PDS provides such commodities as food grains, sugar, kerosene, oil, wheat, rice. PDS can be defined as "an equitable distribution of an essential commodities at a reasonable prices". In June, 1997, the targeted public distribution system (TPDS) was introduced under which two sets of PDS were announced, one each for above poverty line (APL) and below poverty line (BPL) households.

The government tried to remove the problems of food and for improved their nutritional status. We can say it aims at improving food security. Food security at the household level is an issue of great importance for a developing country. 'Food security implies access by all people at all times to sufficient quantities of food to lead an active and healthy life'.

The food security problem has many dimensions. It may arise at global, national or household level. It is also true that more availability of food will not ensure food security to all section of society. In our findings really poor people depend on food grain which is provided through FPS at affordable prices in urban and rural areas. Some poor people cannot purchase food grains in the market, in this inflation conditions.

We have observed really people have need of food security and they want good quantity and quality to improve their life style as well as nutrition status.

So the public distribution system in India has become one of the important economic and social aspects of democratic government. The poor and majority of middle class people have been able to breathe easily to some extent owing to existence of PDS despite several difficulties encountered by both the fair price owners and cardholders.

The government is supplying essential commodities. This is essential in order to protect the poor and weak sections of the population in particular and all other in general from the continuously and all other in general from the continuously rising prices and some provide food security it is a matter of serious concern that the PDS is not implemented systematically.

But at present we see many problems in the functioning of the PDS. The poor do not get justice in terms of quality of good supplied, fair prices or timely supply of essential commodities. A black market is observed to be operating where FPS owners sell the subsidized commodities supplied by the government to traders. Prices of the same commodities are different in shops in the same town. There is no inspection of the FPS to see whether the PDS is functioning properly. Also, only three commodities wheat, rice and kerosene, are supplied through the PDS. No other type of food grains are supplied.

So far that it is essential to prevent black marketing availability of adequate stock of food grains at the fair price shops, increase in number of fair price shops and extended hours of opening of the FPS and also opening through out the week. As well as allowing cardholders to draw ration in maximum number of installments as per their purchasing power.

Even so, the PDS is extremely important in order to bring food security in India. Food security means 'Food security implies access by all people at all times to sufficient quantities of food to lead an active and healthy life'.

The citizens will have food security only if food items are supplied which are of suitable quality in adequate quantity and at the appropriate times.

We found in our survey that the majority of persons in the rural and urban areas feel that the PDS is really very important. Because some persons because of their occupations are unable to purchase food grains in the open market.

To conclude PDS must be continued for the society in rural and urban areas, people are in need of food grains for increasing their nutritional status.

RECOMMENDATION

The present research examined whether the PDS is functioning satisfactorily or has any serious drawback by appraising the role of the PDS in total consumption of essential commodities, assessing the economic viability of PDS, evaluating the working of PDS along with the opinion of the cardholders.

- 1) Government officers strictly ensure that there should not be black market sales of fair price commodities. They should be provided to the Below Poverty line people only.
- 2) Government should concentrate on smooth working and functioning of the PDS by appointing special investigation officers to check the Public Distribution System and transparency.
- 3) The elected members of wards (Corporators) are empowered to inspect the fair price shops by regular checking. This control over, the working of fair price shops must be ensured by peoples' representatives.

- 4) A committee should be constituted to attend to all the complaints both from the shopkeepers and the cardholders and the committee should have adequate powers.
- 5) The wholesale nominees should deliver the kerosene within fixed time at the doorstep of the fair price shopkeepers.
- 6) The shopkeepers suggest fixing ration amount on basis of the number of members in a family. The quota fixed should be at least 50% of their monthly family requirements.
- 7) The government should take adequate and timely steps for making quality goods available. Similarly rigorous and different punishments should be meted out to dishonest and unfair price shop owners including in any kind of malpractice.
- 8) The government must advise the fair price shops owners to replace poor quality food grains instead of penalizing the innocent cardholders.
- 9) The proper implementation of AAY must be there as per the rules and criteria of the government.
- 10) There should not be bias due to caste, religion and other factors while distributing the daily necessities to the public through FPS.
- 11) Presently, FPS remain open only twice or thrice a week. This arrangement should be done away with and instead arrangement should be made so that FPS remain open throughout the week.
- 12) Doorstep delivery of grains by government agencies or wholesale dealers would also contribute towards reduction in leakages. Ensuring timely availability of ration quota should be the responsibility of state.
- 13) The involvements of local bodies in overseeing the functioning of PDS is generally, nominal/non-existent in most states. A committee should be formed among members of each municipality/Gram Panchayat, which should be responsible for effective functioning of FPS.
- 14) The proportion of population with food insecurity should be identified based on planning Commission's poverty ratio. The planning commission should make appropriate adjustment in the method of BPL identification that would enable the state government to correct its own estimates of people with food insecurity.
- 15) Families who do not have a secure source of regular income, should be included in the BPL list, irrespective of their income. This would benefit a large majority of the poor, particularly, those with economic insecurity.
- 16) Since the BPL identification survey is critical to the success of TPDS, it is appropriate that this be carried out with the assistance of reputed agencies such as the NSSO and state level research institute. The data base should be then computerized for effective monitoring and regular updating.
- 17) The lifting of food grains from FCI godowns, State/Civil supplies corporation's warehouses as well as delivery at FPS should be computerized.
- 18) The Annapurna Yojna must be contained all the commodities consumed by the poor i.e. Rice, Sugar, Oil, Kerosene, and bajra, jawar, pulses not only wheat products.
- 19) Fresh stock of the commodities must be distributed by FPS i.e. Sugar, Wheat, Oil and Rice.
- 20) The most needed commodity is Kerosene, the Government officers themselves or the supply officers found involved in many places in selling the kerosene in black market. It should be avoided by the strict and proper implementation of the government rules and regulations. There must be punishment to the distributors or government officers who are fully involved in this black market practice.
- 21) The sugar, oil, kerosene must be sold only to the ration card holders, it should not be sold to the consumers without cards.
- 22) Local bodies like municipalities and panchayats should not be involved in the process of identification of the poor. Since their members are very closely involved with the local community, they may not be as objective as desired. Thus, survey and identification should be done by teams of officials from various departments.
- 23) There should be greater decentralization of operations relating to PDS. States should be free to procure cereals themselves, buy it from private traders or from FCI, and maintain buffer stocks. Any rules and regulations standing in the way of the states in this regard should be removed.
- 24) Quantum of total subsidy to be provided, issue price of food grains, amount of food grains to be distributed per head, the extent of subsidy involved in food stamps etc should be decided by the state government.

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RELATIONS BETWEEN THE COOPERATIVE AND SOCIALIST MOVEMENTS IN THE FORMATIVE YEARS**VINCENT DODOO****SR. LECTURER****DEPARTMENT OF HISTORY & POLITICAL STUDIES****SOCIAL SCIENCES FACULTY****COLLEGE OF ART & SOCIAL SCIENCES****KUMASI****ABSTRACT**

Cooperation is by nature socialist and Lenin observed that the socialist society is one giant cooperative. The seeds of growth of both cooperation and socialism are traceable to Robert Owen and this was before the establishment of the first communist state. This chapter looks at the formative years of cooperation and socialism and then moves on to look at how the communist states, especially, the first communist state were able to relate to the cooperative society. Indeed, the first communist state would have found it difficult, if not impossible, to survive if it had not reached an early understanding with the Russian cooperative apparatus, an apparatus which was well established in 1917. Again, all the socialist countries of former Eastern Europe had significant cooperative sectors which handled the production and distribution network in the new states. Once an understanding was reached between the cooperative sectors and the new communist governments, these cooperative networks proceeded to support the new communist states, especially in Russia.

KEYWORDS

Cooperative movement, Marxism, Owenite socialism, Rochdale pioneers, State apparatus.

INTRODUCTION: THE NATURE OF COOPERATION

Ernest Poisson has observed that cooperation is by nature socialist. However, some cooperators will not agree with this view. Albin Johansson, for one, regards cooperation as “working capitalism”. This is contrasted with “finance capitalism” which according to Johansson leads to monopolies by interfering with the smooth functioning of the capitalist system. This contention is, however, debatable for what Johansson had in mind was not capitalism. The logical conclusion of that economy – defined succinctly as the economy of capital by capital for capital – is the control of that economy by those who own the capital (Lasserre, 1979: 69). But where capital is owned by the majority of the people for the benefit of the whole society, that is something else. And this point is of relevance in our discussion of the relation between cooperation and socialism. The roots of socialism can be traced to the Industrial Revolution which happens also to be the context for the emergence of modern cooperation. According to one account, in 1844 when the potential pioneers were debating the way out of the plight faced by the working class, Charles Howarth suggested cooperation. Cooperation was, therefore, a compromise solution agreed upon by the hard core socialists, the Owenite socialists and the artisans (Bonner, 1970).

Charles Howarth was not the only socialist. There had been a long tradition of socialism in England and France before the emergence of modern cooperation and the names usually associated with it are Robert Owen of England and Francois Fourier and Saint Simon of France. In fact, at one time, socialism in England was synonymous with Owenism. It is quite significant then that Robert Owen should be regarded as both the father of socialism and cooperation. Nevertheless, the man had to be purified to obtain the two philosophies of cooperation and socialism: the purification of his brand of cooperation led to modern cooperation whilst his socialism had to be subjected to a similar process for Marxism to emerge. Thus in looking at the relationship between cooperation and socialism, a word on Robert Owen and the early socialists will be in order.

ROBERT OWEN AND THE EARLY SOCIALISTS

Owen is one of a series of thinkers and activists who are associated with socialism in the pre-Rochdale era. One major name in France was Francois Fourier. He was a contemporary of Owen, born a year after him in 1772. Though the two are said to have different characters and different social standings, both came up with similar programs for resolving the problems created in 19th century industrial Europe. Neither contemplated revolution as a means of attaining that end, nevertheless, both programs were reformist enough to frighten their contemporaries. These programs were dominated by the notion that the environment was largely responsible for defects in character and accountable for the misery of the people. A way out of this was the creation of microcosm societies possessing all characteristics of the ideal society. Fourier's answer was the “phalanstery”, Owen's was the community village New Harmony.

While the association of both Owen and Fourier to the social philosophies of cooperation and socialism is beyond dispute, the same cannot be said of the degree to which their projects – the phalanstery and the community village – are cooperative or socialist. Furthermore, this debate has not been limited to proponents and opponents of the two social philosophies but is found even within the ranks of the cooperative theoreticians. Charles Gide, for instance, distinguishes Owen the communist from Fourier the cooperatist. He argues that Fourier's communism applies to labour, to production, to housing and to daily life in general but never to capital. The phalanx was thus a joint –stock company to him; each member of the phalanx was the owner of his share of the capital and was to receive profits in the form of dividends at the rate of 40–50 per cent (Gide, 1974: 124). Other cooperators, however, think that Fourier's attitude to capital still falls within the definition of socialism. The argument is that even though he counts capital, he does so in a graduated manner in proportion to the production in the phalanstery. Any piece of production was divided into twelve parts. Work attracted 5/12; qualification (including qualified work) attracted 3/12 while capital was given 4/12. Secondly, the total proportion allotted to capital was the total due but was not necessarily what was paid out. To calculate this, a series of rules quite incompatible with capitalism were applied: for instance, Fourier took into account the origin of the capital and granted a higher dividend to the worker's savings than he did to other contributions. In view of these distinctions, Charles Gide is among those who recognize that Fourier's phalanstery was not a capitalist joint-stock company but a pro-socialist joint stock company and that is why it is a cooperative, for the immediate purpose of the phalanstery, thanks to democracy, was not profit but the common good (Lambert, 1967). On the contrary, Owen was opposed to permanent profits which he regarded as the cancer of the social body and advocated the ultimate abolition of it in the community. Hence, Gide's acceptance of him as the true communist. Again beginning at New Lanark, Owen introduced widespread reforms. Four principles have been identified as common to the programs of Owen and Fourier. These are association, voluntary cooperation, democracy of enterprise and service instead of profit as the major aim of their enterprises. Both men succeeded in attracting numerous followers who assisted in shaping their ideas and programs from socialist doctrines into a workable cooperative form. The immediate ones were Dr. William King of Brighton for Owen and Michael Derrion of Lyon for Fourier.

Another pre-Rochdale socialist worth mentioning was Saint Simon. In 1830, he published the Doctrine of Saint Simon in which he condemned “unearned incomes”, the explanation of the exploitation of man by man and advocated a distribution principle which would be based on ability and need. He disapproved of free competition and instead argued for associated work with the understanding that the whole society is a vast association of producers. Saint Simon did not have a direct connection with cooperation, but it was one of his followers, Philippe Buchez who used the idea of associated work as the point of departure for creating a systematic theory of producer cooperatives. In 1831, he set down the basic regulations for organizing autonomous producer cooperatives. He favoured a democratic republic and proposed the establishment of state banks to extend credit to workers associations in order to avoid industrial crisis. Buchez argued that through economic planning and state loans the latter could help production adjust itself to consumption (Lambert, 1967: 52). Thus via Owen and Saint Simon, the consumers and productive cooperatives became a reality.

One socialist thinker who cannot be ignored in any discussion of cooperation and socialism is Louis Blanc. He did not only propose a cooperative theory but he also actually had a chance in 1848 to put his cooperative workshop into practice. Even though, as organizer of such workshops, Louis Blanc was not exactly a success, his work of 1840, *L'Organisation du Travail* sets out some guiding principles for later worker's cooperatives. Thus Louis Blanc could be grouped together with Buchez as among the early theorists on the workers' producer cooperatives. There are several respects in which the two had similar views. Both recognized the role the state had to play in production to avoid depression and crisis. It has been pointed out that the great advantage of Louis Blanc was his recognition that in a completely socialist society, the state would still have to act as the coordinator of economic activities. The importance of Louis Blanc as a result, in the emergence of a strong public sector goes without saying. The planned economies also abstracted much from his theory. Louis Blanc's theory of the social workshop is weak in that it does not give a creative role to the consumer, an omission which it has been pointed out, would always lead to high cost of products, waste and low productivity. There is also the danger of compromising individual democratic rights with the state assuming the sole task of social transformation.

In short, pre-Rochdale socialism was of a particular brand and its interpreters and theoreticians almost always had a place for the cooperative ideal. Nevertheless, within the socialist ranks itself, there was a ferment which began to manifest itself from the second half of the 19th century when it became obvious that while the prevailing notions of socialism had clearly rejected the evils of the capitalist system, none of their programs appeared to be effective for dealing with the crisis in any decisive way. In fact, there seemed to be one characteristic which was applicable to all the early socialist doctrines – from Owen all the way to Louis Blanc. This was the failure to deal capitalism any significant blow. The diagnosis of Marx for the ineffectiveness of Owen, to some degree, could therefore apply to the others which collectively came to be known as the utopian socialists. Owen and his followers took such pains with their plans for the new communities like plans for machines. But human society cannot be constructed according to a plan or established at will. Human society evolves and Marx held that a new order could only be generated by forces contained in the old (Bonner, 1970: 478). That whole question required an explanation. Such an explanation was offered with reference to laws which governed social evolution. Four theories were developed to offer this explanation: these are the materialist conception of history; a theory on religion and alienation; a theory on revolution and finally, a theory on surplus value. After this socialism, it was claimed, ceased to be utopian and became scientific. This was the beginning of Marxism and its appearance signified new relations between cooperation and socialism.

The decade beginning from 1840 were years of expectation for the serious revolutionaries in Europe who were determined to find an answer to the exploitation of man by man, that is, the liberation of the working man. The earlier revolutions, especially, the 1830 revolutions had demonstrated the weaknesses and strengths of these revolutionaries and suggested what could be done to gain power for the workers. Thus as the years after 1840 went by, the socialist revolutionaries became less and less tolerant of groups and creeds which were not in a position to assist the imminent confrontation between the workers and the ruling classes. In fact, it has been claimed that prior to the launching of the Communist Manifesto in 1848, Engels had been in communication with Robert Owen and that, had it not been for police chicanery, he would probably have established a cooperative commune on Owenite lines in Germany in 1845 (Lambert, 1967: 46). After 1847, however, it was obvious that he had abandoned such ideas and the explanation was largely because Karl Marx and his followers came to the conclusion that cooperatives were the groups which could not assist the movement towards confrontation between the antagonistic classes.

MARXISM

Karl Marx diagnosed the cooperatives '... as non-capitalist elements within capitalism...' which were incapable of assisting the prosecution of the work against capitalism. This view of Marx came to be the view of many of his leading followers, including Engels and Lenin. His concern was that by mitigating the suffering of the masses – a subject which was not in dispute by either the capitalists or cooperators themselves – cooperation was deterring wage earners from the urgent and by far the most critical task of assuming political power. Naturally, much hostility towards cooperation was generated among the early Marxists. Those Marxists who did not share such hostility were equally frowned upon as people of low intelligence (Dodoo, 1995). Such hostility and contempt translated into active opposition against the cooperatives. This attitude was, however, based on the assumption that the opportunities of the decade made class struggle the only means of gaining political power for the workers. By the end of 1849, however, the fire generated by the 1848 revolution was virtually spent. Thereafter, the Marxists began to show some flexibility towards other possible alternatives to achieving power for the workers. By 1864, therefore, Karl Marx was openly beginning to grant recognition to the cooperative organization, at least at the level of production. He came to accept the idea that modernized large scale production could take place without a class of employers employing a class of workers. This recognition of Marx was made public on 28th September 1864 in the manifesto adopted by the International Labour Association in London. That portion of the manifesto regarding cooperation was drafted by Marx himself. With that the theory proposed by Philippe Buchez thirty years earlier, and presented in a slightly different form by Louis Blanc, began to receive the attention of Marx. Henceforth, cooperation began to receive some positive recognition among Marxists. The task of actually incorporating the cooperative organization into a socialist society was to take place first in Russia and was the work of Nikolai Lenin. At first Marxism did not have a home in the sense that there was no one state which was totally organized on the Marxist theory. This situation changed with the coming of the October 1917 Revolution in Russia.

Cooperation in Russia pre-dated the 1917 Revolution. In fact, by 1917 the cooperative movement in Russia had become so well established that but for the existence of this machinery for grassroots production, the soviet experiment would not only have been difficult to implement, it would certainly have taken a much longer time to accomplish.

The Russian cooperative movement was used to state intervention and control before the Bolsheviks took over. And this was due to the conditions under which the movement was established in the country. The conditions in Russia at the time of the introduction of the cooperative organization were not the same as in Western Europe when that type of organization emerged. At the time, Russia was still under feudal authority. The liberal attitude and the presence of varieties of new ideas which prevailed in Western Europe were not present in Russia and the cooperative organisation had to grow up gradually within confines and supervision established by the Czarist apparatus, a political apparatus that did not look kindly on any attempt to organize people within any part of Russia. Peter the Great's westernization drive and the wholesale introduction of industries into Russia in the early part of the 19th century created a new industrial climate in Russia. He established plants for the production of arms and shops for the manufacture of textiles. These factories were not only managed by the government but special decrees were passed in order to give concessions such as tax breaks and actual gifts of money to all businessmen who were willing to emulate the Government example and establish industries. The lavish inducements offered to foreign investors helped to solve the problem of skilled labour but did not solve the problem of labour since Russia did not have a proletarian class. The Government found a way out by using peasants living on crown lands to work in the government factories. The Russian gentry followed this example by establishing their own factories on their estates and using the serfs on them to work in the factories. This was the beginning of factories operated by bonded labour. Such labour could easily be abused and this was precisely what happened resulting in confrontation with the management. Unfortunately in such confrontations, the peasants and serfs always expected the Government to intervene to help them. The opposite was usually what happened with the vicious suppression of such revolts by the state simply because it distrusted any coalition of people. After several such episodes, in which the workers were denied state support, the consciousness developed among them that the whole structure of government was on the side of the owners and the capitalists and that the only avenue opened to them for ameliorating their condition was in worker solidarity. With this conclusion drawn, the Russian people easily became amenable to new ideas for worker organizations such as the cooperative society (Blanc, 1924).

The modern cooperative idea began to develop after the emancipation of the serfs and grew as a bourgeois organization championed largely by the populists in the newly established administrative units or *Zemstvos*, who saw it as a way of helping the poor Russians. After failing to make headway with the *moujiks* or agricultural peasants, they turned attention to the *kustars* (industrial workers) who were mainly artisans. The first cooperative stores were however established under the influence of articles and pamphlets on western European cooperative stores. It is said that the Schulze-Delitzsch model was favoured to begin with since it was mainly educated Germans in Baltic provinces who founded such stores. The first workers consumers association was established in the Ural Region in 1870. In 1897, the *Zemstvos* and cooperative leaders prevailed upon the Government to issue "The Normal Articles of Association for Consumers Societies"

which made it easier for new cooperatives to open. As a result by the close of the century about 800 consumer societies were in operation in Russia (Blanc, 1924).

PECULIAR CHARACTERISTICS OF THE RUSSIAN COOPERATIVE MOVEMENT

The early cooperatives which sprang up in Russia were pure business and bourgeois organizations and had peculiar features dictated largely by the limitations imposed by the Czarist state. The first of these relates to membership of the cooperatives. In Russia, certain groups of people like students and soldiers and others whose civil liberties were limited by law were ineligible as shareholders. This attitude was adopted by the cooperatives because they strove to be on good terms with the police and, as such, could not have people under police supervision to join as shareholders. Secondly, unlike the cooperatives in the West, the cooperatives in Russia could never hold a meeting and discuss an agenda which had not been previously approved by the police. Again the mayor of the city and the governor of the province concerned had the power to order the liquidation of any cooperative society so much so that meetings of the cooperatives were always under the watchful eye of the police.

Furthermore, since the Czar distrusted large aggregations of people, the Russian consumer cooperatives were not allowed to amalgamate. As a result, unlike their counterparts in the West, advantages of large scale organization were not available to them. It was not until 1898 that societies in Moscow were able to come together on the privilege of private agreement. In January, 1908, a committee was formed to work out plans for a cooperative bank. This bank materialized and by 1931 the Moscow Narodny Bank was serving the whole national cooperative movement in Russia. In conclusion, the Russian cooperative movement was accustomed to state intervention and control before the Bolsheviks took over (Blanc, 1924: 80).

THE PROCESS OF INCORPORATION

When the Bolsheviks took over the government in Russia, it was a government under immense pressure. But they moved very quickly to dismantle the older system and immobilise capital. They moved to reorganize industries and introduce economic and social reforms all through the country. Accordingly, a whole range of private concerns, both political and economic, were nationalized. Some major cooperatives were affected. However, after Lenin's realization of the uses to which he could put the cooperatives, his attitude to them changed completely and he became the champion and protector of the cooperatives.

Lenin's views, intentions and programs for the cooperative organization came through forcefully in, especially, two addresses which he made in November and December of 1918 to delegates of the workers cooperatives. In these addresses the view came across that Lenin regarded the cooperative movement as one large cultural legacy that Russia should treasure and make use of. Since it was a cultural legacy, Lenin intended from the outset to achieve a total absorption into the new system, that is, the merger of the tremendous good of the economic and the political achievements (Lenin, 1965: 333). The rationale was that all sections of the population fighting for their freedom must be merged into a single and strengthened union. He believed that the best way to achieve this was to bring everything under the Soviet Government and banish all illusions about sectional independence. Such thinking, he was convinced, was largely dictated by hopes of return to the pre-soviet era, a turn-around Lenin was not prepared to encourage. The cooperatives were placed in this category since they were mainly associations of petty bourgeois and middle peasantry background. Nevertheless, their ability to encourage popular initiative was recognized as the great service they rendered to the Russian society and Lenin was determined to utilise the latter quality while discouraging the bourgeois hopes.

With this recognition the Soviet Government approached the cooperative leaders with caution. These leaders also happened to be drawn from the Mensheviks, right social revolutionaries and members of other compromise and petty-bourgeois parties. Hence the further need to start any negotiations from the top political hierarchy. Accordingly, the matter was discussed thoroughly in the Council of People's Commissars. Following this, a meeting of the leaders of the non-Government Cooperative Movement met together with the Communist People's Commissars in April, 1918 at which agreement was reached between the two parties as to how best the cooperatives could be employed in the new system and under what terms.

The meeting of the Council of the People's Commissars of April, 1918, was exceptional for two reasons. First, it was the first time since the Soviets assumed power that non-party members were allowed to participate in a meeting of one of the very top political institutions of the new Government and on equal terms as the party members of that body. This Council of People's Commissars was comparable to the cabinet in the Western political system and its chairman had the same rank as that of the Prime Minister or leader of government business (Meyer, 1965). The second reason was that it was the first time that this cabinet adopted a minority resolution – which happened to be that of the cooperators. Later on, Lenin explained that the communists decided on this course of action as a gesture of good will to the cooperators for the Council of People's Commissars recognized the need to employ the experience and knowledge of the cooperative apparatus. The decision of April 1918 has a background. After the conclusion of the Brest-Litovsk treaty, the Mensheviks, among others, decided that the Bolsheviks had sold out to German imperialism. Subsequent events, however, caused them to change this attitude and cooperate with the Bolsheviks. The first of these events was the effect that the revolution in Russia had on other countries –revolutionary fever gripped the rest of Europe and soviets of workers parties were formed in Rumania and Austria-Hungary, among others. Secondly, the ruthless manner in which the British and Americans treated the subdued Germany convinced the Mensheviks that these two countries were worse imperialists. Accordingly, the Menshevik Central Committee published an appeal to all working people urging them to place ideological differences aside and work together with the communists to oppose Anglo-American imperialism. Lenin quickly seized the opportunity and prevailed on the Soviet Government to meet the Mensheviks half way. Hence the invitation of the cooperative leaders to the meetings of the Council of People's Commissars for April 1918 and its outcome (Blanc, 1924).

Following this decision, a decree was passed and published in the Izvestia allotting considerable role to the cooperative movement in national production. The decree effectively made the cooperatives the major distribution network in the country and ordered the denationalization of all previously nationalized cooperatives and the return of their assets. This was the first major effective step towards the eventual incorporation of the cooperative network into the soviet system. All parties gained something out of the arrangement. First, the Soviet Government was satisfied since it did not have its own supply and distribution apparatus. The cooperators were happy because they could keep the organisation they had toiled so hard to erect to become the leading one in the whole world at the time but also because of the added pride in being given such an important national assignment. In giving away so much autonomy to the cooperatives, they were also expected by the Soviet Government to use the people in the workers cooperatives with the objective of discovering talent irrespective of the literacy levels. Lenin was not particularly troubled by the new power given to the cooperative movement for two reasons. First, the whole question was temporary and was for transition only and secondly, because he conceived of the socialist society as one single cooperative.

Shortly after this agreement, the Soviet Government proceeded to plan for the merger of the two complementary bodies, the cooperatives and the Soviet Government. Some of the arguments for this move are seen in Lenin's address to the Third Workers Cooperative Congress of 9 December, 1918. In this speech, he rejected the claim for total independence advocated by some people within the cooperative movement, affirmed the friction which was developing between cooperative organizers and communist functionaries as inevitable but maintained that such differences would disappear with time in the course of the revolution. He also took the opportunity to expatiate on the substance of another decree which had the object of merging the two bodies. The strategy eventually adopted was highlighted upon by Lenin in another speech of 3 April, 1919. The contents of this address were basically a consideration of the merits of two proposals – minority and majority resolutions. The majority resolution advocated fusion with the executive committees of the consumer cooperatives in a direct, decisive and revolutionary way. Lenin denied this resolution his support with the argument that the one lesson that their revolution had taught was that whenever attention was paid to prior preparation, good results always followed. But good results usually eluded them when the input was only revolutionary slogans. He gave his support to the minority resolution which suggested first, the intensification of communist work in the consumer cooperatives with the object of securing a majority within them. The principle here was that you first make ready the organs you wish to hand over before actually carrying out the handing over ceremony.

This then was the approach adopted in securing the merger of the two bodies. Such organized infiltrations soon turned the cooperative societies into organizations peopled largely by the new breed of communists who went on not only to help the merging process with the Soviet Government but to actually take up the matter of communist cooperatives recognition at the international level, that is, their acceptance into the International Cooperative Alliance (Blanc, 1924).

THE CENTROSOYUZ AND THE INTERNATIONAL COOPERATIVE ALLIANCE

The process of transformation of the cooperative society in Russia had some implications at the international level. The rough tactics initially adopted by the Bolsheviks on assuming power in 1917 was scoffed at, as far as the cooperatives were concerned, outside of Russia. The Bolsheviks appointed a new Board which was pro-Soviet in place of the old Board which adhered to the "Principle of Neutrality". The ICA Executive continued to give recognition to the old Board and refused recognition to the newly appointed Board. This impasse was, however, overcome with the intervention of the then ICA Secretary-General, H. J. May, who made repeated trips to Moscow to resolve the misunderstanding. For one thing, the Centrosoyuz was the largest cooperative union in the world and for the other, the Soviet authorities were ready to cooperate with the ICA Executive. The attitude of the early days thus changed and soon Soviet cooperative delegations to ICA meetings became instrumental in reviewing the old regulations and principles based largely on Western experience.

Unavoidably, the ICA became a battle ground between those who wished the ICA rules to remain as they were and those who wanted changes to reflect the realities of the time. The Soviet representatives at the ICA requested tirelessly that the cooperative principles should be '...adapted to the conditions of the different political and economic systems...' (Davidovic, 1967: 224). They insisted, for instance, that cooperatives must abandon neutrality, play a political role and serve as an instrument in the preparation of the proletarian revolution. Eventually, the question of political and religious neutrality together with the other objectionable principles were brought to the 1937 ICA Congress in Paris for discussion. At this Congress, four principles were accepted as basic to the ICA with the principles of neutrality being downgraded to a less prominent position. The Congress stressed its validity in the report of the ICA special Committee, note being taken of the fact that 84 per cent of the organizations affiliated to the ICA actually adhered to it. Interestingly, the other supposed principles like cash trading and education which were dropped from the list were not applied universally, in any event. The cooperatives in Russia, before the sovietization, were actually practising credit sales. Again, if education is extended to include propaganda, then no country can claim to do it better than the Soviet Union which carried on this function, as well, for its cooperatives. With respect to the four which were accepted by the Special Committee as representing cooperative principles, there were real concerns as to whether they were actual principles and not mere practices which aspire to capture the spirit of the principles (Watkins, 1967).

The Soviet behaviour at the international level soon started generating interest in cooperators to consider the question as to whether it was really possible for genuine cooperatives to exist in all types of systems which spring up and, if not, whether any group or groups from obscure systems which profess to be cooperatives should be admitted into the ICA: such debates, especially, within the ICA took off seriously after 1937. After several of these debates, the consensus seemed to reflect an acceptance of the position where it would be more logical to insist on the creation of conditions for application of cooperative principles rather than their mutilation. In accordance with this thinking, in 1949 and 1950, the ICA Central Committee meeting in Paris and Helsinki ruled that: '... cooperatives organisations must be completely free and independent and must be able to take up a position in respect of all problems affecting their own interests and general interests independently of the state and public authorities as well as private organizations...' (Davidovic, 1967: 225). The Committee went on to state that countries which could not allow differing opinions and freedom of association could not claim to have true and independent cooperatives (Kirschbawn, 1980: 49-75).

The view contained in the recommendation was to the effect that it was impossible to have cooperatives as an organic part of a state system, irrespective of what state is in question. But suppose the cooperatives had the same objectives as the state system, why could they not be organized as part of the single unit? The strength of the recommendation was, perhaps, the advocacy of a pluralist system. This was the weakness contained in the recommendation. In other words, as late as 1950, the ICA was still not ready to admit that it was possible to have organizations radically different from the Western models. The Central Committee ruling was thus directed against the Soviets or communist conception of cooperation. Not surprisingly, the Soviets waited impatiently for an opportunity to challenge this ruling. They had their opportunity at the 1963 ICA Congress at Bournemouth.

At this Congress, A. P. Klimov, the leader of the Soviet delegation argued that while the principles developed by the Rochdale Pioneers had played an important role in the development of cooperation, they were not universal for all types of cooperation. The Soviet delegation then went on to propose a resolution requesting the central committee to constitute a committee to study the rules and come up with principles suitable to modern times and which recognize the existence of varieties of cooperatives (Watkins, 1986). With objections from a few delegates like Marcel Brot, notwithstanding, the resolution was passed without much difficulty (Watkins, 1967). The outcome of the resolution was the short listing of the cooperatives which were subsequently adopted at the 1966 ICA Congress. To a large extent these principles are about the same that we have today. But generally, the idea came to be accepted that the communist countries had the right to organise their own cooperatives to suit their material conditions (Lambert, 1967).

EASTERN EUROPE

The Soviets were the first to experiment with the new conception of communist cooperatives. However, cooperation in communist Eastern Europe did not begin in the Soviet Union but rather in modern Czechoslovakia. Secondly, though the Russian cooperatives followed the Rochdale model (with slight modifications) the communist countries argued that the development of modern cooperation in this part of the world was independent of the West and that it was a spontaneous reaction to foreign domination and economic exploitation. The first of these was claimed to have been organized on 9th February, 1845, that is, only 50 days after the Rochdale Equitable Pioneers (21 December, 1844), in the small Slovak town of Sobotiste. It was in this town that a group of farmers and artisans under the direction of a local school master founded the "Spolok Gazdovsky" or the "Farmers Society". Kirschbawn does not tell us the detailed nature of this early society except that its structure and organization was similar to the modern credit union. He does argue, however, that fifty days may be too short for news to seep through to reach obscure Slovakia (Kirschbawn, 1980).

It is maintained (Manaster, 1968: 449) that the cooperatives which sprang up in central and Eastern Europe were of a particular brand since they emerged out of experiences so different from the situation which prevailed in Western Europe. J. M. Kirschbawn contends that the process seemed to follow that of Slovakia. Thus a look at the process of transformation from the bourgeois cooperatives to the communist model in Czechoslovakia should be adequate commentary on the pattern in Eastern and Central Europe to balance the account given of the Russian experience before we turn to look at the joint agenda for communist cooperatives in general.

The process here assumed two forms. First there was the enactment of a law transferring all financial control of the cooperatives to the Ministry of Finance. This law no. 181 of 20th July, 1948 gave institutional and policy control in addition to the financial control to the Finance Ministry. Such power included the right to order mergers, to dissolve institutions without previously liquidating any obligations and to approve the funding of new ones. By this one law, all credit and savings cooperatives in Slovakia were merged into credit cooperatives (Manaster, 1968: 449). The other strategy was the grouping of all non-financial associations into one Central Cooperative Council to control all cooperative activities: from foundation, constitution to determining operating regulations. This was the Gleichschaltung (Laidlaw, 1980). In other words, the process of transformation to communist cooperatives was much more sudden and drastic than what happened in the Soviet Union.

COOPERATION OF THE SOCIALIST COUNTRIES

Concluding an impressive exposition on the Soviet Collective Economy, Albert Manaster notes: '...that alongside the questions of efficiency and output... must not be forgotten that every economy and its organs of command, should be at the service of man and should respect his personality...'. He points out further that this principle applied equally to both collectivist and market economies. Lurking in the above statement are both the factual and the philosophical basis for the debates about the two dominant systems which prevailed in our world before 1990. On the one extreme the assumption of the system was to give service to man. The process of implementation, however, did not enhance the personality of the individual. In the second instance, the whole rhetoric was about giving room for this personality to achieve his potential only for us to discover the erection of structures which glorify other things instead. The promise offered by alternative systems such as cooperatives, in the face of these realities, was therefore quite attractive. But then, we also realise that the cooperatives which emerged in the two environments were equally conditioned by the two systems and, therefore, neither could serve as an independent model for all to emulate.

The above view was certainly not the state of thinking when in preparation for the 1980 ICA Congress in Moscow, A. F. Laidlaw was invited to undertake a study that would project development in the world wide cooperative movement up to the end of the century. This assignment was undertaken and the results were made available for that Congress. The communist countries, however, were not satisfied with the report which came out of the study. They protested that their approach to cooperation had not been given any attention in the study. Subsequently, they put together their own brochure projecting what the situation would be like for the cooperatives in the communist regions by the year 2000.

The Laidlaw's study was a one-man affair and it affirms at once the tendency of the West to give prominence to the individual. As a Canadian citizen, perhaps, the criticism that the views reflected purely Western attitudes, is not altogether unfounded. Nevertheless, Laidlaw was an international as well as a national activist in the cooperative movement and as such there was some credit in the decision to give him the opportunity to forecast the future of cooperation. On the other hand, one cannot regard his report as an analytical study. At best this was a series of well-founded observations, some statistics about cooperative growth and a couple of recommendations (Laidlaw, 1980).

Laidlaw's one man report is contrasted with the contribution from the cooperatives in the communist countries which was the work of a team. This point reinforces the opening statement of the report that cooperation in the socialist countries was an integral part of the whole system where coordination and team work took pre-eminence over individual contribution.

In this document, the first striking statement was the affirmation of the application of cooperative forms of management, ownership and democracy at all stages in the construction of socialism and communism. This was the suggestion that the communist economy was not a simple single economy but a complex economy. Cooperatives here were not distinct and autonomous within the system but were part and parcel of one national economy or economies with common goals with the entire, socialist society and direction from socialism's inherent economic laws including that of planned, proportional development' (Cooperation..., 1980).

In agreement with Manasta's point, this document states that another feature of the law of proportionality is the achievement of balance between individual spheres and branches of the economy. Ownership of the means of production was not therefore exclusively public; there was provision for cooperative ownership. The differences between the two forms of property rest in the level of the socialization of the means of production and exchange 'in specific ways of forming key and circulating assets and in methods of management'. The one assumption in such differentiated property is that as the socialist countries advance towards the communist stage, the development of cooperative property would approach gradual but higher levels of socialization and ultimately become state forms of property. This process was, however to be a long term development (Cooperation..., 1980).

In another section, the document deals with the communist cooperatives' long-term expectations by the year 2000. Such expectations are based on planning for the future. Examples of such planning foresights are given as the Soviet Union's comprehensive programme of Scientific and Technological Progress and its social and economic consequences till the year 2000. Another plan was the Comprehensive Program for Further Deepening and Improving Cooperation and Developing Socialist Economic Integration for all CMEA member countries. A third concrete plan was the Long-term Cooperation Program or the LSCP.

Going back to the complex nature of the socialist economy in which the cooperatives featured, agricultural production was singled out for illustration in the third section of the document; four basic types of production cooperatives differing according to the degree of socialisation are specified. First, there was the association of peasants for the joint cultivation of land which they owned. Second there was the socialization of only a part the basic means of production with the exception of land, which though used jointly, remained the property of the members. In the third type, labour, land, productive cattle and other means of production were pooled together in the cooperative effort.

In the above type, income was distributed according to work done with the share of income increasing from the first to the third type. Correspondingly, depending on the quality or quantity of land contributed, the share of unearned income (land rent) decreased (Krasheninikov, 1980). In the fourth type of cooperative society, there was total socialization of land, all basic means of production and labour as a result of which income distribution was done only according to quality and quantity of work done. In this fourth type of cooperative there was no more private ownership of land and so land rent ceased entirely. All the other three types were expected to reach this stage to merge smoothly and without trace into the communist society to prove the dream of Lenin: that the socialist society was one giant cooperative.

CONCLUSION

As to the future of cooperation and socialism, this document projected that while socialist countries recognised the existence of two opposing systems, cooperatives from the socialist countries would contribute whole heartedly in attempts to resolve pressing world political and economic problems. Given the limits within which these cooperatives had to operate, it could not be argued that such cooperatives did not have any identity or that they were not successful.

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BALANCE OF PAYMENTS CONSTRAINT GROWTH: AN ARDL APPROACH

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ABSTRACT

The relationship between balance of payments and economic growth is investigated with the concept of "balance of payments constrained growth". Although Dornbusch (1971) stated that economic growth is not associated with the balance of payments in small open economies, this discussion became very popular in the last decades. In a Keynesian framework, when it is assumed that prices are sticky, exchange rates are fixed and exports are exogenous, one can conclude that balance of payments deteriorates following a positive economic growth. The reason is that an increase in national income leads to an increase in imports demand. This discussion has started with Thirlwall (1979) (Thirlwall's Rule). According to this rule, economic growth is closely related to the balance of payments. The reason is that the balance of payments surplus or deficit affects the demand. In this paper, Thirlwall's Rule is investigated in selected European economies by applying an ARDL model.

JEL CLASSIFICATIONS

C53, F43, O52.

KEYWORDS

ARDL, European economies, Thirlwall's Rule.

I. INTRODUCTION

One of the main discussions of the open economy macroeconomics has been the relationship between economic growth and balance of payments after the leading work of Keynes. The relationship between balance of payments and economic growth is investigated with the concept of "balance of payments constrained growth". Although Dornbusch (1971) stated that economic growth is not associated with the balance of payments in small open economies, this discussion became very popular in the last decades. In a Keynesian framework, when it is assumed that prices are sticky, exchange rates are fixed and exports are exogenous, one can conclude that balance of payments deteriorates following a positive economic growth. The reason is that an increase in national income leads to an increase in imports demand. However, Mundell (1968) concluded that European countries grew rapidly while they had balance of payments surpluses after the Second World War. If export-led growth strategy is adopted in these countries, one can claim that this observation does not contradict with the Keynesian model. In this context, Gandolfo (2002) showed that balance of payments can be written as a function of an increase in national income by using Lamfalussy's Model:

$$\frac{x-m}{y} = \frac{s'-h'\mu'}{1+h'} \frac{\Delta y}{y} + \frac{s-h-h'\mu}{1+h'} \quad (1)$$

To this equation, an increase in national income arising from an increase in exports affects the balance of payments in two different ways. If $s' - h'\mu' > 0$, economic growth affects the balance of payments in a positive way and vice versa. As a clarifying assumption, economic growth may originate from the factors other than exports. Under this assumption, two possible explanations emerge: Keynesian model and monetary approach to the balance of payments. Keynesian model puts that economic growth affects balance of payments in a negative way. As for the monetary approach, economic growth has a positive impact on balance of payments under the assumptions of full employment and sticky prices and exchange rates. Because an increase in national income leads to an increase in demand for money, the balance of payments improves. It is impossible for balance of payments of all countries to improve simultaneously in a real world. Due to that reason Gandolfo (2002) offers flexible exchange rates to loosen the balance of payments constraint on growth. Komiya (1969) introduced a general equilibrium model for that relationship. The main finding is that increases in national income deteriorate the capital account while it affects the trade balance and the balance of payments positively.

The number of the studies on this topic has gone up after the leading work of Thirlwall (1979) (Thirlwall's Rule). According to this rule, economic growth is closely related to the balance of payments. The reason is that the balance of payments surplus or deficit affects the demand. Thirlwall's Rule puts forward that there is a strong relationship between the rate of increase in national income and the rate of increase in exports under the assumptions of fixed exchange rates and trade balance. This implies the demand side of the rule. On the other hand, Thirlwall (1979) also considered the supply side by regarding income elasticities for exports and imports. Thirlwall's Rule can be written as follows:

$$P_d X = P_f M \quad (2)$$

Equation (2) represents the equilibrium condition for balance of payments. P_d shows price for exports, P_f shows price for imports in terms of national currency, X shows quantity of exports and M shows quantity of imports. Demand functions for imports and exports are written as follows:

$$M = (P_f/P_d)^g Y^h \quad (3)$$

$$X = (P_d/P_f)^v Y^{*w} \quad (4)$$

In these equations, Y represents national income, Y^* represents national income of foreign countries, g shows price elasticity of demand for imports, v shows price elasticity of demand for exports, h stands for income elasticity of demand for imports, and w stands for income elasticity of demand for exports. After taking the natural logarithms and differences with respect to time, rates of increase in imports and exports can be given in equations (5) and (6):

$$m = g(p_f - p_d) + hy \quad (5)$$

$$x = v(p_d - p_f) + wy^* \quad (6)$$

In this context, equation (2) can be rewritten as equation (7):

$$p_d x + x = p_f + m \quad (7)$$

The balance of payments growth rate (y_b) is obtained by considering equations (4) and (5) in the same equation namely, equation (7):

$$y_b = [(1 + v + g)(p_d - p_f) + wy^*]/h \quad (8)$$

Thirlwall (1979) and McCombie and Thirlwall (1994) put forward that the effect of the changes in relative prices on exports and imports is very limited. So, $(1 + v + g)(p_d - p_f) = 0$ can be written. Then, it is possible to rewrite the equation (8) as equation (9):

$$y_b = \frac{wy^*}{h} \quad (9)$$

When we substitute equation (6) into equation (9), we get equation (10) which represents The Thirlwall's Rule.

$$y_b = \frac{x}{h} \quad (10)$$

According to the rule, when there is no capital flows and relative price changes do not play an important role in international trade, economic growth is determined by the increase in the rate of exports (x) and the income elasticity of demand for imports (h).

As for empirical literature, McCombie (1997) investigates the validity of the hypothesis of balance of payments constraint growth in the USA, Japan and the UK. It is concluded that growth rates in the USA and the UK especially after the period of the Second World War are so close to the balance of payments constraint growth rates. In addition to that the growth rate in Japan is less than the balance of payments equilibrium growth rate, which is consistent with the balance of payments surplus in Japan. Jayme (2003) tests Thirlwall's Rule for Brasil for the period 1955-1998 by applying cointegration and vector error correction models by following the works of Thirlwall (1979) and McCombie and Thirlwall (1994) and the findings suggest that there is a positive cointegration between growth in exports and long-run economic growth. Holland *et al.* (2004) test Thirlwall's Rule by implementing VAR models for 10 Latin American countries for the period 1950-2000. To the results, there is a strong and long-term relationship among national income, exports, and imports.

Thirlwall's Rule has been developed by many other researchers. For example, Thirlwall and Hussain (1982) further developed the Thirlwall's Rule by considering international capital flows. This approach enables to model the effects of foreign exchange rates on the long-run economic growth performance in open economies. When current account disequilibrium is assumed at first, the following equation can be written:

$$P_{dt} + X_t + C_t = P_{ft} M_t E_t \quad (11)$$

Where X_t represents volume of exports, P_{dt} shows domestic price of exports, M_t , P_{ft} , E_t , and C_t stand for the volume of imports, foreign price of imports, exchange rates and the value of capital flows measured in national currency respectively. If C_t is positive, it represents the capital inflows. If it is negative, it implies the capital outflows. After taking the rates of changes for the variables in equation (11), equation (12) is achieved:

$$\left(\frac{E}{R}\right)(p_{dt} + x_t) + \left(\frac{C}{R}\right)(c_t) = p_{ft} + m_t + e_t \quad (12)$$

In equation (12) $\frac{E}{R}$ and $\frac{C}{R}$ represent the shares of exports and capital flows respectively in total receipts. In the model it is assumed that imports and exports demand functions have constant elasticity:

$$M_t = \left(\frac{P_{ft} E_t}{P_{dt}}\right) \psi Y_t^\pi \quad (13)$$

$$X_t = \left(\frac{P_{dt}}{P_{ft} E_t}\right) \eta Z_t^\varepsilon \quad (14)$$

In equations (13) and (14), ψ represents the price elasticity of demand for imports ($\psi < 0$), η stands for price elasticity of demand for exports ($\eta < 0$), Y_t represents domestic income, Z_t shows the world income, π represents income elasticity of demand for imports, and finally ε implies income elasticity of demand for exports. These equations can be rewritten by taking rates of changes in variables:

$$m_t = \psi(p_{ft} + e_t - p_{dt}) + \pi(Y_t) \quad (15)$$

$$x_t = \eta(p_{dt} - e_t - p_{ft}) + \varepsilon(Z_t) \quad (16)$$

Substituting equations (15) and (16) into equation (12) leads to the balance of payments constraint growth rate:

$$y_{Bt} = \frac{\left(\frac{E}{R}\eta + \psi\right)(p_{dt} - e_t - p_{ft}) + (p_{dt} - p_{ft} - e_t) + \frac{E}{R}(\varepsilon(Z_t)) + \frac{C}{R}(c_t - p_{dt})}{\pi} \quad (17)$$

The right-hand side of equation (17) involves a ratio, the numerator of which is made up of the addition of four components. The first component gives the volume effect of relative price changes on the balance of payments constrained real growth, the second component implies the effects of the terms of trade, the third component represents the effects of the exogenous changes in incomes of the other countries, and finally the fourth component represents the effects of increases in capital flows. If $p_{dt} = e_t + p_{ft}$, equation (17) would be reduced to equation (18):

$$y_{Bt}^* = \frac{\frac{E}{R}(\varepsilon(Z_t)) + \frac{C}{R}(c_t - p_{dt})}{\pi} \quad (18)$$

Then, one can claim that the balance of payments constraint growth is determined by the growth rate of income abroad, real capital flows, and income elasticity of demand for imports. It is impossible to know the value of $\varepsilon(Z_t)$ for any country. Therefore, $\varepsilon(Z_t) = x_t$ and the following equation can be written:

$$y_{Bt}^* = \frac{\frac{E}{R}(x_t) + \frac{C}{R}(c_t - p_{dt})}{\pi} \quad (19)$$

Thirlwall's Rule has been developed by considering the effect of interest payments by Moreno-Brid (2003). Accordingly, the balance of payments constraint growth is presented as follows:

$$y_b = \frac{\theta_1 \pi \left(\frac{dw}{w}\right) - \theta_2 \left(\frac{dr}{r}\right) + (\theta_1 \eta + \varphi + 1) \left(\frac{dp}{p} - \frac{dp^*}{p^*}\right)}{\xi - (1 - \theta_1 - \theta_2)} \quad (20)$$

Where, θ_1 is the proportion of import bill covered by export earnings, θ_2 is the proportion of net interest payments abroad relative to imports, w is the world real income, p and p^* stand for the domestic and foreign prices respectively and η is the price elasticity of exports ($\eta < 0$), π is the income elasticity of exports ($\pi > 0$), φ is the price elasticity of imports ($\varphi < 0$), ξ is the income elasticity of imports ($\xi > 0$), and r is the real value of net interest payments.

Araujo and Lima (2007) put forward a multisectoral version of the rule which is called as the Multisectoral Thirlwall's Rule and presented as follows:

$$\sigma_y^U = \frac{\sum_{i=1}^{n-1} \xi_i \beta_i a_{in} a_{ni}}{(\sum_{i=1}^{n-1} \phi_i a_{in} a_{ni})(\sum_{i=1}^{n-1} \beta_i)} \sum_{i=1}^{n-1} \frac{a_{in}}{a_{ni}} \quad (21)$$

Left-hand side of equation (21) represents the per capita growth rate of the country U . The right-hand side of the equation is composed of the product of two components. The first component shows that the increase in foreign demand has a positive impact on economic growth. ϕ_i is the sectoral income elasticity of demand for imports, β_i is the sectoral income elasticity of demand for exports, a_{in} is the per capita export demand for good i , and a_{ni} is the per capita import demand for good i . This new version of the rule is of great importance on the grounds that it implies that countries would grow depending on the composition of exports and imports even if the foreign income level remains the same. Gouvêa and Lima (2011) investigate this rule for 90 countries for the period 1965-1999 by applying panel data analysis and found evidence for the validity of the Multisectoral Thirlwall's Rule.

The organisation of the study is as follows. Second section discusses the empirical procedures applied in this study. Third section presents the data and the empirical results. Finally, policy recommendations deduced from the empirical findings are discussed.

II. EMPIRICAL METHODOLOGY

Time series properties of the variables are tested by applying unit root tests introduced by Dickey and Fuller (1979), Phillips and Peron (1988) and Kwiatkowski *et al.* (1992). The Phillips – Perron (PP) unit root test differs from the ADF test mainly in the consideration of serial correlation and heteroskedasticity in the errors. The ADF test uses a parametric autoregression to approximate the ARMA structure of the errors in the test regression while the PP test ignores any serial correlation in the regression. The Dickey – Fuller test assumes that the errors are statistically independent and have a constant variance. Phillips and Perron (1988) developed a generalized procedure by allowing mild assumptions. For example, PP test lets the disturbances be weakly dependent and heterogeneously distributed. KPSS (1992) test makes the series stationary by eliminating the deterministic trend. The main distinctive feature of this unit root test is its null hypothesis of stationarity.

After applying the unit root tests, we use an ARDL model initially introduced by Pesaran *et al.* (2001). This procedure has some advantages compared to the other cointegration procedures. Firstly, one can use this procedure when the variables are integrated of different orders. So, it is not necessary to check the

stationarity properties of the series. Besides, error correction model (ERM) is easily obtained by a linear transformation in this procedure. So, the short-run and the long-run parameters of the model can be estimated simultaneously. More importantly, all of the variables are considered as endogenous. Before estimating the model, it is necessary to determine the optimal lag length and test for autocorrelation. The first step of the ARDL modeling involves testing the null hypothesis of no-cointegration by applying F-test or Wald Test. In the second step, the error correction term is defined.

III. DATA AND FINDINGS

The model is estimated on annual data from 1961 to 2011 for Hungary, Italy, The Netherlands, and The United Kingdom. Due to the lack of data, the abovementioned model is estimated on annual data from 1971 to 2011 for Germany. All of the variables are transformed into natural logarithms. The dataset is gathered from the database of the World Bank. Natural logarithm of gross domestic product (GDP) is used as an indicator for economic growth (y). Similarly, the natural logarithm of exports of goods and services is considered as a growth rate of exports (x). Finally, income elasticity of imports (h) is measured by the ratio $\frac{\Delta M}{\Delta Y}$. Here, M represents imports of goods and services and Y represents real GDP. Thus, the dependent variable of the model is economic growth and the independent variable is $\frac{x}{h}$.

According to the unit root test results, growth rate is difference stationary while $\frac{x}{h}$ is stationary at the level⁴. Since the variables are integrated at different levels, we apply an ARDL model in order to test the Thirlwall's Rule. Applying an ARDL model involves testing the null hypothesis of no-cointegration by F-test (or Wald Test). If the calculated F-statistics is greater than the upper limit, then one can conclude that there is cointegration. If it is lower than the lower limit then there is no-cointegration. If the F-statistics is between these two limits, then the result would be inconclusive. To our F-test results, there is a cointegration between y and $\frac{x}{h}$ ⁵. After the transformation of the coefficients, the long-run coefficient estimates would be reliable. In the second step, error correction term is defined. According to the results of the short run model, error correction terms are statistically significant and take values between 0 and 1. So, the error correction mechanism works in each case⁶. As far as the estimated models are considered, it is possible to say that effective growth rates of the countries are very close to their balance of payments equilibrium growth rates⁷.

IV. CONCLUSION

The interaction between balance of payments and economic growth is examined within the concept of balance of payments constrained growth. The number of both theoretical and empirical studies about this issue has gone up after the leading work of Thirlwall (1979). Under the assumption that the effect of capital flows and relative price changes on international trade is very limited, Thirlwall's Rule puts forward that economic growth is determined by the increase in the rate of exports and the income elasticity of demand for imports.

In this paper, Thirlwall's model was tested for the selected European economies (Germany, Hungary, Italy, The Netherlands and The United Kingdom) by developing an ARDL Model. To the findings, external constraints are of vital importance in terms of long run economic growth. Effective growth rates of the countries are very close to their balance of payments equilibrium growth rates. On the other hand, countries grow faster than the balance of payments equilibrium growth rates. As far as the related literature concerned, the difference between two growth rates can be explained by the effects of capital flows and relative prices.

Our findings are consistent with the ones from Thirlwall's famous paper which suggests that exports play an important role in inducing economic growth. One can observe that property by examining the graphs of the two growth series against time. By taking these into consideration export-led growth is supported by the data for the selected countries.

IV. ACKNOWLEDGEMENT

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⁴ See appendices A1.

⁵ See appendices A2.

⁶ See appendices A3.

⁷ See appendices A4.

APPENDICES

A1. UNIT ROOT TEST RESULTS

TABLE 1: UNIT ROOT TEST RESULTS (GERMANY)

Variable	Level	ADF Unit Root		Phillips Perron		KPSS	
	1 st Dif.	No Trend	Trend	No Trend	Trend	No Trend	Trend
GDP	Level	-1.945 (0.309)	-1.661 (0.750)	-2.891 (0.055)	-1.579 (0.783)	0.803	0.196
	1 st Dif.	-5.150 (0.000)	-5.353 (0.000)	-5.039 (0.000)	-6.468 (0.000)	0.355	0.137
x/h	Level	-1.679 (0.433)	-3.761 (0.029)	-1.422 (0.561)	-3.075 (0.125)	0.668	0.081
	1 st Dif.	-6.505 (0.000)	-6.448 (0.000)	-7.157 (0.000)	-6.985 (0.000)	0.352	0.352

Notes:

1- Numbers in parentheses denote the probabilities.

2- Augmented Dickey-Fuller test statistics: 1% level: -3.568, 5% level: -2.921, 10% level -2.598

3- Asymptotic critical values for KPSS Test with Constant: 1% level: 0.739, 5% level: 0.463, 10% level 0.347

Asymptotic critical values for KPSS Test with Constant and Trend: 1% level: 0.216, 5% level: 0.146, 10% level 0.119

TABLE 2: UNIT ROOT TEST RESULTS (HUNGARY)

Variable	Level	ADF Unit Root		Phillips Perron		KPSS	
	1 st Dif.	No Trend	Trend	No Trend	Trend	No Trend	Trend
GDP	Level	-3.718 (0.006)	-6.287 (0.246)	-4.072 (0.002)	-2.333 (0.408)	0.785	0.202
	1 st Dif.	-4.780 (0.000)	-5.632 (0.000)	-4.864 (0.002)	-5.660 (0.000)	0.529	0.147
x/h	Level	-2.421 (0.141)	-2.731 (0.228)	-2.226 (0.199)	-2.767 (0.215)	0.501	0.164
	1 st Dif.	-7.997 (0.0009)	-7.931 (0.000)	-8.397 (0.000)	-8.310 (0.000)	0.169	0.153

Notes:

1- Numbers in parentheses denote the probabilities.

2- Augmented Dickey-Fuller test statistics: 1% level: -3.568, 5% level: -2.921, 10% level -2.598

3- Asymptotic critical values for KPSS Test with Constant: 1% level: 0.739, 5% level: 0.463, 10% level 0.347

Asymptotic critical values for KPSS Test with Constant and Trend: 1% level: 0.216, 5% level: 0.146, 10% level 0.119

TABLE 3: UNIT ROOT TEST RESULTS (ITALY)

Variable	Level	ADF Unit Root		Phillips Perron		KPSS	
	1 st Dif.	No Trend	Trend	No Trend	Trend	No Trend	Trend
GDP	Level	-5.642 (0.000)	-0.715 (0.966)	-7.301 (0.000)	-0.480 (0.981)	0.896	0.238
	1 st Dif.	-4.545 (0.0006)	-6.702 (0.000)	-4.586 (0.000)	-7.284 (0.000)	0.875	0.081
x/h	Level	-6.662 (0.000)	-7.838 (0.000)	-6.703 (0.000)	-8.086 (0.000)	0.662	0.070
	1 st Dif.	-5.972 (0.009)	-5.907 (0.000)	-18.31 (0.000)	-18.497 (0.000)	0.048	0.042

Notes:

1- Numbers in parentheses denote the probabilities.

2- Augmented Dickey-Fuller test statistics: 1% level: -3.568, 5% level: -2.921, 10% level -2.598

3- Asymptotic critical values for KPSS Test with Constant: 1% level: 0.739, 5% level: 0.463, 10% level 0.347

Asymptotic critical values for KPSS Test with Constant and Trend: 1% level: 0.216, 5% level: 0.146, 10% level 0.119

TABLE 4: UNIT ROOT TEST RESULTS (THE NETHERLANDS)

Variable	Level	ADF Unit Root		Phillips Perron		KPSS	
	1 st Dif.	No Trend	Trend	No Trend	Trend	No Trend	Trend
GDP	Level	-3.899 (0.003)	-2.978 (0.148)	-3.458 (0.013)	-1.699 (0.737)	0.955	0.165
	1 st Dif.	-4.531 (0.000)	-5.813 (0.001)	-4.770 (0.000)	-5.878 (0.000)	0.508	0.103
x/h	Level	-0.444 (0.893)	-1.862 (0.659)	-0.447 (0.892)	-2.033 (0.569)	0.952	0.132
	1 st Dif.	-6.652 (0.000)	-6.580 (0.000)	-6.656 (0.000)	-6.585 (0.000)	0.090	0.092

Notes:

1- Numbers in parentheses denote the probabilities.

2- Augmented Dickey-Fuller test statistics: 1% level: -3.568, 5% level: -2.921, 10% level -2.598

3- Asymptotic critical values for KPSS Test with Constant: 1% level: 0.739, 5% level: 0.463, 10% level 0.347

Asymptotic critical values for KPSS Test with Constant and Trend: 1% level: 0.216, 5% level: 0.146, 10% level 0.119

TABLE 5: UNIT ROOT TEST RESULTS (THE UNITED KINGDOM)

Variable	Level	ADF Unit Root		Phillips Perron		KPSS	
	1 st Dif.	No Trend	Trend	No Trend	Trend	No Trend	Trend
GDP	Level	-1.201 (0.667)	-2.797 (0.204)	-1.283 (0.630)	-2.195 (0.481)	0.963	0.070
	1 st Dif.	-5.020 (0.000)	-5.101 (0.000)	-5.020 (0.000)	-5.101 (0.000)	0.144	0.065
x/h	Level	-1.616 (0.467)	-2.250 (0.451)	-1.726 (0.412)	-2.236 (0.459)	0.408	0.164
	1 st Dif.	-6.017 (0.000)	-5.937 (0.000)	-5.945 (0.000)	-5.850 (0.000)	0.119	0.086

Notes:

1- Numbers in parentheses denote the probabilities.

2- Augmented Dickey-Fuller test statistics: 1% level: -3.568, 5% level: -2.921, 10% level -2.598

3- Asymptotic critical values for KPSS Test with Constant: 1% level: 0.739, 5% level: 0.463, 10% level 0.347

Asymptotic critical values for KPSS Test with Constant and Trend: 1% level: 0.216, 5% level: 0.146, 10% level 0.119

A2. F-TEST RESULTS**TABLE 7: F-TEST RESULT (GERMANY)**

k	F-Statistics	Asymptotic critical value bounds for the F-statistic	
		I(0)	I(1)
1	60,6685	4.94	5.73

TABLE 8: F-TEST RESULT (HUNGARY)

k	F-Statistics	Asymptotic critical value bounds for the F-statistic	
		I(0)	I(1)
1	104,862	4.94	5.73

TABLE 9: F-TEST RESULT (ITALY)

k	F-Statistics	Asymptotic critical value bounds for the F-statistic	
		I(0)	I(1)
1	20,8771	4.94	5.73

TABLE 10: F-TEST RESULT (THE NETHERLANDS)

k	F-Statistics	Asymptotic critical value bounds for the F-statistic	
		I(0)	I(1)
1	21,3193	4.94	5.73

TABLE 11: F-TEST RESULT (THE UNITED KINGDOM)

k	F-Statistics	Asymptotic critical value bounds for the F-statistic	
		I(0)	I(1)
1	21,4049	4.94	5.73

A3. ESTIMATIONS OF ARDL MODEL**TABLE 12: ESTIMATES OF THE SELECTED ARDL (1,1) REGRESSION (GERMANY)**

Variables	Coefficient	Std. Error	t-Statistics
y_{GER}	1		
$y_{GER}(-1)$	0,170	0,111	1,526
$(x/h)_{GER}$	0,564	0,072	7,789
$(x/h)_{GER}(-1)$	-0,095	0,051	-1,863
C	0,006	0,003	2,305
$R^2 = 0,672$ $DW = 2,23$ $F = 22,559$			
Estimated Long-Run Coefficients			
$(x/h)_{GER}$	0,565	0,110	5,13
C	0,008	0,003	2,54

TABLE 13: SHORT-RUN ESTIMATION (GERMANY)

Variables	Coefficient	Std. Error	t-Statistics
dy_{GER}	1		
$d(x/h)_{GER}$	0,564	0,072	7,789
dC	0,006	0,003	2,305
ECM	-0,829	0,111	-7,425

TABLE 14: ESTIMATES OF THE SELECTED ARDL (2,0) REGRESSION (HUNGARY)

Variables	Coefficient	Std. Error	t-Statistics
y_{HUN}	1		
$y_{HUN}(-1)$	-0,078	0,087	-0,902
$y_{HUN}(-2)$	0,204	0,083	2,452
$(x/h)_{HUN}$	0,251	0,024	10,240
C	0,016	0,005	2,902
$R^2 = 0,759$ DW= 1,76 F= 44,096			
Estimated Long-Run Coefficients			
$(x/h)_{HUN}$	0,287	0,035	8,216
C	0,018	0,005	3,354

TABLE 15: SHORT-RUN ESTIMATION (HUNGARY)

Variables	Coefficient	Std. Error	t-Statistics
dy_{HUN}	1		
$dy_{HUN}(-1)$	-0,204	0,083	-2,452
$d(x/h)_{HUN}$	0,251	0,024	10,240
dC	0,016	0,005	2,902
ECM	-0,874	0,100	-8,689

TABLE 16: ESTIMATES OF THE SELECTED ARDL (0,2) REGRESSION (ITALY)

Variables	Coefficient	Std. Error	t-Statistics
y_{ITA}	1		
$(x/h)_{ITA}$	0,166	0,043	3,817
$(x/h)_{ITA}(-1)$	0,114	0,043	2,620
$(x/h)_{ITA}(-2)$	0,181	0,043	4,150
C	0,011	0,003	3,528
$R^2 = 0,470$ DW= 2,06 F=13,043			
Estimated Long-Run Coefficients			
$(x/h)_{ITA}$	0,495	0,080	6,158
C	0,010	0,003	3,362

TABLE 17: SHORT-RUN ESTIMATION (ITALY)

Variables	Coefficient	Std. Error	t-Statistics
dy_{ITA}	1		
$d(x/h)_{ITA}$	0,161	0,038	4,155
$d(x/h)_{ITA}(-1)$	-0,174	0,040	-4,297
dC	-0,000	0,002	-0,018
ECM	-0,956	0,130	-7,350

TABLE 18: ESTIMATES OF THE SELECTED ARDL (1,0) REGRESSION (THE NETHERLANDS)

Variables	Coefficient	Std. Error	t-Statistics
y_{NET}	1		
$y_{NET}(-1)$	0,369	0,124	2,975
$(x/h)_{NET}$	0,212	0,063	3,330
C	0,012	0,005	2,407
$R^2 = 0,423$ DW= 2,01 F= 12,511			
Estimated Long-Run Coefficients			
$(x/h)_{NET}$	0,431	0,100	4,280
C	0,013	0,004	2,895

TABLE 19: SHORT-RUN ESTIMATION (THE NETHERLANDS)

Variables	Coefficient	Std. Error	t-Statistics
dy_{NET}	1		
$d(x/h)_{NET}$	0,085	0,061	4,617
dC	0,009	0,003	2,316
ECM	-0,661	0,106	-6,234

TABLE 20: ESTIMATES OF THE SELECTED ARDL (1,0) REGRESSION (THE UK)

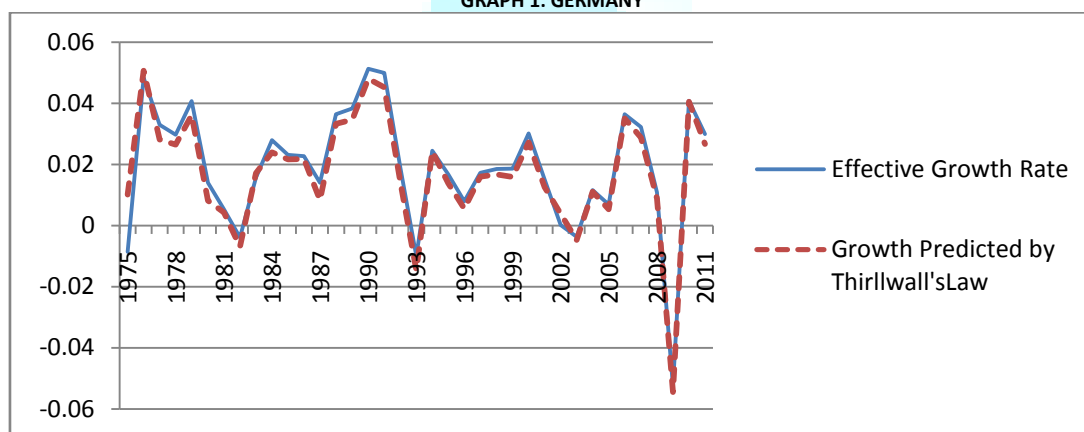
Variables	Coefficient	Std. Error	t-Statistics
y_{UK}	1		
$y_{UK}(-1)$	0,275	0,116	2,358
$(x/h)_{UK}$	0,326	0,070	4,626
C	0,007	0,004	1,858
$R^2 = 0,389$ $DW = 1,71$ $F = 14,0302$			
Estimated Long-Run Coefficients			
$(x/h)_{UK}$	0,450	0,118	3,79
C	0,010	0,004	2,22

TABLE 21: SHORT-RUN ESTIMATION (THE UK)

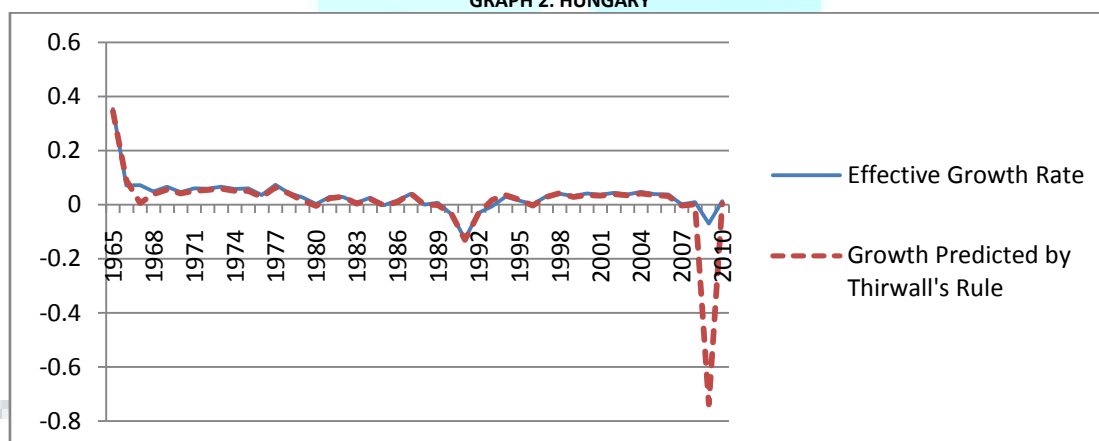
Variables	Coefficient	Std. Error	t-Statistics
dy_{UK}	1		
$d(x/h)_{UK}$	0,326	0,070	4,62
dC	0,007	0,004	1,858
ECM	-0,724	0,116	-6,199

A4. EFFECTIVE GROWTH AND GROWTH PREDICTED BY THIRLWALL (1979)

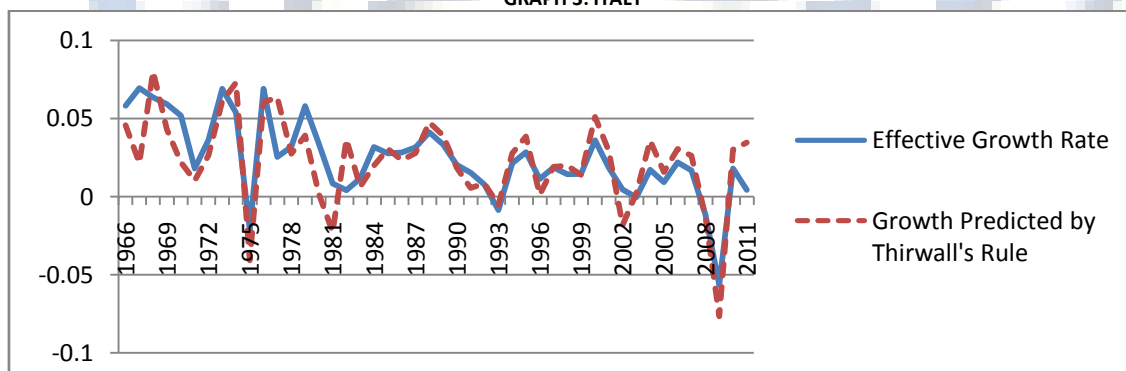
GRAPH 1: GERMANY



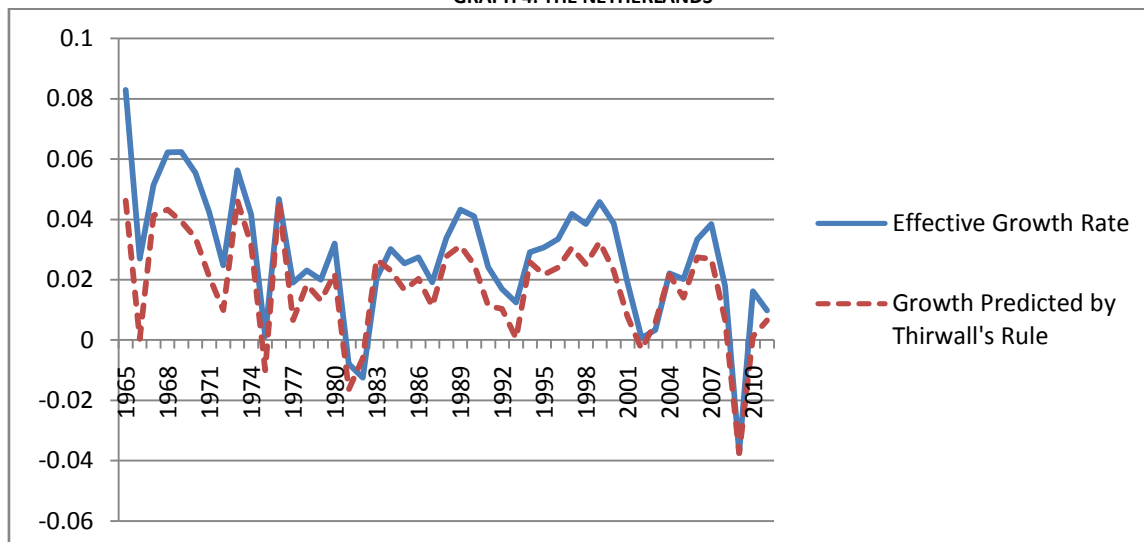
GRAPH 2: HUNGARY



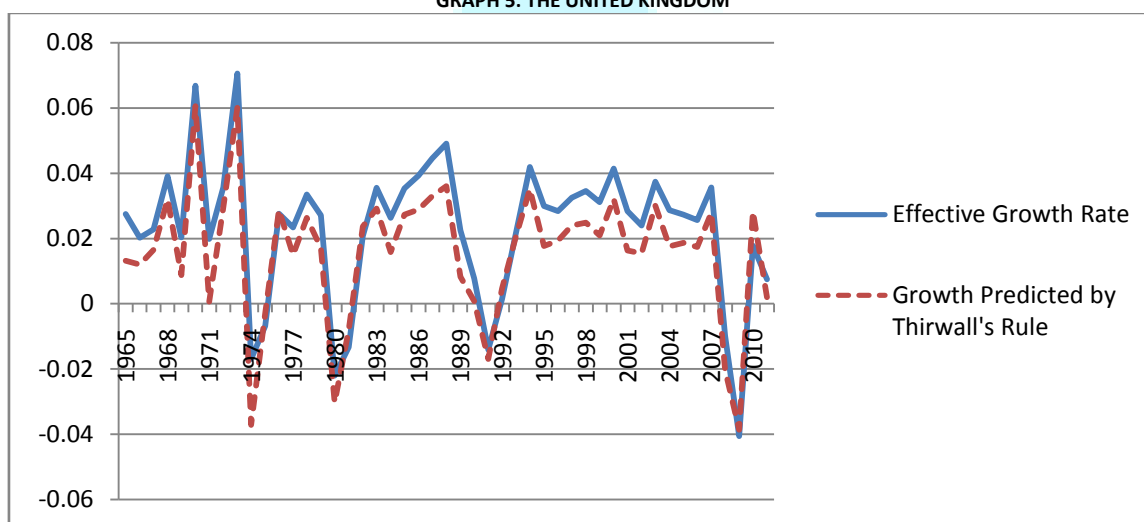
GRAPH 3: ITALY



GRAPH 4: THE NETHERLANDS



GRAPH 5: THE UNITED KINGDOM



POTATO PRICING: A SOLEMN DILEMMA FACED BY THE FARMERS OF BANGLADESH

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ABSTRACT

Bangladesh is a densely populated country with over 150 million people. This large number of population needs a lot of food each year and undoubtedly its food security is largely depends on production of potato. Fortunately Bangladesh can grow enough to feed its population. Yet, unorganized distribution of potato and other staple food deprived a large proportion of people from getting right price. The economic disparity, poverty, lack of access to the information by the farmers and consumers, poor transportation system, absence of preservation facility are main causes. Together with inadequate credit facility and technological support have made the pricing of potato a solemn dilemma to the farmers and consumers of Bangladesh. Although measures has been taken to reduce such problem. But the solution is still in progress. We have tried to illustrate the actual scenario regarding potato pricing through this paper.

KEYWORDS

Bangladesh, Economic disparity, Preservation facility, Potato pricing, Transportation System.

1. INTRODUCTION

Bangladesh is an agro-based country. The economy of Bangladesh is predominantly based on agriculture. Agriculture contributes about 18.5 per cent to the Gross Domestic Product (GDP) in 2009-10. In Bangladesh potato occupied the first position among all the vegetables in respect of hectare, production and it contributed 64.69 percent to the total production of vegetables in Bangladesh in 2010 (BBS 2010). In Bangladesh the productions of potatoes as well as its many fold uses have increased over the last few years.

2. IMPORTANCE OF POTATOES IN AGRICULTURAL ECONOMY OF BANGLADESH

In Bangladesh, potato is used as food crop as well as vegetable by both the poor and rich people. Rice and wheat are main food crops in Bangladesh but their production is not sufficient to meet the increasing requirements for the growing population in the country. The country imports food grains each year at the cost of hard earned foreign currency ranging from 2.7 million to 0.85 million tones. In this regard, potato can play an important role as an alternative and a multipurpose food crop of Bangladesh. It is also an important cash crop for the farmers.

3. OBJECTIVES OF THE STUDY

1. To estimate the seasonal price variation of potato
2. To estimate the seasonal indices of potato prices in different districts and their behavior.
3. To identify the problem of potato marketing and finally to make suggestions for improving pricing system of potato in Bangladesh.

4. LIMITATIONS OF THE STUDY

1. The first problem was the limitation of time, due to shortage of time the study could not cover wide areas for collecting necessary information.
2. The second problem was shortage of money that did not allow to take a large numbers of samples and to cover wide areas.
3. This study based on secondary data. So all data is not available in different sources. So some data was missing.
4. And all dates were not properly decorated. So it's taken a lot of time.

5. REVIEW OF LITERATURE

The purpose of this chapter is to review the previous project works that are related to the present analysis. The most relevant studies, which have been conducted in the recent past, are discussed below:

Sabur and Gangwar (1984) carried out a study on production and price structure of potato in Bangladesh and showed that the growth rate of potato in terms of production, area and productivity during the pre liberation period was by and large higher than that for the post liberation period.

Sabur (1986) conducted a study on marketed surplus of potatoes in two districts of Bangladesh and found that production and marketed surplus of potatoes moved in same direction and land under potatoes was the most important factor determining the marketed surplus. He showed that the average production cost per hectare was Tk.29637.57 which was the lowest for medium farmers and net return and benefit cost ratio were calculated at Tk.30947.82 per hectare and 1: 2.25 respectively which were the highest for medium farmers in both the areas

Sabur (1988) in his study analyzed that resource use and profitability of potato production at farmer's level in two upazilas namely, Tongibari in Munshigonj district and Bogra sadar respectively. He found that in case of potato cultivation, medium farmers emerged as the most efficient in the study areas

Islam et al (1991) conducted a study on farm level price behavior of different farm products. This paper illustrated monthly farm level price fluctuation patterns of different important farm products which are cereals, pluses, chilli, onion, mustard and potato at different locations in Bangladesh.

Sarker et. al, (1992) carried out a study analyzed the economics of marketing potatoes by farmers in some selected areas of sadar upazila of Naogaon district, Bangladesh. The study shows that average potato production is positively related to the size of farm under potato cultivation. The per farm sale was highest (152

quintals) for large farms and the sale was highest (152 quintals) for large farms and the lowest (42 quintals) for small farms, and the largest volume of sale (69%) was made at the market.

Nand, et al, (1994), conducted a study on the training needs of farm women involved in potato production, based on 41 farm families in Patna district, Bihar, India. Education and age did not show a significant relationship with the inclination for learning about new technologies, whereas area under potatoes and the desire to learn seemed to be related. They suggested that training programmers for women should primarily be focused on selection of seeds, insect and pest control, fertilizer application and seed treatment.

Aslam (1995) carried out a comparative economic study on winter crops in Gauripur upazila of Myrnsingh district. He studied the economic aspects of winter crops such as potato, mustard, brinjal, bottlegourd, beans, cucumber, sweet potato and groundnut. He estimated per hectare gross expenses and gross return of HYV potato obtained second highest, in case of net returns HYV potato obtained the highest position among the selected winter vegetables.

Saha (1996) in this study An Economic Analysis of Potato Production in Some Areas of Bangladesh observed that gross expenses for producing per hectare of Diamant variety of potato under improved management was Tk. 62288.54 of which cash and non-cash expenses occupied about 68 and 32 per cent, respectively while farmers gross return was Tk. 61719.44, net return was 73% of gross expenses and net return 27% of cash expenses in per hectare of production of Diamant variety of potato under farmer's management.

Ahmed (2001) conducted a study during the period of January to February 2000 on a comparative Economic Study of Potato and Cauliflower production in a selected area of Comilla district. The study was undertaken to analyze the comparative profitability of potato and cauliflower production. Sixty households were selected to which 30 were potato and 30 were cauliflower farmers. It was estimated that per hectare costs of production of potato were (Tk 71860.23 and Tk 59054.31 on full costs and cash costs basis respectively) higher than cauliflower (Tk 48642.44 and Tk 31708.69 on full costs and cash costs basis respectively).

Brouya (2001) conducted a study entitled Area, Yield and Production Growth of Potato in Bangladesh: A Quantitative Estimating. The study estimated quantitative of potato in Bangladesh by utilizing the time series data from 1981-82 to 1997-98. It carried out a disaggregated analysis to compute the status of the parameters according to high concentration region (HCR), medium concentration region (MCR) and low concentration region (LCR). The findings showed that area, yield and production indices of local potato decreased in HCR, LCR and aggregate (Bangladesh as a whole) category while it was almost stagnant in MCR category. Area, yield and production indices of Indian variety potato increased in all the categories except MCR; however, those of modern potato showed the increasing trend.

Saiyem (2007) investigated that the potato marketing in selected areas of Rangpur district. This study was mainly based on data of samples, which were randomly selected 1mm the study area, Rangpur district. The samples included 30 farmers and 30 market intermediaries of Rangpur sadar upazila and Taragong upazila. He found that the marketing cost per quintal potato incurred Tk 43.46 and Tk 44.36 for farmers of Rangpur sadar upazila and Taragong upazila respectively. The marketing cost per quintal potato incurred Tk 60.95, Tk 56.87, Tk 133.60 and Tk 37.81 Beparis, Paikers for cold storage owners and retailer of Rangpur bazar respectively. The marketing cost per quintal incurred Tk 45.42, Tk 61.21, Tk 134.64 and Tk 37.32 for Beparis, Paiker, cold storage owners and retailers of Taragong bazar respectively. The net margin of per quintal potato of Beparis, Paikers, the cold storage owners and retailers of Rangpur bazar were calculated at Tk 21.73, Tk 21.50, Tk 19.57 and Tk 23.28 relatively. The net margin of per quintal potato of Beparis, Paikers, the cold storage owners and retailers of Taragong bazar were calculated at Tk 30.02, Tk 26.91, Tk 25.62 and Tk 21.94 respectively.

The above review of literature clearly indicates that a few studies have been conducted on pricing behavior and marketing of potato. However, no detailed study was done on pricing system and price behavior of potatoes in the selected areas of Bangladesh, where large number of potato farmers were located. Therefore, this study is expected to provide new and additional information to help the farmers, intermediaries and further research.

6. METHODOLOGY

In order to make an assessment of the pricing behavior system of potato, this project was conducted in some selected districts of Dhaka, Chittagong, Narayanganj, Rajshahi and Rangpur. On the basis of these districts were selected for the present study. Because these districts are mostly allocated their land in potato production was higher than other districts.

In the present study, data were collected mainly from secondary sources. The researcher several visits were needed to collect necessary data from different sources. Data were collected in local units.

The secondary sources of data were gathered from various books, journals and publication of Bangladesh Bureau of Statistics (BBS). These intermediaries were included in the sample to assess the level of pricing margin of different intermediaries. Farm-gate prices were collected from the Beparis and consumer prices were collected from the retailers. Secondary data was collected during the months of May, 2011. The secondary data was accumulated from different records of BBS, DAM, DOF, etc. In the present study, data were collected on daily. On the basis of Weekly and monthly.

7. ANALYSIS AND FINDINGS

TABLE 1: SEASONAL PRICE INDICES OF POTATO IN DIFFERENT DISTRICTS (Indices)

Month	Dhaka	Chittagong	Narayanganj	Rajshahi	Rangpur	Average
January	98.05	104.7	97.72	99.52	93.50	98.90
February	79.50	97.70	67.60	91.46	71.10	81.47
March	64.90	67.03	69.23	72.04	76.10	69.69
April	76.80	71.16	85.96	79.91	82.10	79.15
May	93.08	87.90	99.49	89.86	94.10	92.86
June	100.49	97.70	97.43	101.85	105.05	100.46
July	109.50	108.50	110.52	106.57	110.80	109.12
August	108.70	110.12	111.25	108.83	121.10	111.70
September	116.18	117.41	111.76	104.71	114.30	114.01
October	117.50	111.18	113.57	113.05	118.50	114.30
November	122.01	110.60	116.70	117.62	105.30	114.90
December	113.30	116.00	118.80	114.58	107.20	113.90
Range	79.27	101.30	89.62	102.2	90.20	92.52
C.V.	17.57	15.97	16.49	13.53	15.74	15.24

[C.V. = (Standard deviation / Mean) × 100]

[Range= Highest value – Lowest value]

FIGURE 1: SEASONAL PRICE VARIATION IN DHAKA

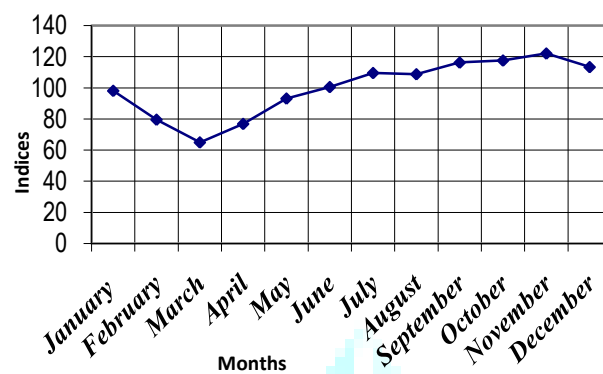


FIGURE 2: SEASONAL PRICE VARIATION OF POTATO IN CHITTAGONG

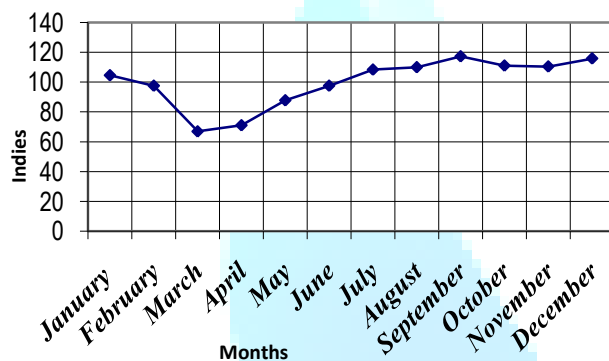


FIGURE 3: SEASONAL PRICE VARIATION OF POTATO IN NARAYANGONJ

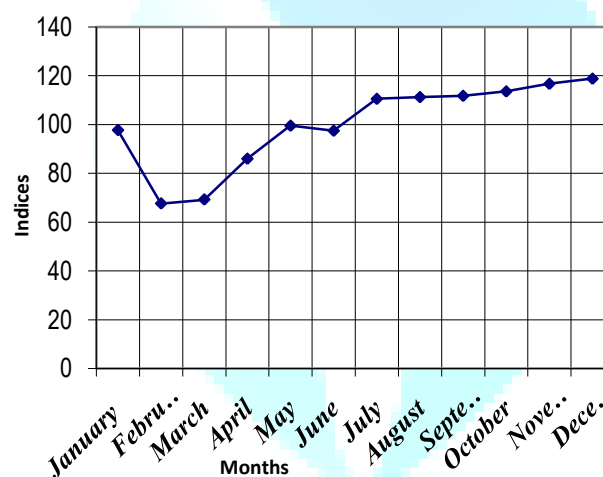


FIGURE 4: SEASONAL PRICE VARIATION OF POTATO IN RAJSHAHI



FIGURE 5: SEASONAL PRICE VARIATION OF POTATO IN RANGPUR

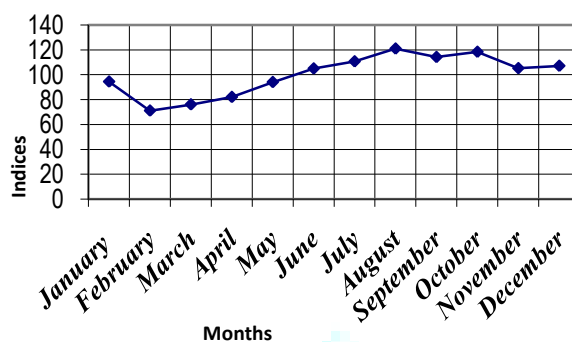
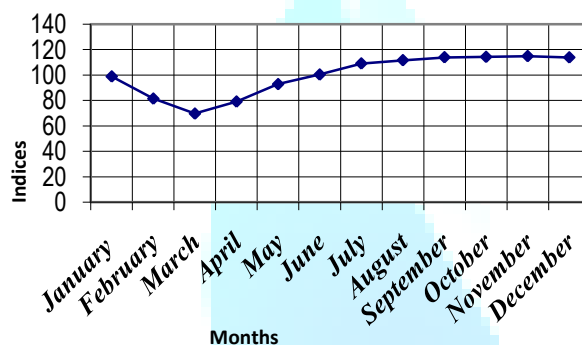
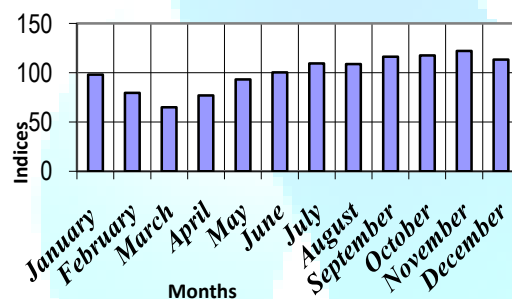


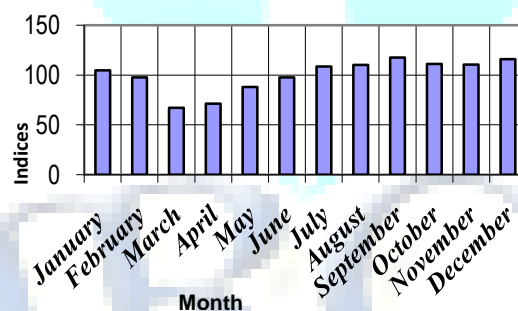
FIGURE 6: AVERAGE SEASONAL PRICE VARIATION IN ALL DISTRICTS



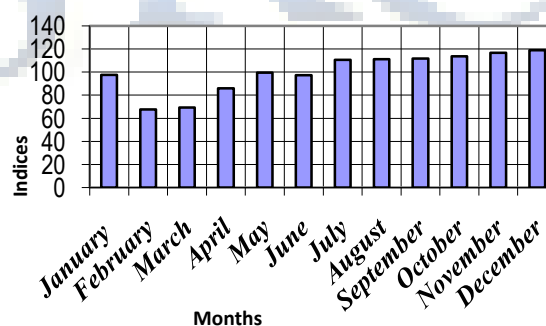
BAR-DIAGRAM 1: SEASONAL PRICE VARIATION OF POTATO IN DHAKA DISTRICT



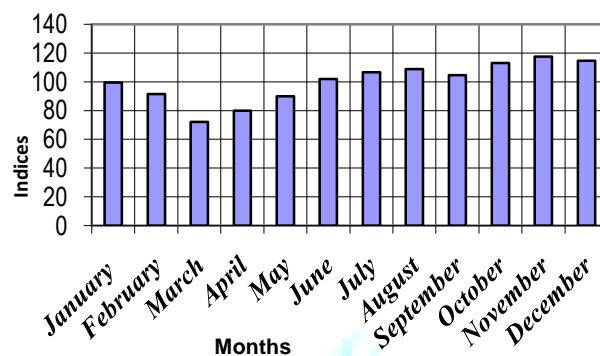
BAR-DIAGRAM 2: SEASONAL PRICE VARIATION OF POTATO IN CHITTAGONG DISTRICT



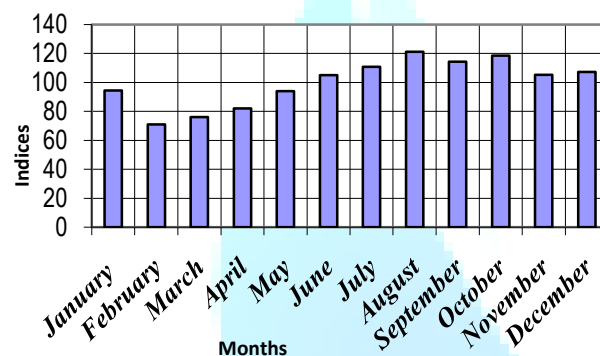
BAR-DIAGRAM 3: SEASONAL PRICE VARIATION OF POTATO IN NARAYANGONJ DISTRICT



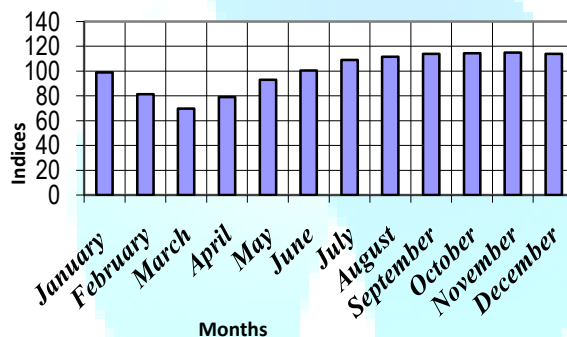
BAR-DIAGRAM 4.4: SEASONAL PRICE VARIATION OF POTATO IN RAJSHAHI DISTRICT



BAR-DIAGRAM 5: SEASONAL PRICE VARIATION OF POTATO IN RANGPUR DISTRICT



BAR-DIAGRAM 6: AVERAGE SEASONAL PRICE VARIATION IN ALL DISTRICT.



7.1 COMPARISON AMONG ALL DISTRICT PRICE BEHAVIOR

From the table 1 and figure 6, during 2005 to 2010, average seasonal price indices of potato of Dhaka, Chittagong, Narayanganj, Rangpur and Rajshahi districts were the highest in the month of November and the lowest in the month of March. After initial peak in January, February the price began to fall and it fell to reach the lowest level in March. After March, the price began to rise and reached the highest level in November with a small decrease in December Table 4.1 also shows that the range was 92.52. The co-efficient of variation of monthly price index of potato was 15.24 percent. In all the districts potato price indices reveal seasonal variation on account of variation in supply in the market.

In general it was found that the prices of potato fluctuated in different months within a year. The causes of this fluctuation might be:

1. Supply of potato came to an end in November-December especially November but the demand remained unchanged and so the price rises.
2. The cause for falling prices of potato in March is that the supply of potato was greater than its demand which resulted in lower price of potato in March. At this time other winter vegetables also became easily available and the price of potato began to fall gradually.

7.2 SPATIAL PRICE INTREGATION

A pricing system is spatially integrated when prices in each individual market respond not only to their supply and demand, but also to the supply and demand of the set of all markets. Spatial integration fulfills a very important social function. In short, a local scarcity in an integrated system is less prejudicial to local consumers because it induces the arrival of products from other location. It increases supply and decreases the price. Consequently, local price in an integrated system would be more stable than there in a non-integrated system. Spatial arbitrage generates these results. Therefore, market integration signifies the extent to which price movements in one market are related to those in other market.

CORRELATION CO-EFFICIENT METHOD

In this study simple correlation co-efficient as a measure of market integration is used even though this method has been criticized by many authors (Blyn, 1973, Harriss, 1979, Landahl and Petersson, 1982). Price series correlations are convenient measure of market integration since the only required data are prices and these are more readily available than cost data

relevant to evaluating inter market price differentials. In an integrated market, prices of the homogenous commodity at different specially separated locations should tend to move together. This implies that price movement in one location should be highly correlated with price movement in other locations. It is argued that, in an efficient integrated market the correlation co-efficient will be positive and close to unity.

Table 2 showed the correlation matrix of monthly wholesale price of potato in the selected during Potato markets of Dhaka-Narayanganj, Dhaka-Chittagong, Dhaka-Rangpur, Dhaka-Rajshahi markets appear to be highly integrated or linked because the correlation co-efficient between the markets are very high (more than 0.8) and significant. Good communication among the traders and easy transportation facilities has made the markets more competitive.

TABLE 2: CORRELATION CO-EFFICIENT MATRIX (MONTHLY DATA) OF POTATO IN SELECTED DISTRICTS

Market	Narayangonj	Dhaka	Chittagong	Rangpur	Rajshahi
Narayangonj	1.00	0.995**	0.916**	0.916**	0.969**
Dhaka	0.995**	1.00	0.932**	0.970**	0.974**
Chittagong	0.916**	0.932**	1.00	0.958**	0.959**
Rangpur	0.954**	0.970**	0.958**	1.00	0.969**
Rajshahi	0.969**	0.974**	0.959**	0.969**	1.00

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

Source: Computed from the data on prices collected from Monthly Statistical Bulletin of Bangladesh and Department of Agricultural Marketing.

Table 3 showed the correlation matrix of average annual wholesale price of potato in the selected markets during 2005 to 2010. Here potato markets of Dhaka-Chittagong, Dhaka-Rangpur, Dhaka-Rajshahi, Chittagong-Rangpur, Chittagong-Rajshahi, Rangpur-Rajshahi, markets appeared to be highly integrated or linked. As the correlation co-efficient values are close to unity (more than 0.8). This indicates that markets are significantly correlated in respect of their price changes and markets are integrated in the long run.

TABLE 3: CORRELATION CO-EFFICIENT MATRIX (ANNUAL DATA) OF POTATO IN SELECTED DISTRICTS

Market	Narayangonj	Dhaka	Chittagong	Rangpur	Rajshahi
Narayangonj	1.00	0.093	0.631	0.200	0.579
Dhaka	0.093	1.00	0.828**	0.986**	0.865**
Chittagong	0.631	0.828**	1.00	0.886**	0.994**
Rangpur	0.200	0.986**	0.886**	1.00	0.906**
Rajshahi	0.579	0.865**	0.994**	0.906**	1.00

** (correlation is significant at the 0.01 Level (2-tailed).

7.3 FINDINGS

The paper reveal that the seasonal indices is highest in November is 122.2 and lowest in March 64.90 in Dhaka districts. In the Chittagong district, the highest seasonal indices is 117.41 in September & lowest seasonal indices is 67.03 during March month. In Narayongang district the highest seasonal indices is 118.8 during December, lowest is 67.6 during February month. In Rajshahi district, the seasonal indices highest during November 117.62 & lowest are 72.04 during March month. And lastly in Rangpur districts the highest seasonal indices is 121.1 during august & lowest is 71.1 during February month.

In order to make an assessment of the pricing behaviour system of potato, this project was conducted in some selected districts of Dhaka, Chittagong, Narayangonj, Rajshahi and Rangpur. On the basis of these districts were selected for the present study. Because these districts are mostly allocated their land in potato production was higher than other districts. And the study districts have some homogenous characteristics like topography, Soil & climate condition for producing potato and it we select these 5- districts (Dhaka, Chittagong, Narayangonj, Rajshahi and Rangpur.) Then we can see the whole pricing behaviour of Bangladesh. As a result data can be founded accumulate from the BBS. In the present study, data were collected mainly from secondary sources. The researcher Several visits were needed to collect necessary data from different sources. Data were collected in local units. The secondary sources of data were gathered from various books, journals and publication of Bangladesh Bureau of Statistics (BBS). These intermediaries were included in the sample to assess the level of pricing margin of different intermediaries. Farm-gate prices were collected from the Beparis and consumer prices were collected from the retailers. The study will be based on secondary data. Secondary data was collected during the months of May, 2011. The secondary data was accumulated from different records of BBS, DAM, DOF, etc. In the present study, data were collected on daily. Weekly and monthly basis. After data collection the data were edited and coded. Then all the collected data were scrutinized carefully and recorded in master sheets. Finally, a few relevant tables were prepared according to necessity of analysis in order to meet the objectives of the study.

Lastly from the table 4.1 and figure 4.6 that during 2005 to 2010. Average seasonal price indices of potato of Dhaka, Chittagong, Narayangonj, Rangpur and Rajshahi districts were the highest in the month of November and the lowest in the month of March. After initial peak in January, February the price began to fall and it reached the lowest level in March. After March, the price began to rise and reached the highest level in November with a small decrease in December Table 4.1 also shows that the range was 92.52. The co-efficient of variation of monthly price index of potato was 15.24 percent. In all the districts potato price indices reveal seasonal variation on account of variation in supply in the market.

8. LIMITATION AND SOLUTIONS

LIMITATIONS

- 1 Scarcity of capital
- 2 Lack of quality seeds and over price
- 3 Pest and diseases problem
- 4 Inadequate pricing of potato
- 5 Transportation problems
- 6 Inadequate pricing facilities
- 7 Over charges for cold storage
- 8 Dominance of intermediaries
- 9 Inadequate storage facilities

SUGGESTIONS FOR THE PRODUCERS:

- 1 Supply of credit on easy terms
- 2 Supply of inputs
- 3 Improvement of transportation facilities
- 4 Arrangement of storage facilities
- 5 Formation of farmers' organization
- 6 Improvement of market facilities
- 7 Increased cold storage facility

PROBLEM FACED BY THE INTERMEDIARIES

- 1 Inadequate transportation facilities
- 2 Lack of capital
- 3 Inadequate storage facilities
- 4 Inadequate pricing facilities
- 5 Lack of adequate price information
- 6 High cold storage charges

SUGGESTION FOR THE INTERMEDIARIES

1. Institutional credit should be made available for all types of businessman in the study areas against their product.
2. Physical facilities like construction of godown (Store House), building tinshed and pacca floor in the market places would facilitate the marketing operation.

3. They furthermore suggested that market information and weather forecasts should be made at right time. Government should ensure a stable price to stop market price fluctuation.

They also suggested that modern storage facility should be developed by establishing more cold storage by the Government at market place.

9. RECOMMENDATIONS

On the basis of findings of the study the following recommendations are made for the improvement of existing production and pricing system of potato.

1. Institutional credit should be made available to the potato producers and intermediaries to meet their production and pricing requirements.
2. Government should ensure timely supply of fertilizer and pesticides to the farmers at subsidized price.
3. The input prices should be fixed at certain reasonable level and their supply should be ensured by the Government.
4. Irregular pricing practices should be checked and better marketing facilities ought to be provided in order to improve the marketing efficiency of potato. This will require supportive intervention of the government. Provisions of loans may be made through the nationalized banks for expansion of potato production and pricing activities to the producers and traders.
5. Poor communication and transportation system is possibly the principal problem of potato marketing. Therefore, development of communication and transportation system is essential for improving the pricing efficiency.
6. Storage facilities should be improved at primary and secondary markets by establishing public as well as private cold storage plants at different points of potato pricing zone.
7. Physical facilities of the markets should be developed by the local authority.
8. Provision should be made by the Government to disseminate improved technology relating to production and pricing of potato to the farmers. And
9. Necessary steps should be taken against illegal subscription collection by hooligans.

10. CONCLUSION

The finding of project paper reveals that the production of potato is profitable. The profit of farmer was lower than others intermediaries. As a result farmers have to face pricing problem. From project paper study seasonal price of potato is higher in ending month of the year for its off season. And at the starting point of the year shows lower price for its harvesting period. And other time show average price behavior. Lastly Potatoes are not only the source of nutrients but also source of cash income for farmers. Moreover, a large number people involved in the production and marketing of potato. So the farmer's and intermediaries could certainly be benefited financially if production and pricing system of potato are well developed.

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THE ROLE OF NON-GOVERNMENTAL ORGANIZATIONS (NGOS) IN SOCIAL DEVELOPMENT

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ABSTRACT

In a large developing country like India, there are numerous gaps left by the government in the development process - sometimes by intention, sometimes due to lack of funds, sometimes due to lack of awareness. These are the gaps that many NGOs try to fill in modern India. Some of them may work in areas that the government does not want to get into - like fighting discrimination on the basis of caste. Most Indian politicians do not really want to upset the existing caste hierarchy in his or her Constituency, because the politician is dependent for votes on the dominant castes of that particular constituency. In the process, laws prohibiting discrimination on the basis of caste are often ignored unless there is an NGO working in the area that is willing to take up the cause of those being discriminated against. To establish the range of activities and effects of health sector NGOs in development. The Present paper intends to analyses To find out the criteria used for assessing NGOs' contribution to development and document the processes currently used to monitor effects of NGO activities including indicators and it also examine the explore factors constraining measurement of NGO contributions to social development in India and the District level.

KEYWORDS

NGOS, Social Development, Fund, Discrimination, Factors.

INTRODUCTION & HISTORY OF NGOS IN INDIA

India has a long history of civil society based on the concepts of *daana* (giving) and *seva* (service). Voluntary organizations—organizations that are voluntary in spirit and without profit-making objectives—were active in cultural promotion, education, health, and natural disaster relief as early as the medieval era. They proliferated during British rule, working to improve social welfare and literacy and pursuing relief projects.⁴ During the second half of the 19th century, nationalist consciousness spread across India and self-help emerged as the primary focus of sociopolitical movements. Numerous organizations were established during this period, including the **Friend-in-Need Society** (1858), **Prathana Samaj** (1864), **Satya Shodhan Samaj** (1873), **Arya Samaj** (1875), the **National Council for Women in India** (1875), and the **Indian National Conference** (1887). The Societies Registration Act (SRA) was approved in 1860 to confirm the legal status of the growing body of nongovernment organizations (NGOs). The SRA continues to be relevant legislation for NGOs in India, although most state governments have enacted amendments to the original version. Christian missionaries active in India at this time directed their efforts toward reducing poverty and constructing hospitals, schools, roads, and other infrastructure. Meanwhile, NGOs focused their efforts on education, health, relief, and social welfare. A firm foundation for secular voluntary action in India was not laid until the governmental development agencies were established around this time, such as the **People's Action for Development of India**. Foreign-trained Indians entered civil society in greater numbers, leading to a professionalization of the sector.

India witnessed a rapid increase in and diversification of the NGO sector as a response to the national political scenario and increasing concern about poverty and marginalization. Both welfare and empowerment to rented organizations emerged during this period, and development, civil liberties, education, environment, health, and livelihood all became the focus of attention.

With community participation as a defined component in a number of social sector projects during the 1970s and 1980s, NGOs began to be formally recognized as development partners of the state. Their work was increasingly characterized by grassroots interventions, advocacy at various levels, and mobilization of the marginalized to protect their rights. The process of structural adjustment begun in the early 1990s—and the more recent approach of bilateral and international donors channeling funds directly through the government, NGO networks, and large corporate NGOs—have somewhat pushed peoples' organizations into the background. Small, spontaneous initiatives at the community level, as a response to social and economic exploitations at the community level, are no longer the hallmark of the NGO sector.

In this context present paper attempts to examine the Role of non-governmental organizations (NGOs) in social development: A study of health sector NGOs in Raichur district. The discussion in this paper is organized in five sections. In the First section, related to introduction and historical background of NGOs in India. And The second section deals with the Study area profile. In the Third section, the main NGO activities & constraints to NGO activities: are discussed. The Fourth section deals with the Recommendations, and the Last Section deals with the Summary and Conclusion.

STATEMENT OF THE PROBLEM

It is now over a decade since India adopted the World Bank and the International Monetary Fund (IMF) sponsored Structural Adjustment Policies and Programs (SAPs). Although economic growth has been registered at a national level during this time, poverty is still a critical issue in much of India. Local NGOs and external organizations have played an essential role in social and economic development including efforts against poverty and toward alleviating some of the negative impacts of SAPs. The contribution of the NGO sector to national development is sufficiently important to justify measures aimed at reinforcing and promoting the sector. There are, however, some limitations.

THE RESEARCH QUESTIONS

This study explored the following research questions:

1. What are perceptions of key stakeholders about potential variables for assessing the contributions of NGOs to social development at district level?
2. How can NGO contributions be assessed (especially in ways that permit comparisons)?

The study focused on health-related NGOs and aimed to yield suggestions from multiple stakeholders about how to assess, and improve co-ordination of NGO/government interactions.

OBJECTIVES OF THE STUDY

1. To establish the range of activities and effects of health sector NGOs in development.
2. To find out the criteria used for assessing NGOs' contribution to development.
3. To document the processes currently used to monitor effects of NGO activities including indicators.
4. To explore factors constraining measurement of NGO contributions to social development.

TABLE 1: STUDY RESPONDENTS

Category of Respondent	Number
Central Level/Raichur District Officials	8
District Officials- Raichur	6
NGO Representatives-Raichur	20
Local, Opinion Leaders and Elders-Raichur	16
Community Members- Raichur	30

The above table shows the clear picture of study respondents in the raichur district. Central Level/Raichur District Officials number 8, NGO Representatives – Raichur 20, Local, Opinion Leaders and Elders 16 and Community Members 30 are choose for the study.

TABLE 2: VARIABLES AND INFORMATION DESIRED

Variable	Information Desired
Activity and Geography	NGOs activities vs. district priorities; influence of activity by the presence of other NGOs; NGO plans and activities compared to district plans; NGO participation in district planning.
Impact	Social and cultural impact: perceptions of change in income distribution, health, education, gender roles and community participation. Economic impact: perceptions of change in consumption, savings, and asset levels.
Performance of NGOs	Criteria used by NGOs, districts and communities being served.
Equity	Equity of activity vs. need; geographical equity within the district, and equity for various population groups, for example, by age, gender, disability or other aspects of marginalization or vulnerability. Perceptions of greater social equality, existence of non-hierarchical relationships among people.
Quality	Quality (and its measures) was explored from the different perceptions of the district leadership, beneficiary communities and from the NGOs.
Sustainability vs. NGO Self-propagation	NGO contribution was assessed, i.e., whether it was encouraging sustainability or ensuring demand for the services provided; flexibility and adaptability to prevailing needs in the target area or population.
Policy	Existing policy guidelines/regulations, effect of guidelines on NGO activity, facilitation or inhibition. Perceptions of government, district and NGOs about policy needs.

DATA COLLECTION TOOLS

Data was collected using qualitative methods and tools, which included the following:

- An assessment form/checklist about the study NGOs
- Key informant interviews
- Focus group discussions with community persons
- A review of documents produced by or about the study NGOs were reviewed, e.g., project documents, needs assessments, routine reports, etc.

DISTRICT PROFILE OF RAICHUR

Raichur district is situated in the north-eastern part of Karnataka, which is also popularly known as Hyderabad Karnataka. The district lies between 15 09' and 16 34' North latitude and 75 46' and 77 35' East longitude and at about 1311 feet above mean sea level. To the north of the district is Gulbarga district, Bijapur district to the west, Bellary district to the south and Kurnool district of Andhra Pradesh to the east. Its area is 8.386 sq. kms and has five blocks- Deodurga, Lingasugur, Manvi, Raichur and Sindhanoor.

The district has a historical importance; it is believed that Ashok's empire extended over this region. The stone inscriptions of the Ashok period are situated at Maski of Lingasugur taluk.

Agriculture is the main occupation of the majority of the people in the district. The soil is black and crops like paddy, jowar, maize, groundnut, sunflower, cotton, and grams are grown. Agriculture is mostly rain fed. About 18% of the agricultural land is irrigated by the left bank canal of Tungabhadra Project. The taluks Sindhanoor, Manvi, Deodurga and Raichur are being provided with irrigation facilities from the Krishna River. The neighboring people from Andhra Pradesh who have expertise in the cultivation of paddy are moving to the district. This has resulted in the new habitations coming up very frequently.

TABLE 3: THE POPULATION OF THE DISTRICT ACCORDING TO 1991 AND 2001 CENSUS IS AS UNDER

Area	1991			2001		
	Male	Female	Total	Male	Female	Total
Rural	5,12,804	5,06,954	10,19,758	6,17,332	6,11,871	12,29,203
Urban	1,70,454	1,61,597	3,32,051	2,15,020	2,03,989	4,19,009
Total	6,83,258	6,68,551	13,51,809	8,32,352	8,15,860	16,48,212

Source: Census 2001.

The table.3. shows the population of the district according to 1991 to 2001 census in rural area 5,12,804 male and 5,06,954 are females and its increased in 2001 accordingly 6,17,332 male and 6,11,871 and in urban area male 1,70,454 and female 1,61,597 in 1991 census and this figure also increased in 2001 was 2,15,020 male and 2,03,989 female.

TABLE 4: THE POPULATION OF THE DISTRICT BLOCK WISE FOR THE YEAR 2001 IS AS UNDER

Block		2001		
	Area	Male	Female	Total
Deodurga	Rural	91,789	90,293	1,82,082
	Urban	11,304	10,688	21,992
	Total	1,03,093	1,00,981	2,04,074
Lingasugur	Rural	1,25,037	1,22,289	2,47,326
	Urban	37,710	35,843	73,553
	Total	1,62,747	1,58,132	3,20,879
Manvi	Rural	1,46,931	1,46,054	2,92,985
	Urban	19,074	18,481	37,555
	Total	1,66,005	1,64,535	3,30,540
Raichur	Rural	1,04,597	1,03,350	2,07,947
	Urban	1,15,556	1,09,061	2,24,617
	Total	2,20,153	2,12,411	4,32,564
Sindhanoor	Rural	1,48,978	1,49,889	2,98,863
	Urban	31,376	29,916	61,292
	Total	1,80,354	1,79,801	3,60,155
Total	Rural	6,17,332	6,11,871	12,29,203
	Urban	2,15,020	2,03,989	4,19,009
	Total	8,41,840	8,27,922	16,69,762
State		2,68,98,918	2,59,51,644	5,28,50,562

Source: Census 2001.

Table 4 shows the population of the district block wise for the year 2001 according to the 2001 census. Deodurga block was have lowest population(2,04,074) in the district and highest was Raichur block 4,32, 564 and Sindhanoor block was in the second place its population was 3,60,155 and Manvi block is in third place its population was 3,30,540 and the lingsugur in fourth place its population was 3,20,897.

DISTRICT DEMOGRAPHY**SEX RATIO**

The sex ratio has slightly increased from 979 (991 census) to 983 (2001 census)

LITERACY

TABLE 5: THE LITERACY IN THE DISTRICT IS GIVEN UNDER

Category	1991	2001	% Of decadal increase
Male	46.75	62.02	15.27
Female	21.70	36.84	15.14
ALL	34.34	49.54	15.20

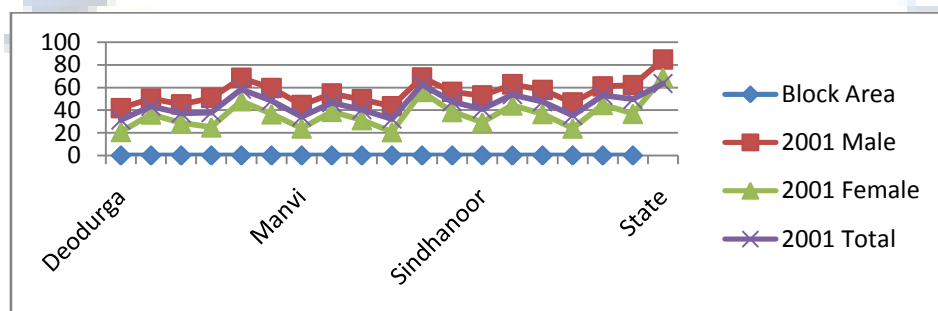
Source: Census 2001.

The above table shows that the literacy has increased by 15.20% over the decade. But still it is much below the state average of 63.42.

TABLE 6: LITERACY OF THE DISTRICT BLOCK WISE FOR THE YEAR 2001 IS AS UNDER

Block		2001		
	Area	Male	Female	Total
Deodurga	Rural	41.69	20.89	31.37
	Urban	50.12	36.30	43.40
	Total	45.10	28.59	37.38
Lingasugur	Rural	50.58	24.92	37.88
	Urban	68.39	48.00	58.45
	Total	59.49	36.46	48.16
Manvi	Rural	44.42	24.00	34.24
	Urban	54.51	38.60	46.68
	Total	49.46	31.30	40.46
Raichur	Rural	43.35	20.78	32.13
	Urban	68.79	56.11	62.63
	Total	56.07	38.45	47.38
Sindhanoor	Rural	52.75	29.20	40.94
	Urban	62.69	44.20	53.67
	Total	57.72	36.70	47.31
Total	Rural	46.55	23.95	35.31
	Urban	60.90	44.64	52.96
	Total	62.02	36.84	49.54
State		84.48	68.48	63.42

Source: Census 2001.

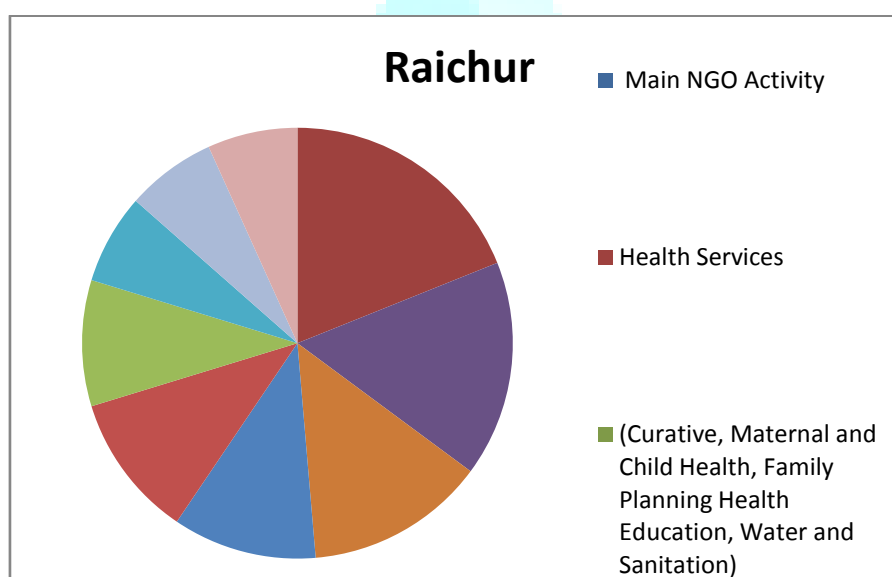


The above table shows that the literacy of Deodurga block is the lowest in the district especially in the female literacy. However the female literacy is remarkably low in almost all the blocks of the district compared to that of the male literacy.

THE MAIN NGO ACTIVITIES & CONSTRAINTS TO NGO ACTIVITIES

TABLE 7: MAIN NGO ACTIVITIES

Main NGO Activity	Raichur	
	Number of NGOs	Rank
Health Services (Curative, Maternal and Child Health, Family Planning Health Education, Water and Sanitation)	14	1
AIDS activities (IEC, Treatment of PWAs, Social Support to PWAs, HIV Testing and Counselling)	12	2
IGA/Credit/saving (Education, Provision of Loans)	10	3
Evangelism	8	4
Education (Formal, Informal)	8	4
Provision for Needy Groups (Shelter, Food, Clothing)	7	5
Agriculture/Nutrition/Environmental Services (Education, Provision of Seeds, Food Supplements)	5	6
Rehabilitation/Resettlement Displaced Persons	5	6
Infrastructure Development/rehabilitation of Health Units, Schools, Roads	5	6



1. General Health Services

NGOs are involved in the provision of general health services, including the provision of drugs and sundries, training health workers, and health education of communities on domestic hygiene, water and sanitation.

2. Maternal and Child Health Services

The Private Midwives Association and Namunsi Birth Attendants Association of Raichur are involved in improving the health of mothers and children through mobilizing pregnant women to attend antenatal and postnatal clinics. At these units, family planning services are provided and high-risk patients are screened for referral. Also provided are immunization and health education services, education on nutrition for mothers and their children, personal and domestic hygiene, water and sanitation activities and control of diarrheal diseases through the preparation of oral rehydration salts (ORS).

3. AIDS Activities

At least 15 NGOs are involved in various AIDS activities, including preventive education on HIV transmission, provision of condoms, care of People With AIDS (PWAs) (treatment, counseling and home visits) as well as support to AIDS orphans. Some of the NGOs in both Raichur districts that are involved in AIDS activities are doing so in collaboration with other NGOs working in the same geographical location, as one local leader observed:

4. Water and Sanitation Activities

There were two main forms of assistance for water and sanitation – construction and health education. The NGO is providing external resources (corrugated iron sheets and money), while communities provide other locally available resources, such as sand, bricks and labor.

5. Economic Activities

Although the sampled NGOs were chosen principally for their work in health, many of them were involved in various activities to assist communities with improving their economic status. Some economic benefits have been direct, for example, Salem Brotherhood has provided employment to community members (clinical officers, nurses, teachers and watchmen are employed at the NGOs health units and schools).

6. Agricultural/environmental Activities

Some NGOs are involved in environmental protection activities, especially tree planting of fast growing trees such as eucalyptus. The timber is subsequently sold and the proceeds shared or used by members in the construction of their own homes. One local leader observed thus:

IMPLICATIONS

The NGOs visited in both districts are engaged in a broad range of activities beyond the narrow definition of health. Their activities aim at solving specific problems as well as improve the health, social and economic wellbeing of individuals, families and communities.

CONSTRAINTS TO NGO ACTIVITIES

*Unmet Community Needs and Expectations

**Inadequate Mobilisation and Involvement of Communities by NGOs

***Non-Involvement/Low Involvement of Communities in NGO Plans

**NGO-Related Problems:

1. **Physical Location and Activities of NGOs:** Some NGO coordinators reported lack of adequate staff, equipment and supplies to run their activities. This reportedly results in creating little or no impact on the intended beneficiaries.

2. Organisation and Staffing: Key informants at district and national level explained that NGO staff members are occasionally secretive about their functions in a given area, especially about funding sources and amount procured.

3. Inadequate Funding of NGO Activities and Dependence on External Donor Funding: Many NGO staff in both Raichur. Explained that some of their activities are not carried out as expected due to inadequate funding. This arises from delayed funds, less than expected release of funds from donors, or the absence of alternative donor sources. These financial problems arise from poor planning of activities and, therefore, inadequate support from both the communities and other agencies in the region. Community members in Raichur said some NGOs and CBOs have a donor dependency syndrome and are unable to sustain their activities when funding from these donors ceases.

4. Non-sustainability of NGO Activities

5. Unaccomplished NGO Objectives: Both central level and community respondents said some NGOs come to communities promising certain activities for them but these are not always fulfilled.

6. Government/District Related Problems: Community members mentioned lack of a government policy guiding the establishment and activities of NGOs, both at central and district level.

RECOMMENDATIONS FOR THE POLICY MAKERS

1. Improve Access of Services to Target Communities:

- Physical access should tally with local demand and needs for services, location and equity; and
- Economic access should take into consideration the affordability of services to the majority of target population.

2. Improve Community Participation in NGO Activities:

- Promote community involvement at all stages, i.e., planning, implementation and monitoring, as observed:
- Enable bottom-top involvement and capacity building of the communities to ensure sustainability of activities when the NGO completes its life span.
- Promote effective community participation and involvement at the grassroots level where the NGO operates. This was explained thus:

3. Improve Accountability and Transparency of NGOs:

- To improve accountability and transparency of NGOs to the community they serve, to district and national authorities through submission of regular reports to these categories of stakeholders.

4. Improve Policy Environment for NGOs

- Improve government policies relating to NGO operations both at district and national level to ensure less bureaucracy in the process of NGO registration, equity of service, access to services (both physical and economic) and reconciliation between planned NGO activities and community needs. Thus:

5. Networking:

- Form and strengthen NGO networks.

6. Sustainability of NGO Activities:

- Provide for sustainability.

CONCLUSION

In a large developing country like India, there are numerous gaps left by the government in the development process - sometimes by intention, sometimes due to lack of funds, sometimes due to lack of awareness. These are the gaps that many NGOs try to fill in modern India. Some of them may work in areas that the government does not want to get into - like fighting discrimination on the basis of caste. Most Indian politicians do not really want to upset the existing caste hierarchy in his or her Constituency, because the politician is dependent for votes on the dominant castes of that particular constituency.

Finally this study has highlighted some of the areas of further research, both nationally and at district level. For example, comparing national, district and community needs versus NGO resources and interests to further refine the possible role of NGOs in development.

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EXPORT OF INDIAN AGRICULTURAL PRODUCTS: PRE AND AFTER TRADE REFORMS

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ABSTRACT

India's foreign trade has significantly changed in the post-reform period. In absolute terms, the trade volume rose from 8.5 US b in 1980-81 to 351.9 US b in 2011-12. But share of agricultural product to total exports has decline. Present study examines the performance of exports of agricultural products both in pre and post reform period.

KEYWORDS

Indian agriculture, agriculture exports.

INTRODUCTION

Agriculture Sector of Indian Economy is one of the most significant part of India. Agriculture is the only means of living for almost two-thirds of the employed class in India. As being stated by the economic data of financial year 2012-13, agriculture has acquired 14 percent of India's GDP. The agriculture sector of India has occupied almost 43 percent of India's geographical area. Agriculture is still the only largest contributor to India's GDP even after a decline in the same in the agriculture share of India. Agriculture also plays a significant role in the growth of socio-economic sector in India.

Indian Agricultural based economy remained closed until the early 1990s. By 1991, there was new economic policy which stressed both external sector reforms in the exchange rate, trade and foreign investment policies, and internal reforms in areas such as industrial policy, price and distribution controls, and fiscal restructuring in the financial and public sectors. In addition, India's membership and commitment to World Trade Organization (WTO) in 1995 was a clear sign of India's intention to take advantage of globalization and face the challenge of accelerating its economic growth. But Indian Agricultural products have been facing stiff competition from Asian countries for quite some times. Due to globalization and liberalized regime, this competition is likely to increase further and new initiatives in agriculture development shall have to meet the emerging challenges. The performance of agriculture after integration with the world markets is linked to the success of exports. In its bid to increase overall exports, the government of India has decided to achieve this objective by giving a push to production and export of agricultural commodities. Agriculture has been a source of foreign exchange for India in the past. Most of the export earnings of agriculture came from the conventional items such as tea, cashew and spices.

India's share in the world agricultural exports is very low in many items. Until the beginning of the early seventies India has been an importer of a number of agricultural commodities. With the exception of a few commodities like rice, cotton, tea, coffee, oilseeds, oil cakes, tobacco and spices, the share of agricultural export of India in total world trade was very insignificant. The share is particularly low in the world trade of fish, meat, chicken, vegetables and fruits. India has made substantial strides in the total world production of many commodities. However, its share in the export market is relatively very small. The pertinent questions of marketable surplus and export surplus are ailing the export potentials of Indian agricultural products. Nevertheless, the country has made phenomenal efforts in enhancing the agricultural exports.

OBJECTIVES OF THE STUDY

The main objective of the study is to make an extensive/ comprehensive study of growth and performance of agricultural export of India in pre and post era of economic reforms.

ANALYTICAL TOOLS

The method used in the study is essentially descriptive. We have taken annual absolute time series data from 1980-81 to 2011-12. For the analysis of composition of agricultural exports appropriate statistical tools like percentage share, average values, and Compound Annual Growth Rate (CAGR) and dummy variable are used.

SOURCES OF DATA

This study depends upon secondary data only. However, collecting the necessary information together benefits greatly the various key sources such as:- Handbook of Statistics on Indian economy (various Issues), International Yearbook of trade and Statistics, Statistical Abstracts of India, Economic survey of India, Indian Foreign Trade Review, World Development Reports, Report on currency and finance, RBI Bulletin, UN Com Trade Statistics (various issues) etc.

EXPORTS AND AGRICULTURAL ECONOMY

Exports have acquired added significance in the wake of liberalization wave sweeping across the world. The trend towards market economy in almost all the countries of world has increased the role of exports in developmental efforts. Therefore, exports constitute a key factor in economic development of a country. For a developing country, it is essential to build up a sizeable export surplus. The rate of economic growth is largely determined by the rate at which a country can expand its export capacity. Higher rates of economic growth tend to be associated with higher rates of export growth. A country that tries to promote growth while ignoring its export performance may succeed in the short-run, but it will be hard-pressed to sustain growth over a long period of time. Thus, it can be concluded that exports are a key factor in the growth process, not one of political astrology but of empirical fact.

INDIA'S SHARE IN WORLD EXPORTS

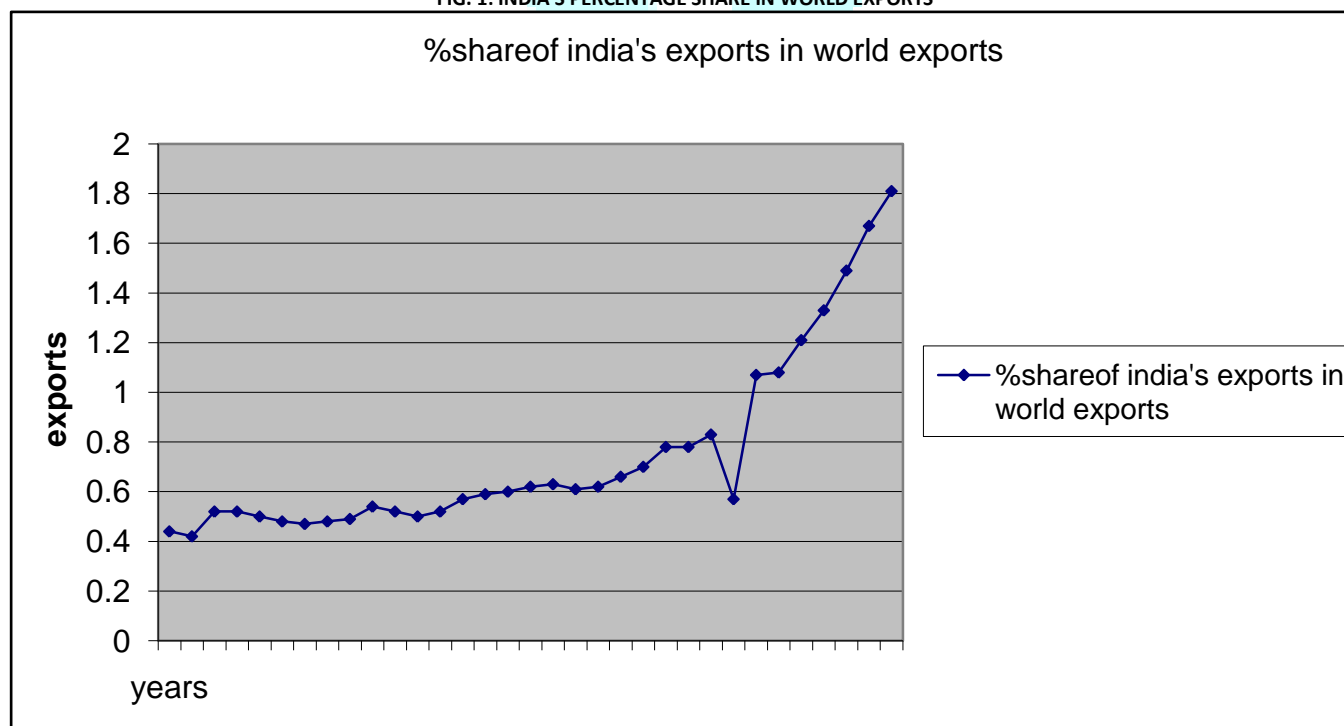
Trend in value of India's exports against the background of trends in world's exports are presented in the table:-

TABLE 1: INDIA'S SHARE IN WORLD EXPORTS

YEAR	WORLD EXPORTS (\$ b.)	INDIA'S EXPORTS (\$ b.)	INDIA'S % SHARE IN WORLD EXPORTS
1980	1931.7	8.5	0.44
1981	1924.4	8.2	0.42
1982	1777.2	9.3	0.52
1983	1736.0	9.1	0.52
1984	1845.2	9.4	0.50
1985	1875.8	9.1	0.48
1986	1989.1	9.4	0.47
1987	2349.6	11.3	0.48
1988	2683.2	13.3	0.49
1989	2899.0	15.8	0.54
1990	3423.4	17.9	0.52
1991	3478.1	17.6	0.50
1992	3728.5	19.6	0.52
1993	3724.1	21.5	0.57
1994	4236.8	25.0	0.59
1995	5089.5	30.6	0.60
1996	5327.5	33.1	0.62
1997	5505.7	35.0	0.63
1998	5426.0	33.4	0.61
1999	5657.9	35.6	0.62
2000	6373.1	42.3	0.66
2001	6124.2	43.4	0.70
2002	6435.5	50.4	0.78
2003	7474.6	59.0	0.78
2004	9086.5	75.6	0.83
2005	10240.2	59.2	0.57
2006	11523.4	124.0	1.07
2007	13774.2	150.0	1.08
2008	15987.6	194.5	1.21
2009	12376.8	164.9	1.33
2010	15100.5	226.3	1.49
2011	18024.3	302.6	1.67
2012	19350.7	351.9	1.81

Source:- International Financial Statistics Yearbook (Various issues)

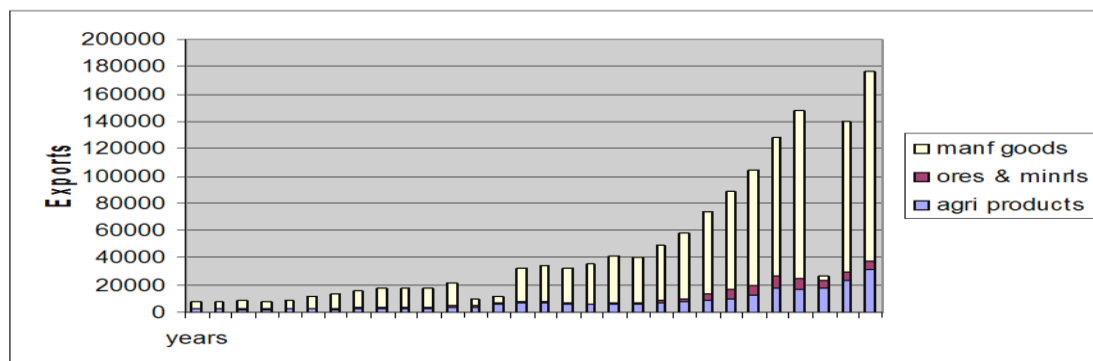
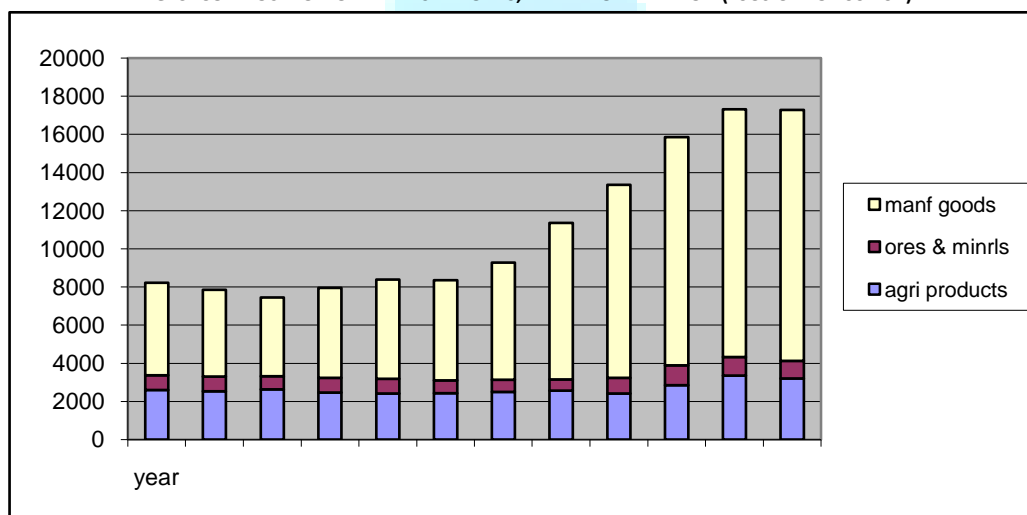
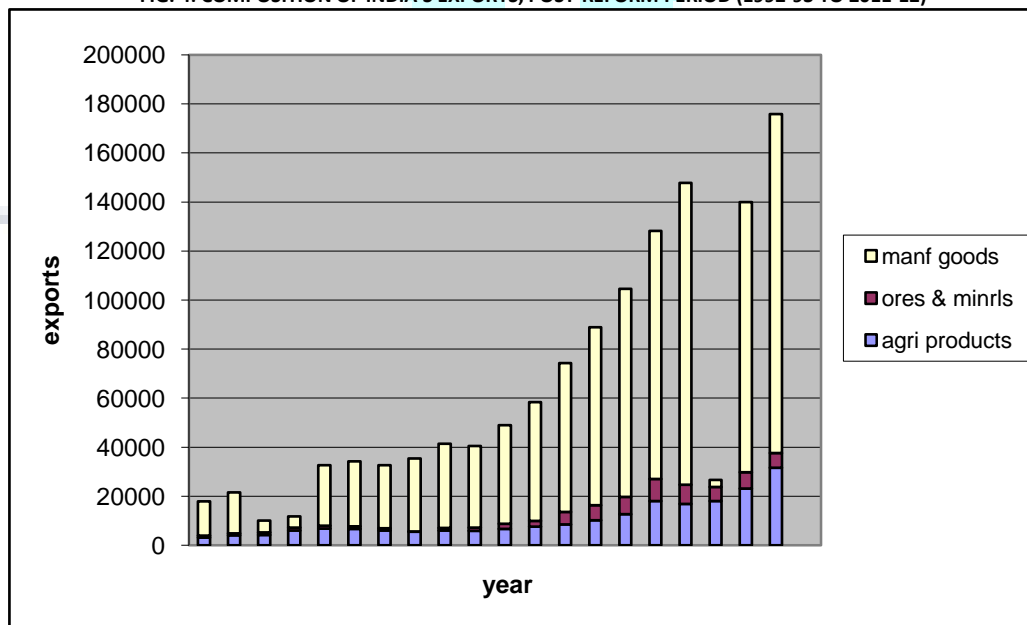
The above table shows that India's share in world exports has increased from 0.44 percent in 1980 to 1.81 percent in 2012. India's share in world exports has started rising since 2007 albeit a very slow 0.1 percentage point so as to reach 1.21 percent in 2008 and 1.81 percent in 2012. This was mainly due to the relatively slow rise or greater fall in world export growth than India's. Recently, announced Foreign Trade Policy also set the long-term policy, objective to double India's exports share in global exports by 2020.

FIG. 1: INDIA'S PERCENTAGE SHARE IN WORLD EXPORTS

COMPOSITION OF INDIA'S EXPORTS

The changing structure of India's exports throws some interesting light on both the demand pattern and supply factors that are increasingly influencing India's exports and the manner in which its production structures, institutions, and policies are responding to it. Regarding changes in the composition of exports since 1980s, it may be observed that the share of agriculture and allied products has been declining while that of ores and minerals has remained more or less steady. Share of manufactured goods has increased generally. Although the opening up of the Indian economy since the early 1990s provided impetus for higher growth for most of the commodities, some products gained more than the others.

India's merchandise exports are predominated by the manufacturing sector which accounted for more than three-fourth of its total exports during post-reform period. The following fig (2), (3) & (4) clearly shows that share of manufactured exports has been rising continuously during the whole period 1980-81 to 2011-12 and also for the pre-reform period and post-reform period.

FIG. 2: COMPOSITION OF INDIA'S EXPORTS, 1980-81 TO 2011-12**FIG. 3: COMPOSITION OF INDIA'S EXPORTS, PRE-REFORM PERIOD (1980-81 TO 1991-92)****FIG. 4: COMPOSITION OF INDIA'S EXPORTS, POST-REFORM PERIOD (1992-93 TO 2011-12)**

The detailed analysis of composition pattern of India's agricultural exports is as follows:-

A.) AGRICULTURE AND ALLIED PRODUCTS

Agricultural products like tea, coffee, rice, tobacco and spices are important items of India's exports and hence foreign exchange earnings. Agriculture is also the source of raw material for agro-based industries including textiles, jute, sugar, paper and processed foodstuffs. Moreover, agricultural sector provides market for capital goods inputs and light consumer goods. The growth rate of India's exports of Agriculture and Allied products has been presented in the following table:-

TABLE 2: INDIA'S EXPORTS OF AGRICULTURE AND ALLIED PRODUCTS

	Coefficients	S.E.	t-statistics	P-value	R ²	
Constant Term	7.753	0.10	75.385*	0.000		0.93
Dummy Variable (D)	-0.672	0.20	-3.263*	0.003	Adjusted R ²	0.92
Time (t)	0.019	0.01	1.369	0.183	Standard Error of the Estimate	0.1671
Interaction of Dummy & Time (D.t)	0.066	0.01	4.050*	0.000	F-value	117.46*
Regression Equation for Pre-Reform Period (1980-81 to 1991-92)			7.753 + 0.019 t		I.G.R. =	1.9%
					C.G.R.=	1.92%
Regression Equation for Post-Reform Period (1992-93 to 2011-12)			7.081 + 0.085 t		I.G.R. =	8.5%
					C.G.R.=	8.87%

t * Statistically Significant at 5% level of Significance

F* Statistically Significant at 5% level of Significance

The above table shows that differential intercept and differential slope coefficient are found to be individually statistically significant. The value of R² and adjusted R² is found to be very high and F-test is also found to be statistically significant at 5% level of significance. The compound rate of growth for India's exports of agriculture and allied products is found to be only 1.92 percent during the pre-reform period but it is found to be higher (8.87%) during the post-reform period. It implies that the export of agriculture and allied products has been rising during post reform era due to the adoption of a National Agricultural policy (NAP) by the Government of India and establishment of Agriculture Export Zones (AEZs). The EXIM policy of 2002-07 gives a major thrust to agricultural exports by removing export restrictions on designated items. The efforts to promote exports of agro and agro based products in the floriculture and horticulture sector have been sustained in the notification of 32 Agri-Exporting Zones across the country. Non- actionable subsidies such as transport subsidy have been provided for the exports of fruits, vegetables, poultry and dairy products. The categorical export performance of Agriculture and Allied products is as follows:-

1.) TEA

Tea has been the most important traditional commodity in our exports. The Indian tea industry is a profile source of foreign exchange for the central and state Governments. India has the largest average as well as the highest production of tea in the world. It even occupied first position in our export items in the few years of sixties. The growth rate of India's exports of tea has been presented in the following table:-

TABLE 3: INDIA'S EXPORTS OF TEA

	Coefficients	S.E.	t-statistics	P-value	R ²	
Constant Term	6.142	0.10	60.961*	0.000		0.45
Dummy Variable (D)	-0.630	0.20	-3.121*	0.005	Adjusted R ²	0.38
Time (t)	0.008	0.01	0.621	0.540	Standard Error of the Estimate	0.1637
Interaction of Dummy & Time (D.t)	0.014	0.01	0.851	0.403	F-value	6.91*
Regression Equation for Pre-Reform Period (1980-81 to 1991-92)			6.142 + 0.008 t		I.G.R. =	0.8%
					C.G.R.=	0.8%
Regression Equation for Post-Reform Period (1992-93 to 2011-12)			5.512 + 0.022 t		I.G.R. =	2.2%
					C.G.R.=	2.22%

t * Statistically Significant at 5% level of Significance

F * Statistically Significant at 5% level of Significance

The above table shows that differential intercept is found to be statistically significant but differential slope coefficient is found to be insignificant. The value of R² and adjusted R² is found to be low, but F-test is found to be statistically significant at 5% level of significance. The compound growth rate for India's exports of tea is found to be only 0.8 percent during pre-reform period which indicates very poor performance of tea exports due to the following reasons:-

- Increase in domestic demand for tea faster than expansion in its production, which generated pressure on exportable surplus.
- Exports of Indian tea had received a set-back in the Common Wealth of Independent states (CIS) due to disintegration of erstwhile soviet Union and for political Reasons.
- Rise in Price of tea in domestic MKT vis-à-vis international prices.
- Competitions from East Africa, China, Lanka and Bangladesh.
- Low Yield Rate.
- Increase in Cost of Production
- Heavy fiscal Burden
- Progressive Tax Policy of Government.
- But the C.G.R. is found to be 2.2% during post-reform period which is much greater as compared to pre-reform period. It implies a rise in exports of tea during post reform era because of the following factors:-
 - Improvement in the production of North Indian Tea.
 - Firming up of tea price in the world market.
 - Rise in unit value Realization.
 - Failure of Kenya's tea crop.

Further, the export of Value-added tea i.e. packet tea, tea bags, instant tea and quick brewing black tea, identified by the Government as thrust items, have been encouraged by various promotion programmes launched by the Tea Board such as Uni-National promotional campaign in Egypt and Saudi Arabia, Special promotional campaign for Darjeeling tea, viz. Darjeeling Logo and Assam Logo. These promotional activities are carried out through the Board's foreign offices located in London, Brussels, New York and Dubai. This would help to sell a larger volume of tea at a lower price. The Govt. Undertook four-pronged measures to arrest the sharp decline in exports of tea:-

- To enhance production and productivity to increase availability for exports
- Adjustments in the exchange rate of rupee which have made tea exports more competitive.
- To prove Eximscrips against exports to encourage exports of tea.
- Promotion of Indian tea through foreign offices and participation in trade fairs.

In addition, for the rapid growth of tea industry, measures like rationalization of excise duties, grant of depreciation on plantations etc. would be very helpful. It is also very important for plantations to become more efficient and competitive and to concentrate on producing superior quality tea. Indian tea industry in the

coming years can be expected to play a major role in country's economic development and foreign trade only if it is given the encouragement and the incentives to strengthen its competitive capacity.

2.) COFFEE

Coffee is another important traditional commodity in India's export basket. The growth rate of India's exports of coffee has been presented in the following table:-

TABLE 4: INDIA'S EXPORTS OF COFFEE

	Coefficients	S.E.	t-statistics	P-value		
Constant Term	5.409	0.19	27.890*	0.000	R ²	0.45
Dummy Variable (D)	-0.311	0.38	-0.801	0.431	Adjusted R ²	0.39
Time (t)	-0.026	0.02	-0.970	0.341	Standard Error of the Estimate	0.3150
Interaction of Dummy & Time (D.t)	0.056	0.03	1.813	0.082	F-value	7.07*
Regression Equation for Pre-Reform Period (1980-81 to 1991-92)			5.409 - 0.026 t		I.G.R. =	-2.6%
					C.G.R.=	-2.57%
Regression Equation for Post-Reform Period (1992-93 to 2011-12)			5.098 + 0.03 t		I.G.R. =	3%
					C.G.R.=	3.05%

t * Statistically Significant at 5% level of Significance

F * Statistically Significant at 5% level of Significance

The above table shows that differential intercept and differential slope coefficient are not found to be individually statistically significant. The value of R² and adjusted R² is found to be very low but F-test is found to be statistically significant at 5% level of significance. The C.G.R. for India's exports of coffee is found to be negative during the pre-reform period. It implies the very poor performance of coffee exports due to the under - mentioned reasons:-

- Persistent downward slide in prices ever since the collapse of international Quota system in 1987.
- Fall in exports of coffee to USA and EEC.
- High prices of Indian coffee vis-à-vis major exporters which offers sizable discount on their prices.
- The preferential tariff structure of the European Economic Community (EEC), which was the main importer of coffee, adversely affects India's exports.

But the export of coffee has shown some improvement during post- reform period as C.G.R. is found to be positive. This rise in export of coffee may be attributed to the following factors:-

- Failure of Brazilian coffee crop.
- Increase in India's competitiveness in coffee.
- Increase in world demand for Indian coffee.
- Steep fall in coffee production in major coffee producing countries.

3.) RICE

The growth rate of India's exports of rice has been presented in the following table (3.7) which shows that differential slope coefficient is found to be statistically significant whereas differential intercept is found to be insignificant. The value of R² and adjusted R² is found to be high and F-test is also found to be statistically significant at 5% level of significance. The C.G.R. for India's exports of rice is found to be negative during pre-reform period. The fall in export volume, in face of the buoyant market conditions is due to decline in domestic availability following the drought conditions and because of ban placed on exports of non-basmati rice to augment domestic supply. But during the post-reform period exports of rice has shown a remarkable growth as C.G.R. is found to be 10.19 percent.

TABLE 5: INDIA'S EXPORTS OF RICE

	Coefficients	S.E.	t-statistics	P-value		
Constant Term	5.462	0.25	21.777*	0.000	R ²	0.81
Dummy Variable (D)	-0.613	0.50	-1.221	0.234	Adjusted R ²	0.79
Time (t)	-0.004	0.03	-0.113	0.911	Standard Error of the Estimate	0.4079
Interaction of Dummy & Time (D.t)	0.101	0.04	2.542*	0.018	F-value	37.17*
Regression Equation for Pre-Reform Period (1980-81 to 1991-92)			5.462 - 0.004 t		I.G.R. =	-0.4%
					C.G.R.=	-0.4%
Regression Equation for Post-Reform Period (1992-93 to 2011-12)			4.849 + 0.097 t		I.G.R. =	9.7%
					C.G.R.=	10.19%

t * Statistically Significant at 5% level of Significance

F * Statistically Significant at 5% level of Significance

The adjustments in the exchange rate of rupee, attractive premium on exim-scrips and inclusion of exports of certain varieties of rice in the open general license made the exports of rice competitive. Bulk of these exports found their ways to the gulf region and the USA. Further, recovery in agriculture also facilitated an increase in rice exports during post-reform era.

4.) TOBACCO

Tobacco has been yet another highly playing traditional exportable item and its relative share in the country's exports, like that of other traditional exportable has been marginal and has moved in a narrow direction in eighties. The growth rate of India's exports of Tobacco has been presented in the following table:-

TABLE 7: INDIA'S EXPORTS OF TOBACCO

	Coefficients	S.E.	t-statistics	P-value		
Constant Term	5.209	0.17	29.541*	0.000	R ²	0.71
Dummy Variable (D)	-1.557	0.35	-4.409*	0.000	Adjusted R ²	0.67
Time (t)	-0.045	0.02	-1.897	0.069	Standard Error of the Estimate	0.2864
Interaction of Dummy & Time (D.t)	0.130	0.02	4.673*	0.000	F-value	20.70*
Regression Equation for Pre-Reform Period (1980-81 to 1991-92)			5.209 - 0.045 t		I.G.R. =	-4.5%
					C.G.R.=	-4.4%
Regression Equation for Post-Reform Period (1992-93 to 2008-09)			3.652 + 0.085 t		I.G.R. =	8.5%
					C.G.R.=	8.87%

t * Statistically Significant at 5% level of Significance

F * Statistically Significant at 5% level of Significance

The above table shows that differential intercept and differential slope coefficient are found to be individually statistically significant. The value of R² and adjusted R² is found to be quite high and F-test is also found to be statistically significant at 5% level of significance. India's exports of Tobacco experienced a negative growth rate during pre-reform period mainly due to the following reasons:-

- Anti-Smoking drive.
- Government restriction measures adopted by certain developed countries.
- Increased competition from other tobacco producing countries

- 4) Preference given by certain countries to products of others
- 5) Higher price as compared to Brazil and South Korea.
- 6) Decline in exports to China and USSR.
- 7) Drought Conditions prevailing in the country,
- 8) Stagnant yield and use of traditional methods of cultivation.
- 9) Pressure for internal consumption
- 10) Failure to produce quality Tobacco.
- 11) Increase in the cost of production.
- 12) Low demand from U.K because of inferior quality of tobacco.

But the export of tobacco has shown a rapid growth during post-reform period as the C.G.R is found to be 8.87 percent. This is mainly due to higher unit value realization. Furthermore, the rapid growth of exports of tobacco during post- reform era is a welcome development in view of the value-added being generated within the country.

5.) SPICES

The growth rate of India's exports of spices has been presented in the following table:-

TABLE 8: INDIA'S EXPORTS OF SPICES

	Coefficients	S.E.	t-statistics	P-value		
Constant Term	4.834	0.17	27.521*	0.000	R ²	0.82
Dummy Variable (D)	-1.061	0.35	-3.016*	0.006	Adjusted R ²	0.80
Time (t)	0.034	0.02	1.431	0.165	Standard Error of the Estimate	0.2853
Interaction of Dummy & Time (D.t)	0.068	0.02	2.461*	0.021	F-value	39.87*
Regression Equation for Pre-Reform Period (1980-81 to 1991-92)			4.834 + 0.034 t		I.G.R. =	3.4%
					C.G.R.=	3.46%
Regression Equation for Post-Reform Period (1992-93 to 2011-12)			3.773 + 0.102 t		I.G.R. =	10.2%
					C.G.R.=	10.74%

t * Statistically Significant at 5% level of Significance

F * Statistically Significant at 5% level of Significance

The above table shows that both the differential intercept and differential slope coefficient are found to be statistically significant. The value of R2 and adjusted R2 is found to be high and F-test is also found to be statistically significant at 5% level of significance. The export of spices experienced a low growth rate during pre-reform period as C.G.R. is found to be only 3.46% due to the following reasons:-

- a) Drought conditions prevailing in the country.
- b) Severe competition from Brazil, Guatemala, Indonesia, Malaysia.
- c) Decrease in production at Home.
- d) Lack of delivery of goods at stipulated time and appropriate packaging.
- e) Sharp fall in export price of peeper.
- f) Erosion of export surpluses available and fall in unit value realization.
- g) Increase in domestic demand.

But the C.G.R. is found to be very high i.e. 10.74% during post-reform period as compared to pre-reform period. This implies that India's export of spices has shown an impressive performance during post-reform era because of the steps undertaken by the Spices Board and Export Promotions Councils.

6.) MARINE PRODUCTS

Marine products have emerged as an important source of foreign exchange earnings. The growth rate of exports of marine products has been presented in the following table:-

TABLE 9: INDIA'S EXPORTS OF MARINE PRODUCTS

	Coefficients	S.E.	t-statistics	P-value		
Constant Term	5.589	0.07	77.980*	0.000	R ²	0.97
Dummy Variable (D)	0.522	0.14	3.636*	0.001	Adjusted R ²	0.96
Time (t)	0.056	0.01	5.781*	0.000	Standard Error of the Estimate	0.1164
Interaction of Dummy & Time (D.t)	-0.009	0.01	-0.792	0.436	F-value	262.14*
Regression Equation for Pre-Reform Period (1980-81 to 1991-92)			5.589 + 0.056 t		I.G.R. =	5.6%
					C.G.R.=	5.76%
Regression Equation for Post-Reform Period (1992-93 to 2011-12)			6.111 + 0.047 t		I.G.R. =	4.7%
					C.G.R.=	4.81%

t * Statistically Significant at 5% level of Significance

F * Statistically Significant at 5% level of Significance

The above table shows that differential intercept is found to be statistically significant whereas differential slope coefficient is found to be insignificant. The value of R2 and adjusted R2 is found to be very high and F-test is also found to be statistically significant at 5% level of significance. Exports of marine Products has shown a positive trend during pre-reform period. The C.G.R. for exports of marine products is found to be 5.76% during pre-reform period and 4.8% during post-reform period. Improved catch position because of the operation of Chartered vessels, coupled with better infrastructural facilities like cold storage, transport, etc. and quality control gave apparently a boost to these exports. The Marine Products Exports Development Authority (MPEDA) evolved a scheme under which it provides limited equity capital to support export-oriented deep sea fishing projects. The increase in exports of marine products has been achieved despite stiff competition due to abundant supply of farmed shrimp by China, Thailand, Indonesia, Vietnam, Philippines etc. in major markets like Japan, EEC and USA.

But exports of marine products declined slightly during post-reform era due to the following reasons:-

- (a.) Decline in Unit value
- (b.) European Union's ban on marine Products.
- (c.) Lack of adequate and steady production etc

Results will be more clear through following diagrams:-

FIG. 2: COMPOSITION OF EXPORTS OF AGRICULTURE AND ALLIED PRODUCTS, 1980-81

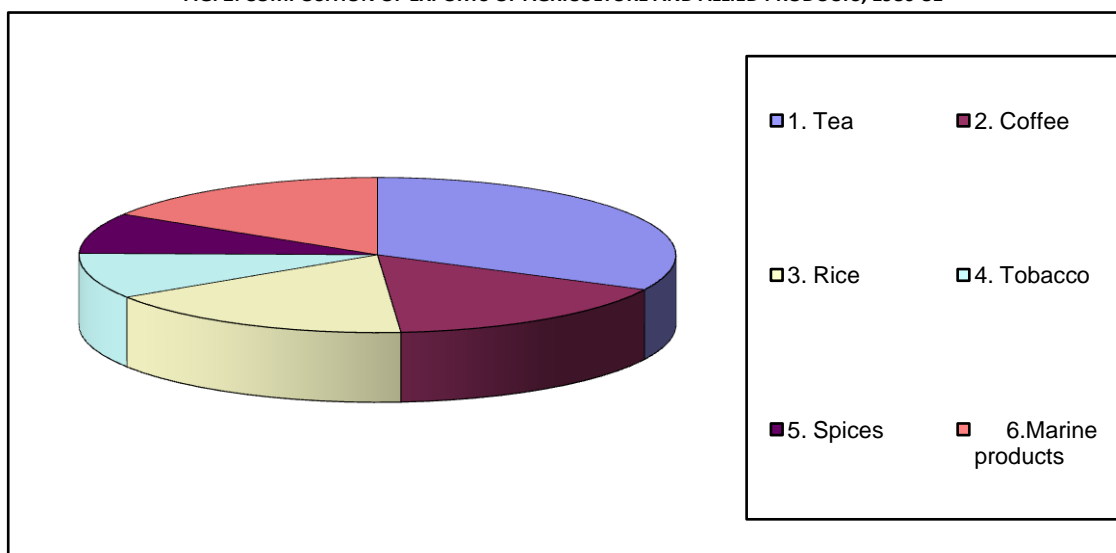


FIG. 4: COMPOSITION OF EXPORTS OF AGRICULTURE AND ALLIED PRODUCTS, 1992-93

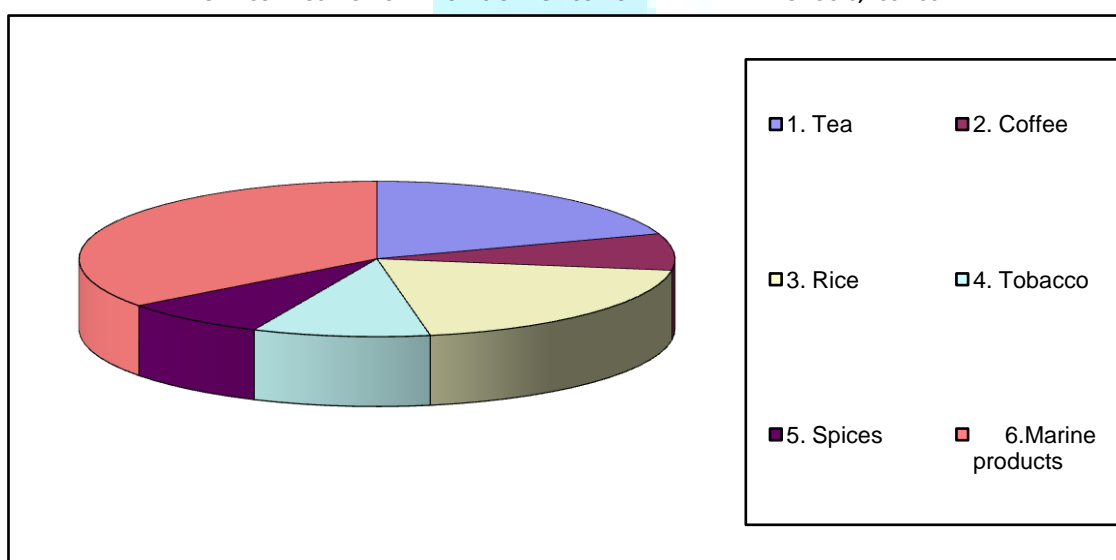


TABLE 10: EXPORTS OF AGRICULTURE AND ALLIED PRODUCTS, 1980-81 TO 2011-12

COMMODITY	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-1991	1991-92	1992-93	1993-94	1994-95	1995-96
I.) Agriculture And Allied Products	2601.0	2524.5	2627.1	2463.3	2415.2	2422.6	2499.0	2560.7	2417.5	2852.8	3354.4	3202.5	3135.8	4027.5	4226.1	6081.9
1. Tea	538.0	440.7	382.5	498.2	644.9	511.9	451.4	463.7	420.8	550.7	596.4	491.5	337.2	337.7	310.7	350.2
2. Coffee	270.9	163.1	193.6	175.8	176.8	223.5	232.2	201.7	202.7	208.5	140.6	134.7	129.9	173.9	335.3	449.3
3. Rice	283.2	382.4	449.8	110.2	142.1	160.1	154.4	261.2	228.9	256.2	257.2	306.5	336.8	410.2	384.0	1365.7
4. Tobacco	157.3	228.5	221.8	150.5	126.6	111.9	113.8	104.2	87.0	105.1	146.8	152.9	163.7	147.0	81.1	133.6
5. Spices	140.8	110.1	97.8	112.8	173.8	227.1	218.3	259.6	190.0	166.4	130.4	151.0	135.8	181.4	195.0	237.2
6. Marine products	269.2	312.6	376.7	347.5	320.8	334.3	414.3	411.3	435.0	412.7	535.2	585.2	601.9	813.6	1126.4	1010.8
B.) Ores and Minerals:-	763.8	784.7	693.0	765.9	776.5	675.3	628.5	599.8	825.3	1030.5	969.6	929.8	737.8	888.2	988.3	1174.9
II.) Manufactured Goods:-	4852.0	4547.5	4122.9	4722.1	5194.2	5254.0	6144.7	8195.0	10110.4	11971.6	12996.4	13148.4	14038.8	16656.7	4852.0	4547.5

Cont.

COMMODITY	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
I.) Agriculture And Allied Products	6862.7	6626.2	6034.5	5608.0	5973.2	5901.2	6710.0	7533.1	8474.7	10213.8	12683.5	18060.2	16914.0	18051.0	23172.3	31571.7
1. Tea	292.1	504.9	538.4	411.9	391.5	360.5	341.4	356.3	409.6	390.9	435.3	502.3	585.0	455.3	557.8	719.2
2. Coffee	401.9	456.4	410.7	331.1	259.4	229.6	205.4	236.3	237.9	358.8	435.3	464.0	491.0	288.2	408.9	655.5
3. Rice	893.6	907.0	1492.9	721.4	641.8	665.6	1204.9	907.0	1506.5	1405.2	1554.9	2913.8	2428.0	1783.0	1726.6	3246.2
4. Tobacco	213.2	288.0	181.1	232.8	189.8	169.4	211.4	238.6	279.2	300.6	372.4	479.0	753.0	691.0	653.7	576.7
5. Spices	338.6	379.3	388.2	407.9	354.0	313.9	342.0	336.0	419.1	477.9	697.9	1037.3	1378.0	940.4	1258.5	2055.7
6. Marine Products	1128.9	1207.3	1038.4	1182.6	1393.8	1236.8	1431.6	1328.7	1439.8	1589.2	1768.2	1702.6	1536.0	1583.3	1990.5	2777.1
B.) Ores and Minerals	1172.4	1061.1	893.4	-16.1	1153.0	1262.4	1996.0	2368.7	5078.6	6163.6	7002.5	9004.7	7726.0	5665.5	6672.6	6036.5
II.) Manufactured Goods	24613.4	26546.6	25791.5	29714.4	34335.2	33369.8	40244.4	48492.1	60730.7	72563.0	84920.6	101099.4	123109.9	29327	110094.6	138286.0

CONCLUSION

Beside of falling share of agriculture in gross domestic product agriculture export had been occupying the place of pride in the export basket of India. Study reveals clearly that export of agriculture and allied products has been rising during post reform period .but matter of fact is that there is a consistent decline in the percentage share of primary products in total export. More over there is a noticeable change in its composition also.

Share of tea and coffee has been decline and rice and marine product has shown progressive trend and minerals has remained more or less steady.

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TRENDS IN AGRICULTURAL WAGES: AN INTER-DIVISIONAL ANALYSIS IN CHITTOOR DISTRICT OF ANDHRA PRADESH

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CHITTOOR**

ABSTRACT

There are number of studies on the agricultural sector in Chittoor district. Among these studies, the research on agricultural labour is very limited. The empirical investigations are needed to study the agricultural labour problems. Hence the empirical and scientific investigational study of trends in agricultural wages in the rural economy of Chittoor district is an important phenomena. Hence the attempt is made to study trends in agricultural wages of agricultural workers in three revenue divisions of Chittoor district, Andhra Pradesh. This paper aims to study trends in agricultural wages in three revenue divisions of Chittoor District, Andhra Pradesh. In the present study, the trend is calculated for the period 1980-81 to 1998-99. The linear function is used to determine the trend. The relevant secondary data for explanatory and explained variables is collected from the handbook of statistics and unpublished official records of the Chief Planning Officer, Chittoor. The primary data required is collected through field survey : 1998-99. Trends in agricultural wages (money and real wages) are estimated by employing the simple regression equation – wages as the function of time. Wage trends are calculated for both male and female agricultural labour separately with time. It is observed that there is significant positive trend in the both money and real wages with time (for male and female agricultural labour). The estimated percentage growth rates of real wages for both male and female are less than the percentage growth rates of money wages. This is due to the increasing trend in consumer price indices. The growth rates of female real wages are less than the growth rates of male real wages in Chittoor and Madanapalle divisions. But the growth rates of male real wages are less than the growth rates of female real wages in Tirupati division as well as in Chittoor district as a whole.

JEL CODE

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KEYWORDS

Trend in Female Money Wagerate, Trend in Female Real Wagerate, Trend in Male Money Wagerate, Trend in Male Real Wagerate, Regression Co-efficients.

INTRODUCTION

The poverty of the landless labourers, as a part of the poverty of the people of India, is all too known. The trends in agricultural wage rates during the post-Independence period, and analysis of the factors influencing the trend have generated considerable discussion among economists since the late 1960s. Agricultural labour get unusually low wages for the work done under the worst conditions put in excessively burdens on hard work. The opportunity to work is extremely irregular; hence their income is also low. Since, they possess no skill or training, they have no alternative employment opportunities either. Socially, a large number of agricultural labourers belong to scheduled castes and scheduled tribes. Hence, they are an oppressed class. They are not organized and cannot fight for their rights. Because of all these reasons, their economic lot has failed to improve even after four decades of developmental efforts. Low agricultural wage is a key determinant of the rural poverty in Indian masses.

Wages are defined as “sum of money paid under contract by an employer to a worker for services rendered”. Wages are affected by sociological factors, customs and traditions, demographic factors also. Wages are divided into two types, viz., money wages and real wages. Money wages refers to monetary payment to workers by employers for services rendered. Real wages means money wages which are measured in terms of purchasing power. Real wages are what money wages will buy. They are as such figured by dividing money wages by an index of cost of living. If prices drop and wages stay up, then real wages rise. If both prices and wages rise, but prices rise more rapidly then real wages fall. Apart from purchasing power of money, a number of other variables like provisions of concessional food, housing and other amenities, possibilities of additional sources of income to members of the family, conditions of work like hours of work and physical environment and security of employment have to be taken into consideration to have an estimate of real wages and standard of living of workers. The trend and its significance of money wages are different from real wages.

There are number of studies on the agricultural sector in Chittoor district. Among these studies, the research on agricultural labour is very limited. The empirical investigations are needed to study the agricultural labour problems. Hence the empirical and scientific investigational study of trends in agricultural wages in the rural economy of Chittoor district is an important phenomena. Hence the attempt is made to study trends in agricultural wages of agricultural workers in three revenue divisions of Chittoor district, Andhra Pradesh.

OBJECTIVE

The following is the objective of the study:

- To study the trends in agricultural wages in three revenue divisions of Chittoor District, Andhra Pradesh.

METHODOLOGY

The following methodology is proposed to study the trends in agricultural wages in three revenue divisions of Chittoor district and the entire district as a whole as one unit. The function which is used to determine the trend is,

$$Y = a + bt$$

Where,

Y = Real/Money wage rate

t = Time in years

a, b are the constants

In the present study, the trend is calculated for the period 1980-81 to 1998-99. The relevant secondary data for explanatory and explained variables is collected from the handbook of statistics and unpublished official records of the Chief Planning Officer, Chittoor. The primary data required is collected through field survey : 1998-99.

FINDINGS

A rise in money wagerate for agricultural labour is to be realized as increase in real wages, i.e., money wages keep ahead of the trends in the prices of commodities purchased by the agricultural labour. To arrive at the real wages, money wages are deflated by consumer price indices for agricultural labour compiled with the base year 1980-81. The fluctuations in the real wages, in general, reflect the changes in the consumer price index numbers. Jose points out

that, the single most important variable influencing the movement of real wages is the level of agricultural output though it is difficult to establish this relationship statistically. In view of Acharya, the real wages are sensitive to upswings and downswings in the economy such as agricultural production and inflation.

TRENDS IN AGRICULTURAL WAGES

The division-wise female, male money and real wage trends are explained in Chittoor district.

CHITTOOR DIVISION

The estimated linear regression equation of female money wage rate in Chittoor division is

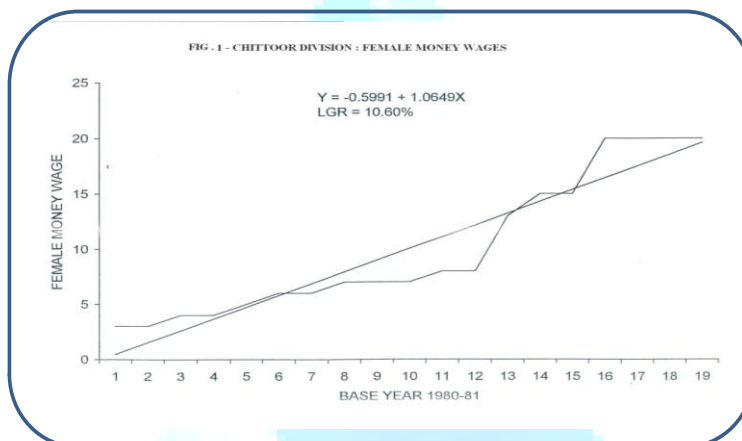
$$Y = -0.5991 + 1.0649^*t$$

(0.0877)

$$r = 0.9469, \quad \text{LGR} = 10.6\%$$

* Significant at 5 percent probability level.

From the above equation, the co-efficient of 't', i.e., value of 'b' is 1.0649. It reveals that there is an increasing trend in female money wage rate in Chittoor division. In terms of numerical expression, an average of 1.06 rupees of female money wage rate increasing every year during the study period. But this increase is significant. The effect of time (t) on female money wage rate is shown by the value of 'r'. The value of 'r' is 0.9469. It indicates that, 94.69 percent of variation in female money wage rate is observed by the time factor. The linear growth rate is estimated and it is 10.6 percent. This shows that the average annual increase in female money wage rate is 10.6 percent. The value of intercept term is - 0.5991.



The estimated linear regression equation of female real wage rate in Chittoor division is

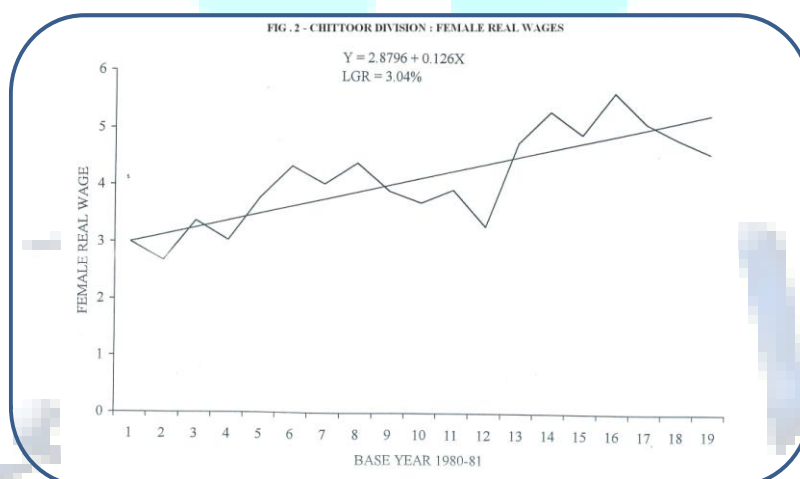
$$Y = 2.8796 + 0.1260^*t$$

(0.0214)

$$r = 0.8406, \quad \text{LGR} = 3.04\%$$

* Significant at 5 percent probability level.

From the above equation, the co-efficient of 't', i.e., the value of 'b' is 0.1260. It expresses that there is an increasing trend in female real wage rate in Chittoor division. An average of 0.13 rupees of female real wage rate is increasing every year during the study period. But this increase is significant. The effect of time (t) on female real wage rate (y) is shown by the value of 'r'. The value of 'r' is 0.8406. It indicates that, 84.06 percent of variation in female real wage rate is observed by the time element. The linear growth rate is estimated and it is 3.04 percent. This tells that the average annual female real wage rate is increased by 3.04 percent. The value of intercept term 'a' is 2.8796.



The estimated linear regression equation of male money wage rate in Chittoor division is

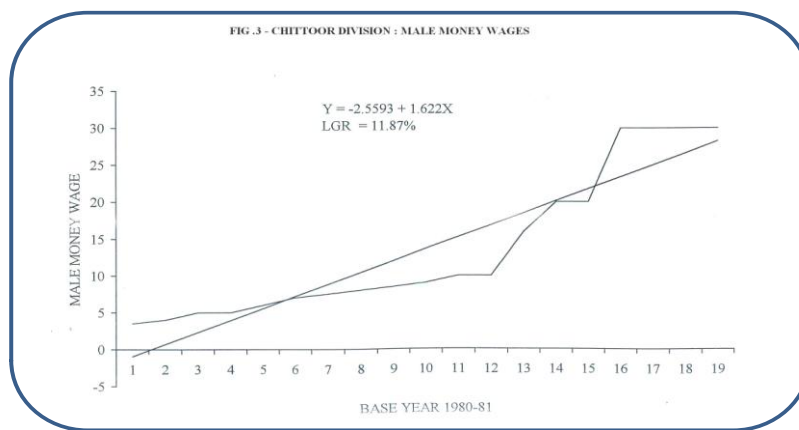
$$Y = -2.5593 + 1.622^*t$$

(0.1603)

$$r = 0.9260, \quad \text{LGR} = 11.87\%$$

* Significant at 5 percent probability level.

From the above equation, the co-efficient of 't', i.e., the value of 'b' is 1.622. It tells that there is an increasing trend in male money wage rate (Y) in Chittoor division. An average of 1.62 rupees of male money wage rate is increasing every year during the study period. But this increase is significant. The effect of time (t) on male money wage rate is shown by the value of 'r'. The value of 'r' is 0.9260. It indicates that, 92.6 percent of variation in male money wage rate is observed by the time factor. The linear growth rate is estimated and it is 11.87 percent. This shows that the average annual percentage of male money wage rate is increased by 11.87 percent. The value of constant term 'a' is - 2.5593.



The estimated linear regression equation of male real wage rate in Chittoor division is

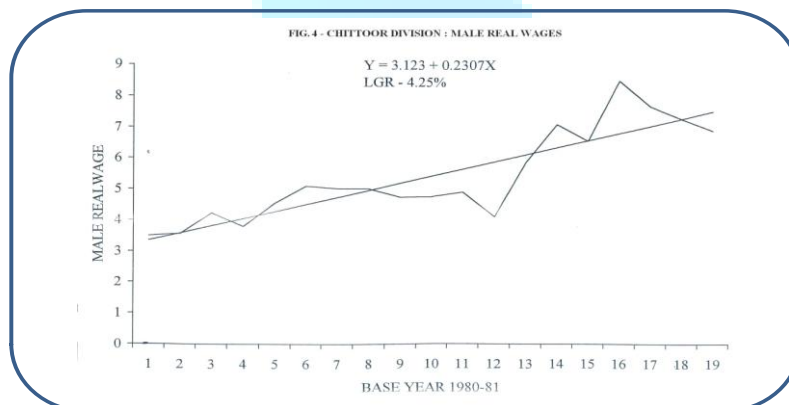
$$Y = 3.123 + 0.2307t$$

(0.031)

$$r = 0.8735, \quad \text{LGR} = 4.25\%$$

* Significant at 5 percent probability level.

From the above equation, the co-efficient of 't', i.e., the value of 'b' is 0.2307. It indicates that there is an increasing trend in male real wage rate in Chittoor division. An average of 0.23 rupees of male real wage rate (Y) is increasing every year during the study period. But this increase is significant. The effect of time on male real wage rate is shown by the value of 'r'. The value of 'r' is 0.8735. It indicates that, 87.35 percent of variation in male real wage rate is observed by the time factor. The linear growth rate is estimated and it is 4.25 percent. This expresses that the average annual percentage of male real wage rate in Chittoor division is increased by 4.25 percent. The value of intercept term 'a' is 3.123.



TIRUPATI DIVISION:

The estimated linear regression equation of female money wage rate in Tirupati division is

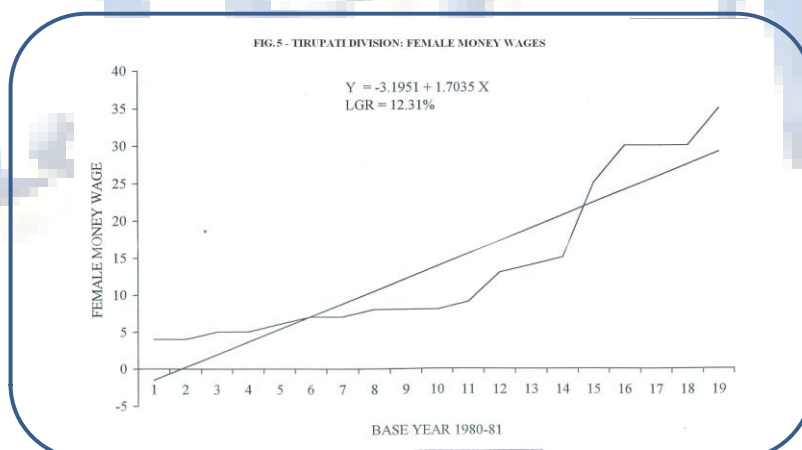
$$Y = -3.1951 + 1.7035t$$

(0.1858)

$$r = 0.9120, \quad \text{LGR} = 12.31\%$$

* Significant at 5 percent probability level.

From the above equation, the co-efficient of 't' is 1.7035. It reveals that there is an increasing trend in female money wage rate in Tirupati division. It means that average annual increase in female money wage rate is 1.70 rupees. But this increase is significant. The effect of time on female money wage rate (Y) is shown by the value of 'r'. The value of 'r' is 0.9120. It indicates that, 91.20 percent of variation in female money wage rate is observed by the time element. The linear growth rate is estimated and it is 12.31 percent. It reveals that the average annual increase in female money wage rate is 12.31 percent. The value of intercept term is - 3.1951.



The estimated linear regression equation of female real wage rate in Tirupati division is

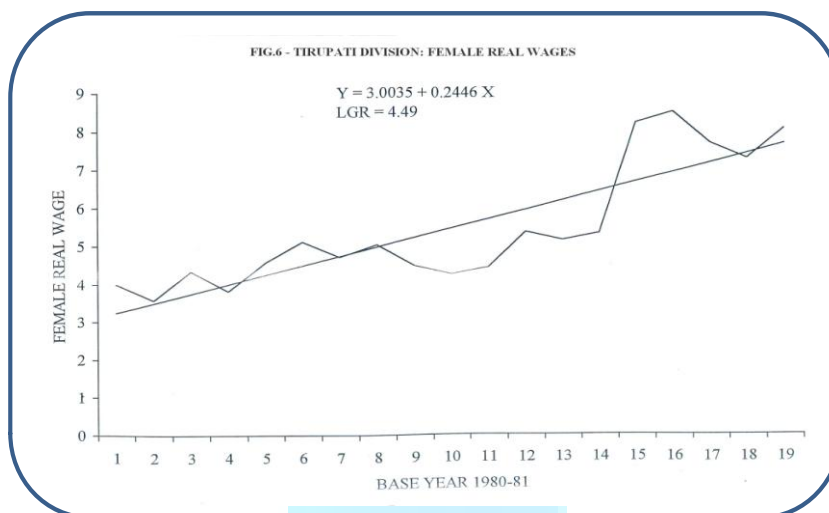
$$Y = 3.0035 + 0.2446t$$

(0.0365)

$$r = 0.8517, \quad LGR = 4.49\%$$

* Significant at 5 percent probability level.

From the above equation, the coefficient of 't', i.e., the value of 'b' is 0.2446. It expresses that there is an increasing trend in female real wage rate in Tirupati division. Every one year increase in time will increase 0.24 rupees of female real wage rate during the study period. But this increase is significant. The effect of time on female real wage rate is shown by the value of 'r'. The value of 'r' is 0.8517. It indicates that 85.17 percent of variation in female real wage rate is observed by the time element. The linear growth rate is estimated and it is 4.49 percent. This shows that the average annual growth in female real wage rate is 4.49 percent. The value of constant term 'a' is 3.0035.



The estimated linear regression equation of male money wage rate in Tirupati division is

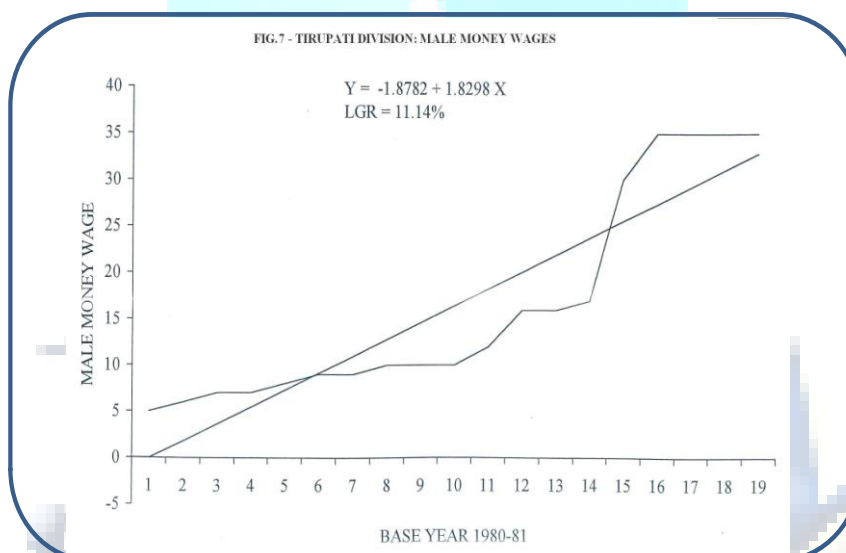
$$Y = -1.8782 + 1.8298t$$

(0.2027)

$$r = 0.9096, \quad LGR = 11.14\%$$

* Significant at 5 percent probability level.

From the above equation, the co-efficient of 't' is 1.8298. It reveals that there is an increasing trend in male money wage rate in Tirupati division. The estimated co-efficient expresses that, an average of 1.83 rupees of male money wage rate is increasing every year. But this increase is significant. The effect of time on male money wage rate is shown by the value of 'r'. The value of 'r' is 0.9096. It indicates that 90.96 percent of variation in male money wage rate is observed by the time factor. The linear growth rate is estimated and it is 11.14 percent. This indicates that average annual growth in male money wage rate is 11.14 percent. The value of intercept term 'a' is -1.8782.



The estimated linear regression equation of male real wage rate in Tirupati division is

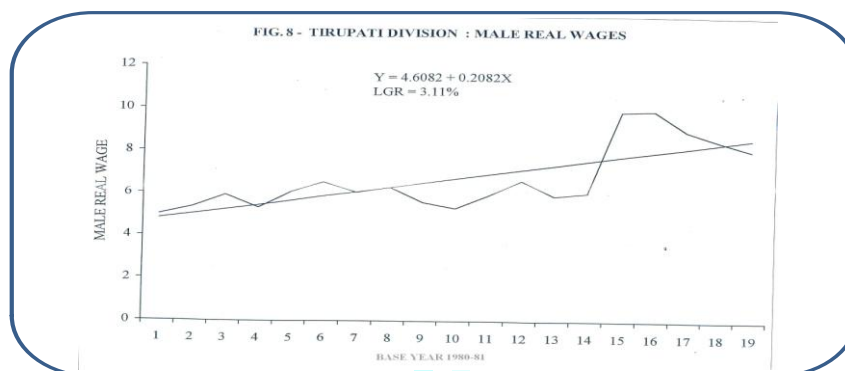
$$Y = 4.6082 + 0.2082t$$

(0.0441)

$$r = 0.7534, \quad LGR = 3.11\%$$

* Significant at 5 percent probability level.

From the above equation, the co-efficient of 't' is 0.2082. It expresses that there is an increasing trend in male real wage rate. An average of 0.21 rupees of male real wage rate is increasing every year during the study period. But this increase is significant. The effect of time on male real wage rate is shown by the value of 'r'. The value of 'r' is 0.7534. It indicates that 75.34 percent of variation in male real wage rate is observed by the time element. The linear growth rate is estimated and it is 3.11 percent. It reveals that the average annual growth rate in male real wage rate is 3.11. The value of constant term 'a' is 4.6082.

**MADANAPALLE DIVISION**

The estimated linear regression equation of female money wage rate in Madanapalle division is

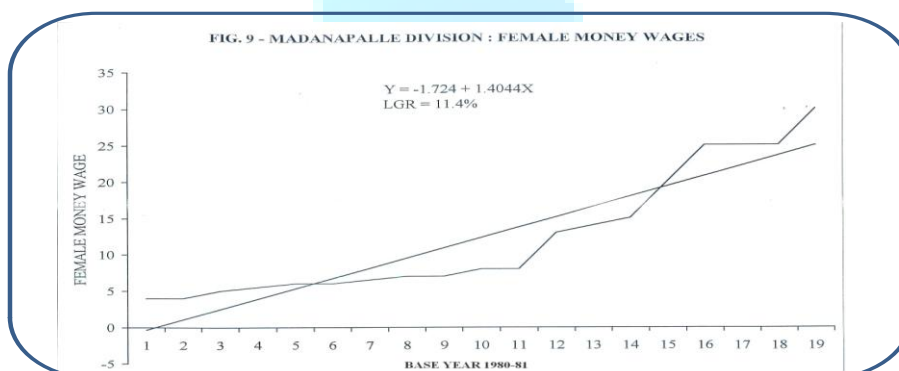
$$Y = -1.7240 + 1.4044t$$

(0.1379)

$r = 0.9262$, LGR = 11.4%

* Significant at 5 percent probability level.

From the above equation, the estimated regression co-efficient of 't' is 1.4044. It reveals that there is an increasing trend in female money wage rate in Madanapalle division. From this estimated co-efficient, it is observed that the female money wage rate is increasing, 1.40 rupees every year. But this increase is significant. The effect of time on female money wage rate is shown by the value of 'r'. The value of 'r' is 0.9262. It indicates that 92.62 percent of variation in female money wage rate is observed by the time element. The linear growth rate is estimated and it is 11.4 percent. It tells us that, the average annual growth in female money wage rate is 11.4 percent. The value of intercept term 'a' is -1.7240.



The estimated linear regression equation of female real wage rate in Madanapalle division is

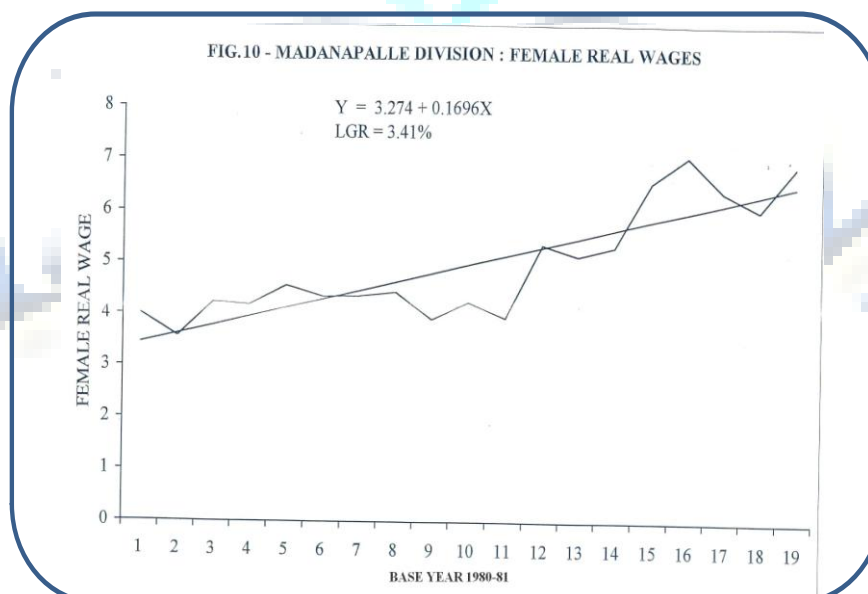
$$Y = 3.2740 + 0.1696t$$

(0.0246)

$r = 0.8584$, LGR = 3.41%

* Significant at 5 percent probability level.

From the above equation, the value of 'b' is 0.1696. It expresses that, there is an increasing trend in female real wage rate in Madanapalle division. The annual increase in female real wage rate is 0.17 rupees. But this increase is significant. The effect of time on female real wage rate is 0.8584. It is indicated by the correlation value. About 85.84 per cent of variation in female real wage rate is observed by the time factor. The linear growth rate is estimated and it is 3.41 percent. It indicates that the average annual growth in female real wage rate is 3.41 percent. The value of constant term 'a' is 3.2740.



The estimated linear regression equation of male money wage rate in Madanapalle division is

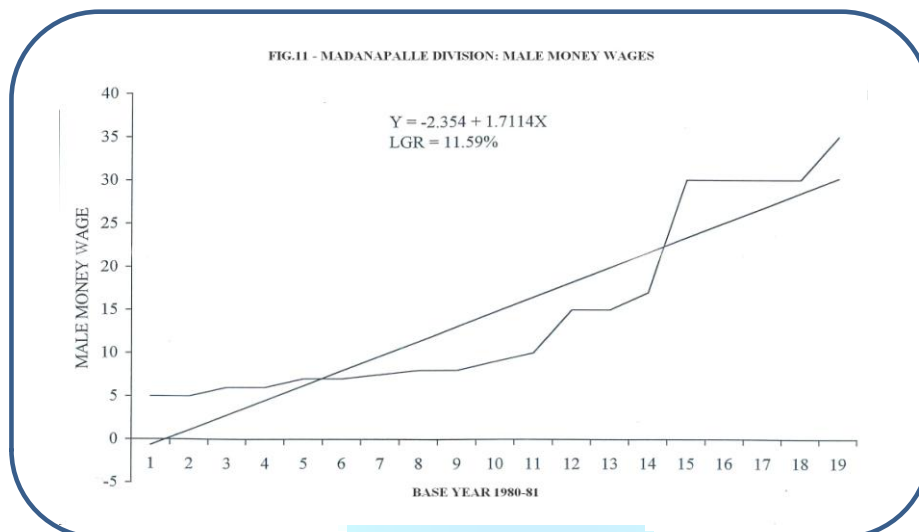
$$Y = -2.3540 + 1.7114 \cdot t$$

(0.1870)

$$r = 0.9118, \quad \text{LGR} = 11.59\%$$

* Significant at 5 percent probability level.

From the above equation, the regression co-efficient of 't' i.e., the value of 'b' is 1.7114. An increasing trend in male money wage rate is observed in Madanapalle division. An average of 1.71 rupees male money wage rate is increasing every year during the study period. But this increase is significant. The effect of time variable on male money wage rate is expressed by the correlation co-efficient 'r'. The value of 'r' is 0.9118. Therefore, 91.18 percent of variation in male money wage rate is observed by the time element. The linear growth rate is estimated and it is 11.59 percent. This shows that the average annual increase in male money wage rate is 11.59 percent. The value of constant term 'a' is -2.3540.



The estimated linear regression equation of male real wage rate in Madanapalle division is

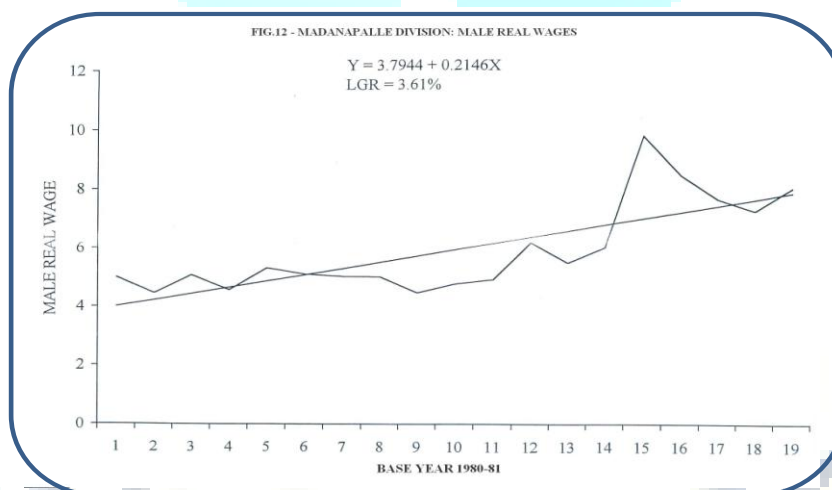
$$Y = 3.7944 + 0.2146 \cdot t$$

(0.0447)

$$r = 0.7690, \quad \text{LGR} = 3.61\%$$

* Significant at 5 percent probability level.

From the above equation, the estimated co-efficient of time variable is 0.2146. The positive and significant co-efficient says that there is significant increase in male real wage rate in this division. About 0.22 rupees of male real wage rate is increasing every year. But this increase is significant. The relation between time and male real wage rate is shown by the value of 'r'. The value of 'r' is 0.7690. Therefore 76.90 percent of variation in male real wage rate is observed by the time factor. The linear growth rate is estimated and it is 3.61 percent. This reveals that the average annual increase in male real wage rate is 3.61 percent. The value of intercept term 'a' is 3.7944.



CHITTOOR DISTRICT

The estimated linear regression equation of female money wage rate in Chittoor district as a whole is

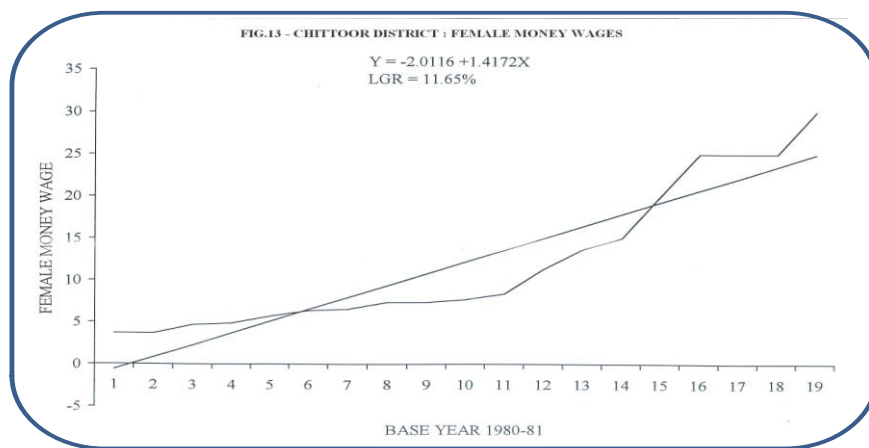
$$Y = -2.0116 + 1.4172 \cdot t$$

(0.1379)

$$r = 0.9281, \quad \text{LGR} = 11.65\%$$

* Significant at 5 percent probability level.

From the above equation, the estimating value of 'b' is 1.4172. There is an increasing trend in female money wage rate. An average of 1.42 rupees of female money wage rate is increasing every year during the study period. But this increase is significant. The effect of time on female money wage rate (Y) is shown by the value of 'r'. The value of 'r' is 0.9281. It indicates that, 92.81 percent of variation in female money wage rate is observed by the time element. The linear growth rate is estimated and it is 11.65 percent. This tells that the average annual female money wage rate is increased by 11.65 percent in the district. The value of intercept term 'a' is -2.0116.



The estimated linear regression equation of female real wage rate in Chittoor district is

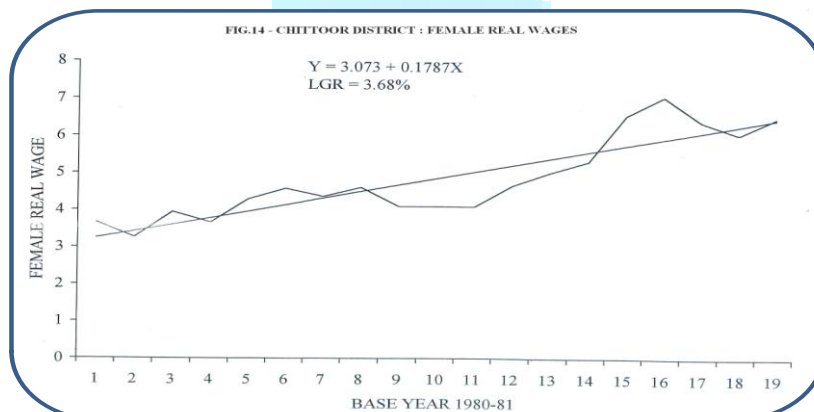
$$Y = 3.073 + 0.1787t$$

(0.0229)

$$r = 0.8842, \quad \text{LGR} = 3.68\%$$

* Significant at 5 percent probability level.

The estimated regression co-efficient of 't' is positive and significant. It indicates that there is an increasing trend in female real wage rate. About 0.18 rupees of female real wage rate (Y) is increasing every year during the study period. But this increase is significant. The effect of time on female real wage rate is shown by the value of 'r'. The value of 'r' is 0.8842. It indicates that 88.42 percent of variation in female real wage rate is observed by the time element. The estimated linear growth rate is 3.68 percent. This shows that the average annual increase in female real wage rate in the district is 3.68 percent. The value of constant term 'a' is 3.073.



The estimated linear regression equation of male money wage rate in Chittoor district is

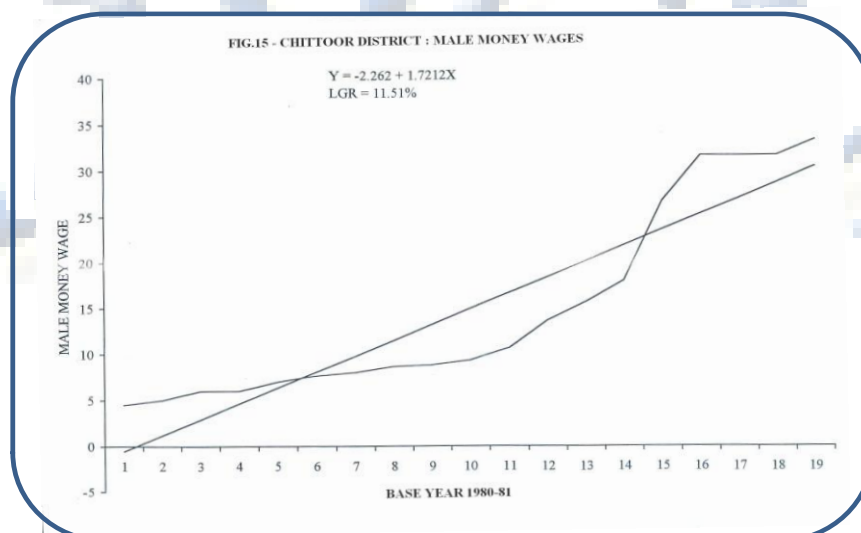
$$Y = -2.2620 + 1.7212t$$

(0.1749)

$$r = 0.9223, \quad \text{LGR} = 11.51\%$$

* Significant at 5 percent probability level.

From the fitted equation, the co-efficient of the variable 't' is 1.7212. It reveals an increasing trend in male money wage rate in entire district. Nearly 1.72 rupees of male money wage rate is increasing every year during the study period. But this increase is significant. The effect of time on male money wage rate (Y) is shown by the value of 'r'. The value of 'r' is 0.9223. It reveals that there is 92.23 percent of variation in male money wage rate. The linear growth rate is estimated and it is 11.51 percent. The average annual increase in male money wage rate is 11.51 percent. The value of intercept term 'a' is -2.2620.



The estimated linear regression equation of male real wage rate in Chittoor district is

$$Y = 3.8410 + 0.2179t$$

(0.0344)

$r = 0.8383$, LGR = 3.62%

* Significant at 5 percent probability level.

In the above equation, the estimated co-efficient of 't' is 0.2179. It is observed that there is an increasing trend in male real wage rate in Chittoor district. About 0.22 rupees of male real wage rate (Y) is increasing every year during the study period. This increase is significant. The effect of time on male real wage rate is shown by correlation co-efficient 'r'. The value of 'r' is 0.8383. Therefore 83.83 percent of variation in male real wage rate is observed by the time element. The linear growth rate is estimated and it is 3.62 percent. This shows that the average annual increase in male real wage rate is 3.62 percent. The value of constant term 'a' is 3.8410.

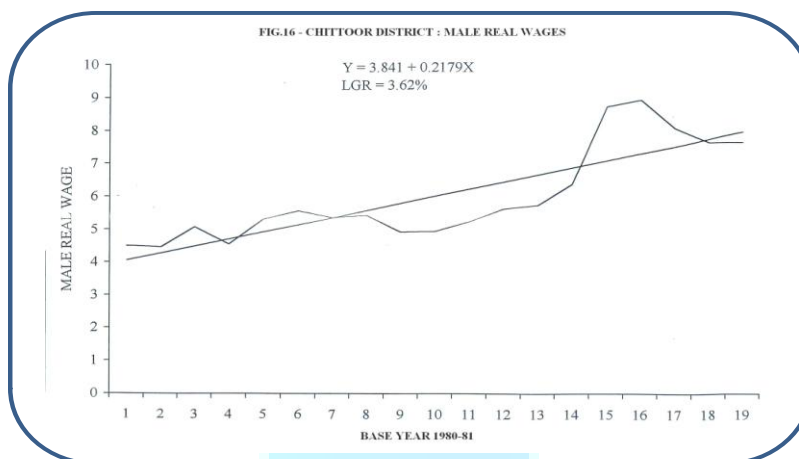


TABLE – 1: DIVISION – WISE GROWTH RATES OF FEMALE AND MALE WAGES

Particulars	Female Labour		Male Labour	
	Money Wages	Real Wages	Money Wages	Real Wages
Chittoor Division	10.60	3.04	11.87	4.25
Tirupati Division	12.31	4.49	11.14	3.11
Madanapalle Division	11.4	3.41	11.59	3.61
Chittoor District	11.65	3.68	11.51	3.62

Percentage growth rate of money wages for both male and female is more than the percentage growth rate of real wages in all divisions of Chittoor district and the district as a whole. This is due to the increase in the consumer price indices. The growth rate of female real wages is less than the growth rate of male real wages in Chittoor and Madanapalle divisions. Owing to the high demand for the male labour than the female labour, this variation in real wages may be arisen. But the growth rate of male real wages is less than the growth rate of female real wages in Tirupati division and in Chittoor district as a whole. Owing to the high demand for the female labour than the male labour, this variation in real wages may be arisen.

The growth rate of female real wages is high in Tirupati division (4.46) followed by Madanapalle division (3.41) and Chittoor division (3.04). In the case of money wages the growth rate is high in Tirupati division (12.31) followed by Madanapalle division (11.4) and Chittoor division (10.6).

The growth rates of male real wages is high in Chittoor division (4.25) followed by Madanapalle division (3.61) and Tirupati division (3.11). The same trend is also observed in the case of male money wages.

Comparing the growth rates of male and female real wages, it is observed that the growth rates of male real wages are more in Chittoor and Madanapalle divisions. This is due to more demand for male labour in these two divisions. Observing the growth rates in Tirupati division, a different trend is identified. In Tirupati division the growth rate of female real wages (4.49) is more than the growth rate of male real wages (3.11). It indicates that the higher demand for female labour than male labour in Tirupati division.

Comparing the growth rates of female real wages of Chittoor and Tirupati divisions, it is observed that the growth rate is more in Tirupati division than in Chittoor division. This is due to the reason that the rate of increase in female real wages to the rate of increase in consumer price index in Tirupati division is more than the rate of increase in female real wages to the rate of increase in consumer price index in Chittoor division.

Comparing the growth rates of female real wages of Chittoor and Madanapalle divisions, it is observed that the growth rate is more in Madanapalle division than in Chittoor division. This is due to the reason that the rate of increase in female real wages to the rate of increase in consumer price index in Madanapalle division is more than the rate of increase in female real wages to the rate of increase in consumer price index in Chittoor division.

Comparing the growth rates of female real wages of Tirupati and Madanapalle divisions, it is observed that the growth rate is more in Tirupati division than in Madanapalle division. This is due to the reason that the rate of increase in female real wages to the rate of increase in consumer price index in Tirupati division is more than the rate of increase in female real wages to the rate of increase in consumer price index in Madanapalle division.

Comparing the growth rates of male real wages of Chittoor and Tirupati divisions, it is observed that the growth rate is more in Chittoor division than in Tirupati division. This is due to the reason that the rate of increase in male real wages to the rate of increase in consumer price index in Chittoor division is more than the rate of increase in male real wages to the rate of increase in consumer price index in Tirupati division.

Comparing the growth rates of male real wages of Chittoor and Madanapalle divisions, it is observed that the growth rate is more in Chittoor division than in Madanapalle division. This is due to the reason that the rate of increase in male real wages to the rate of increase in consumer price index in Chittoor division is more than the rate of increase in male real wages to the rate of increase in consumer price index in Madanapalle division.

Comparing the growth rates of male real wages of Tirupati and Madanapalle divisions, it is observed that the growth rate is more in Madanapalle division than in Tirupati division. This is due to the reason that the rate of increase in male real wages to the rate of increase in consumer price index in Madanapalle division is more than the rate of increase in male real wages to the rate of increase in consumer price index in Tirupati division.

Comparing the growth rates of female real wages of Chittoor district and Chittoor division, it is observed that the growth rate is more in district than in Chittoor division. This is due to the reason that the rate of increase in female real wages to the rate of increase in consumer price index in Chittoor district is more than the rate of increase in female real wages to the rate of increase in consumer price index in Chittoor division.

Comparing the growth rates of female real wages of Chittoor district and Tirupati division, it is observed that the growth rate is more in Tirupati division than in the district as a whole. This is due to the reason that the rate of increase in female real wages to the rate of increase in consumer price index in Tirupati division is more than the rate of increase in female real wages to the rate of increase in consumer price index in Chittoor district.

Comparing the growth rates of female real wages of Chittoor district and Madanapalle division, it is observed that the growth rate is more in Chittoor district than in Madanapalle division. This is due to the reason that the rate of increase in female real wages to the rate of increase in consumer price index in Chittoor district is more than the rate of increase in female real wages to the rate of increase in consumer price index in Madanapalle division.

Comparing the growth rates of male real wages of Chittoor district and Chittoor division, it is observed that the growth rate is more in Chittoor division than in Chittoor district. This is due to the reason that the rate of increase in male real wages to the rate of increase in consumer price index in Chittoor division is more than the rate of increase in male real wages to the rate of increase in consumer price index in Chittoor district.

Comparing the growth rates of male real wages of Chittoor district and Tirupati division, it is observed that the growth rate is more in Chittoor district than in Tirupati division. This is due to the reason that the rate of increase in male real wages to the rate of increase in consumer price index in Chittoor district is more than the rate of increase in male real wages to the rate of increase in consumer price index in Tirupati division.

Comparing the growth rates of male real wages of Chittoor district and Madanapalle division, it is observed that the growth rate is more in Chittoor district than in Madanapalle division. This is due to the reason that the rate of increase in male real wages to the rate of increase in consumer price index in Chittoor district is more than the rate of increase in male real wages to the rate of increase in consumer price index in Madanapalle division.

CONCLUSION

Trends in agricultural wages (money and real wages) are estimated by employing the simple regression equation – wages as the function of time. Wage trends are calculated for both male and female agricultural labour separately with time. It is observed that there is significant positive trend in the both money and real wages with time (for male and female agricultural labour).

The estimated percentage growth rates of real wages for both male and female are less than the percentage growth rates of money wages. This is due to the increasing trend in consumer price indices. The growth rates of female real wages are less than the growth rates of male real wages in Chittoor and Madanapalle divisions. But the growth rates of male real wages are less than the growth rates of female real wages in Tirupati division as well as in Chittoor district as a whole.

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TOTAL QUALITY MANAGEMENT: AN EMPIRICAL INVESTIGATION OF ISO CERTIFIED COMPANIES IN HYDERABAD

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ABSTRACT

The management in TQM implies that it's a management approach, not just a narrow quality control or quality assurance function. TQM is a very people oriented and has many implications for the study and application of organizational behavior. Some principles and practices of TQM may differ among firms and industries, but there is unanimous agreement as to the importance of leadership by management in implementing TQM. Such leadership is a pre-requisite to all strategy and action plans. Accordingly the objective of the paper is to empirically investigate the impact of leadership behavior on the success of TQM. This study limited to ISO certified companies in HYDERABAD. The sample of study consisted 180 executives and managers who are working under functional heads. The researcher used convenience sampling in selecting the subjects. The instrument used in the study was a survey questionnaire. The Correlation analysis explained a positive moderate relationship between leadership and success of TQM ($r=0.531$, $p=0.000$) That is leadership behavior of an organization is positively related to the success of TQM. According to the regression analysis, 28.2% of success of TQM is accounted for by leadership behavior. Accordingly this study implies that, the senior leaders should serve as role models in planning, communication, coaching, review of organizational performance, and employee recognition. As role models, they can reinforce values and expectations while building leadership, commitment, and initiative throughout the organization.

KEYWORDS

Total Quality Management, Leadership, Success of Total Quality Management.

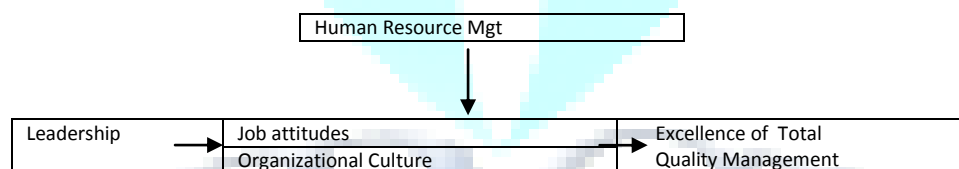
INTRODUCTION

Wilkland (1989) argues that after the industrial revolution of the nineteenth century and the computing revolution of the early 1980s "we are now without doubt in the midst of quality revolution" (**Wilkinson, et al, 1998**). Development in the product markets; technology, and legislation have led employers to search for new strategies and structures. Accordingly product and service quality are high on the agenda of both private and public sector organizations with quality certification and Total Quality Management emerging as key concerns. (**Wilkinson,1996**). TQM is a management approach of an organization centered on quality based on the participation of all of its members aiming at long term success through customer satisfaction and benefits to all members of the organization and to the society (**ISO 8402**). Accordingly TQM is an organization wide approach to continuously improving the quality of all the organizations, processes, products and services (**Kotler, 2000**)

Having discussed what is meant by TQM, we can look in at the two aspects of the TQM namely Hard and Soft aspects. (**Wilkinson,1998**). The hard aspect reflecting the production orientation of the quality 'gurus' emphasizes systems, data collection and measurement. It involves a range of production techniques including statistical process control, changes in the layout, design processes and procedures of the organization, and use of the seven basic TQM tools used to interpret data. (Process Flow Charting, Tally Charts, Pareto Analysis, Scatter Diagrams, Histograms, Control Charts and Cause and Effect Analysis). The soft side focuses on the management of human resources in the organization and lays particular emphasis on the need to change the culture. TQM thus emphasizes both production oriented and employee relations oriented elements.

Accordingly the management in TQM implies that TQM is a management approach, not just a narrow quality control or quality assurance function. It should be remembered that every one in the organization is involved in TQM not just project head. In other words TQM is a very people oriented and has many implications for the study and application of Organizational Behavior. An extensive review of literature indicates that the leadership, conducive work culture and positive attitudes of employees as the major factors that affect the excellence of TQM.

FIGURE: 1- MAJOR FACTORS WHICH AFFECT THE EXCELLENCE OF TQM



Source: Author developed

Some principles and practices of TQM may differ among firms and industries, but there is unanimous agreement as to the importance of leadership by top management in implementing TQM. Such leadership is a pre-requisite to all strategy and action plans. According to Juran (1989) it cannot be delegated. Those firms that have succeeded in making total quality work for them have been able to do so because of strong leadership (Juran, 1989) If moral integrity is fundamental to TQM, the TQM is the means by which it is expressed. Leadership is defined in the context of TQM as providing and driving the vision. (Mittal,1999,p:200)

DIMENSIONS

According to Schmidt and Finnigan (1992), there are twelve behaviors that successful quality leaders demonstrate. They were considered as the dimensions of the leadership behavior. These dimensions are,

- D₁ - Giving priority attention to the needs of external and internal customers
- D₂ - They empower rather than control
- D₃ - They emphasize improvement rather than Maintenance
- D₄ - They emphasize prevention rather than correction
- D₅ - They encourage collaboration rather than Competition
- D₆ - They train and coach, rather than direct and Supervise
- D₇ - They learn from problems

- D₈ - They continually try to improve communications
 D₉ - They continually demonstrate their commitment to quality
 D₁₀ - They establish organizational systems to support the quality effort.
 D₁₁ - They encourage and recognize team effort.

According to the theory TQM success is measured in five main areas of effectiveness, efficiency, productivity, quality, and non quality related measures such as defects, error rates, cost of poor quality and deliveries not on time etc (Oakland, 1995, Pp.173-187) For the purpose of the research the researcher has given his own operational definition for the success of TQM. That is TQM success is measured in terms of employee perception of the quality. Accordingly TQM success is the perception of a person to see in the production of the final product that, he should be educated in the process and should be participated with full authority and self control with the intention of being innovative, so that the ultimate product or service to be free of errors in accordance with the current prevailing quality concepts. There are seven dimensions identified for the measurement of success of TQM. They are,

- D₁ - Educative Process
 D₂ - Participative structures (Quality Circles, Action Teams etc.)
 D₃ - Greater autonomy and self control
 D₄ - Decreasing trend of errors towards zero defects
 D₅ - Adherence to quality concepts
 D₆ - Creativeness or innovativeness
 D₇ - Perception of customer satisfaction.

OBJECTIVE OF THE STUDY

The objective of this paper is to empirically investigate the impact of leadership behavior on the success of Total Quality Management. Accordingly this paper examined the following research question.

Does the leadership behavior have an impact on the success of TQM?

METHODOLOGY

THE SAMPLE

The sample of study consisted 180 executives and managers who are working under functional heads of operations, marketing, human resources, and finance departments. The researcher used convenience sampling in selecting the subjects. The subject community has all the characteristics of the type needed for in-depth study of this topic.

INSTRUMENTATION

The instrument used in the study was a survey questionnaire which consists 49 questions. The leadership behavior has been measured by a 27 item questionnaire which has been originally devised by the Xerox for its management performance survey. (Besterfield *et al*, 2005, P.51) The success of TQM has been measured by a 15 item questionnaire originally devised by the researcher for this specific study. Of 49 questions, seven were designed to gather background information of the respondents.

DATA COLLECTION AND ANALYSIS

Two hundred questionnaires along with a covering letter were distributed among the selected sample of managers and executives. It explained the purpose of the study and the importance of the participation of the employees in responding to the questionnaires.

The first stage of data analysis involved computing descriptive statistics as frequencies and percentages for analyzing characteristics of the subjects. Second a reliability analysis was done to check whether the questionnaires measure the variables reliably. The Alpha values were calculated for the same purpose. If the Alpha values are greater than 0.5, the questionnaires measure the variables reliably. (leadership questionnaire and success of TQM questionnaire) Third a factor analysis was performed to find out the dimensions of each variable, how questions are grouped to dimensions, to find out whether any unwanted questions can be eliminated from the questionnaire. Finally the simple correlation analysis was performed to identify the relationship between leadership and success of TQM.

RESULTS

QUESTIONNAIRE RESPONSES AND THE PROFILE OF EMPLOYEES

There were 185 responses from the 200 questionnaires. It is a response rate of 93%, which is at a satisfactory level. However 180 questionnaires were selected for this analysis. It shows that 80% of the respondents were male employees while the rest were female employees. The majority of the employees appear to be within the age group of 36-50 (60%). The highest number of respondents have been employees with GCE (A/L) qualification (48%) while rest 30% and 22% of employees were degree qualifications and GCE (O/L) respectively. The respondents have been from majority group having job experience of 6-10 years. There were 85% of married and 15% unmarried employees in the sample.

RELIABILITY ANALYSIS AND FACTOR ANALYSIS

A reliability analysis was done to check whether each Questionnaire measure the variables reliably. The Chronbach's Alpha value was measured for this purpose. The results reveal that the questionnaires measure the variables reliably.

TABLE 1: SUMMARY OF RELIABILITY ANALYSIS

	Questionnaire	Alpha Value	Comment
01	Leadership Behavior Questionnaire	0.7647	acceptable
02	Success of TQM Questionnaire	0.6832	acceptable

Source: Survey data

Factor analysis is a statistical procedure to take a large number of constructs and reduce them to a smaller number of factors that describe this measure. A 'factor' is a combination of questions where shared correlation explains a certain amount of total variance. After rotation, factors are designed to demonstrate underlying similarities between groups of variables.

Three measures were considered for the analysis.

- (1) Kaiser – Meyer – Olkin Measure of Sampling adequacy

KMO measure is acceptable, (KMO = 0.756) since it is higher than 0.5. Therefore the distribution of data is acceptable for performing the factor analysis.

- (2) Bartlett's test of sphericity

Bartlett's test of sphericity: Significance = 0.000. This result is acceptable since data do not differ significantly from multivariate normal. That is the chance to differ occurs at $p = 0.000 < 0.05$.

- (3) Component Matrix

At the beginning there were two components. But, after extracting, two variables come under one component. Therefore the entire set of questionnaire is unidimensional. It means that the questionnaire has equally measured all of the variables.

DESCRIPTIVES

The Standard Error of Mean (SEM) is less than 3.5% for all variables and the highest standard Error of mean is for leadership behavior (2.6%). The success of TQM has the highest average scores. Overall averages are above 03, and it implies that successfulness of all factors.

The following table shows a summary of the descriptives.

TABLE 2: SUMMARY OF DESCRIPTIVES

	Mean	Standard Deviation	Remarks
Leadership	4.08	0.343	Highest dispersion : Points scattered away from the mean
Success of TQM	4.15	0.248	Points scattered some what close to the mean.

Source: Survey Data

CORRELATION ANALYSIS

Scatter plots were taken to identify relationship of success of TQM with the leadership. The correlation between leadership and success of TQM is positive and significant at 1% significance level since $r = 0.530$ and $P = 0.000$.

The results of the scatter plots are commented as follows.

TABLE 3: COMMENT ON SCATTER PLOTS

Variables Involved	Correlation Co-efficient(r).	Comments
Leadership-Success of TQM	0.530	A positive correlation The points are much scattered around a straight line

Source: Survey Data

REGRESSION BETWEEN LEADERSHIP BEHAVIOUR – SUCCESS OF TQM

The analysis gives the following information.

1. $R = 0.531$, which means a moderate gradient regression line.
2. $R^2 = 0.282$, means 28% of the variance of success of TQM was accounted for by leadership.
3. Sum of squares figures explain a larger proportion of unexplained variance than explained variance.
4. $\text{Sig } F = 0.000$, which shows that a particular “F” value could occur by a chance of less than 1 in 1000.

TEST OF HYPOTHESIS

The hypothesis states as follows

“Leadership behavior of an organization is positively related to the success of TQM.”

Correlation analysis explained a positive relationship between leadership and success of TQM ($r = 0.531$, $P = 0.000$). Regression analysis also supports this by giving a value, ($B_3 = 0.236$). Hence leadership is a predictor of success of TQM ($F = 35.189$, 0.000). Hence the decision is, leadership behavior is a predictor of success of Total Quality Management.

DISCUSSION

The study reveals a moderate relationship between leadership and success of TQM ($r = 0.531$, $P = 0.000$). This is significant at 1% significance level. Hence leadership is reflected on success of TQM. The simple regression analysis describes that leadership has a positive impact on success of TQM with the strength of $B = 0.384$ ($F = 69.423$, $P = 0.000$). The leadership behavior gives a measure of success of TQM and it has a 28.2% accuracy of predicting. That is 28.2% of success of TQM is accounted for, by leadership behavior.

The distribution of the leadership shows that the Mean and standard Deviation are at favorable levels. (Mean = 4.0789, Standard Deviation = 0.3425). The Standard Deviation shows that all senior managers' leadership behavior is committed on the quality at plus or minus 0.3425 Standard Deviation level.

CONCLUSION

As far as the role of TQM leader is concerned, every managers are responsible for quality; specially senior management and the CEO, however, only latter can provide the leadership system to achieve results. Senior management has numerous responsibilities. They must practice the philosophy of management by wondering around. Management should get out of the office and visit the customers, suppliers and departments within the organization, so that managers learn what is happening with a particular customer, supplier or project. The idea is to let employees think for themselves. Senior management's role is no longer to make the final decision, but to make sure the team's decision is aligned with the quality statements of the organization. Push problem solving and decision making to the lowest appropriate level by delegating authority and responsibility. The needed resources must be provided to train employees in the TQM tools and techniques, the technical requirements of the job, appropriate equipment and security.

Senior managers must find time to celebrate the success of their organization's quality efforts by personally participating in award and recognition ceremonies. One of the duties of the managers is to establish or revise the reorganization and reward system. Senior managers must be visibly and actively engaged in the quality effort by serving on teams, coaching teams, and teaching seminars. They should lead by demonstrating, communicating, and reinforcing the quality statements. As a rule of thumb, they should spend about one third of their time on quality (Besterfield, 2003, P.32). A very important role of senior managers is listening to internal and external customers and suppliers through visits, focus groups and surveys. This information is translated in to core values and process improvement projects. Another very important role is the communication. The objective is to create awareness of the importance of TQM and provide TQM results in an ongoing manner. The TQM implementation process beings with senior management. Leadership is essential during every phase of the implementation process and particularly at the start.

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AN EMPIRICAL ANALYSIS OF CONTRIBUTION PENSION SCHEME ON RETIREES' BENEFITS IN NIGERIA

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ABSTRACT

Pension reforms were put in place to cater for old age, dwindling strength and to provide for one's sustenance after the hay days. However, lack of funding budget allocation, sustainable outstanding pension liabilities bankruptcy and ghost pensioners have contributed to the lingering pension crisis. This paper seeks to evaluate whether or not contributory pension scheme has an impact on retirees' social and economical life. In line with objective two hypotheses were formulated. The technique of data analysis in the study was the Chi-square used to compute frequency tables. We conclude that contributory pension scheme has positive impact on retirees' social and economic life in Nigeria. The study recommends an effective monitoring, enforcement of provisions of the pension reform Act, 2004 and the application of penalties for non-compliers no matter their status.

KEYWORDS

Contributory Pension, Retirement benefits, retirees, Act2004, Nigeria.

INTRODUCTION**BACKGROUND TO THE STUDY**

The inevitability of ageing has made retirement a natural phenomenon in the world of work. The significance of work lies in the fact that it determines that social and economic status of an individual and influences, philosophy, attitude, dressing, behavior and belief of an individual.

Pension is the amount that the employer set aside for the employee to ensure that at retirement the employee is able to fall back on something as income (Ahmad, 2006). It is the amount that is paid at regular intervals to a pension or his surviving dependants at death in consideration of his past services, age or an injury sustained and it is fixed in nature.

Pension plan according to Ahmad (2006) date back to the early 1900s. Because of harsh economic conditions the public has a need for security and as an added measure to social security; pension plan began to take greater significance in people's mind.

Pension plans became a notable part of industry since 1940s. The introduction of Pension Reform Act (PRA) 2004 gave the need to properly manage pension reform in Nigeria which made the traditional way of pension (defined benefit scheme) copied from Chile to be obsolete since the introduction of contributing pension scheme (CPS) each employee can track his or her pension contribution and how the pension fund administrator are investing the fund.

The right to receive pension may be seen as the victory of labour in their fight with the employer over employee exploitation. Due to the advent of pensionable employment, the attractiveness of any employment contract is being determined in terms of whether it is pensionable or not because labour had to look forward to the enjoyment of a favourable welfare package when he leaves employment due to old age or disability.

Non-pensionable jobs pay higher current salaries/ wages than the pensionable ones.

Governments all over the world get involved in pension matters by laying down the legal framework, institutionalizing pension funds management and regulation of pension schemes. Nigeria government recently overhauled the legal framework for pension administration by promulgating the Pension Reform Act (PRA 2004). The PRA (2004) contains the policies of the government to give an end to problems embattling pension administration in Nigeria. Also many countries have chosen to take various forms of contributory pension scheme where employers and their employees are supposed to pay a certain percentage of the employee's monthly salaries/ to a Retirement Savings Account (RSA) from which they would be drawing their pension benefits after retirement due to the difficulty of administering defined benefit scheme copied from Chile model. Besides, pension funds are now among the most important institutional. Retirees during defined benefit scheme experience difficulties when they are to receive pension benefits, resulting to accumulated arrears. Poor documentation and filling in pension offices, incompetent and inexperienced pension staff, poor human relations and etiquette resulted in the long delay of payment of the pension to the beneficiaries.

It is therefore against this backdrop that the study attempts to appraise contributory pension scheme the retirees on social and economic benefits of retired public servants in Nigeria. This paper is organized into five (5) sections. Following the background of the study is the review of related literature. Section three discusses the methodology employed by the researcher to conduct the study. Section four is data presentation and analysis while section five gives findings, conclusion and recommendations.

STATEMENT OF THE PROBLEM

Pension scheme management in Nigeria is swamped/ overwhelmed by a lot of diverse problems. One key problem is the lack of adequate funding, because of inadequate budgetary allocations to government parastatals and institutions which have made them not to succeed in setting aside the recommended 25% for pension scheme from the total emoluments of their employees.

Another dimension of the problem are situation where pension funds are released directly to underwriters without the awareness of pension board of trustee, poor management style in pension offices, incompetent and inexperienced pension staff, poor human relations. Other problems were red tapism caused by bureaucracies, economic downturn, gross abuse of pensioners and pension funds.

Also another major problem embattling administration of pension fund in Nigeria is the non-payment or delay in pension and gratuity payment by the federal, state and local governments for instance the pension arrears was put at about #2.56 trillion as at December, 2005. In fact, pension fund administration became a thorny issue which makes millions of pensioners to live in abject poverty (Orifowomo, 2006).

OBJECTIVES OF THE STUDY

The board objective of this research work is to assess the impact of pension scheme on retirees social and economic benefit in Nigeria. The specific objectives of this study are:

- To examine the effect of effective management of pension scheme on employees' welfare in Nigeria.
- To investigate effect of contributory pension scheme on economic life of pensioner in Nigeria.

RESEARCH HYPOTHESIS

Ho₁: There is no positive relationship between effective management of pension schemes and retirees' welfare in Nigeria.

Ho₂: Pension scheme has no economic benefits to pensioners.

LITERATURE REVIEW

HISTORY OF PENSION SCHEME IN NIGERIA: AN OVERVIEW

The origin of pension in Nigeria is controversial. However, the privilege of receiving gratuity and pension appears the manifestation of victory of labour in his fight with the employers over exploitation. Nigeria's first ever legislative instrument on pension matters was the pension ordinance of 1951, which had retrospective effect from 1st January, 1964. The national provident fund (NPF) scheme established in 1961 was the first legislation enacted to address pension matters of private organizations. Eighteen (18) years later, the pension Act No.102 of 1979 as well as the armed forces pension Act No. 103 were established.

The police and other Government Agencies' pension scheme were enacted under pension Act No. 75 of 1987, followed by the local Government Pension Edict which culminated into the establishment of the Local Government staff Pension Board of 1987. The National Social Insurance Trust Fund (NSITF) scheme was established in 1993 to replace the defunct NPF scheme with effect from 1st July, 1994 to cater for employees in the private sector of the economy against loss of employment income in old age or death. Prior to the pension Reform Act 2004, most public organizations operated a Defined Benefit (Pay-as-you-go) scheme. Final entitlement was based on length of service and terminal emoluments. The Defined Benefit (BD) scheme was funded by Federal Government through budgetary allocation, and administered by pensions Department of the office of Head of service of the Federation (Balogun, 2006).

However, the pension scheme became a great problem on the government as it could no longer cope with the payment of pension and gratuity to retirees. This was seen due to the fact that there was no plan put in place to forestall this problem. Therefore, managing and administering pension funds have continue to pose a major challenge to government in Nigeria (Okotoni and Akeredolu, 2005). Yet pension which guarantees an employee certain comfort in his or her inactive year is critical to the sustenance of the life of the individual and the society (Nkanga, 2005).

Furthermore, the pension system in Nigeria was largely characterized by pay-As-You-Go defined benefit in the public sector, which is a non-contribution pension scheme and was bedeviled by many problems. These problems really constituted a set back for the scheme as they include non-availability of records, uncoordinated administration, inadequate funding, fraudulent practices irregularities and conflicting laws, diversion of remitted or allocated fund, presence of ghost pensioners on the pension's payroll and incapacity to effectively implements budget and make adequate provisions. It became imperative to embark on reform to restore the hope of the pensioners and the entire Nigerian workers. The Federal Government of Nigeria in 2004 announced a change in the management and administration. The pension Reform Act 2004 introduced the new contributory pension scheme in the public and private sectors. The act further put in place the establishment of the National Pension Commission to regulate, supervise and ensure effective administration of Pension matters in Nigeria. The commission was meant to achieve this role by ensuring that payment and remittance of contributions are made and beneficiaries of retirement savings account are paid assets when due. Above all, the commission will ensure the safety of the pension funds by issuing guidelines for licensing, approving regulating and monitoring the investment activities of pension fund Administrator and custodians (Ahmad, 2006) and Pension Reform Act 2004.

OBJECTIVES OF CONTRIBUTORY PENSION REFORM (ACT 2004) IN NIGERIA

The following are the objectives of the new contributory pension in Nigeria as disclosed in Pension Reform Act 2004

- To ensure that every person who worked in either the public service of the federation or private sector receives his retirement benefits as at when due;
- To assist individual by ensuring that they save in order to cater for their livelihood during old age;
- To establish a uniform set of rules, regulation and standards for the administration and payments of retirement benefits for the public servants and private sector workers;
- To promote wider coverage of pension scheme in Nigeria;
- To ensure transparent and efficient management of pension funds; &
- To establish a sustainable pension scheme to empower the employees to have control over retirement Salary Accounts (RSA), promotes labour mobility and minimizes incentives for early retirement.

SALIENT ISSUE IN THE NEW CONTRIBUTORY PENSION ACT 2004

This scheme made the employees to contribute a minimum of 7.5% of their monthly emoluments and the military to contribute 2.5%. Employers contribute 7.5% in the case of the public sector and 12.5% in the case of Military. Employers and employees in the private sector have to contribute a minimum of 7.5% each of the monthly emoluments of their employees. An employer may elect to contribute on behalf of the employees such that the total contribution shall not be less than 15% of the employees. An employer is helped to deduct and remit the Contribution to Asset Custodian Committee (PAC) within 7 days from the day employee is paid his salary while the custodian shall notify the Pension Fund Administrator (PFA) within 24 hours of the receipt of contribution. Contribution and retirement benefits are tax-exempt. However, for voluntary contributions, the tax relief is only applicable if the amount contributed or [part thereof is not withdrawn before five years after the first voluntary contribution was made (Pension Reform Act, 2004) The new pension scheme is contributory, fully funded based on individual accounts that are privately managed, supervised, regulated by pension fund Administrators reliable insurance policy.

PENSION DEFINED

Different auditors have defined pension because it is not a new economic phenomena.

Olaoye (2008) defined pension as the payment made monthly to a retired officer (pensioner) who had worked for a statutory period of years and guaranteed for a minimum of five (5) years. Ahmad (2006) defined it as the amount set aside either by an employer or the employee or even both to ensure that they fall on something at retirement. It is the amount of money monthly or regularly paid by governments or companies to who is too old to work (ie. Retired). From the above definition it can be inferred that pension is an amount which a pensioner / retiree received monthly or as specified from the government or organization in which he or she has served or worked.

In addition, is a plan for the many days after retirement and also makes the retiree not to be financially shorted when he or she retires. Pension is characterized with the following pros, some of which are: the stimulation of workers productivity, motivation of workforce for higher performance, reduction in dependency rate and with cons which are but not limited to the following; lack of adequate government management, poor funding by government which does not make for regular payment of pension, killing of the initiative capacity of beneficiaries to think about better source of income and also it is a derivative of remuneration.

Pension was established for the purpose of motivating and stimulating workers for productivity, enhancing retirees' socio – economic standards, encouraging, fairly old workers to quit work so that young minds will be absorbed into the system / service.

At the date of retirement the total or gross remuneration attached to a retiring officer's grade level or rank is pensionable emoluments. (Olaoye, 2008).

It should be noted that pension are paid in arrears just like salary.

PENSION SCHEME

This is an organized way in which employee and employer pays certain amount of money regularly into pension fund while the employee was still employed.

Olurankise (2010) itemized two forms of pension scheme which are public sector and private sector schemes.

Public sector is the scheme that government funds and characterized by two benefits which are lumpsum benefit known as a gratuity and life pension payment while private sector scheme is funded by private sector scheme is funded by the private employers for their employees. It is organized more than the public sector scheme.

PENSION REFORM

Blake (2003) said that pension reform is not a new phenomenon which is in a continuous process in an ever changing economic and political process experienced in all the part of planet called earth.

PENSION FUNDING

This according to IAS19 / SAS8 as the irrevocable transfer of assets to an entity separate from the employer's enterprise to meet future obligations for the payment of retirement benefits.

It is of two types which is stated in ICAN band book SAS 8 which are defined benefit Scheme (DBS) and contributory pension Scheme (CPS). Defined benefit Scheme is the system in which the amount to be paid to pensioners are retirements are determined based on employee pensionable emolument year of service. While, contributory pension Scheme (CPS) is the Scheme in which the amount to be paid to be paid to retirees as retirement benefits are determined based on contributions made to the scheme by employer and employee together with investment earnings also contributory pension scheme, employers obligations. Usually discharged by contributions to the fund (Adesina, 2011).

In addition pension funding can also be described as the act of providing money by an employer (in defined benefit Scheme, DBS) and employer and employee in contributory scheme for employer retirement benefits at retirement.

NATIONAL PENSION COMMISSION (PENCOM)

According to Olurankise (2010) PENCOM is the highest agency that incense, administer, regulate, supervise pension fund Administrators (PFA) for effective administration of pension in Nigeria.

It was also established because of the following reason: to formulate, direct and oversee all policy on pension matters in Nigeria to investigate pension fund administrator, custodian and other party involved in the management of funds and all also, for the purpose of sanctioning erring agencies. Section 16 pensions Act 2004 give details on the composition of this commission. In a nutshell National Pension Commission (PENCOM) was set up in by pension reformed Act 2004 as administrator of Pension fund.

FUNCTIONS OF NATIONAL PENSION COMMISSION (PENCOM)

The principal objectives of the commission include the following:

- To regulate, supervise and ensure effective administration of Pension matter in Nigeria.
- To issue guidelines for the investment of Pension funds.
- To approve, regulate, supervise and license pension fund Administrators (PFA), Pension Fund Custodians (PFC) and other institutions relating to pension matters.
- To establish rules and guidelines for the management of the pension funds under the Act.
- To maintain National Data Bank on all pension matters.
- To promote capacity building for pension fund administrators and custodians.

To investigate complaints of impropriety leveled against pension fund administrator, custodians, employer and staff In addition Section 21 of Pension Act 2004 prescribed its powers which are but not limited to the following: Fix the terms, conditions and remuneration of Commission's employees, call for information on the activities of pension fund administrators (PFA) custodians and charge and collect penalties, fees or levies as specified by the Act and also do such other things that make for the efficient performance of its functions under the Act

PENSION FUND ADMINISTRATORS (PFA_s)

A pension Fund administrator is a private organization licensed by PENCOM under the Act to manage Pension funds on behalf of contributors to the scheme. The functions of PFA_s include:

- To invest and manage pension funds and assets in accordance with the provision of the Act
- To maintain books of accounts on all transactions relating to the pension funds strategy, market returns and other performance indicators to the commission and beneficiaries of the retirement saving accounts
- To provide customers services support to employees including access to employees including balance sheet and statement on demand

PENSION ASSETS CUSTODIAN (PAC)

The functions of the PAC includes the followings:

- To receive the total contribution remitted by the employer on the behalf of the pension fund administrators.
- To notify the pension fund administrator with in 24 hours of the receipt of contribution from an employee.
- Hold pension funds and asset in safe custody on trust for the employee and beneficiaries of the Retirement Saving Account (RSA).
- To settle transactions and undertake activities relating to the administration of pension investments including the collection of dividends.
- To report to the commission matter relating to the assets being held.
- To undertake statistical analysis of investments and return on investments.

RISK MANAGEMENT COMMITTEE (RCM)

The functions of risk management committee are as follows:

- To determine the risk profile of the investment portfolio of the pension fund administrator.
- To draw up programmes adjustments in the case of deviations.
- To determine the level of reserves to cover the risks of the investment portfolio.
- To advice pension fund administrator in maintaining adequate internal controls measures and procedure.

INVESTMENT STRATEGY COMMITTEE

The functions of the investment strategy committee are:

- To formulate strategies for complying with investment guidelines issued by the commission.
- To determine an optimal investment mix consistent with risk profile agreed by the board of the PFA.
- To review the performance of the major securities of the investment portfolios of the pension fund Administrator.

EMPIRICAL STUDIES

This study also attempts to review some of the arguments that arise from previous studies regarding the effect of contributory pension scheme on employee retirement benefit among firms. In the same vein, the first to conduct a research on this nature according to Wolk, etal and Dada (2003) were Deaton and Weygandt in the years 1968 to 1973. The study was conducted in US with a sample of 100 annual accounts of enterprises to study the extent of application and compliance with APB No.8 by firms using variables employees covered accounting and funding policies, pension policy, past and prior service cost and size of pension funds. They found that the financial statements of the sample firms in the US was very weak in compliance with pension standards but has been source of worries even in the developed countries (Revsine, etal, 2002) and (Klumpes and Whittington, 2003). Pension liabilities have been found to have long-term effects on a firm's profitability credit rating and the value of the firm's. Clerk etal 2000 reported that strict application of international accounting standards 19

revealed significant pension liabilities among leading German corporations. They concluded that the size of pension liabilities shown by the financial statements of most German firms affect their credit rating and share prices

Yaro. (2009) investigated the impact of pension administration on employer in Nigeria using primary data (Personal interview and detailed questionnaire). He used simple random sampling and purposive technique to determine the sample and analyzed the data gathered from the study with chi-square statistical method. Yaro discovered that pension administration has great impact on employee in Nigeria. Omotayo (2004) examined the impact of pension scheme on the socio-economic constitution of retirees (Pensioners) using secondary data (magazine and literature). He found that pension scheme will improve the socio-economic stands of retirees if properly monitored and implemented.

An elaborate study was conducted by Sule et al (2009) to examine the impact of contributory pension scheme application on employee retirement benefits of ten (10) quoted firms through the use of judgmental sampling and analyzed the data gathered from the study with t-Statistics. He discovered that contributory pension scheme was a major factor used in enhancing employees retirement benefits. In addition, they are recommended that National Pension Commission (PENCOM) should monitor, supervise and enforce effectively the provisions contained in the pension Act, 2004. Olurankinse (2010) investigated the impact of Nigeria Pension scheme in the public service using primary and secondary data (survey questionnaire, interviews and literature). He discovered that defined benefit scheme (DBS) was not properly administered which made retirees under the scheme to be neglected and recommended that pension administrators should properly monitor and administer the scheme.

Bassey et al (2010) carried out a study on the overview of the pension scheme in Nigeria. He sampled sixty (60) staffs from the University of Calabar teaching Hospital, Calabar and administered on a five point likert scale. In addition, he analyzed the gathered data with the use of Chi-square. The study revealed that pre and post 2004 pension scheme failure was caused by corruption, under funding, pension staff in competency. They recommended that pension laws should be trained and retrained and the proper internal control should be put in place in the pension reform commission.

Adebayo and Dada (2012) used cross sectional and longitudinal design to assess the management of pension scheme in Nigeria. A comparative study was carried out on pension reform prior to Obasanjo regime (Gowon, Abacha and Babangida) and Obasanjo regime. They revealed that the pension scheme (contributory pension scheme) introduced by Obasanjo regime would enhance socio-economic conditions of Retirees in Nigeria that Pre-Obasanjo regime pension scheme (defined benefit scheme). Furthermore, the contributory pension scheme was adjudged to be better and secure for retirees than defined benefit scheme. Finally, the study confirmed the recommendation of previous studies of Omotayo (2004) Sule et al (2009) and Olurankinse (2010) that only proper coordination, supervision and regulation of the pension industry would enhance the effectiveness and efficiency of pension scheme management and this would equally have a positive effect on the socio-economic standards or retirees in Nigeria.

Nyong and Duze (2011) studied the significance of pension reform Act (PRA) 2004 on retirement planning in Nigeria using explanatory design and survey questionnaires for a sample of 3000 serving teachers and teacher pensioners. They discovered that the (PRA 2004) were yet to be achieved, the reason being that retirees still suffer, pains and even death before they receive their pension benefits in Nigeria which have a negative effect on the socio-economic standards of pensioners

METHODOLOGY

The researcher carried out the study in Ondo state Nigeria based on the demographic density of the state. The research design was survey design and considered suitable because of its ability to view thoroughly the significant questions raised in the study. Based on Denscombe (2003) viewed survey research design as the efficient way of collecting information a large group of respondents and the ability to use statistical methods to determine statistical importance. Also the survey is carried out by the researcher to find out: whether the socio-economic trauma experienced by retirees in the past has been eliminated with the introduction of Pension Reform Act 2004 and whether there would adequate funding and administration of the pension scheme 2004 that would secure Nigeria workers happiness after retirement. The population of study comprised of all pensionable serving teachers and retired teachers between the ages of 50-65. The reason for this age bracket is that 50-59 for serving pensionable teachers is that they would be more focused at 60. Also for retired teachers between ages 60-65 is that based on pension Reform Act (PRA), 2004 a qualified officer shall enjoy pension for a minimum of five years. They would therefore be able to give more accurate and honest responses.

A sample size of 165 was selected from the population through multi-stage random sampling technique, made up of equal numbers of pensionable serving teachers and teacher pensioners. Both primary and secondary data were used for the study. The primary data was obtained from target respondents through the use of a well structured questionnaire. Each group contained equal numbers of males and females. In addition, well briefed assistants were employed by the researcher to help administer the questions

The research questionnaire was divided into two sections. Section A was designed to obtain information on the subject details of respondents, while section B consisted of questions measuring the view of the respondents on the socio-economic benefit of pension scheme to retirees in Nigeria. Likert type scale was used to construct the questionnaire. Respondents were required to show the extent of their agreement or disagreement with each of question in the drafted questionnaire on a score of one (1) to five (5). A score of one (1) indicates strongly disagree while five (5) represent strongly agree. The researcher use both descriptive and inferential statistics to analyze the data gathered

DATA PRESENTATION AND ANALYSIS

In this section, the researcher would compress data gathered to a size that would be easily understood to enable the extraction of new information from it. Analysis of data is the techniques where the researcher extracts from the data information to enable a summary description of the subjects studied to be made. The information extracted would be used to answer research questions and /or test research hypothesis. The result of questionnaires on impact of pension scheme on socio-economic life of retirees in Nigeria would be presented and analysis with the use of chi-square statistical tools to test the formulated hypothesis. The responses were from group of teacher's employees and retired teachers across the eighteen local government area of Ondo state, Nigeria

TEST OF HYPOTHESIS

Chi-square method was used to test the hypothesis formulated in tables 4.1 and 4.2. To calculate the expected frequency, this formula used is $C_1 = \frac{R_1 \times C_1}{E}$ and

$$\text{Chi-square formula } (X^2) = \frac{\sum (O-e)^2}{e}$$

HYPOTHESIS I

H0₁: Contributory pension reform has no positive benefits on the social welfare of the retirees

TABLE 4.1: CHI-SQUARE (X^2) ANALYSIS SHOWING THE EFFECT OF CONTRIBUTION PENSION REFORM ON THE SOCIAL WELFARE OF THE RETIREES

RESPONSES	O	E	O-E	(O-E) ²	$\frac{(O-E)^2}{E}$
SD	8	33	-25	625	18.94
D	46	3	13	169	5.12
NS	105	33	72	5184	157.09
A	5	33	-28	784	23.76
SA	1	33	-32	1024	31.03
			X^2		235.94

Source: Researchers' computation

X^2 calculated =235.94

X^2 table =9.488

Since χ^2 calculated (235.94) is greater than χ^2 tabulated (9.4888) at 0.05 level of significance. The null hypothesis (H_0) is rejected. This implies that the effect of contribution pension reform on the social contributory pension reform on the social welfare of the retirees

HYPOTHESIS 2

H_{02} : Contributory pension reform has no economic benefits to pensioners

TABLE 4.2: CHI-SQUARE (χ^2) ANALYSIS SHOWING THE EFFECTS OF CONTRIBUTORY PENSION REFORM ON THE ECONOMIC BENEFITS OF PENSIONERS

RESPONSES	O	E	O-E	(O-E) ²	$\frac{(O-E)^2}{E}$
SD	23	33	-10	100	3.03
D	83	33	50	2500	75.76
NS	43	33	10	100	3.03
A	13	33	-20	400	12.12
SA	3	33	-30	900	27.27
				χ^2	121.21

Source: Researchers' computation

χ^2 calculated = 121.21

χ^2 table = 9.488

Since χ^2 calculated (121.21) is greater than χ^2 tabulated (9.488) at 0.05 level of significance. The null hypothesis (H_0) is rejected. This implies that the effect of contributory pension reform has significance effect on the economic benefits of pensioners

FINDINGS

It is valuable to note that the interpretation of research outcome connotes a key issue in the research process. Due to this reason, the results of research must be well spelt out so that it can be reasonable and presented in such a way that it would be concisely understood. In this duration, the results of the study were used to test the hypothesis which has been presented in the previous chapter while the emerging findings were deduced with reference to specific objectives of the study.

OBJECTIVE

To appraise the contribution of pension scheme on retirees' social and economic benefits in Nigeria.

RESULT

The model was used to evaluate if contributory pension scheme had an impact on the social and economic life of the retirees sample from pensionable serving teachers and teacher pensioners in Ondo State, Nigeria. This objective was tested empirically and the result revealed that contributory pension scheme had significant impact on the social economic well being of the retirees. Similarly, it showed that the application of contributory pension scheme was a significant factor in enhancing employee's retirement/ benefits of pensionable serving teacher in Nigeria

CONCLUSION AND RECOMMENDATIONS

The broad objectives of this study were to investigate the effect of the contributory pension on employer retirement benefit of teachers in Ondo state, Nigeria. However, the contributory pension scheme was set up to be managed by pension fund administrators with benefits for employers, employees, government and society as a whole. This scheme is affected by legislation, risk management committee, investment/ strategy committee and pension fund administrators which positively affect the administration and investment opportunities for the pensioners

The results of this have revealed that there was a significant influence of contributory pension scheme on the social economic life of the retirees. We also discovered that results of the study have been consistent to the objectives of the pension reform scheme. In this direction, we have the following recommendations:

- The Government and National Pension Commission (PENCOM) must regulate and supervise, the scheme establish under the Pension Reform Act 2004.
- Government and National Pension Commission should promote capacity building and maintain National data bank for all pension matters.
- Pension operators must ensure effective implementation, compliance and application of the new contributory pension scheme that would promote employees retirement benefits.
- The regulatory agencies must enforce the implementation of the penalties provided by the Act for non compliance no matter the status of the violators.
- Government should put in place the enabling environment for smooth implementation of the scheme by firms and other operators in the pension administration.
- Vibrant legal institutions should be put in place by the government to provide support for the scheme. Pension Assets Custodian (PAC) must hold pension funds and assets in safe custody on trust for the employee and beneficiaries of Retirement Saving Account (RSA).
- On a periodic basis, a review of the performance of the major securities of the investment portfolio of the pension fund administrator should be carried out.
- Management and investment committee must determine the risk profile of the investment portfolio geared towards optimum investments that will enhance net worth and profitability of the firms.

In conclusion, the finance experts world-wide believed that contributory scheme option is the best for any economy that hopes to meet the future obligations of old age workers and to ensure their economic and social comfort after their disengagement from active service

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APPENDIX

FREQUENCIES: PENSION REFORM ACTS

FREQUENCY TABLE

Sex

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	90	54.5	54.5	54.5
Female	75	45.5	45.5	100.0
Total	165	100.0	100.0	

B1

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	8	4.8	4.8	4.8
Disagree	46	27.9	27.9	32.7
Not sure	105	63.6	63.6	96.4
Agree	5	3.0	3.0	99.4
Strongly Agree	1	.6	.6	100.0
Total	165	100.0	100.0	

B2

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	23	13.9	13.9	13.9
Disagree	83	50.3	50.3	64.2
Not sure	43	26.1	26.1	90.3
Agree	13	7.9	7.9	98.2
Strongly Agree	3	1.8	1.8	100.0
Total	165	100.0	100.0	

NPAR TESTS

CHI-SQUARE TEST

B1

	Observed N	Expected N	Residual
Strongly Disagree	8	33.0	-25.0
Disagree	46	33.0	13.0
Not sure	105	33.0	72.0
Agree	5	33.0	-28.0
Strongly Agree	1	33.0	-32.0
Total	165		

B1

	Observed N	Expected N	Residual
Strongly Disagree	8	33.0	-25.0
Disagree	46	33.0	13.0
Not sure	105	33.0	72.0
Agree	5	33.0	-28.0
Strongly Agree	1	33.0	-32.0
Total	165		

B2

	Observed N	Expected N	Residual
Strongly Disagree	23	33.0	-10.0
Disagree	83	33.0	50.0
Not sure	43	33.0	10.0
Agree	13	33.0	-20.0
Strongly Agree	3	33.0	-30.0
Total	165		

Test Statistics

	B1	B2
Chi-Square ^a	235.939	121.212
df	4	4
Asymp. Sig.	.000	.000

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 33.0.



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