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# A Fundamental Study on Brand in Business

#### Md. Sawkat Ali\*

**Abstract:** The practices of branding of products may change the business environment. Brand is an indispensable part of any modern business. The brand is not the product but its gives the products meaning and defines its identity. A brand is not just a name, static symbol, term, sign or design or a combination of them. It creates the extra loyalty and valuable qualities about product in the consumer's mind. Brand is symbolic embodiment of all the information connected to an organization, product or service and how people perceive what an organization is trying to sell. Brand requires a clear understanding of the concept of product, price, place, promotion, people, quality, color, shape, size, attributes, package, ingredient, process, weight and many more factors. Brand creates certain amount of awareness, reputation and prominence in the market place to consumer's mind. Brand helps to simplify the customer's choice, searching actual product, and minimizing risk, indicates the quality levels of product, and engender trust and so on.

**Key Words**: Awareness, Brand, Business, Consumer, Environment, Image, Impact, Reputation, Symbol etc.

#### Introduction

The concept of branding in Bangladesh existed from the pre-liberation era. The word brand is derived from the Old Norse Word brands which means" to burn" as brands were and still are the means by which owner of livestock's mark their animals to identify them . A brand can take many forms including a name, sign, symbolic, color combination, or slogan. The word has continued to evolve to encompass identity. The population of Bangladesh is increasing to explosive growth. The explosive population growth has major implications for business (it means growing human needs, more markets, sufficient purchasing power, available products and resources supply with profit margin to keep balance market). A population can be subdivided into six age groups:like pre school, school age, children, teens age, young adults age 25 to 40, middle adult age- 40 to 65, and older adults age 65 and up<sup>1</sup>. Each population group has certain and specific wants, needs, demands, perception, preferences, buying habit. Every categories of population has different sets of values and brand liking or disliking habits. Trends and demands of branding activities are rapidly increasing among the producers. The customers are currently seeking the best, easy, efficient and smooth business operations. It is absolutely crystal clear that the customers are now more expects advanced branding support to make life more fascinating, flexible, beautiful and organized. Intendances to identify the goods and services of one seller or groups of seller's and to differentiate them from those of the competition<sup>2</sup>. Brands are powerful

assets that should be carefully develop and manage. At present in all most all cases the tendency is to manage product which happen to have a brand name. The brand carries certain level of image amounts of awareness, trust, reputation, prominence.

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The brand has financial valuation in the business market. In a recent phenomenon the economic interest of brand established among the business owner. The 1980's marked a turning point in the conception of brand. The business leader came to realizes that the brand is the most precious assets<sup>3</sup>. Differences can be made a "small-b brand" and a "big b Brand" actually American Marketing Association (AMA) favors for "small-b brand" and industry owner use" big-b Brand" that is a "brand" vs. "Brand". Brand differs from company's other assets such as patents and copyrights, the best brand convey a warranty of product quality. It conveys up to six significant of meaning like, attributes, benefits, values, cultures, personality and user<sup>4</sup>. Brand represent the sum of all valuable qualities of a product to the consumer. From the consumer's psychological aspect; brand associations like thoughts, feelings, perceptions, image, experiences, beliefs, attitudes, reorganizations and so on. A brand is the identity of a specific product, service, or business<sup>5</sup>.

## Objectives

This study covers the following objectives:

- 1. To analyze the importance of branding
- 2. To understand the major reasons of branding
- 3. To provide some suggestions for branding

## Methodology

This paper discussed the fundamental study on brand. This is a conceptual & qualitative nature of study. This study discussed as product branding prospective with based on secondary information. Qualitative nature of research provides direct and indirect approaches of methods. Here indirect approach has been applied. The secondary information has been collected from different texts, journals, articles, national

and international publications, reports and internet. The collected secondary information has been incorporated properly.

### **Literature Review**

Review of literature is an important for any researcher to find out the knowledge gap. So, some of the available literatures have been reviewed in this study.

Ishtgaque Arif (The Eastern University Journal, Volume no 03, Issue-02, July2011, and ISSN No-7889) in his study entitled "Branding in Bangladesh: A Historical Perspective" highlighted the branding situation in Bangladesh. Author analyzed about the branding from the view points of historical perspective<sup>6</sup>. Farhana Tahmida Newaz (Southeast University, Journal of Business Studies Volume - 02. July- December, ISSN 1815-3267 2009) in her study entitled "Storytelling: A Strategic Tool to Communicate Brand Image." researcher discussed in storytelling that brand image depends some of aspects as experiences, values, goals and culture of the organization<sup>7</sup>. Mueksh and Soumendra (The AIUB Journal of Business and Economics (AJBE) Volume 09, No.02 August-2010 ISSN 1683-8742). The field of their studies entitled "Brand Personality Orientation to its Brand Loyalty: A Case Study on KILLER Brand." Clearly they tried to establish the relationship between the brand personality dimensions and brand loyalty with the consumer<sup>8</sup>.

Leonard L. Berry (Texas A&M University, Journal of the Academy of Marketing Science. Volume 28, No.1, pages 128-137). entitled "Cultivating Service Brand Equity." Author focuses in the article on Service branding model that indicate the salient role of customers' service experiences in brand formation<sup>9</sup>. Dr. Ramesh Kumar Miryala, Swami Ramanada Tirtha Institute of Science & Technology, Nalgonda (International Journal of Multidisciplinary Research Volume no-01, Issue no-02, June-2011, ISSN-2231 5780) named "Brand image Vis-à-vis its impact on customer commitment and loyalty in India." In this study, the writer emphasized the customer's perceived quality and satisfaction<sup>10</sup>.

#### Importance

The customers of Bangladesh are peace loving, emotional, highly passionate, but with very low level of wants. This implies that they are satisfied easily. They are not supposed to expect too much from a marketer. The brand marketer must think positively about customer's wants' needs and demands. Brand should be established standard form in the customer's mind through the marketing. Sometimes marketers need to build up customer's image with the help of brand personality. It is an attribute of various descriptive personality's traits or characteristics to different brands in wide variety of product categories. A brand personality either is functional or symbolic. Brand personality indicates the sincerity, excitement, commence, and sophisticate, raggedness, gender, geography, color etc<sup>11</sup>. Sometimes the consumer develops good relationship with a brand that is similar with others (e.g. friends, family, and neighbors). Customer's factors for branding depends on certain traits, skills, habits, professions, culture, relationship, and different way of behaving. Varieties of different consumer self-image on brand have been recognized in the following (a) Actual selffactors: how consumer's impact sees themselves. (b)Ideal self-factors: how consumer would like to see themselves (c) Social self-factors: how customers feel others see them and (d) Ideal social factors: how consumers would like others to see them. To building strong brand image, marketer takes challenges major strategic decisions where involve brand positioning, brand name selection, brand sponsorship and brand development<sup>12</sup> .Today's customers want to know about a brand with wide range of contacts and touching points through the advertising, , telephone interactions, company's web page, personal experience and many others. Any of the experience can have positive or negative impacts on brand perceptions and feeling. So the marketer should as much as care into managing brand. Managing brand marketer can takes some importance stapes, firstly: The brand positioning must be continuously communicated to consumers. Secondly: Brand owner can maintain and protect their brands images, associations, and quality. Finally: Marketers need to periodically audit their respective brand's strengths and weakness, threats and opportunities.

The brand activities are greatly affected by the society. The brand owners have some social responsibility concerning of business. It involves a) Responsibility to consumer: right to safety, right to be informed, right to choose, and right to be heard. b) Responsibility to employees: Safety in the work place, equality in the work place, heard core unemployed. c) Responsibility to the environment: Water pollution, air pollution land pollution. d) Responsibility to investors: Proper management funds, access to information, executive compensation<sup>13</sup>. However branding products must be functional possess, added values destination for employments, industry status, user's culture and

educative. Today's brand marketing has reached in the digital age. Organizations are well equipped because the real value of a strong brand is it's power to capture consumer performance and loyalty. They are ready to provide any sorts of information about products or services with hassle - free way to customers. Already business sectors are starting to invest in branding for customer's satisfaction. The brand owners are establishing brand image in the customer's mind. The brand campaign conveys the form of advertisement, personal selling, publicity, billboards, sponsorship etc. The brand campaign helps to redecorating the business and sub-business sectors. All these actions reflect seriously to customer's mind. Producers should invest heavily on information communication technology.

## **Branding Reason**

Corporate goals: Brand focuses the values and distinct amount of good will for products or services. It helps to communicate for the achieving corporate goals and customers image of respect for the organization. Product identification: Brand name helps to quickly identify, clearly make sense concerning the product and services. User's Loyalty: Branded product savings of time and energy through identical purchasing. Product guarantee: It helps to finding the same quality of product or services to buy. Continuity: A good brand introduced to customers with other brand of the company. Brand values: Brand creates the tangible and intangible values for customer. The customer makes their choice essentially according to the visible characteristics of the product. Cultural factor: The brand represents the user's culture and its prestige, safety, norms etc. Product quality: From the consumer point of view, quality of brand is most significant when the brand user perceive about the brand. Familiarity: Brand recognizes the familiarity of the products. Default products: Customers are likely to be less cheated by the defect products. Relationships: The good brands ensure life time relation between the customers and the producers. Trust: Strong brand increase the customer's trust for upcoming products. Brand Management: Brand helps to measuring return on brand investment and establishing a brand based culture. Trouble-free monitoring: It facilitates the manager's ability to easy monitor and manages the brand continual basis. Rapidly market Expand: Quickly market share can be expanding through the brand awareness.

#### Findings

The brand builds just about heritage. Customers in some products just do not have the necessary knowledge or experience to judge product quality. They are no longer committed to one particular brand. They want to pay more attention that the brands meet their image, lifestyle, goals, culture and even corporate values etc. It is the brand that customers experience. It comes from an image in the customer's mind. The image influences to customers buying decision. The brand owners want to create it. Each individuals are involves within an organization either as the customers nor as the suppliers or as the employees. Brands shifts from local to international and reversely international to local. Many companies launched products with in the same name into new categories. Fundamental brand building elements are memorability, meaningfulness, likeability, transferability, adaptability, protectability etc. Co-branding strategy becomes popular. It consists of two well-known brands working together in promoting their products. Many companies have mismanaged their brands. The brand name makes customers easy to process purchase order and identify the problems. The brand name and trade mark provides legal protection of unique product features. It gives the sellers opportunity to attract a loyal and profitably set of customers. Loyal brand provides sellers protection from competition. Strong brand helps build the company's images, make it easier to launch new brands. Low quality and high price is only responsible for collapse brand.

#### Suggestions

Customer may changes brands, especially for price reasons so, product's prices should reasonable. Satisfied customers do not to change the brand, so take care about the customer satisfaction. The brand name should be distinctive, easy pronounce, recognize and unforgettable. Brand name should be supported to the customer's cultural and values. Unethical brands should not be created for the customer. Company may enjoy the marketing benefits due to creating brand awareness among the customer. Fulfill the customer's expectation, the company should carefully manage it's channel member. The manufacturers sometimes should change higher price than its competitor's incase the brand has higher perceived quality. The producer should launch new brand, if the brand name carries high credibility. The brand name and trade mark should provide legal protection with unique product features. Marketer should build up good brand relationship with the target customers. Company's mission and vision should be highlighted through the brand. Brand building program should be integrated. Logical interaction and interrelations should adopt the different brands. Separate strategy should be followed for the corporate and consume brands. Technical dimension should be included both corporate and consumer brand. The brand positioning factors are product features, tangible and intangible attribute, functions, benefits, operational factors etc. Communicating the brand message reach to customer advertising, celebrities, events, trade shows should properly use. Performing the brand equity product owner should setup line extension, brand addition, co-branding, brand alliance, social integration etc. Accurately delivering the brand performance the marketer should checkup the product performance, service performance, customer care, customer satisfaction and so on. Ethical issues should highly enhancement, invite and preserved for brand selling.

## Conclusion

Trends and demands of branding activities are rapidly increasing. The customers are currently seeking the best, easy, efficient and smooth business operations. The customers expect advanced branding support to make life more fascinating, flexible, beautiful, and organized. The brand reflects both positive and negative impressions in the business. The brand performs an economic function and it effects on the company's activities. A few years ago manufacturer, trader and consumer do not know about the theme of brand. The branded product strongly provides some information for the consumer's community regarding manufacture's goods and services. It highlights the company's name, label, symbol, registration number, logo, attributes, caution, manufacturing date, expiry date, ingredients, characteristic, shape, size, color, weight, uses rate and so on.

#### **References:**

- 1. Kotler P. Marketing Management. 9th ed. India-1997, P.152.
- Keller L K. Building, Measuring and Managing Brand Equity. 2nd Ed. New- Delhi-2008. P.3.
- 3. "Introduction," Kapferer Nou Jean, Strategic Brand Management, 2nd ed, New Delhi- 2000, 1st ed-1992, 1993. 1997, P.15.

- 4. Kotler P. Marketing Management, Ibid, P.443.
- 5. David A. 1991, Managing Brand Equity, 5th ed, New Delhi-2000, P.9.
- 6. Ishtgaque Arif , Branding in Bangladesh: A Historical Perspective. Volume-03, Issue-02, July2011, ISSN No-7889,
- 7. Farhana T N. Storytelling: A Strategic Tool to Communicate Brand Image. Journal of Business Studies Volume-02. July-December, ISSN 1815-3267 2009,
- 8. Mueksh and Soumendra, Brand Personality Orientation to its Brand Loyalty: A Case Study on Killer Brand Journal of Business and Economics, Volume 09, No.02 August-2010 ISSN 1683-8742.
- Leonard L. B. Cultivating Service Brand Equity. Texas A&M University, Journal of the Academy of Marketing. Science. Volume 28, No.1, pages 128-137.
   Kumar R & Ramanada S. Brand image Vis-à-vis its impact on customer commitment and l oyalty in India, Tirtha Institute of Science &Technology, Nalgonda, International Journal of Multidisciplinary research volume #01, Issue #02, June-2011, ISSN-2231 5780.
- 11. Schiffman G. Leon, Consumer Behavior, 9th ed, Prentice Hall 2007, PP.153-154.
- 12. Kotler P. Principles of Marketing, 10th Ed, India-2005, 1st ed, 2004, P. 40
- 13. Ibid P.297.

# **Employee Satisfaction and HRM Practices in the Business:** A Case Study on the Private Financial Service Sector in Bangladesh

## Md. Azmir Hossain<sup>1,</sup> Md. Rofiqul Islam<sup>2</sup>

Abstract: In the recent period of time Human Resource Management (HRM) practices became so familiar and momentous in every business sector of Bangladesh. The success of every organization is coming through the performance of the employees of that organization. The effectiveness of the employee performance is largely depends upon the HR policy and practices. HRM is a modern version of personnel management. IHRM practices are now considered as one of the key contributing factors to the success of an organization. The organizations are putting increased emphasis on the policies and practices of HRM to gain competitive advantage. The focus of this study is to gain an insight into the current HRM practices and its impact on employee's satisfaction on the private financial service sectors in Bangladesh. For conducting this research, 100 employees of different financial service sectors are selected and the questionnaire consists of different questions on nine HRM dimensions such as recruitment and selection systems, compensation package, job security, career growth, training and development, management style, job design and responsibilities, reward and motivation and working environment. The questionnaire was developed by using a five point Likert scale. In this study, some statistical measures used to examine employee's satisfaction. The study reveals that all HRM dimensions exercised in the private financial service sectors of Bangladesh does not satisfied to the employees equally. Most of the employees are dissatisfied with compensation package followed by reward and motivation, career growth, training and development, management style, and job design and responsibilities. The effectiveness of the employee performance is largely depends upon the HR policy and the successful HRM practices.

**Keywords:** Human Resource Management; Employees Satisfaction; Z-test; Private Financial Service Sector; Performance, Bangladesh.

#### Introduction

Human Resource Management (HRM) is not just to hire people. Apart from hiring, HRM has lots of functions which help an organization to gain competitive advantage. HRM is a relatively new concept in Bangladesh. It was few years ago that this was considered as a part of the administrative functions of an organization. Effective HRM practices support business goals and objectives. That is why effective HRM practices are strategic.<sup>1</sup> It can improve the performance of an organization by improving customer satisfaction, innovation and productivity. So from HR planning, recruitment and selection to training, performance appraisal, compensation, all practices of HRM are now considered as equally important as any other aspects of the organization such as marketing, financing, etc. Dramatic advances of Information and Communication Technology (ICT), changing mix and personal values of the workforce, emergence of the knowledge economy and increasing global competition have created enormous challenges on organizations.<sup>2</sup> To cope with the challenges efficiently, human resource has been considered as one of the most important factors in today's hypercompetitive market place. In the context of a developing economy like Bangladesh, where the need for formation of capital is pressing, where financial crises accompanying pangs of economic

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growth are frequent, the challenges posed by HRM are great importance.<sup>3</sup> HRM is a distinctive approach to employment management which seeks to achieve competitive advantage through the strategic development of a highly committed and capable workforce using an integrated array of cultural, structural and personnel techniques (Storey, 2001). Human resource measurement is about valuing the contribution people make to the success of an organization, and the term 'human capital' describes the contribution made by human skills and knowledge to the production of goods and services. From these definitions, it is clear that efficient HRM practices are inevitable factor in determining the growth and prospects of any organization.<sup>4</sup> Human resource is the most precious asset and delicate factor of production. In this global competitive world, it is necessary to retain skilled workers in the organization by efficient HRM practices. Every organization operates its activities with the support of human resource which includes top level managers, executives, supervisors and other employees. Lack of efficient HRM practices reduces employee's satisfaction towards their organization that affects their commitment to work.<sup>5</sup>

## **Objectives of the Study**

The objectives of the study are to measure employees' satisfaction on the HRM practices of private financial service sectors in Bangladesh. The specific objectives are:

- a. To provide an overview and analysis of HRM practices;
- b. To focus the dimensions of HRM practices;
- c. To propose a test for measuring employee's satisfaction by HRM practices;
- d. To examine weak points of HRM practices which affects employees' satisfaction;
- e. To provide some suggestions (if any) for improving HRM practices and employee's satisfaction.

#### Scope of the study

This study covers the HRM policies of private financial service sectors of Bangladesh, along with some recommendations to improve the HRM policies and practices.

#### **Literature Review**

Human resource management (HRM) is considered a critical organizational resource that helps an organization sustain its effectiveness. HRM is both an academic theory and a business practice that addresses the theoretical and practical techniques of managing a workforce. Synonyms include personnel administration, personnel management, manpower management, and industrial management It is one important area that influences a number of employees' attitudes and behavior such as intent to leave, levels of job satisfaction, and organizational commitment.<sup>6</sup> It refers to the policies, practices and systems that influence employees' behavior, attitudes, and performance. HRM practices generate trust in employees and these practices include giving employees empowerment and involvement in decision making; extensive communication about functioning and performance of the employees service; designing training for skills and personal development of employees; selective hiring; team-working where idea are pooled and creative solutions are encouraged; rewards system that commensurate with effort; reduction of status between the management and staff and all workers are valued regardless of their role.<sup>7</sup> Organizations that do not pay equitably compared to others may lose their employee's because of the non-competitive compensation package.<sup>8</sup>

Society has entered a new era in the relationship between organizations and their employees. In this new era, people are the primary source for a company's competitive advantage and organizational prosperity and survival depends on how employees are treated. The best Human Resource practices areas are recruitment and selection, socialization, job design, training, communication, participation, career development, performance management, employee reward and job security.<sup>9</sup> Many companies refer to HRM as involving 'people practices'. HRM is the organizational function that deals with issues related to people such as compensation, hiring, performance management, organization development, safety, wellness, benefits, employee motivation, communication, administration, and training.<sup>10</sup> It is plausible that when employees judge the organization to be fair and supportive in their treatment particularly with regards to the availability and frequency of promotional opportunities, adequacy of pay and good supervision, positive feelings of well being will be created, which is likely to stimulate that to reciprocate by increasing their loyalty to the organization and reducing turnover.<sup>11</sup>

The motivation and opportunity focused bundles of Human Resource practices positively related to affective commitment and negatively related to turnover. HRM practice signaled the organization's intentions to invest in employee's developmental experiences and training produced higher levels of affective organizational commitment.<sup>12</sup> HR practices such as pay, benefits and training are negatively related to turnover because they motivate employees and "lock" them to their jobs indicate that involuntary turnover is affected by staffing practices (recruitment and selection process) and employee monitoring (performance appraisal). According to Wikipedia, a web based encyclopedia, HRM serves five key functions: 1) Hiring, 2) Compensation, 3) Evaluation and Management (of Performance), 4) Promotions, and 5) Managing Relations.

The HRM function includes a variety of activities, and key among them is deciding what staffing needs the organization has and whether to use independent contractors or hire employees to fill these needs, recruiting and training the best employees, ensuring they are high performers, dealing with performance issues, and ensuring that the personnel and management practices conform to various regulations.<sup>13</sup> Nine important HRM practices such as decentralization, Compensation, Participation, training, development, employment security, social interactions, management styles, communications, and performance appraisal.<sup>14</sup>

Through better job assignment or work design, employees may display greater commitment, leading to better job performance. From recruiting to orienting new employees, from writing job descriptions to tracking attendance, and from instituting and monitoring policies to monitoring benefits, there has been a need for an HR generalist to assist senior management in both establishing a structure to hold down costs of administration. The ultimate aim of HRM is to ensure that at all times the business is correctly staffed by the right number of people with the skills relevant to the business needs.<sup>15</sup> Thus HRM is meant to unlock the talent, experience, wisdom and common sense of many within the organization by making work simpler, quicker, rewarding, safer and funny. On the basis of the above literature review, the study consider the following dimensions of HRM practices have impacts on employees' satisfaction towards financial service sectors such as recruitment and selection systems, compensation package, job

security, career growth, training and development, management style, job design and responsibilities, reward and motivation, and working environment.<sup>16</sup>

### Methodology of the Study

This paper is based on both primary and secondary data. Primary data were collected through a structured questionnaire which was administered personally to the employees of different financial service organizations. Convenience sampling technique has been used to interview the employees. The target population of this study was employees in Dhaka and Narayangonj city Corporations who are serving as officers or executives of different private financial service organizations. Among various private banks, insurance companies, financing companies, NGOs and money lending firms this study considered 20 private organizations. For conducting this research, 100 employees, officers and managers are selected from the chosen organizations and out of this 88 employees responses properly, the response rate is 88 percent. The questionnaire consists of different questions on nine HRM dimensions such as recruitment and selection systems, compensation package, job security, career growth, training and development, management style, job design and responsibilities, reward and motivation and working environment. The questionnaire was developed by using a five point Likert scale, whereas-

- 1 = dissatisfied
- 2 = somehow satisfied
- 3 = satisfied
- 4 =moderately satisfied
- 5 = highly satisfied

But some secondary data have been used in the study. The secondary data used in the study have been collected from related journals, books, newspapers and internet, etc. In this study, some statistical measures such as Z-test mean and proportion analysis is used to examine employee's satisfaction.

## **Hypothesis Development**

On the basis of HRM practices, the following hypotheses are developed:

- H1: Employees' satisfaction on "Recruitment and selection systems".
- H2: Employees' satisfaction on "Compensation package".
- H3: Employees' satisfaction on "Job security".
- H4: Employees' satisfaction on "Career growth".
- H5: Employees' satisfaction on "Training and development".
- H6: Employees' satisfaction on "Management style".
- H7: Employees' satisfaction on "Job design and responsibilities".
- H8: Employees' satisfaction on "Reward and motivation".
- H9: Employees' satisfaction on "Working environment".

#### Analysis and Results

H1: Employees' satisfaction on "Recruitment and selection systems"

It is assumed from the hypothesis that employees are satisfied on the current recruitment and selection systems of their organizations i.e. the recruitment system is fair and appropriate for the appointment to the job. Table 1 shows that at 0.05 level of significance (two tailed test), table value (1.96) is greater than calculated value (Z = 0.55). So, the null hypothesis is accepted and

hence, we conclude that employees are satisfied on recruitment and selection systems of their bank.

## *H2: Employees' satisfaction on "Compensation package"*

This hypothesis indicates that employees are satisfied with present salary, increment allocation method and other compensation packages. Table 1 shows that at 0.05 level of significance (two tailed test), table value (1.96) is less than calculated value (Z = 8.82). So, the null hypothesis is rejected and hence, we conclude that employees are not satisfied on compensation package of their organizations.

## H3: Employees' satisfaction on "Job security"

It is assumed from this hypothesis that employees are satisfied with security to their job. Table 1 shows that at 0.05 level of significance (two tailed test), table value (1.96) is greater than calculated value (Z = 0.25). So, the null hypothesis is accepted and hence, we conclude that employees are satisfied on job security of their organizations.

Employees Satisfaction Dimensions	N	Mean	Standard Deviation	Standard Error	Z Value (Calculated	Mean Rank
					value)	
Recruitment and Selection	88	3.06	0.99	0.11	0.55	01
Systems						
Compensation Package	88	2.03	0.99	0.11	8.82	09
Job Security	88	3.03	1.17	0.12	0.25	02
Career Growth	88	2.13	0.98	0.10	8.70	07
Training and Development	88	2.30	1.03	0.11	6.36	06
Management Style	88	2.49	1.03	0.11	4.64	05
Job Design and Responsibilities	88	2.54	1.00	0.11	4.18	04
Reward and Motivation	88	2.10	1.03	0.11	8.18	08
Working Environment	88	3.02	1.13	0.12	0.17	03

#### Table- 1: Computation of Z- value

#### *H4: Employees' satisfaction on "Career growth"*

This hypothesis indicates that employees are enjoying enough space for his/her career growth. Table 1 shows that at 0.05 level of significance (two tailed test), table value (1.96) is less than calculated value (Z = 8.7). So, the null hypothesis is rejected and hence, we conclude that employees are not satisfied on career growth of their organizations.

## *H5: Employees' satisfaction on "Training and development"*

This hypothesis indicates that training and development program are available in their organizations and employees are satisfied on that program. Table 1 shows that at 0.05 level of significance (two tailed test), table value (1.96) is less than calculated value (Z = 6.36). So, the null hypothesis is rejected and hence, we conclude that employees are not satisfied on training and development of their organizations.

#### *H6: Employees' satisfaction on "Management style"*

This hypothesis indicates that management style is very flexible for employees and they involved with the managerial decision making. Table 1 shows that at 0.05 level of significance (two tailed test), table value (1.96) is less than calculated value (Z = 4.64). So, the null hypothesis is rejected and hence, we conclude that employees are not satisfied on management style of their organizations.

## *H7: Employees' satisfaction on "Job design and responsibilities"*

The hypothesis indicates that job is properly designed and employees are easily performed their task. Employees receive fair treatment, recognition and overall quality supervision from boss. Table 1 shows that at 0.05 level of significance (two tailed test), table value (1.96) is less than calculated value (Z = 4.18). So, the null hypothesis is rejected and hence, we conclude that employees are not satisfied on job design and responsibilities of their organizations.

## *H8: Employees' satisfaction on "Reward and motivation"*

The hypothesis indicates that various financial and non-financial reward and motivation system is present in their organizations, employees are satisfied on that system. Table 1 shows that at 0.05 level of significance (two tailed test), table value (1.96) is less than calculated value (Z =8.18). So, the null hypothesis is rejected and hence, we conclude that employees are not satisfied on reward and motivation of their organizations.

## H9: Employees' satisfaction on "Working environment"

This hypothesis indicates that the physical working environment is very conducive for satisfaction at large. Table 1 shows that at 0.05 level of significance (two tailed test), table value (1.96) is greater than calculated value (Z = 0.17). So, the null hypothesis is accepted and hence, we conclude that employees are satisfied on working environment of their organizations.

From the above hypotheses testing it shows that employees are satisfied on some dimensions of HRM practices such as recruitment and selection systems (mean rank-01), job security (mean rank- 02) and working environment (mean rank-03). The hypotheses test also shows that employees are not satisfied on some dimensions such as job design and responsibilities (mean rank-04), management style (mean rank-05), training and development (mean rank-06), career growth (mean rank-07), reward and motivation (mean rank-08) and compensation package (mean rank-09).

	RSS1	CP2	JS3	CG4	TD5	MS6	JDR7	RM8	WE9
1 = Dissatisfied	7.95	32.95	9.09	30.68	22.73	13.64	11.36	31.82	9.09
2 = Somehow Satisfied	17.05	40.91	19.3 2	37.5	42.05	45.45	43.18	38.64	22.7 3
3 = Satisfied	43.18	19.32	39.7 7	22.73	22.73	25	29.55	20.45	36.3 6
4 = Moderately Satisfied	25	3.41	22.7 3	6.82	7.95	10.23	11.36	5.68	20.4 5

Therefore, it is clear that all dimensions are not equally satisfied to employees. It is also very clear from the Table 2 which dimensions highly satisfied or dissatisfied to employees.

5 = Highly Satisfied	6.82	3.41	9.09	2.27	4.55	5.68	4.55	3.41	11.3
									6
Totals	100	100	100	100	100	100	100	100	100

#### Table 2. Percentage of employees on different levels of Satisfaction of HRM dimensions

Here, RSS1 = Recruitment and Selection Systems, CP2 = Compensation Package, JS3 = Job Security, CG4 = Career Growth, TD5 = Training and Development, MS6 = Management Style, JDR7 = Job Design and Responsibilities, RM8 = Reward and Motivation, WE9 = Working Environment.

Table 2 shows percentage of employees on different levels of Satisfaction of HRM dimensions. The table indicates that the highest 43.18 percent employees are satisfied on recruitment and selection systems followed by 39.77 per cent on job security, 36.36 per cent on working environment, 29.55 per cent on job design and responsibilities, 25 per cent on management style, 22.73 per cent on career growth as well as training and development, 20.45 per cent on reward and motivation and the lowest 19.32 per cent on compensation package. Table 2 also shows that the highest 11.36 per cent employees are highly satisfied on working environment and the lowest 2.27 percent on career growth. The study also indicates that the highest 32.95 per cent of employees are dissatisfied on compensation package followed by 31.82 percent on reward and motivation, 30.68 percent on career growth, 22.73 per cent on training and development, 13.64 per cent on management style, 11.36 percent on job design and responsibilities, 9.09 per cent on job security as well as working environment and the lowest 7.95 per cent on recruitment and selection systems. Therefore, the analysis shows that employees are not fully satisfied on any HRM dimensions of their organizations. So, the HRM dimensions quality should be improved for the betterment of the organization's success.

#### Limitations of the Study

Researchers were really unable to collect enough information due to official restrictions of the selected private sector financial organizations. Many things were so confidential that was not entitled to access there. To the best of knowledge of the research very little study was conducted on this specific area, that's why there is lack of guidance. This study was based on HRM practices in the business, so information was designed on the basis of HR dimensions only.

#### **Findings and Recommendations**

The study has discovered the following findings from this study:

- 1. The study disclosed the relationship between employees' satisfaction and various dimensions of HRM practices.
- 2. In this study, we considered nine major factors which represented most of the human resources management practices followed by different private financial service organizations.
- 3. The study reveals that all HRM dimensions exercised in the private financial service organizations of Bangladesh does not satisfied to the employees equally. Most of the employees are dissatisfied with compensation package followed by reward and motivation, career growth, training and development, management style, and job design and responsibilities.<sup>17</sup>

- 4. It is obvious that HRM practices in the private financial service organizations of Bangladesh have not been fully developed.
- 5. There is the urgent need to employ the services of HR professionals, consultants and researchers to help shape and develop new directional focus that will ensure an efficient and effective human resource practices.<sup>18</sup>

The study suggests the following recommendations for doing perfect HRM practices.

- 1. Organizations should give various financial and non-financial benefits to employees according to their performance. This will make them more devoted to the work and their satisfaction will be definitely high.<sup>19</sup>
- 2. Bangladesh economy allows the importation of new technologies to enhance HRM, but training is still a bit slow, thus employment of expatriates to handle such is still encouraged. The cooperation and coordination between management and employee should be developed because it is crucial for effective and efficient functioning of an organization. Attractive compensation package should be given to the employees. Management should make a clear cut career advancement path.<sup>20</sup>
- 3. The organizations should prepare the standard human resource planning. Because the success and failure of organizations is highly dependent on the proper human resource planning.<sup>21</sup>
- 4. The manager training program of the organizations is a good way to groom a to-bemanager for the probable vacancy in the future. The organization should regularly follow this procedure to build a productive and valuable workforce. The selection tools and procedures used in this program have also provided to be very effective.<sup>22</sup>
- 5. The HR Department should look into the matter of consuming more time in the process of calling the applicants after their responses very seriously. The organization could control the size of applicants' pool by using more clear and specific statements in the ad in terms of the minimum educational degree, preferred institutions and other necessary criteria based on which the initial screening of the applications were conducted.<sup>23</sup>
- 6. The company should follow both on-the-job and off-the –job method of training when they are training their employees
- 7. The HRD manager of the company should be analyzed the organizational jobs properly. Because job analysis serves as the cornerstone of all human resource functions in an organization. Side by side the HRD manager should evaluate the different positions of employees in the organization in order to establish the well conceived for pay-structure.<sup>24</sup>
- 8. Before appraising the performance of employees in the organization properly, the HRD manager should establish the standard. Here it is noticeable that the HRD manager should appraise the performance of all employees in the organization without showing any discrimination.
- 9. The HRD manager should prepare the standard promotion policy for the employees of the organization. Here it is very much important that the employees should get the promotion based on the performance not the nepotism, political influence and whatsoever.<sup>25</sup>
- 10. The HRD manager should established the standard pay structure for the employees of the organization in order to reduce the high turnover of employees.
- 11. The organizations should use suitable techniques for assessing the performance of employees.

### Conclusion

HRM practices are crucial for every organization for the proper management for all activities in an organization. As the activities are done through the human asset of the organization, therefore the management should be very much cautious to formulate and implement the HR policy for their organization that could satisfy and inspire the employee to meet the organizational goal. Employees are the most important assets for any organization. So the organization must ensure that the right person is hired for the right position at the right time and he is trained and developed properly to accomplish his job activities effectively. Now the organization culture is rapidly changing with some new characteristics. Now employees work in a friendly and positive environment, their performance is highly recognized by the management, they are motivated with different types of non-monetary incentives. This paper suggest that financial service organizations should review existing pay practices so as to offer fair pay, provide challenging and meaningful work tasks, and foster positive co-worker relationships in order to create a good working environment. At the conclusion, Bangladesh should practice the standard human resource management. It has been disclosed that the present practices of strategic HRM are in satisfactory level with some little variation. Therefore, the management should continue their present practice and take initiative to resolve this problem.

#### References

- 1. Bernardin, H.J., Russel, J.E, (1993), Human Resource Management: An Experiential Approach. Singapore: McGraw-Hill, Inc. *International Review of Management and Marketing, Vol. 2, No.1, 2012, pp.52-58* 58
- 2. Ahmed, Jashim Uddin, Human Resource Management Practices: A Case Study of the Supply Chain Department of Square Pharmaceuticals Ltd., Sri Lankan Journal of Management, Volume 10 Numbers 3 & 4, July December, 2005.
- 3. Huselid, M.A.(1995), 'The Impact of Human Resource Management Practices on Turnover Productivity and Corporate Financial Performance, 'Academy of Management Journal, 38, 635-672.
- Khan, Atiqur Rahman, Human Resource Management Practices in Bangladeshi Organizations: A Case Study on Bangladesh Centre for Communication Program, Bangladesh Institute of Bank Management (BIBM), Dhaka.
- 5. Becker, G.S. (1993), Human Capital: a Theoretical and Empirical Analysis, Edited by Beer, M., Spector, B., Lawrence, P., Mills, D. and Walton, R. (1984). A Conceptual View of HRM in Managing Human Assets, Free Press, New York.
- 6. Gardner, T., Moynihanand, L. and Wright, P. (2007), The Influences of Human Resource Practices and Collective Affective Organizational Commitment on Aggregate Voluntary Turnover, CAHRS Working Paper, Cornell University.

- 7. Buck, J.M., Watson, J.L. (2002). 'Retaining Staff Employees: The relationship between Human Resource Management Strategies and Organizational Commitment', Innovative Higher Education, 26(3), 175-93.
- 8. DeCenzo, D.A., Robbins, S.P. (1996), Personnel/Human Resource Management. 3rd ed. New Delhi: Prentice-Hall of India Pvt. Ltd.
- 9. Adams, J.S. (1965). Inequity in Social Exchange. In Berkowitz, L. (ed.). Advances in Experimental Social Psychology. New York: Academic Press, pp.267-299.
- 10. Madrian, B.C. (1994), Employment-Based Health Insurance and Job Mobility: Is There Evidence of Joblock? Quarterly Journal of Economics, 109, 27–51.
- Majumder, Md. Tofael Hossain, (2012), Human Resource Management Practices and Employees' Satisfaction Towards Private Banking Sector in Bangladesh, International Review of Management and Marketing, Vol. 2, No. 1, 2012, 2012, ISSN: 2146-4405, pp.52-58
- Moyeen, AFM, Abdul and Huq, Afreen, (2001), "Human Resource Management Practices in Business Enterprises in Bangladesh", Dhaka University Journal of Business Studies, Vol. XX11, No.2, December 2001, ISSN 1682-2498. pp. 29-35.
- 13. Nasurdin A.M., Ramayah, T., Osman, M. (2001). Job Satisfaction and Organizational Commitment among the Malaysian Workforce, Malaysian Publications: April 2006.
- 14. Rahman, M.A. and Associates (2012), Human Resource Management, University Publications, Dhaka.
- 15. Rahman, M.A. (2012), Human Resource Management Practices in Bangladesh, Zahin Publications, Dhaka.
- 16. Shaw, J. D., Delery, J.E., Jr. Jenkins, G.D., Gupta, N. (1998), An Organization-Level Analysis of Voluntary and Involuntary Turnover, Academy of Management Journal, 41(5), 511–525.
- 17. Walton, R. (1985). Toward a Strategy of Eliciting Employee Commitment Based on Policies of Mutuality, In R. E. Walton & P. R. Lawrence (Eds.), Human Resource Management: Trends and Challenges, Boston: Harvard Business School Press.
- 18. Steers, R.M. (1977). Antecedents and Outcomes of Organizational Commitment. Administrative Science Quarterly, 22, 46-56.
- 19. Macky, K., Boxall, P. (2007), The Relationship between 'High Performance Work Practices' and Employee Attitudes: An Investigation of Additive and Interaction Effects. The International Journal of Human Resource Management, 18(4), 537-567.

- 20. Klaus, T., LeRouge, C., Blanton, J.E. (2003), An Examination of the Relationships between Select Nature of Work Characteristics and Organizational Commitment of IT Professionals, Special Interest Group on Computer Personnel Research Annual Conference, Session 3.2, 147–149.
- 21. Gruber, J., Madrian, B.C. (1994), Health Insurance and Job Mobility: The Effects of Public Policy on Job-Lock. Industrial and Labor Relations Review, 48(1), 86–102.
- 22. Lazear, E.P. (1986), Retirement from the Labor Force. In Ashenfelter, O., and Layard, R. (Eds.). Handbook of Labor Economics, volume 1. Amsterdam: North-Holland. Lee, S. H. and Heard, A. (2000). A managerial Perspective of the Objectives of HRM Practices in Singapore: an Exploratory Study, Singapore Management Review, 22, 65–82.
- 23. Khera, S. (1999), Just How Important Is It? Business Age 1: 36. Lawler, E.E. (2005). Creating High Performance Organizations, Asia Pacific Journal of Human Resources, 43(1), 10-17.
- 24. Beardwell, I., Holden, L., Claydon, T. (2004). Human Resource Management a Contemporary Approach. 4th (edn.), Harlow: Prentice Hall.
- 25. Senyucel, Z. (2009), Managing Human Resources in the 21st Century. Available at http://www.bookboon.com. Accessed on 23/11/2009.

# Social Business: A New Phenomenon to Solve the Social Problems in Business way

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**Abstract:** This study shows the concept of Social Business that are influencing to solve the social problems all over the world as well as Bangladesh. It's a mere creation of our real phenomenon of our country named Prof. Yunus. Increasing our social development index, Social Business plays a great role of our country. In the prevailing world economic conflict arises all over the world, in this cases social business is a buzz word through the world. This paper shows the linkage between the micro credit and social business type II, where researcher found that how micro credit help to develop socio economic situation and how to solve unemployment problem, to ensure food security etc.

Key words: Social Business, Micro-credit, job creation.

#### Introduction

"Social business is not just a trend or a strategy – but rather, a necessary evolution."

Social business is a cause-driven business. In a social business, the investors/owners can gradually recoup the money invested, but cannot take any dividend beyond that point. The purpose of the investment is purely to achieve one or more social objectives through the operation of the company; no personal gain is desired by the investors. The company must cover all costs, make a profit, and at the same time achieve a social objective, such as, healthcare for the poor, housing for the poor, financial services for the poor, nutrition for malnourished children, providing safe drinking water, introducing renewable energy, etc. The impact of the business on people or the environment, rather the amount of profit made in a given period measures the success of a social business. Sustainability of the company indicates that it is running as a business. The objective of the company is to achieve social goal/s.<sup>1</sup>

#### **Objectives of the Study:**

The major objectives of this study are:

- 1. To show the concept of Social Business
- 2. To explore how social business eradicate social problem
- 3. To find out the Linkage between the Social Business and Micro Credit
- 4. To enumerate the social business impact on society

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## Methodology

This paper is based on secondary data only. The secondary source of information includes the available relevant review of literature, different books and many national and international journals.

## **Concept of Social Business**

Social business, as the term is commonly used, was first defined by Nobel Peace Prize laureate Prof. Muhammad Yunus and is described in his books Creating a world without poverty - Social Business and the future of capitalism and Building Social Business - The new kind of capitalism that serves humanity's most pressing needs. A number of organizations with which he is involved actively promote and incubate social businesses. (These include the Yunus Centre in Bangladesh and the Grameen Creative Lab in Germany.)<sup>1</sup>

In Yunus' definition, a social business is a non-loss, non-dividend Company designed to address a social objective within the highly regulated marketplace of today. It is distinct from a nonprofit because the business should seek to generate a modest profit but this will be used to expand the company's reach, improve the product or service or in other ways to subsidizes the social mission.

In fact a wider definition of social business is possible, including any business which has a social rather than financial objective.

Historical Background of Social Business:

Professor Muhammad Yunus, the key proponent of the social business model, argues that capitalism is too narrowly defined. The concept of the individual as being solely focused on profit maximizing ignores other aspects of development economics. Failures of this system to address vital needs, that are commonly regarded as market failures are actually conceptualization failures, i.e. failures to capture the essence of a human being in economic theory by limiting humankind to the home economics.<sup>1</sup>

Yunus postulates a new world of business in which profit-maximizing enterprises and socialbenefit-maximizing enterprises coexist. In addition, a social business would operate much like a profit-maximizing business in that the company as a whole grows financially and gains profits. The only difference is that the company's shareholders and investors would be re-accumulating their initial investment only as opposed to receiving dividends. He calls the latter social business.

Key ingredients to the success of the approach are education, institutions to make social businesses visible in the market place (a social stock market), rating agencies, appropriate impact assessment tools, indices to understand which social business is doing more and/or better than other social businesses so that social investors are correctly guided. The industry will need its Social Wall Street Journal and Social Financial Times.

Therefore, a social business is driven to bring about change while pursuing economic and social sustainability together. Although from a strictly profit-maximizing perspective it seems inappropriate to pursue a social goal other than profit, social business's aim is to achieve certain

social and environmental goals. In this perspective, a social business can also be understood as a business-pursuing NGO which is (eventually) financially self-sufficient.

Social business is a cause-driven business. In a social business, the investors or owners can gradually recoup the money invested, but cannot take any dividend beyond that point. The purpose of the investment is purely to achieve one or more social objectives through the operation of the company, since no personal monetary gain is desired by the investors. The company must cover all costs and make revenue, but at the same time achieve the social objective.

The impact of the business on people or environment, rather than the amount of profit made in a given period measures the success of social business. Sustainability of the company indicates that it is running as a business.

#### **Types of Social Business**

There are two kinds of Social Business. One is a non-loss, non-dividend Company devoted to solving a social problem and owned by investors who reinvest all profits in expanding and improving the Business. The second kind of Social Business is a profit-making company owned by poor people, either directly or through a trust that is dedicated to a predefined social cause.<sup>1</sup> Since profits that flow to poor people are alleviating poverty, to ensure food security, such a business is by definition helping to solve a social problem.

Grameen Danone, which is Yunus' prototype social business, was launched in 2005. It's social mission is to address malnutrition in Bangladesh, by providing products, such as yoghurt, containing many of the nutrients missing in an impoverished child's diet and providing these products at a price affordable to everyone. Grameen Danone received seed capital and in-kind support from dairy products company, Danone and the brand credibility leant by Yunus' well-known micro-finance company, Grameen Bank.

#### The Three Pillars of Social Business:

Social business is built on three pillars – people, governance and technology.

The first pillar deals with the people of the organization. It addresses the need to drive organizational change in an effort to break down organizational silos and get internal teams to communicate. It's also about activating the organization's most import assets, its employees.

The second pillar deals with governance. This simply means that organizations need to put processes in place to manage the chaos that exists from behind the firewall. Training, social media guidelines and policies are imperative for organizations to monitor and roll out across the organization within different teams and geographies. It ensures consistency; it protects the organization and at the same time, empowers its employees.

The third and last pillar deals with technology. Organizations have to invest in platforms that facilitate internal collaboration. This is essential to ensure proper communication. External campaign management tools like Sprinklr are also essential to scale, especially if an organization has multiple web sites.

### Seven Principles of Social Business:

These were developed by Prof. Muhammad Yunus and Hans Reitz, the Co-Founder of Grameen Creative Lab:<sup>1</sup>

- 1. Business objective will be to overcome poverty, or one or more problems (such as education, health, technology access, and environment) which threaten people and society; not profit maximization.
- 2. Financial and economic sustainability.
- 3. Investors get back their investment amount only. No dividend is given beyond investment money.
- 4. When investment amount is paid back, company profit stays with the company for expansion and improvement.
- 5. Environmentally conscious.
- 6. Workforce gets market wage with better working conditions.
- 7. do it with joy.

## **Social Business Eradicates Social Problems:**

Poverty is endemic in Bangladesh. Currently, Bangladesh ranks 146 out of 187 countries in the Human Development Index (HDI) ranking. Lack of adequate necessities, clothing, shelter, and healthcare constitutes poverty. The last 10 years saw a significant improvement in reversing the rising trend of poverty. Stable economic growth contributed to the fallen poverty rates. The government of Bangladesh has improved the distribution of healthcare, education, and other necessities. It has also supported microcredit programs which have empowered women and created jobs. Despite the progress, poverty remains a problem. Poverty inhibits progress and creates other problems such as hunger and malnutrition. To describe the ill effects of poverty, Dr. Yunus writes:

It can expose them to life-threatening dangers. Because poverty denies people any semblance of control over their destiny, it is the ultimate denial of human rights. When freedom of speech or religion is violated in this country or that, global protests are often mobilized in response.

The consequences of poverty threaten the social and economic improvements that Bangladesh has achieved. It is not an option. Social business and microcredit programs must continue to flourish. Government reforms and policies must be sustained. Ongoing social, political, and economic empowerments are the answers to long-term prosperity in Bangladesh. Dr. Yunus has given us an indispensable weapon – social business – to combat poverty and other social issues. This innovative model promotes investments by the business owners or the investors to eradicate social problems. In his book, creating a World without Poverty, Dr. Yunus writes:

If you spend enough time living among the poor, you discover that their poverty arises from the fact that they cannot retain the genuine results of their labor. And the reason for this is clear: They have no control over capital. The poor work for the benefit of someone else who controls the capital. Poverty is the root of the cause of our social problems. Poverty causes malnutrition, which causes preventable diseases to spread, leading to deaths among children and adults alike. This vicious cycle must be stopped. We must continue to invest in social business to break this cycle.<sup>2</sup> While free market capitalism is thriving globally, almost unopposed now, and bringing

unprecedented prosperity too many, half of the world lives on two dollars a day or much less. Eradication of poverty remains the biggest challenge before the world. Colossal social problems and deprivations, mostly poverty-related and very unevenly distributed around the globe, continue to shame us every day. Obviously the free market has failed much of the world. Many people assume that if free markets can't solve social problems, then governments can. After all, the government is supposed to represent the interests of society as a whole. But decades and even centuries of experience has shown that while government must do its part to help alleviate our worst problems, it alone cannot solve them. Fortunately for us there is a keen desire among many to lend a hand through charity, for addressing the problems of poverty and other social problems. Charity is rooted in basic human concern for other humans. These days concern is usually expressed in the shape of non-profits and NGOs which may take various names and forms. Then there are aid organizations sponsored by rich governments-bilateral and multilateral. Nonprofits and aid organizations are trying to keep the problems within some control. But charity is a form of trickle-down economics; if the trickle stops, so does help for the needy. On the other hand multilaterals like World Bank focus only on growth as the means of helping the poor, but cannot see that the poor people can be actors themselves. There are serious questions about the type of growth that can help the poor. As another response to the global social problems some businesses are identifying themselves with the movement for Corporate Social Responsibility (CSR), and are trying to do good to the people while conducting their business. But profit-making still remains their main goal, by definition. Though they like to talk about triple bottom lines of financial, social, and environmental benefits, ultimately only one bottom line calls the shot: financial profit. Poverty can be totally conquered in our own lifetimes if the right approach is adopted. Our belief on the inherent ability of the poor that can be unleashed once they are given the opportunity to help themselves. The concept of microcredit did not exist before in Bangladesh, which basically recognized that credit without collateral is a fundamental right of the poor. Our success with this in my own country has been widely replicated all over the world including in some of the richest countries; and the Nobel Peace Prize 2006 for Grameen Bank and Dr. Muhammad Yunus is one recognition of that success. But more importantly introduced and elaborated here my broadened concept of social business that the Grameen experience has led me into. Social business introduces a totally revolutionary dimension to the free market economy. It does not interfere with the mechanism through which the normal Profit Making Business (PMB) works and prospers - capitalization, expert business management, competitiveness etc., - but investors here do not receive any dividend, though they can recover their investment if they want to, to reinvest in other social businesses or PMBs. The satisfaction gained in achieving the stated social goals are the only motive behind the investment, and the business will be evaluated according to that standard. Essentially it is a non-loss, non-dividend business aimed at social objectives - education, health, environment, whatever is needed to address the problems faced by society. The profits here remain with the business and help it to grow further. The whole thing is based on the premise that entrepreneurs need not be motivated only by the profits they personally receive, but can also be motivated by social goals and may enjoy success there with equal satisfaction. The important thing is not to mix up a Social Business with a PMB. In fact the inclusion of Social businesses alongside PMBs in the business world will give the free market capitalism a larger, nobler and a more fulfilling purpose. Its advantages over straightforward charity are many - efficiencies, continuous use with each turnover, competition with PMBs following the same rules, utilization of business innovations being some of the most important ones.<sup>3</sup> By applying that creativity and technology to solving

problems in a business framework, all the world's problems would be solved."Human capacity increases when you bring more options, it all depends on your feelings, what you want to do," Whereas profit-making businesses are driven by personal gain, he says, social businesses are solution-seeking in their motivation. Essentially, a social business is "a non dividend company for finding a solution to a problem". And they have a virtually unlimited scope. Rather than the charity model; Yunus argues, under a well-run social business with the right business model, the same money can be put to work again and again, recycling earnings to deliver on-going and sustainable benefit. Social businesses, he says, don't come in ready-made, off-the-shelf formulas. But he believes creative minds once put to work can come up with appropriate solutions. That's the beauty of social business, it makes you think, makes you bring creative ideas.

#### **Job Creation**

With that in mind Yunus has set up some pioneering social businesses in his native Bangladesh, working with leading multinationals. In one example, begun in 2006, Yunus led a joint venture between Grameen, the microfinance conglomerate he established, and European food giant Danone, to produce high nutrition yoghurt. The yoghurt, known as "Shakti Doi", meaning "power yoghurt" in Bengali, aims to reduce malnutrition in Bangladeshi children while also creating a manufacturing and distribution network that provides income and job opportunities for the local community. Another more recent joint venture with Adidas is aimed at producing shoes costing just one euro per pair. The project is designed to alleviate the problem of parasites infecting poor people forced to walk barefoot because they can't afford shoes, while again also creating jobs and opportunities in the process. These, he says, are high profile examples that show the social business model in action and in a way that is self-sustaining. But social businesses can also be successful at the grass roots level, and don't need the backing of a major multinational in order to deliver the solutions they seek. Yunus, who was awarded the Nobel Peace Prize in 2006, says he has made it his mission to "put poverty in a museum" and in Bangladesh he is promoting the target of 2030 for eradicating poverty from the country. It's an ambitious target: with its booming garment export trade Bangladesh has enjoyed some of the fastest economic growth in Asia in recent years, but it remains at a very low base.<sup>4</sup>

#### Social Business Consequences on Society:

When we go shopping, it's normal to look for the price tag to see whether the item we want is good value. The price is certainly a key piece of information. But it doesn't give us the full picture. We may, for example, buy some green beans from the supermarket that have been flown from Kenya because they are out of season in the UK. In this case, there is an environmental cost in flying the beans thousands of miles to us - a cost that the price tag doesn't show. Perhaps there is a human cost too, depending on how far the deal is for the developing world farmers who grew the produce. More and more consumers and procurers of goods and services are becoming aware that price, by itself, doesn't give them all the information they need to make a judgment on value. In the supermarket, labels now often state if the product has been flown in. Logos and stamps such as the Fair-trade mark aim to reassure us about the human or environmental story behind our purchase.

In the social business world, which is all about trading goods and services, telling the story of successful business is fundamental. Price is important and social enterprises aim to be competitive in the marketplace. But, for a social business, providing evidence of social impact

takes on special significance. Whether we use methods such as SROI (Social Return on Investment) or other forms of social and environmental accounting and auditing, the basic aim is to measure and communicate the social, environmental or economic value that our activity creates. By doing this, the compelling stories told by social enterprises, by charities and by ethical businesses can be backed up with facts that prove - and improve - the value of their activity. We believe that making an effort to measure, explain and promote the 'social impact' of organizations operating in this sector is crucial if social enterprise is to win mainstream support as a business model that can make a real difference. The government too has backed initiatives to promote this. Muhammad Yunus on his "a-ha" moment while teaching economic theory at Chittagong University: "My theories are useless, but I am not...if I can be of help to one person each day, I will be a happy person."<sup>5</sup>

Muhammad Yunus was promoting his new book, Building Social Business: The New Kind of Capitalism That Serves Humanity's Most Pressing Needs. The Nobel Peace Prize winner developed the idea of microfinance and started Grameen Bank, which now loans \$100 million/month and has a repayment rate upwards of 97%. Then, he diverged into the idea of "social business" with his previous book, creating a world without Poverty: Social Business and the Future of Capitalism. Now, Yunus promotes the concept further and describes his own partnerships with Danone, Adidas, and others as examples of social businesses. Social business, as defined by Yunus, is a venture whose sole mission is to create a positive impact on society through its good or service, and is thoroughly sustainable, or covers its costs. All profits are reinvested into the company in order to expand and create a greater impact. As with any market-based approach, social businesses increase their efficiency and quality through competition, but on the basis of social impact rather than profit. Social businesses, by the nature of being businesses, can scale up quickly and solve the world's problems.

Yunus envisions a world in which social businesses and for-profit companies thrive side-by-side. Instead of donating to charities, people will have the option to invest in a social business, creating more lasting change than donating to a charity, whose work may be limited by its dependence on funding. Soon, there will emerge a "social stock market" that functions alongside the traditional stock market. Since humans are multi-dimensional beings with aspirations other than just getting rich, unlike the one-dimensional profit-seeking drones as painted by traditional economic theory, most people will invest in both stock markets and choose social businesses on the basis of the social impact they create. There will be no dividends in the social stock market, only the satisfaction of helping to change the world.

Additionally, Yunus challenges us to creatively use social business tackle big issues in the "developed" world. Yunus even applies his social business concept to seemingly insurmountable challenges. He suggests placing 5% of a welfare fund into a social business venture fund to encourage those on welfare to start social businesses or devising businesses that serve those who need healthcare in the US. He also champions placing 10-15% of charity to Haiti in a social business fund to encourage sustainable solutions and set a precedent for future crisis situations. He declares that solving these challenges is "all about how to use our creative mind."

Yunus argues against any profit at all in a social business; he feels that there is an inherent tradeoff between profit and social impact, and that the profit motive will inevitably dominate. Perhaps social businesses can change the world more quickly and effectively. After all, a company that only has to cover its costs may have the freedom to implement change on a grander scale. On the other hand, will it be possible to attract investors to a purely social business? We see organizations such as Acumen Fund thriving with a requirement of both financial and social returns. However, we also know that people donate money to charities every year with no expectation of profit, and that those same people could channel their millions into social businesses instead. Nevertheless, maybe the profit motive is a necessary imperative for other ends, like scaling up efficiently.

#### Linkage between the Social Business and Micro credit

This discussion is to reflect on the overall performance of Bangladesh economy, which is also a period of expansion of microfinance sector in Bangladesh. The progress of Bangladesh has been mixed during the 1990-2012 years under democratic governments. There have been considerable positive changes in many social indicators, even in comparison to the country's better known neighbors. However, there have been disappointments on many fronts, with a failure to capitalize fully on all the opportunities in the social and economic arenas in order to achieve faster economic growth. The success of microcredit Bangladesh has led to using it as a major tool in national poverty reduction strategy by both the government and non-governmental organizations. The popularity of microfinance has made it the core activities of hundreds of microfinance institutions in Bangladesh. The case of microfinance in Bangladesh is a good example of nongovernment organization led operations where the government directly and indirectly provided major policy and material support to make it probably the largest microfinance sector in the world. We have also discussed the possibility of rising poverty in Bangladesh due to external factors and no fault of the poor. Microfinance may need to bear more responsibilities in this environment. Readers should look into the country report with this perspective in mind to appreciate the significance of microfinance.<sup>6</sup>

This study paper shows the major linkage between the social Business and Microcredit. Basically, there are two types of Social Business- Social Business Type- 1 & Type- 2. Microfinance has no linkages with Social Business Type-1 but there is strong tie between Social Business Type-2 and Microcredit. It can be define again-

A Type-2 Social Business is a profit-oriented Business that is owned by the poor or other underprivileged parts of the society, who can gain through receiving direct dividends or by indirect benefits. That means this kind of social Business is a profit making company, owned by poor people, either directly or through a trust that is dedicated to a predefined social cause. Since the profits are directed towards poor people, this profit is automatically serving a social cause.

This paper reflect the major Social Business activities for instance- Agriculture, Fisheries, Livestock, Small Entrepreneurship, Poultry, Embroidery, Vegetables trading, Dairy, Rickshaw Puller, Bamboo works, Mat Making and so on. Through these activities the poor people lifting their veil in the society, living standard is upgrading, purchasing power is increasing, insisting the motive of life pattern in a better manner.<sup>7</sup>

The economy of Bangladesh becoming boost through their contribution, per capital income is increasing by adopting this type of Social Business. Per capital income influence our GDP that

have a direct relationship with our economy. So, if we analyze the previous situation of our economy with existing situation, it will be clear for all of us, that Microcredit is playing a vital role in our society. Before introducing Microcredit, the socio economic situation in our country is not good enough which is existing right now.

The population growth rate is increasing rapidly. Comparison with other sectors, Microcredit is playing a great role in our economy. The rate of beneficiaries is increasing over a year, which is greater than population growth. That reflect Microcredit situation is strong enough. Though the borrowers are increasing and deployed themselves betterment of the society. So, there is a direct linkage between Social Business type-2 and Microcredit in this point of view.<sup>7</sup>

## **Conclusion:**

Poverty is a threat for peace, so Prof. Dr. Muhammad Yunus wants to remove poverty from the world. In order to bring the landless and asset less poor people out of the shackles of poverty, social business and microcredit system is an innovative and unique banking system for poor people. Social business is a very recent concept that is wider than microcredit– it is true indeed that microcredit is a part of Social Business. Microcredit and Social Business is a strategic option for alleviating mass poverty and empowering poor people for about four decades, especially in the least developed countries.

## **References:**

- 1. Yunus M, 2010, Building Social Business, The University Press Ltd, Dhaka. ISBN: 9789845060110. pp. 1-109
- 2. http://www.internationalpolicydigest.org
- 3. http://www.muhammadyunus.org/Social-Business/social-business
- 4. http://thinkbusiness.nus.edu/articles/item/13-muhammad-yunus
- 5. http://www.nextbillion.net/blogpost.aspx?blogid=1821
- 6. Alamgir D, 2009, State of Microfinance in Bangladesh, Institute of Microfinance. pp. 1-16
- 7. Rahman. M. B, Mahmud S, Khan S. A 2012, The Performance of Social Business & the Concept of Microcredit in Bangladesh, Faculty of Business Studies, Dhaka International University. pp. 1-19.

# **Islamic Perspectives in Marketing**

## Md. Siddique Alam Khan<sup>1,</sup> A.K.M. Shakil Mahmud<sup>2</sup>

**Abstract:** Islamic marketing ethics combines the principle of value maximization with the principles of equity and justice for the welfare of the society. Adherences to the Islamic ethics it can help elevate the standards of both behavior and living of businessman and customers alike. In a rapidly changing marketing environment, the need to be customer-focused has never been as important as it is today. At present, where customers are demanding more & customer-focused is not enough. Islamic business and more specifically their customer-contact employees (customer relation advisers or officers) need to be perceived by their customers as being Islamic.

Key words: Value maximization, Welfare, Islamic ethics, Marketing environment, Customer-focused.

#### Introduction

Islamic marketing ethics combines the principle of value maximization with the principles of equity and justice for the welfare of the society. When companies do business, the marketing department plays a role in delivering products and services which match the costumers' expectation. Marketing department has a crucial role in determining the success of companies. In delivering their products and services, it is argued that companies are expected to do so in a morally acceptable way. Therefore, through this paper, the author would like to discuss the implementation of the morally acceptable way of marketing from the Islamic perspective. Islam teaches its followers to engage in a decent way of wealth acquisition, as Allah states the issue through one of the Quranic verses as follows:

"O you who believe! Eat not up your property among yourselves unjustly except it is a trade amongst you, by mutual consent. And do not kill yourselves (nor kill one another). Surely, Allah is Most Merciful to you "(Al-Quran 4:29).

From the above verse, one could find a strong message concerning trading. Islam guides its followers to engage in commercial activities and to refrain from the practice of charging interest/usury. Therefore, commerce is something viewed as essential in Islam, for as long as the process is parallel with Islamic teaching on doing business. It should be noted that Islam views commerce as one crucial factor in human life, so crucial that Allah destined Prophet Muhammad (SAW) to be a successful businessman before his prophetic life<sup>1</sup> .Since Islam is a way of life, one could advance a logic that Islam must have written the code of conducts in doing business, among any other things.

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#### **Rationale for the Study**

Islam is a comprehensive way of life which rules everything, including commercial activities. "Give full measure when you measure, & weigh with a balance that is straight: that is the most fitting & the most advantageous in the final determination." (Sura Isra: 35) Through Al-Quran and Hadith, the two main references for Islamic law, Islam exhorts its followers to avoid taking usury and instead maintain the quality of their wealth through just trading. This could be seen from one of the Quranic verses as follows:

Those who eat Riba (usury) will not stand (on the Day of Resurrection) except like the standing of a person beaten by Shaitan (Satan) leading him to insanity. That is because they say: "Trading is only like Riba (usury)," whereas Allah has permitted trading and forbidden Riba (usury). So whosoever receives an admonition from his Lord and stops eating Riba (usury) shall not be punished for the past; his case is for Allah (to judge); but whoever returns [to Riba (usury)], such are the dwellers of the Fire – they will abide therein (Al-Quran 2:275).

There are few points worth considering from the above verse. It could be argued that Islam does allow the practice of wealth acquisition. Second, freedom in wealth acquisition is not unlimited. This means that Islam exhorts its followers to acquire wealth by actively participating in real sectors and not through acquiring "easy money" by practicing interest. Allah, through His messengers, had already given an example of participating in the real sector. On this regard, Prophet Muhammad (SAW) said the following:

Narrated Abu Hurairah RA: The Prophet(SAW)Said, "Allah did not send any Prophet but he shepherded sheep." His Companions asked him. "Did you do the same?" The Prophet SAW replied, "Yes, I used to shepherd the sheep of the people of Makkah for some Qirat"<sup>2</sup>.

The word "Sheep" depicted in the above Hadith symbolizes the real sector. One could argue that investment in real sector is very important since it attracts the creation of capital and decreases the amount of unemployed. However, Islam also rules the condition of participating in the real sector. In this manner can Islamic marketing plays its role, according to the author.

#### Objectives

The major objectives of this study are

- 1. To address the Islamic Marketing
- 2. To enumerate the features of Islamic Marketing
- 3. To implement the Islamic marketing strategy
- 4. To make implications in business

#### Methodology

This paper is conceptual & qualitative in nature. This paper discussed the concept of modern marketing from an Islamic perspective. Secondary Data were collected through extensive review of literature include different articles, texts, newspaper, various national, international research works & publications of different organizations.

#### **Data Analysis**

Information is collected from different sources as per mentioned in methodology. Then secondary data are analyzed in view of topics & make some arrangements regarding this paper title. Data are enumerated throughout the paper where it is suitable to mention.

## **Literature Review**

The Islamic marketing principles combine a value-maximization concept with the principle of 'justice' for the wider welfare of the society. These principles offer a means to create value and elevate the standard of living of people in general through commercial pursuits. Islamic ethics dictate that under no circumstances should marketers exploit their customers or in any way involve themselves in dishonesty, fraud or deceit."Woe to those that deal in fraud,-Those who, when they have to receive by measure from men, exact full measure, but when they have to give bu measure or weight to men, give less than due. Do they not think that they will be called to account?"(Surah mutaffifin:1-3). Any unethical marketing practice does an injustice, which, by definition, negates the concepts of brotherhood and equality of humanity that form the core of the Islamic vision<sup>3</sup>. Thus, adopting the Islamic marketing ethics ensures that the seeds of harmony are planted and a proper order in society is provided, thereby enhancing the dignity of, and upholding the rights of human beings. Islam prohibits getting something too easily without hard labour, or receiving a profit without working for it<sup>4</sup>.Banking or commercial activity from an Islamic perspective is governed by two principles: (i) submission to the moral order of God and (ii) empathy and mercy to God's creations which implies refraining from doing harm to others and thus preventing the spread of unethical practices<sup>5</sup>. According to Islamic principles, marketers are required to "disclose all faults in their goods, whether obvious or hidden; to do otherwise is to act... fraudulently"<sup>6</sup>.

Islam emphasizes the importance of "free" and "independent judgment" on the part of the customer. The ability to think rationally while making any decision relating to global marketing activities is a prerequisite in Islamic law<sup>7</sup>. The Islamic perspective incorporates moral and transcendental elements within the production decision-making process in product development and is guided by the principles of Islamic business ethics<sup>8</sup>. Under the Islamic approach, the production process has to be guided by the criteria of the value and the impact of the product upon the whole society. This is due to the highest importance given to the actualization of the optimum welfare of a human being and society <sup>9</sup>. The Prophet Muhammad (Peace be upon him) expressly condemned all manipulative promotional behavior stating that, "One who cheats us is not one of us" <sup>10</sup>. The society at large should not be deprived of honest, free from coercion marketing information. A customer's right to acquire such information is his right and is indicative of the status given to him by Islam, as well as of the ingrained rights of his wealth which he spends in purchasing products and services. It is the responsibility of the marketers not to resort to any form of coercion and they must, under all circumstances, have a regard for the intellectual integrity and a higher degree of consciousness of the consumers to ensure that the hard earned money of customers is not wasted. Coercion or 'ikrah' (Al-Qur'an 23:7)<sup>11</sup>, as

defined by Tyser et al., (1967:149–150), is to compel a person to do a thing without his consent<sup>12</sup>. It follows therefore, that whenever some coercive force is applied for the purposes of concluding a global marketing deal, the fundamental and vital condition of mutual consent remains unfulfilled and the resultant transaction is unethical and unlawful. According to Islamic principles, sexual appeal, emotional appeal, fear appeal, subliminal advertising and pseudo scientific claims all have elements of coercion which cause them to be categorized as unethical as a means of marketing. An ethically sound marketing-mix, therefore, dictates that customers' decision-making freedom must be protected from all elements of coercion.

## **Religion as Marketing Tool**

In this part, the author would like to discuss the utilization of religion as a marketing tool. The discussion will start from the objectives of Islamic marketing and goes through the Islamic view of utilizing religious teaching to market products and services.

## **Objectives of Islamic Marketing**

It could be argued that the objectives of Islamic marketing cannot be separated from the Objectives of the Sharia. From the above presentation on the philosophy of Islamic Marketing, it is clear that human is Allah's envoy in this world. This world is entrusted to human to be controlled and managed in accordance to Allah's will. This view is rather different from the concept of human in conventional economics, as cited by Haneef<sup>13</sup> as follows: This is of course, totally at variance with modern "economic man," who is not obliged to consider any form of submission to a transcendent God. Therefore, the trust that Allah gives must be utilized in all aspects of life, including marketing. Although in reality, different ways might be taken to utilize that trust as long as they meet certain principles. Those principles, according to Ahmad<sup>14</sup> are as follows:

- Agree with the principles of Islamic law or Shariah
- Achieve the economic and social goal of Islamic civilization

The author argued that it is somewhat challenging to arrive at one single and definitive objective of Islamic marketing. However, since any objectives need to align with the Principles of Islamic law, one could try to elaborate the objectives of Islamic marketing as follows:

- To bring forward marketing theory to a new realm, whereby modern marketing Theory interrelates with Islamic teaching.
- Islamic marketing should be able to take part in realizing social justice.

Given the objectives set above, perhaps one may ask the notion that religious teaching could be utilized as a marketing tool. This notion is important to consider, as failing to address the issue will create doubt on whether religious teaching should isolate itself from any commercial decision making.

## Use of Religious Teaching as a Marketing Tool

It could be said that religious teaching could be utilized as a marketing tool. As far as Islamic teaching is concerned, there are some evidences that are available in light of this proposition. First, the Holy Quran has presented many verses which are related in commercial transaction. These verses, among any, include the prohibition of interest (Al-Quran 2:275); being

straightforward in negotiation (Al-Quran 33:70); and many more. Furthermore, one could also witness Islamic concept on commercial transactions through many sayings of Prophet Muhammad (SAW). On selling products transparently, Prophet Muhammad (SAW) said the following:

Narrated Hakim bin Hizam: Allah's Messenger said, "The seller and the buyer have the right to keep or return goods as long as they have not parted, or till they part; and if both the parties spoke the truth and described the defects and qualities (of the goods), then they would be blessed in their transaction, and if they told lies or hide something, then the blessings of their transaction would be lost"<sup>2</sup>.

Moreover, as far as legal ruling is concerned, there are no prohibitions towards utilizing religion as a marketing tool nor are there any prohibitions for labeling certain marketing strategies as "Islamic Marketing Strategy", "Christian Marketing Strategy", "Hindu Marketing Strategy", and the like. Therefore, the author argued that incorporating religious teaching into marketing is feasible. Finally, the author argued that one cannot fully exclude religious teachings from marketing concept even if marketing strategy development is build from non religious teachings. One example is the development of relationship marketing or the rise of social media (such as Facebook). The author argued that such social phenomenon is parallel with Islamic concept of unity (brotherhood). Therefore, even without scrolling through any religious text, one might set up a strategy which is parallel with the teaching of Islam.

Another interesting exposition comes from Harrison<sup>15</sup> who stated that:

The bounded ethical principles specifically for marketing are suggested to be:

1. The improvement of human life (morality seen as a defence for the weak, etc.)

2. Recognition of Society's constraints (the law; consumer needs)

3. Working within a market economy, with its emphasis on the reward of risk taking, hard work and creativity (issues of distributive justice)

4. Recognizing the constraints of human capabilities and limitations (e.g. the link between Psychological egoism and theories of motivation)

Looking at Harrison's point of view, one could argue that his propositions are very close to Islamic teaching. The issues on "The improvement of human being" and Islamic perspectives on marketing

"Recognition of Society's constraints" could be seen from the above Hadeeth concerning product transparency. The author argued that product transparency could hinder the consumers from any harm that the products may cause. Islam also teaches the concept of "hard working" and "distributive justice" through Al-Quran (3:1-3) and Al-Quran (6-141). However, although Islam encourages people to take some risks, Islamic concept of risks is rather "sharing the risks" than "take the risks yourself." The last point concerning "constraints of human capabilities and limitations" is even more interesting since it is the last point on Harrison's list. This is appealing as Islam teaches its followers to work hard with maximum capability and then submit everything to the will of Allah.

This is shown by the following verse: And by the Mercy of Allah, you dealt with them gently. And had you been severe and harsh-hearted, they would have broken away from about you; so pass over (their faults), and ask (Allah's) Forgiveness for them; and consult them in the affairs. Then when you have taken a decision, put your trust in Allah, certainly, Allah loves those who put their trust (in Him) (Al-Quran 3:159).

The above verse seems to align very well with Harrison's list. The verse already gives Muslim a direction to make final submission to Allah for all the works they have done. The concept of submission is arguably useful to eliminate "this is my work" ego since the verse clearly hints that Allah is the final decision maker. So far the author has argued over the credibility of incorporating religious teachings in marketing. This paper has highlighted some arguments concerning the credibility of incorporating religious teaching religious teaching into marketing concept. In the subsequent part, the author will try to elaborate the conceptual implementation of Islamic marketing. In this regard, the author would like to focus on conceptual implementation of Islamic teachings in marketing strategy.

#### The need for Islamic Marketing

The author argued that people, at least the Muslim, need to live in a way that is prescribed by Allah and His messenger. In one of the Quranic verses, Allah said the following:

O you who believe! Enter perfectly in Islam (by obeying all the rules and regulations of the Islamic religion) and follow not the footsteps of Shaitan (Satan). Verily, He is to you a plain enemy (Al-Quran 2:208).

The above verse suggests that all ways should be Islamic ways. Therefore, all ways could be made Islamic. The only challenge is the "How" element. Realizing that, the author argued that marketing could be made Islamic as well. Therefore, through this paper, the author would like to develop Islamic marketing starting from its philosophical aspect. It could be argued that building philosophical concept is very crucial towards the development of knowledge. Arguably, the philosophy of knowledge will shape the elements of Islamic marketing.

#### **Fundamental Philosophy of Islamic Marketing**

The highest and most important concept in Islam is the Tawhid or oneness<sup>16</sup>. This is the most important concept that Muslim must know in order to live and survive in this world and the hereafter. The concept of Tawhid is the most crucial ingredient in commerce<sup>17</sup>. Furthermore, , the concept of Tawhid is both vertical and horizontal<sup>18</sup>. The vertical relationship pictures the connection between human and its creator, while the horizontal relationship portrays the interhuman relationship based on Allah's law. The Tawhid principle also takes Muslims to believe that Allah is the only architect of the universe and therefore human being is the representative of Allah to manage this world and its resources in just way<sup>18</sup>. In terms of marketing, the author argued that justice could be implemented in smoothing the flow of goods, among others. By smoothing the flow of goods, companies will ease the customers in meeting their needs. Furthermore, the author argued that smoothing the flow of goods could prevent the practice of hoarding which is condemned by Islamic teaching. By eliminating the practice of hoarding, one has successfully shown one's act of brotherhood (good inter-human relationship) to other people and also establishes justice to society. Since everybody is essentially equal, all costumers have equal rights to get the products that they want in order to satisfy their need. Hoarding will inflate the price and create injustice to those who cannot afford to but the particular product that they need<sup>19</sup>. So far this paper has discussed the important principle of Islamic marketing. One should know that the concept needs to be elaborated further. In the author's opinion, the Tawhidic paradigm serves as a spirit which needs "A Character to Fill." Therefore, this paper needs to discuss some traits that could shape a "Character" which can be energized with the spirit of

Tawhid. This "Shape" would be recognized as the characteristics of Islamic marketing, unique traits infused with the Tawhidic spirit that could be utilized in the context of modern marketing theory.

#### **Characteristics of Islamic Marketing**

In general, there are four characteristics that surround Islamic marketing concept. These are spiritualistic, ethical, realistic, and humanistic<sup>20</sup>. If one gives those four characteristics a thought, one will find a good relationship between the five pillars of Islam and the implementation of it. These concepts will be explored as follows.

**A. Spiritualistic**. This is the umbrella of all teachings in Islamic marketing<sup>21</sup>, according to the author. Spiritualistic means that all business conducts must be coherent with the teaching of Al-Quran and Sunnah. Moreover, Islamic marketers must fully believe that Islamic law is the ultimate law that must be used as a guidance which is just, perfect, and the source for all goodness<sup>20</sup>. The first pillar of Islam, the shahadah, becomes the heart of this concept. Shahadah is the ultimate confession of a human to his or her creator. By confessing the shahadah, a Muslim is abode by any "Terms and Condition" set by Allah to live in this world. Any forbidden action will be taken into responsibility in front of the court of Allah . In terms of Islamic marketing, the total submission to Allah SWT means that all aspects of marketing must be parallel with the teaching of Islam. Of course, in some ways, its implementation varies. Islamic marketers must be able to include the spirit of Islam in all aspect of marketing activities, from the planning to after sales service. In other words, any marketing activities must be done within the ethical boundaries set by Islamic teaching<sup>20</sup>.

**B. Ethical.** The spiritual enhancement within Islamic marketing will form Islamic ethics within the business transaction.One of the characteristics of Islamic marketers is full of ethical consideration<sup>20</sup>. This ethical conduct, argued the author, must follow the teachings of Al-Quran and Hadeeth. Therefore, it is necessary to refer this kind of ethics as Islamic Ethics. In the view of the author, the concept of Islamic ethics can be seen from the practice of Islamic daily prayers, the second pillar of Islam. Before Muslims pray, they must clean certain parts of their body before commencing their prayers. In other words, certain

preparations that make Muslims look clean must be done before "meeting" with their creators.

In marketing sense, Islamic marketers must make themselves ready. They must be "purified" before commencing their marketing activities. The term "purified" refers to any attempt of "self-cleansing" before serving the markets. For instance, companies must train their marketers so that all marketing activities could be done in ethical standard set by Islamic teaching. Last but not least, companies must clearly inform their staffs that they must accept any results that appear in front of them, for as long as they have worked hard and done everything they can.

**C. Realistic.** Syariah marketers should not be so "rigid" in practicing Islamic marketing, for as long as it does not violate Islamic law<sup>20</sup>. The content is more important than the appearance<sup>22</sup>. However, it must be noted that being realistic does not mean that in the case of "emergency", Muslim marketers can do something which violates the principles of Islamic law<sup>23</sup>. Muslim marketers must be brave to differ themselves from any other marketers which partially or do not use Islamic principles in conducting business<sup>20</sup>. In the view of the author, the "realistic" mentality could be seen in people who perform fasting in the month of Ramadhan. Fasting, the

third pillar of Islam, teaches people to become realistic. When Muslims perform fasting, they cannot eat when the sun rises until the sun sets. During that time, all Muslims around the world still do their normal activity even if they are in the state of hunger and thirst<sup>24</sup>. In the view of the author, the feeling of hunger and thirst is a symbol of a "struggle" which will end when the sun sets. This shows that nothing lasts forever. For every challenge, there lies hope and prosperity. Being realistic is not just sitting down and losing hope. In marketing point of view, being realistic means an opportunity for creativity. This is a state where marketers' ability is being tested in order to create breakthrough. For instance, if companies know that they are selling expensive products, they had better sold the product in credit rather than asking people to buy it in cash. They could also offer the least expensive products. This may encourage customers' willingness to buy. The two examples show how the state of being realistic creates hope, which in turn create an inner power to make a breakthrough. It is important for Islamic marketers to understand this concept since it will increase the spirit of marketing their products. Last but not least, companies should view the market humanely. This means that companies should realize that it is the human being that buy the products, not just a set of "being" which could be treated like an object. Therefore, Islamic marketing tries to be humanistic.

**D. Humanistic.** Humanistic here means that Islam, like any other religions, comes in order teach people the values that could differentiate people from any other creatures that inhabit this world. As a consequence, one should be able to distant oneself with inhumane desire such as greed<sup>20</sup>. According to the author, being humanistic is equal with the fourth and the fifth pillar of Islam, namely, zakah and hajj<sup>25</sup>. The two pillars, the author argued, are closely related with being human. Paying zakah will increase social sensitivity towards the poor, while going to haji increase social acceptance towards people from different race and most importantly skin colours. Furthermore, the author argued that being humanistic also affects the discipline of marketing. Modern marketing refers this as "Sustainable Marketing"<sup>26</sup>. Basically, it is a concept of marketing which tries to balance between market demand and environmental preservation<sup>26</sup>. In the view of the author, it is the trend of today's companies to pay more attention to their society and more importantly their environment. So far, this paper has already discussed the philosophy and characteristics of Islamic marketing. Before expanding the discussion further, the author argued that the philosophy and characteristics of Islamic marketing need one further test. This test is so important as to determine whether people, especially Muslim, will accept Islamic marketing as a new concept or whether this is regarded as "Me Too" marketing concept which is fabricated to satisfy the emerging Muslim market. One needs to question the eligibility of utilizing religious concept to sell products and services and exploiting people's religious belief to purchase certain products claimed to be "ethical." In order to keep the discussion on track, these questions will be discussed from the viewpoint of Islamic teachings. However, before embarking upon the journey towards discussing the questions, it could be argued that one needs to discuss the objectives of Islamic marketing.

#### **Implementation the Objectives of Islamic Marketing Strategy**

The concept of Islamic marketing is useful if it can turn the philosophical concept into modern marketing concept. In this part, the author would like to present the implementation of Islamic teachings in marketing mix. The first step towards applying Islamic marketing is to understand the basic principles of Islamic marketing. There were 17 principles of Islamic marketing that should be applied when institutions want to be classified as those who based on Islamic

marketing<sup>20</sup>. In general, those principles are divided into four broad categories. The first category belongs to the landscape of Islamic business . These are "Competitor", "Change", "Customers, and "Company" The second category belongs to the elements of marketing strategy. Further divided into three sub categories, namely, "Shariah Marketing Strategy", "Shariah Marketing Tactic", and "Shariah Marketing Value." Furthermore, the third category belongs to syariah scorecard. The scorecard can be used as a tool to balance between the Islamic values that a company promotes and the actors that support and promote those values. Finally, the fourth category belongs to "Sharia enterprise." Those values have a strong relationship with "Inspiration", "Culture", and "Institution". Those three factors must also obey the principles set by Islamic teaching. For the purpose sake of marketing strategy, this paper will focus the discussion on the third category concerning the elements of strategic business architecture<sup>27</sup>.

#### **Fundamental Elements of Islamic Marketing Strategy**

The elements of Islamic marketing strategy consist of segmentation, targeting, and positioning. The following part will discuss how these elements work within Islamic marketing.

A. Segmentation. An interesting example of segmentation practiced by Prophet Muhammad (SAW)<sup>28</sup>. In his time, Prophet Muhammad (SAW) conducted his trading business in several important markets in Arabic peninsula, including the one in Bahrain called "Mushaqqar"<sup>1</sup>. Prophet Muhammad (SAW) knew the way of life and the way people eat and drink in Bahrain<sup>28</sup>. From the information obtained above, one could argue that Prophet Muhammad (SAW) used some of the attributes of geographic, demographic, and psychographic segmentation in doing his business<sup>29</sup>. Furthermore, one could learn the example of market segmentation from Prophet Muhammad (SAW). From the way Prophet Muhammad (SAW) conducted his business, one could learn that market segmentation could be done through mental process of market identification. The author used the term "Mental Process" in order to show how one should come to see his or her market before conducting segmentation. Prophet Muhammad (SAW) knew the situation in Bahrain since he was there and involved in the trading process. In the process, the author argued that Prophet Muhammad (SAW) utilized multiple types of market segmentation. He knew the location of important markets in Arab peninsula Landscapes of Islamic marketing.(geographic segmentation), the type of people he met in the market (demographic segmentation), and the lifestyle of those he met in the market (lifestyle segmentation).

**B.Targeting.** Previously, this paper discussed how Prophet Muhammad (SAW) segmented the market. Now, this paper will look at how he targeted his segments. Modern marketing theory teaches that the various segments available should be evaluated so that companies know which segments that can be served well<sup>26</sup>. How Prophet Muhammad (SAW) exactly targeted his segments needs to be researched thoroughly. However, one argument that Prophet Muhammad (SAW) could target all of his segments<sup>30</sup>. In modern marketing, such targeting strategy is called "Differentiated Marketing", a segmenting strategy whereby companies create several different products for several different segments<sup>26</sup>. The problem that remains, argued the author, is the quest towards searching for a good targeting strategy. Perhaps, in this part, the key lies within positioning strategy.

**C. Positioning**.Companies must position their products so that the products could be deemed valuable from the customers' perspective<sup>26</sup>. When applying this theory back to the era of Prophet

Muhammad (SAW), one could find some similarities in product offering. First, the consumers in that era were arguably as careful as those in present time. Logically, they would buy the best product in accordance to their financial ability. Second, many sellers offer multiple products to sell. Modern marketing theory suggests sellers to position their products in the mind of the consumers. Prophet Muhammad(SAW) positioned himself as an honest trader, rather than positioned the products he sold. In other words, it seems that the sellers are more important that the objects being sold. This does not mean that Prophet Muhammad (SAW) did not think about the quality of his products. Rather, the author argued that Prophet Muhammad (SAW) did total positioning. He did not just position the products he sold, but also the way he sold them. With his personality, Muhammad (SAW) made a differentiation in his offering. Shariah marketing tactics. There are three elements discussed in this part. These are differentiation, marketing mix, and selling.

**D. Differentiation**. The type of differentiation that Prophet Muhammad (SAW) made was unique at his time. The author argued that differentiation of both sellers and the products they sell must be coherent. This is because a factor called transparency will take place. One obvious differentiation that Prophet Muhammad (SAW) did was his moral obligation to tell every customer the weak point of his products. He never concealed anything from his customers, including any defects that his products contained<sup>31</sup>.Based on the above information, it is argued that one should re-think the philosophy behind the modern concept of differentiation. Arguably, this is important to be considered as differentiating products on the basis of the sellers' morality might bring real impact to the quality of the products sold.

E. Designing marketing mix. Prophet Muhammad (SAW) already taught some lessons in conducting business, which could be implemented in marketing mix. On pricing, Prophet Muhammad (SAW) sold his products with a price which could be absorbed by the market<sup>1</sup>. In other words, he got his profit based on sales volume<sup>1</sup>. Arguably, this is a good strategy to take since he could enter all market segments with such pricing. On product, Prophet Muhammad (SAW) chose to sell commodities which are needed by all people and are not rotten<sup>1</sup>. Muhammad (SAW) chose to go for clothing<sup>32</sup>. Prophet Muhammad (SAW) also prohibited to put the low-quality and the high-quality products on the same place. Arguably, that was an act of transparency so that customers could easily differentiate between high and low grade products. On place (distribution), Prophet Muhammad(SAW) prohibited the act of monopoly. Thus, dominating the distribution channel with the intention to set up the price level is an act condemned by Islamic teaching. On promotion, Islam prohibits the practice of over promising<sup>1</sup>. Products should be communicated within ethical boundaries so that customers do not feel deceived. Finally, on phrase, Islam teaches its followers to present an agreement in the process of buying and selling. This is very important in Islam, as failing to meet the conditions of buying and selling will cause the process unacceptable $^{33}$ .

**F. Selling**. In selling products, at least there are several lessons that one can learn from Prophet Muhammad (SAW). First, sellers are not allowed to conceal anything to their buyers during transactions<sup>1</sup>. Second, sellers are prohibited to sell something that does not exist<sup>1</sup>. Thus, the goods being sold must exist. Third, scaling needs to be as accurate as possible<sup>1</sup>. If the products is 1 kilogram, then the scale must show 1 kilogram and not otherwise. Fourth, it is highly recommended that sellers do not go to other buyers unless negotiation fails with the first buyer<sup>1</sup>.

Prophet Muhammad (SAW) did that in order to satisfy and to respect all customers<sup>1</sup>. Last but not least, Prophet Muhammad (SAW) taught to prioritize the first buyer<sup>1</sup>. From the above presentations of Prophet's selling techniques, one could learn that Islam also puts special attention to total customer satisfaction. Arguably, this is the key towards sustainable business development. The author argued that by having all customers satisfied, companies could have customers that last.

**G. Shariah marketing value.**All efforts to sell products and service will doom to fail without any attempts to include product or service values<sup>20</sup>. The concept of value within brand (value indicator), service (value enhancer), and process (value enabler)<sup>20</sup>.

**H. Brand, service and process.** On value indicator stated that the appearance of a brand presents the total service that companies offer, starting from product purchase to after sales service<sup>20</sup>. Brand conveys unique message to its audience and consumers try to link themselves emotionally with it<sup>26</sup>. In the case of Prophet Muhammad (SAW), the author argued that his name was a guarantee for quality, honesty, and integrity.On value enhancer stated that buyers need to serve their customers well<sup>20</sup>. It is argued that one indicator of good service is the lack of complain. Rabi Bin Badr, one of Prophet Muhammad (SAW) business partners once said that Prophet Muhammad (SAW) and Prophet Muhammad (SAW) never cheated as well<sup>1</sup>. Finally, stated that value enabler serve as catalyst in provision of good service<sup>20</sup>. It is argued that everything needs process (throughput). How one does the job could differentiate the end result. Going forward with this discussion, although the author tried to elaborate the concept of Islamic marketing, it could be argued that challenges to make Islamic marketing acceptable by the market are still considerable.

#### **Implications for Business**

Business people should try to conduct their business dealings with practicing Islamic laws whenever possible. This is for the following reasons:

1. Practicing people seek 'blessing' before 'profit'.

2. People are less likely to be cheated. Prophet Mohammad (SAW) says: 'He who cheats is not of us [the Muslims].'

3. People are more likely to get a better deal. Prophet Mohammad (SAW) says: 'May Allah have mercy on those who are easy when they sell, easy when they buy . God loves kindness when you deal with any matter.'

4. In case of dispute we are likely to get off with less harm. Prophet Mohammad (SAW) says: 'May Allah have mercy on those who are easy when they judge, easy when they sue.'

5. We are more likely to be treated better. Muslim scholars accept the rule that 'Religion is treatment' which means that how people deals with all others, how they conduct their affairs, how they performs their duties and so on are what makes people religious.

6. If we receive a present from Muslims or if they invite you to a meal or a social activity, nothing will be expected in return. Bribery is totally forbidden in Islam and therefore practicing Muslims will neither give it nor take it. Practicing Muslims are those who strive to comply with the teachings of Islam, such as performing daily five prayers, fast the month of Ramadan, giving a yearly charity of 2.5 per cent from their wealth and performing pilgrimage to Mecca once in their life time.<sup>34</sup>

#### Conclusion

An Islamic business that aims to be morally responsible in adopting Islamic marketing policies often faces difficulties in determining how popular their products should be. This difficulty is compounded by the fact that economic costs attach to making products safe. These costs must be reflected in the price of a product. Thus an Islamic business that should develop its products much popular than its competitors will have to sell those products at a comparatively reasonably price and risk suffering a corresponding disadvantage in the marketplace. In this paper we discuss the sales behavior relevant to Islamic business that are concerned to follow the Islamic marketing ethics in socially responsible ways and to protect their place in a competitive market.

#### References

- 1. Antonio, 2007; Trim, 2009, 'Business ethics in Islam.' In The Ethics of Business in a Global Economy, ed. P. M. Minus. Dordrecht: Kluwer Academic Publishers. 117–22
- 2. Khan, 1997, p. 254, Islamic Commercial Law, Cambridge: The Islamic Texts Society
- Saeed, M., Ahmad, Z.U. and Mukhtar, S.M. (2001) "International Marketing Ethics from an Islamic Perspectives: A Value Maximization Approach", Journal of Business Ethics, 32: 127-142; Salesperson Selling Behaviors on Customer Satisfaction with Products." Journal of Retailing, 73(2): 171-183.
- 4. Shaw, M. (1996) "Civil Society and Media in Global Crises", St. Martin Press, London.
- 5. Niazi, L.A.K. (1996) "Islamic Law of Contract", Lahore: Research Cell, Dayal Sing Trust Library.
- 6. Ibn al-Ukhuwwah, Diya' al-Din Muhammad (1983) Ma'alim al-Qurbah fi Ahkam al-Hisbah, Translated by Reuben Levy, Luzak, London.
- 7. Ahmad, M. (1995) Business Ethics In Islam, IIIT, Islamabad.
- 8. al-Misri, A.N. (1991) The Reminiscences of the Traveler: A Classical Manual of Islamic Sacred Law, Trans. by Noah Ha Mim Keller, Abu Dhabi: Modern Printing Press.
- 9. al-Faruqi, I.R. (1992) al-Tawhid: Its Implications for Thought and Life, IIIT, Kuala Lumpur.
- 10. al-Nawawi, Imam (nd) "Riyadhus-Saleheen," Trans., S. M. M. Abasi, IIPH, Riyadh.
- 11. al-Qur'an –English translation and commentary (The Meaning of the Glorious Qur'an) rendered by Abdullah Yusuf Ali (1983), Maryland(USA): Amana Corporation.
- 12. Tyser, C.R., Demetriades, D.G. and Efendi, I.H. (1967) "A Complete Code on Islamic Civil Law," (Translation from Turkish of Majallah-el Ahkam-i-Adliya, Majella, Lahore), New York: Law Publishing Company, NY.
- Haneef (1997, p. 45)Islamic Marketing Ethics And Its Impact On Customer Satisfaction In The Islamic Banking Industry, JKAU: IslamicEcon., Vol. 21 No. 1, Pp: 27-46 (A.D./1429 A.H.)
- 14. Ahmad(1989,p.26), Incoherence of Contract Based Islamic Financial Jurisprudence In The Age Of Financial Engineering, Rice University.
- 15. Harrison (2005, p. 278), "Regulatory Challenges Posed By Islamic Capital Market ProductsAnd Services," Centre For Middle Eastern And Islamic Studies, University Of Durham, UK
- 16. Alawneh, S. F. (1998). 'Human motivation: An Islamic perspective.' American Journal of Islamic Social Sciences 15(4): 19–39.

- 17. Rice, G.(2001). 'Islamic ethics & the implications for business' Journal of business ethics 18:345-58
- 18. Abusulayman (1998), Shari'a Standards, The Accounting & Auditing Organization For IslamicFinancial Institutions: Manama, Bahrain
- 19. Al-Faruqi, I. R. A. (1976). 'Foreword.' In Contemporary Aspects of Economic Thinking in Islam, Indianapolis, IN: American Trust Publications.
- 20. Sula and Kartajaya, 2006 ,Islam and Business Ethics. Herndon, VA: International Institute of Islamic Thought.
- Ali, A. J. and Gibbs, M. (1998). 'Foundations of business ethics in contemporary religious thought: The ten commandment perspective.' International Journal of Social Economics 25: 1552–64.
- 22. Bassiouni, M. C. (1993). 'Business ethics in Islam.' In The Ethics of Business in a Global Economy, ed. P. M. Minus. Dordrecht: Kluwer Academic Publishers. 117–22.
- 23. Beekun, R. I. (1996). Islam and Business Ethics. Herndon, VA: International Institute of Islamic Thought.
- 24. Belt, D. (2002). 'The world of Islam.' National Geographic. Retrieved 23 February 2011 from http://ngm.nationalgeographic.com/ngm/data/2002/01/01/html/ft\_20020101.5.html.
- 25. Chapra, M. U. (1992). Islam and the Economic Challenge. Herndon, VA: International Institute of Islamic Thought.
- 26. kotler & Armstrong(2010)' Principles of Marketing' edition -10<sup>th</sup> p-345-75
- 27. Kattih, A. (n.d.). 'Islam and business.' The Islamic Education and Services Institute. Retrieved27January2010fromhttp://www.discoverislam.com/projects/business\_ethics.ht m.
- 28. Gunara and Sudibyo (2007). 'Islam and business.' Thunderbird International Business Review 48(1): 109–23.
- 29. Leaman, O. (2005). The Qur'an: an Encyclopedia. London: Routledge. Naqvi, S. N. H. (1994). Islam Economics and Society. London: Kegan Paul International.
- Pomeranz, F. (2004). 'Ethics: Towards globalization.' Managerial Auditing Journal 19(1):8–14
- Quddus, M., H. Bailey and L. White (2009). 'Business ethics: perspectives from Judaic, Christian, and Islamic scriptures.' Journal of Management, Spirituality & Religion, 6 (4) 1942-258X: 323–34.
- 32. Sacharow, S. (1995) 'Islamic marketing opportunities opening up for converters.' Paper, Film and Foil Converter, 1 December. Retrieved 23 February 2011 from http://pffconline.com/mag/paper islamic marketing opportunities/.
- 33. Siddiqi, M. N. (1981). 'Muslim economic thinking: a survey of contemporary literature.' In Studies in Islamic Economics, ed. K. Ahmad. Leicester: The Islamic Foundation.
- 34. Yusoff, N. M. A. B. N. (2002). Islam and Business. Selangor, Malaysia: Pelanduk.

# Dividend Policy of Listed Companies of DSE in Capital Market of Bangladesh

# Md. Ruhul Amin<sup>1</sup>, Faruk Ahmed

**Abstract:** The amount of profit distributed to the shareholders is called dividend. There are two objectives of dividend policy-distribution of dividend and preservation of retained earnings. Therefore, it is an important issue to balance between dividend payment and retained earnings. The research objectives are to study the present scenario of dividend payment analysis of return from investment. These are the dividend payment and stock value, and recommend policy prescriptions regarding dividend policy of companies for development of capital market. The data of dividend payment are taken from the year 2007 to 2011. Around 86.57% of the listed companies paid dividend and 13.43% did not pay dividend. The cash dividend is decreasing and stock dividend is increasing. The 18 sectors, 8 sectors paid more than 20% dividend & 10 sectors paid less than 20% dividend. The paper is concluded with suggestion that regular dividend payments, cash dividend payments, stable dividend policy, increased earnings per share are essential for the development of capital market in Bangladesh. **Keywords:** Capital market, Dividend Policy, Dividend Yield, Capital gain, EPS (Earning per share) and P/E (Price Earning) ratio.

#### Introduction

The earning of a company are shared by different parties-an amount is paid to tax authorities as income tax, a part is retained in the business as retained earnings (reserves and surplus), and another part is distributed to the share holders as share of profit. The amount of profit distributed to the share holders is called dividend. The dividend may be paid in cash or in terms of stock. When it is paid in cash, then it is called cash dividend. When it is paid in terms of stock or shares it is called stock dividend or bonus shares. The dividend policy of a company determines the division of earnings between payments to share holders and reinvestment in the firm (retained earnings). Retained earnings are one of the most significant sources of funds for financing corporate growth, but dividend constitutes the cash flows that accrue to share holders. A higher dividend rate means less retained earnings and, consequently, a slower rate of growth in earnings and stock prices. So, determination of a suitable dividend policy for a company is an important distribution function of a financial manner.

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#### **Statement of the Dividend Policy**

Dividend decision is one of the basic functions of finance. Most of the small investors invested money in the capital market by taking loan from banking sector to gain short term profitability from the capital market. Moreover, due to the contradictory monetary policy of the government, money supply has been squeezed, which has affected the capitalization process of the capital market through declining the rate of dividend. The maximization of wealth depends on the balancing of dividend policy. Shareholders expect both dividend and capital gain. So, there are two objectives of dividend policy-distribution of dividend and preservation of retained earnings for maximization of wealth by company's growth. Therefore it is important issue to balance between dividend payment and retained earnings. If dividend paid is more, retained earnings will be declined. As a result, company's growth will be declined. So, company has to take decision carefully and consider the issues likepreference of share holders, financial need of the company, liquidity, investment opportunities, and inflation etc. Since, it is a developing country, most of the investors prefer regular dividend. There are mainly two types of dividend policy namely stable dividend policy and fluctuating dividend policy. The listed companies in Bangladesh have been categorized as A, B, Z, G and N based on profit-loss, status of annual general meeting, commercial and operational status of the companies.

**'A' Category Companies:** Companies that are regular in holding the current annual general meetings have declared dividend at the rate of ten percent or more in an accounting year.

**'B' Category Companies:** Companies that are regular in holding the current annual general meetings and have failed to declare dividend at least at the rate of ten percent in an accounting year fall in this category.

**'Z'** Category Companies: Companies which have failed to hold the current annual general meetings or have failed to declare any dividend or which are not in operation continuously for more than six months or whose accumulated loss after adjustment of revenue reserve, if any, is negative and exceeded its paid-up capital.

'G' Category Companies: Greenfield companies.

'N' Category Companies: All newly listed companies except Greenfield companies are placed in this category and their settlement system is like B-category companies. At 12<sup>th</sup> November, 2012 there were 235 'A' category, 14 'B' category, 7 'N' category and 12 'Z' category companies. The capital market is small in Bangladesh. The investors do not want to invest by considering dividend earnings (actual return). To make the capital market efficient and effective, dividend policy is an important issue. The research aims at identifying causes of less investment in securities market by considering return (dividend) from investment, making the dividend policy effective and efficient as an important function of finance and producing some viable recommendations of dividend policy to strengthen the capital market.

## **Objectives of the study**

The main objective of the present study is to explore the dividend policy of the listed companies of capital market in Bangladesh. However, the study aims at the following specific objectives.

- **a.** To study the present scenario of dividend payment and dividend policy of companies in Bangladesh: Stability of dividend and forms of dividend.
- **b.** To present the dividend payment and stock value of selected companies.
- **c.** To analyze returns on investment (Share Capital) of the sample companies in Bangladesh.
- **d.** To recommend policy prescriptions regarding dividend policy of companies for the development of capital market in Bangladesh for the perspective of standard practices in advanced capital markets of the world at the present day.

#### Methodology

**a. Types of data:** Both primary and secondary data are used. Mainly secondary data are used to derive the findings. Primary data are collected through interviews with member of DSE, experts, company directors and investors.

#### **b.** Sources of data:

#### **Primary souces:-**

- i) Md. Fakhrul Islam, Member 90 DSE.
- ii) Jamil-uddin Bhuiyan, Sponsor Director (PLFSL).
- iii) Moniruzzaman Bhuiya, BO ID- 1203040038312677
- iv) Naseem Ahmed, BO ID- 1203040020410585
- v) Safina Rahman, BO ID- 1203040016032640

#### Secondary data are collected from the following sources:-

- i) Securities and Exchange Commission (SEC)
- ii) Dhaka Stock Exchange (DSE)
- iii) Chittagong Stock Exchange (CSE)
- iv) Annual Reports of selected Companies of Bangladesh
- v) Bangladesh Bank Publications
- vi) Stock Market Reports on Daily Newspaper
- vii) Books and journals, internet web sites.

#### Scope

The scope of the study covers the companies enlisted in DSE of Bangladesh. Companies are listed in sector wise. These sectors are "Bank, Chemical, Engineering, and Food and allied, Fuel and power, Insurance, Jute, Paper, Service, Textile, Investment, Financial Institutions, Pharmaceuticals, Ceramic, Telecommunication, Travel and Leisure and Miscellaneous."<sup>1</sup>

## **Analysis and Result**

The present scenario of dividend policy of enlisted companies in Dhaka Stock Exchanges is depicted on the basis of categories of companies in terms of percentage and forms of dividend terms of percentage and P/E ratio etc. Now each of these aspects is presented below in suitable form.

# **Types of Companies**

Ζ

	iowing the eutogon	es of instea company	les in percentage	
Categories	2010-2011	Percentage	2009-2010	Percentage
А	234	88.97%	226	90.03%
В	13	4.94%	12	4.78%
Ν	5	1.90%	3	1.19%
		Categories 2010-2011	Categories         2010-2011         Percentage           A         234         88.97%           B         13         4.94%	A         234         88.97%         226           B         13         4.94%         12

**Table-1:** Table showing the categories of listed companies in percentage

11 Source: Annual Report 2011. Dhaka Stock Exchange

From the Table-1: The researchers have seen the real picture of the backwardness in the capital market of Bangladesh. It is seen that in 2010-2011 & 2009-2010, The 'A' Category companies are 88.97% and 90.03%, 'B' category companies are 4.94% and 4.78%, 'N' category companies are 1.90% and 1.19% & 'Z' category companies are 4.18% and 3.98% respectively. It means around 90% of the listed companies are suitable for investment. So, the investors do invest in the listed companies.

4.18%

10

3.98%

# **Comparative Statement of Dividend Payment**

Table- 2: Table showing comparative statement of dividend payment by listed companies of Dhaka Stock Exchange.

Years	200	%	200	%	200	%	201	%	201	%	Tota	%
	7		8		9		0		1		l	
No of	208	75.3	217	78.9	243	87.7	272	95.4	272	94.7	1212	86.5
companie		6		1		3		4		7		7
s paid												
dividend												
No of	68	24.6	58	21.0	34	12.2	13	4.56	15	5.23	188	13.4
companie		4		9		7						3
s did not												
pay												
dividend												

Source: Annual report 2007 to 2011 of DSE

Since Bangladesh is a developing country, the majority investors expect regular dividend and regular dividend is the syndrome of healthy condition of the company. From the table- 2, it is shown that the average 13.43% companies failed to pay the dividend. So, the investors do

find them suitable for investment in capital market of Bangladesh. Now it will be seen that whether it is ''the forms (cash of bonus) of dividend policy of the companies.''<sup>2</sup>

Years	201	%	201	%	200	%	200	%	200	%	Tota	%
	1		0		9		8		7		l	
No of companie s paid dividend	253		239		231		210		206		1139	
No of	92	36.3	95	39.7	124	53.6	128	60.9	141	68.4	580	50.9
companie s paid dividend	~ -	6		5		8		5		5		2
in cash No of	161	63.6	144	60.2	107	46.3	82	39.0	65	31.5	559	49.0
companie s paid dividend	101	4	144	5	107	2	02	5	05	5	557	8
in bonus												

## **Statement of Forms of Dividend**

 Table- 3: Forms of Dividend

Source: Annual report 2007 to 2011 of DSE

**From the table- 3**, it is shown that the average percentage of dividend is 50.92% in cash form and 49.08% in stock form. It is observed that the percentage of cash dividend is increasing and percentage of stock dividend is reducing. In 2007 the cash dividend is 68.45% and stock dividend is 31.55%, but in 2011 the cash dividend is 36.36% and stock dividend is 63.64%. Some companies have paid both cash dividend and stock dividend. So, the investors like do find them investment, in this situation.<sup>3</sup>

# **Dividend Stability**

Researchers observed that there are three distinct forms of dividend stability in the following seventeen companies: constant dividend per share, P/E ratio and constant dividend per share plus extra dividend. Investors expect the stable dividend from their investment. It indicates the regular certain income from investment.

Sl No.	Companies Name	2010(%)	2009(%	2008(%	2007(%)	2006(%
	-		)	)		)
1.	ACI Ltd.	120	105	100.1B:	85	60
2.	Bata Shoe	250	310	5	250	235
3.	Beximco Ltd.	1B:2	3B:5	220	1.5B:10	1.5B:1
4.	British American Tobacco	430	300	101.1B:	70	0
5.	Glaso-smithk Line	200	160	2	25	30
6.	Linde Bangladesh Ltd.	350	177	240	70	10
7.	National Tea Company	250	20	60	15	70
8.	National Bank Ltd.	9.5 B:10	5.5B:10	177	5.5B:10	20
9.	People's Leasing & Finance	3B:4	38.5B:10	20	3.5B:10	1B:2
10.	Reckitt Benckiser BD Ltd.	200	0	5.2B:10	220	3B:10
11.	Singer Bangladesh	600.3B:	750	1B:5	3.5B:10	200
12.	Square Pharmaceuticals	4	90	230	40.3.5B:	35
13.	Renata Ltd.	30.3.5B:1	35.3B:1	30	10	50.1B:
14.	Stylecraft Ltd.	0	0	40.1B:4	50.1B:5	2
15.	Investment Corporation of Bangladesh	60.1B:4	60.1B:4	50.1B:4	30	50.1B:
16.	(ICB)	50	30	30	1.1B:1	5
17.	Aftab Auto Mobiles	15.3.5:10	15.1B:4	5.1B:1	1B:10	25
	Berger Paints	3B:10	4B:10	1B:4	110	14
		180	150	120		1B:5
						100

#### **Table- 4:** Constant Dividend per Share

Source: Annual report 2006 to 2010 of DSE

**From the table- 4:** For constant dividend per share, it is seen that out of Jan-2011, 272 companies which paid dividend. Only 50 companies paid the constant dividend per share. Some companies paid constant dividend shown the table- 4. So, only 18.38% paid the constant dividend per share, which is very low in number.<sup>4</sup>

**From the table- 5:** Now researchers are showing the P/E ratio (price-earnings ratio). So, they can indicate the amount of earnings, which is distributed among the share holders as dividend. They have taken the sectors wise companies P/E ratio which is listed in DSE. Researcher's can see that the range of P/E ratio is 16.69% to 50.94%, when P/E ratio is less than 25%. This is a good indicator for investment. They are paying higher percentage of earnings as dividend as the earning per share is low. It is not attractive to the investors. It is observed that Ceramics, Engineering, IT and Insurance sectors P/E ratio is higher than another sectors.

Sectors	2007(%)	2008(%)	2009(%)	2010(%)	2011(%)	Average(%)
Banks	25.99	16.33	16.46	25.24	10.50	18.90
Financial Institutions	15.13	25.26	32.45	47.27	12.15	26.45
Engineering	28.57	30.24	36.50	50.10	26.40	34.36
Food and Allied	23.28	16.93	17.29	27.30	16.41	20.24
Fuel and Power	35.95	15.83	17.71	21.57	13.95	21.00
Textile	12.14	13.85	32.93	52.44	22.66	26.80
Pharmaceuticals	21.05	3096	27.64	34.14	22.52	27.26
Cement	12.61	10.26	56.90	33.44	21.60	26.96
IT	15.25	46.52	60.71	64.91	38.93	45.26
Ceramics	29.85	47.80	39.97	106.86	30.20	50.94
Tannery	15.38	16.43	15.39	20.66	15.60	16.69
Insurance	15.59	21.81	31.39	64.64	20.37	30.76
Miscellaneous	14.43	34.43	28.85	19.54	8.02	21.05

**Researchers having taken the sectors wise companies P/E ratio which is listed in DSE. Table- 5:** Sectors wise P/E ratio shown the table- 5.

Source: Annual report 2007 to 2011 of DSE

In this situation, the sector wise present P/E ratio is attractive for investment in capital market of Bangladesh. Now a classification of companies is made on the basis of percentage of dividend payments. Here, sector wise classification is made. Sector paying less than 20% dividend is shown in one group and those paying more than 20% dividend is shown in another group. Such classification will help to identify the attractive investment sectors in capital market of Bangladesh.

#### Sector-wise Dividend Payment

Sectors	2011(%)	2010(%)	2009(%)	2008(%)	2007(%)	Average (%)
Banking	31.13	29.16	26.16	48.77	28.11	32.67
Financial Institutions	46.69	39.35	25.30	28.26	20.35	31.99
Investment	55.78	33.79	32.76	39.53	43.43	41.06
Engineering	53.24	27.83	20.65	20.25	20.35	28.46
Fuel and Power	72.69	64.45	37.67	28.00	28.57	46.28
Pharmaceuticals	49.10	101.45	40.68	32.07	30.64	50.79
Tannery	66.00	72.50	55.20	49.57	39.57	56.57
Food and Allied	39.19	37.77	17.13	10.00	5.42	21.34
Miscellaneous	37.22	40.67	31.27	27.50	31.20	33.57

 Table- 6 (a): Sector wise Dividend Payment (Well Performed Companies)

Source: Annual report 2007 to 2011 of DSE

From the table- 6(a): The researchers have seen that the Banking, Financial Institutions, Investment, Engineering, Fuel and Power, Pharmaceuticals, Tannery, Food and Allied &

Miscellaneous sectors paid more than 20% dividend. The range of their dividend is 28.46% to 56.57%.

Sectors	2011(%)	2010(%)	2009(%)	2008(%)	2007(%)	Average(%)
Jute	13.33	25.00	11.67	10.00	6.67	13.33
Textile	14.70	17.00	8.81	8.17	7.37	11.21
Cement	28.00	41.00	8.29	9.69	7.63	18.92
IT	9.00	11.10	9.90	12.50	13.17	11.13
Ceramic	16.00	10.00	13.75	5.00	8.33	10.61
Insurance	23.72	19.10	19.60	16.57	15.42	18.88
Paper & Printing	5.00	5.00	12.50	3.83	2.57	5.78
Service & Real estate	25.25	22.50	18.33	12.50	8.33	17.38

Table- 6 (b): Sector wise Dividend Payment (Companies other than well performed ones)

Source: Annual report 2007 to 2011 of DSE

**From Table- 6 (b):** The researchers have seen that Jute, Textile, Cement, IT, Ceramic, Insurance, Paper & Printing, Service & Real estate paid the dividend less than 20%. The range of the dividend is 5.78 to 18.92. The paper and printing sector paid the lowest dividend, which is 5.78%.

# **Policy Recommendations**

On the basis of findings of the study, following policy recommendation are hereby suggested:

# 1. Regular Dividend Payment

Analysis shows that only 50.92% companies paid the dividend more than 20% and regularly. But 49.08% companies paid dividend less than 10% and irregularly. It is the negative scenario of the capital market. It is shown that average 13.43% not pay the dividend. So, the companies have to pay the dividend regularly and this amount should be higher. As a result the investors will invest more in capital market by getting regular income from the dividend.

# 2. Government Initiatives

Due to down turn of the capital market, the government has taken steps including tax rebate, exemption of credit for margin level investors and influencing banks to generate more investment in the capital market. But the game planners of the capital market scenario have remained unspecified.

# 3. Pay Cash Dividend

From the analysis, it is shown that the cash dividend is decreasing and the stock dividend is increasing. But, the investors want cash dividend. So, the companies have to pay the dividend as cash form.

## 4. Stable Dividend Policy

Only 17 companies paid the constant dividend per share, which is only 7.00%, and no another company paid the constant dividend. The companies should follow the stable dividend policy. So, those investors get the regular income from the investment.

#### **5. Increased Earnings per share**

From the analysis, it is shown that the average P/E ratio is less than 25%. This percentage indicates that the sector wise companies attractive position to investment. Companies are paying high percentage of profit as dividend. But, the earnings per share are low. So, the companies have to increase the earnings per share.

#### 6. Development of Capital Market

The Securities and Exchange Commission (SEC) should take the strict step to control the irregularity in the companies regarding AGM (Annual General Meeting) and dividend payment. Capital Market should be developed by introducing various financial instruments, eliminating conservative monetary policy and awareness of securities market. Securities and Exchange Commission should keep close control over the stocks exchanges. The multinational companies are doing business in Bangladesh without enlisting in capital market. The MNCs are profitable companies. But they have no accountability and they are transferring profit to their own countries from Bangladesh. If they enlist in our capital market, it will be enriched. Bagla Link, Uniliver, Airtel are successfully operating in our country. So, government should take initiative to enlist these MNCs.

#### References

- 1. Dhaka Stock Exchange, annual report (2007-2011), company profile (Dhaka Stock Exchange Ltd.).
- 2. Dhaka Stock Exchange, Monthly Review, January to November- 2011.
- 3. Effect of Dividend Announcement on Shareholders' Value: Evidence from Dhaka Stock Exchange.
- 4. Chittagong Stock Exchange (2012), CSE Bazar Porikroma, August to October- 2012.
- 5. Chittagong Stock Exchange (2012), Portfolio (Chittagong: Chittagong Stock Exchange Ltd.).

#### **Further Reading:**

- Ministry of Finance (2008), Monetary Management and Financial Market Development in Bangladesh Economic Review 2008 (Dhaka: Ministry of Finance, Government of Bangladesh).
- 2. Pandey, I.M. (2004), Financial Management (Delhi: Pashupati Printers Pvt. Ltd.; 10<sup>th</sup> Edition).
- 3. Bangladesh Bank (2010), Balance sheet analysis of joint stock companies (Dhaka: Statistics Department, Bangladesh Bank.

- 4. Brigham, Eugene F and Michael C. Ehrhardt (2003), Financial Management Theory and practice (Mason, Ohio, USA: Thomson South-Western; 11<sup>th</sup> Edition.)
- 5. Kothari, C.R. (2005), Research Methodology (New Delhi: New Age International Pvt. Ltd.; 2<sup>nd</sup> Edition).
- 6. Marshall, John F and Vipul K. Bansal (2003), Financial Engineering (New Delhi: Prentice Hall of India Pvt. Ltd.)
- 7. Ministry of Finance (2010), Bangladesh Economic Review 2010 (Dhaka: Ministry of Finance, Government of Bangladesh).
- 8. Website: www.dsebd.org

# **Social Marketing: Contemporary Marketing Practices**

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**Abstract:** The purpose of this paper is to reflect upon social marketing and its implications for the contemporary marketing practices. Social marketing - like generic marketing - is not a theory in itself. Rather, it is a framework or structure that draws from many other bodies of knowledge such as psychology, sociology, and anthropology, communications theory to understand how to influence people's behavior. Although many primary studies claiming to evaluate the effectiveness of individual social marketing programmes have been conducted, there have been only a small number of reviews of its effectiveness in general behavior change approach. Social marketing principles & techniques can be used to benefit society in general & the target audience in particular in so many ways. **Key Words:** Social marketing, Social ideas, Target audience, Marketing mix, Purse strings.

#### Introduction

Social marketing is the systematic application of marketing, along with other concepts and techniques, to achieve specific behavioral goals for a social good. Social marketing is, broadly speaking, the application of marketing principles and exchange to social issues. It is best known for its use in campaigns related to public health and the environment. Successful strategies dealing with obesity, tobacco consumption, family planning, safe sex, and recycling, waste management and water purity are the more common applications.<sup>1</sup> It is widely accepted that many social problems have underlying behavioral causes. As social marketing is about influencing behavioral exchange outcomes, we have witnessed dramatic growth in its use.<sup>2</sup> Both commercial and non-profit organizations alike are undertaking social marketing, especially in areas where educational and legal interventions have failed.<sup>3</sup> Kotler & Levy's pioneering article, "Broadening the concept of Marketing". It was in this article that the idea of social marketing was first introduced & discussed. Kotler & Levy clearly proposed that as "a pervasive societal activity", marketing "goes considerably beyond the selling of toothpaste, soap & steel," urging marketing researchers & practitioners to consider "whether traditional marketing principles are transferable to the marketing of organizations, persons, & ideas".<sup>4</sup> Subsequently the term social marketing was formally introduced in 1971, when Kotler & Zaltman coined the term.<sup>5</sup> In their article, they provide a clear definition for social marketing, discussed the requisite condition for effective social marketing, elaborated on the social marketing approach, outlined the social marketing planning process & deliberated on the social implications of social marketing. Kotler & Zaltman (1971) define social marketing as:

"The design, Implementation, & control of programs calculated to influence the acceptability of social ideas & involving considerations of product planning, pricing, communication, distribution, & marketing research." Over the years modifications have been made to the definition of Social marketing. Although wording in the definitions of Social Marketing varies the essence of social marketing remains unchanged.

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#### **Definition of Social Marketing**

"Social marketing is a process that applies marketing principles & techniques to create, communicate, & deliver value in order to influence target audience behaviors that benefit society as well as the target audience."<sup>6</sup> (Kotler, P., Lee, N.R., & Rothschild, M., Personal Communication)

As indicated in this definition, several characteristics are essential to social marketing:

A. It is a distinct discipline within the field of marketing

**B**. It is for the good of society as well as the target audience

C. It relies on the principles & techniques developed by commercial marketing especially the marketing mix strategies, conventionally called the 4P's-Product, price, Place & promotion. Thus, it is the explicit use of marketing skills to help translate present social action efforts into more effectively designed & communicated programs that elicit desired audience response. In other words, marketing techniques are the bridging mechanism between the simple possession of knowledge & the socially useful implementation of what knowledge allows. Whereas Kotler & Roberto consider social marketing as science, in social marketing: Promoting the causes of public & nonprofit Agencies, Fine considers it's an art. Whereas Kotler & Roberto see social marketing as a strategy for changing behavior, Fine defines it as the application of marketing plan. The plan proceeds on the basis of his "7P'S" model for social marketing<sup>7</sup>:

1. Who is the producer, the source of the promotional message?

2. Who makes up the market of potential purchasers we are to address, & what needs & wants do these people have?

3. What product(s) can we design specifically to help fill those needs?

4. What price(s) must our consumers sacrifice in order to purchase our product?

5. How can we promote (communicate with) our markets?

6. Which parties (institutions) will participate in the process of making the product available at the best place & time (best for the purchaser)?

7. What probing will be necessary to evaluate our campaign & to obtain feedback from our audiences?

#### **Objectives of the Study**

The major objectives of this study are-

- 1. To address social marketing mix
- 2. To analyze requisite conditions for effective social marketing
- 3. To evaluate fundamental principles of social marketing approach
- 4. To focus social applications of social marketing

#### Methodology of the Study

This paper discussed the concept of contemporary Social marketing practices. This paper is conceptual & qualitative in nature. Although the objectives of quantitative and qualitative research are not mutually exclusive, their approaches to deciphering the world involve distinct research techniques and thus separate skill sets. Secondary Data were collected through extensive review of literature include different articles, texts, newspaper, various national, international research works & publications of different organizations.

#### Literature Review

Kotler and Zaltman (1971) first defined social marketing as- "The design, implementation and control of programmes calculated to influence the acceptability of social ideas involving considerations of product planning, pricing, communication, distribution, and marketing research."Some thirty plus years later, Kotler along with Roberto and Lee (2002) redefined social marketing in the following manner, "Social marketing is the use of marketing principles and techniques to influence a target audience to voluntarily accept, reject, modify, or abandon a behavior for the benefit of individuals, groups, or society as a whole."In essence, social marketing involves using existing traditional marketing principles and techniques such as product, price, promotion and placement, to influence behavioral change and to achieve socially desirable goals. As Andreasen (2006: vii) states, "Social marketing is simply about influencing the behavior of target audiences."Donovan & Henley (2003) further develop the definition of social marketing describing the process as, "The application of commercial marketing technologies to the analysis, planning, execution, and evaluation of programmes designed to influence the voluntary or involuntary behavior of target audiences in order to improve the welfare of individuals or society". Social marketing differs somewhat from commercial marketing which relies on legal, economic and coercive forms of influence. Rather, social marketing is reliant on voluntary or involuntary compliance with no guarantee that a direct benefit or immediate payback will result from the proposed behavioral change. The key difference between social marketing and commercial marketing is its purpose (Weinreich 1999: 4), (Donovan, 2005). Commercial marketing highlights the benefits for the individual or the marketers, e.g. sales, profit, returns, etc, whereas social marketing concentrates on gains for a society (Andreasen, 1995). Furthermore, social marketing does not focus on profit and organizational benefits, but rather the level of influence and behavioral change that occurs. It must also be noted that this type of behavioral change is more than just awareness or attitude change (Lefebvre & Rochlin. 1997). Therefore this means that social marketing tends to be more complex than commercial marketing, and the issues that social marketing attempts to address are often complex and difficult. Perece, Bellringer & Abbott, (2005: 23) state, "The issues are likely to be far more complex (e.g. reducing harmful gambling or smoking behaviors versus purchasing products such as a can of coke or a bike). The number and nature of relationships can be far more complex (e.g. buying shelf space in a supermarket compared to negotiating with politicians, Government agencies, General Practitioners and service providers to fund and deliver specific services; trying to get industry to restrict products that can contribute to harmful behaviors, particularly were it adversely affects their bottom line)"

Even with the complexities of the issues, social marketing still provides tools and concepts that can be used to impact upon the social influence process. All that is needed is a target audience and a behavior that one wants to influence (Andreasen, 2006: 6). Social marketers are also well aware of the fact that societies are constantly in a state of change and are continually seeking ways to influence their development and evolution. Social marketing is therefore in a prime position to impact upon the development of society and its various behaviors. Specific social causes could benefit from marketing thinking & planning. Problems of pollution control, mass transit, private education, drug abuse, & public medicine are in need of innovative solutions & approaches for gaining public attention & support. Social marketing is sufficiently distinct from business marketing to require fresh thinking & new approaches. Social marketing typically has to deal with the markets core beliefs & values, whereas business marketing often deals with superficial preferences & opinions. Social marketing has to work with channel systems that are less well- defined & less pecuniary motivated. There is the definite possibility that the overt marketing of social objectives will be resented & resisted.

#### **Data Analysis**

The data is processed manually. Information is collecting from different sources as per methodology then it analyze in view of topics. Secondary data is analyzing to find out the true fact & implication privilege in the market for make the research more accurate & practicable. This paper examines how complex multiple exchanges, and social and environment influences, associated with social marketing provide a broader context to examine marketing practice.

#### Limitations of the Study

The major limitation of such kind of work is lack of physical observation. We do believe that if we physically had visited, observed & solving case study then we would have been able to enrich the work more than as was done. The works may have other shortcomings. Further practical survey many reveal more important information.

#### Marketing mix of Social Marketing

Like commercial marketing, the primary focus is on the consumer--on learning what people want and need rather than trying to persuade them to buy what we happen to be producing. Marketing talks to the consumer, not about the product. The planning process takes this consumer focus into account by addressing the elements of the "marketing mix." This refers to decisions about 1) the conception of a Product, 2) Price, 3) distribution (Place), and 4) Promotion. These are often called the "Four Ps" of marketing. Social marketing also adds a few more "P's." At the end is an example of the marketing mix.

#### **Product:**

The social marketing "product" is not necessarily a physical offering. A continuum of products exists, ranging from **tangible**-

- A. Physical products (e.g., Pen)
- B. Services (e.g., medical diagnosis)
- C. Practices (e.g., breastfeeding, ORT or eating a heart-healthy diet)

Finally more intangible ideas (e.g., environmental protection). In order to have a viable product, people must first perceive that they have a genuine problem, and that the product offering is a good solution for that problem.

#### Price

"Price" refers to what the consumer must do in order to obtain the social marketing product. This cost may be monetary, or it may instead require the consumer to give up intangibles, such as time or effort, or to risk embarrassment and disapproval. If the costs outweigh the benefits for an individual, the perceived value of the offering will be low and it will be unlikely to be adopted.

However, if the benefits are perceived as greater than their costs, chances of trial and adoption of the product is much greater.

#### Place

"Place" describes the way that the product reaches the consumer. For a tangible product, this refers to the distribution system--including the warehouse, trucks, sales force, retail outlets where it is sold, or places where it is given out for free. For an intangible product, place is less clearcut, but refers to decisions about the channels through which consumers are reached with information or training. This may include doctors' offices, shopping malls, mass media vehicles or in-home demonstrations. Another element of place is deciding how to ensure accessibility of the offering and quality of the service delivery.

#### Promotion

Finally, the last "P" is promotion. Because of its visibility, this element is often mistakenly thought of as comprising the whole of social marketing. However, it is only one piece of social marketing. Promotion consists of the integrated use of advertising, public relations, promotions, media advocacy, personal selling and entertainment vehicles. The focus is on creating and sustaining demand for the product.

#### Additional Social Marketing "P's"

**Publics**--Social marketers often have many different audiences that their program has to address in order to be successful. "Publics" refers to both the external and internal groups involved in the program. External publics include the target audience, secondary audiences, policymakers, and gatekeepers, while the internal publics are those who are involved in some way with either approval or implementation of the program.

**Partnership**--Social and health issues are often so complex that one agency can't make a dent by itself. You need to team up with other organizations in the community to really be effective. You need to figure out which organizations have similar goals to yours--not necessarily the same goals--and identify ways you can work together.

**Policy**--Social marketing programs can do well in motivating individual behavior change, but that is difficult to sustain unless the environment they're in supports that change for the long run. Often, policy change is needed, and media advocacy programs can be an effective complement to a social marketing program.

**Purse Strings**--Most organizations that develop social marketing programs operate through funds provided by sources such as foundations, governmental grants or donations. This adds another dimension to the strategy development-namely, where will you get the money to create your program? <sup>8</sup> The marketing mix strategy for a breast cancer screening campaign for older women might include the following elements as shown in Table-1

Marketing Mix	Consequences
Product	The <b>product</b> could be any of these three behaviors:
Tioduct	A. Getting an annual mammogram,
	B. Seeing a physician each year for a breast exam
	C. & Performing monthly breast self-exams.
Price	The <b>price</b> of engaging in these behaviors includes:
	A. The monetary costs of the mammogram and exam,
	B. Potential discomfort and/or embarrassment,
	C. Time and even the possibility of actually finding a lump.
Place	The <b>place</b> that these medical and educational services are offered might
1 1000	be a mobile van, local hospitals, clinics and worksites, depending upon
	the needs of the target audience.
Promotion	<b>Promotion</b> could be done through public service announcements,
	billboards, mass mailings, media events and community outreach.
Publics	The " <b>publics</b> " you might need to address include your target audience –
	The people who influence their decisions like their husbands or
	physicians, policymakers, public service directors at local radio stations,
	as well as your board of directors and office staff.
Partnership	<b>Partnerships</b> could be cultivated with local or national women's groups,
-	corporate sponsors, medical organizations, and service clubs or media
	outlets.
policy	The <b>policy</b> aspects of the campaign might focus on increasing access to
	mammograms through lower costs, requiring insurance and Medicaid
	coverage of mammograms or increasing federal funding for breast cancer
	research.
Purse Strings	The purse strings, or where the funding will come from, may be
	governmental grants, such as from the National Cancer Institute or the
	local health department, foundation grants or an organization like the
	Bangladesh Cancer Society.

Table-1. Marketing mix Strategy

Each element of the marketing mix should be taken into consideration as the program is developed, for they are the core of the marketing effort. Research is used to elucidate and shape the final product, price, place, promotion and related decisions.

#### Analysis for Effective Social Marketing

Effectiveness means extent to which actual performance compares with targeted performance. For example, if a company has established a target sales plan of 10,000 units at the beginning of the year and the company's salespeople sell only 8,000 units during the year, the salespeople are appropriately considered "ineffective," as opposed to "inefficient. Some clues concerning the difference between social advertising & social marketing are contained in early papers by Lazarsfeld & Metron & by Wiebe which attempt to explain the limitation of social advertising.<sup>9</sup>

#### Lazarsfeld & Merton's Analysis

Lazarsfeld & Merton took exception with the view of many people that mass media can easily be used to connect people's minds: "It is our tentative judgment that the social role played by the very existence of the mass media has been commonly overestimated."<sup>10</sup> They believed that the effectiveness of mass media for propaganda purpose depended on three conditions. The **first condition** is real or psychological monopolization by the media; that is, a condition marked by the absence of counterpropaganda. This characterizes the totalitarian state and accounts for the greater effectiveness of these regimes in molding public opinion through mass media. It is found occasionally in free societies under special circumstances, such as a wartime effort. For example, Kate Smith's effectiveness in selling war bonds over the radio during World War II was partially due to the marathon nature of the event and the fact that everyone believed in the cause; i.e., there was no counterpropaganda. However, most campaigns in a free society in peace time compete with so many other causes and everyday distractions that the monopoly condition is lacking, and this condition reduces the effectiveness of such campaigns.

Lazarsfeld and Merton said the **second condition** required for effective mass propaganda is canalization, the presence of an existing attitudinal base for the feelings that the social communicators are striving to shape. They asserted that typical commercial advertising is effective because the task is not one of instilling basic new attitudes or creating significantly new behavior patterns, but rather canalizing existing attitudes and behavior in one direction or another. Thus, the seller of toothpaste does not have to socialize persons into new dental care habit, but rather into which brand of a familiar and desired product to purchase. If the preexisting attitudes are present, then promotional campaigns are more effective, since canalization is always an easier task than social reconditioning. Lazarsfeld and Merton call the **third condition** supplementation by which they mean the effort to follow up mass communication campaigns with programs of face-to-face contacts. In trying to explain the success of the rightist, Father Coughlin movement in the thirties, Lazarsfeld and Merton observe:

This combination of a central supply of propaganda (Coughlin's addresses on a nationwide network), the coordinated distribution of newspapers and pamphlets and locally organized face-to-face discussions among relatively small groups—This complex of reciprocal reinforcement by mass media and personal relations proved spectacularly successful.

This approach is standard in many closed societies and organizations and suggests another key difference between social advertising and social marketing. Whereas a social advertising approach contrives only the event of mass media communication and leaves the response to natural social processes, social marketing arranges for a step-down communication process. The message is passed on and discussed in more familiar surroundings to increase its memorability, penetration, and action consequences. Thus supplementation, monopolization, and canalization are critical factors influencing the effectiveness of any social marketing effort.

#### Wiebe's Analysis:

An additional contribution was made by Wiebe in his attempt to understand the differential effectiveness of four social campaigns<sup>11</sup>. He explained the relative effectiveness of these campaigns in terms of the audience member's experience with regard to five factors:

1. The Force: The intensity of the person's motivation toward the goal as a combination of his predisposition prior to the message and the stimulation of the message.

2. The Direction: Knowledge of how or where the person might go to consummate his motivation.

3. The Mechanism: The existence of an agency that enables the person to translate his motivation into action.

4. Adequacy and Compatibility: The ability and effectiveness of the agency in performing its task.

5. Distance: The audience member's estimate of the energy and cost required to consummate the motivation in relation to the reward.

To show how these factors operate, Wiebe first analyzed the Kate Smith campaigns to sell bonds during World War II. This campaign was eminently successful, according to Wiebe, because of the presence of force (patriotism), direction (buy bonds), mechanism (banks, post office, telephone orders), adequacy and compatibility (so many centers to purchase the bonds), and distance (ease of purchase). In fact, extra telephone lines were installed on the night of the campaign at 134 GBS stations to take orders during her appeal. The effort to buy bonds

--- was literally reduced to the distance between the listener and his telephone. Psychological distance was also minimized. The listener remained in his own home. There were no new people to meet, no unfamiliar procedures, no forms to fill out, no explanation, no waiting<sup>12</sup>

In the case of a campaign to recruit Civil Defense volunteers, many of the same factors were present except that the social mechanism was not prepared to handle the large volume of response, and this reduced the campaign's success. Teachers, manuals, equipment, and registration and administration procedures were inadequate, and many responding citizens were turned away and disappointed after they were led to believe that their services were urgently needed. The third campaign, a documentary on a juvenile delinquency, did not meet with maximum success because of the absence of a mechanism. Instead of being directed to an existing agency, people were urged to form neighborhood councils themselves. This certainly takes far more effort than simply picking up the phone to buy a war bond, or "stopping in" to register at the nearest Civil Defense unit.

# **Fundamental Principles of Social Marketing Approach**

#### A. The Marketing Mix

is the primary element that differentiates social marketing from communication and advertising approaches with which it is often confused. When Company introduces the product they must first design the product's color, taste, and consistency. It then prices that product to be competitive, places or distributes that product in places where people are most likely to desire it, and then they promote it, using a wide variety of approaches including prizes, events, publicity, advertising, and discounts.

#### **B.** Making a Deal

Perhaps social marketing's principal contribution to social change is the notion that voluntary human behavior is achieved through an exchange of value. It argues that people change not only because they are well informed or forced into action, but also because they get something they value in return.

#### **C. Change Conditions before Messages**

Behavior is tough to change. Don't do it if you don't have to. Also, consider conditions that make adoption difficult, such as social justice, barriers due to poverty, discrimination, and poor access to services. The most powerful marketing question which answer is: What can I do to make it unnecessary for my audience to change their behavior and still achieve my social goal?

#### **D.** Behavior not Awareness

Three characteristics of social marketing behavior are: Observable action by a specific, Segment of the population, under specific, Conditions.

#### E. Mine than his

People have choices. Therefore, almost all behaviors compete with other behaviors to provide benefit to the individual. Any benefits we offer to "drive carefully" must not only be appealing to the individual person, but must also compete effectively with benefits offered by alternative behaviors.

#### F. Audience always right

Consumer and market research is at the heart of all effective social marketing. In addition to asking why people engage in a specific behavior, market research is focused on the answers to a series of practical questions leading to program design decisions, questions such as:

How are people different so that we can target their specific wants?

What benefits do people care about most?

Where are people most likely to want to go to get our products and services?

What barriers are the toughest for people to deal with, and how can those barriers be lowered? How important is the "price" of a new behavior to different users?

What messages (language, metaphors, and images) break through the clutter of other messages and resonate as authentic for them?

#### G. The common Facts

While all people and communities are different from each other, they can be grouped into segments that maximize our ability to influence their behavior. An audience segment is a group of individuals who share a set of common characteristics. These characteristics include:

Demographics-the same age, income, gender, or ethnic range.

Wants—they desire the same basic goal in performing the risk behavior (they want to get a fast start).

Perceptions-they share attitudes about the behavior

Channels—they share the same channels of communication and look to the same spokespersons as credible. Often a segment will be based on a combination of these factors. There are three aspects of a target segment that make it more viable:

1. Does their behavior contribute to solving the problem?

- 2. Is the segment large enough to make a measurable difference?
- 3. Is the segment small enough for us to reach effectively with our resources?

**H. Behaviors are different**—marketing adjusts to the differences. Some behaviors are simple: place an infant on its back to sleep in order to prevent SIDS. Some behaviors are natural but under strong external attack: breastfeed an infant for a full six months. Some behaviors are politically sensitive (needle exchange to prevent HIV transmission, abortion, sex education in school). Some behaviors are supported by strong enforcement policies (seat belt use, drunk driving, and hand gun use). Some behaviors have naturally occurring rewards, while others have delayed rewards, or no rewards that an audience cares about. Each of these factors and more are critical points in understanding which marketing strategy is needed. Research on the differences between these behaviors is useful in choosing an appropriate marketing strategy. Defining differences in behaviours is a useful strategy in choosing an appropriate social marketing strategy.<sup>13</sup> This is represented in Fig 1.

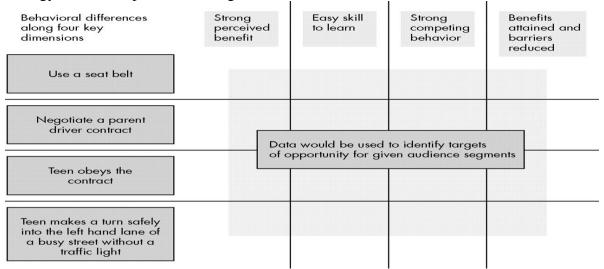


Fig-1. Behavior involved in marketing Strategy

I. **Involvement.** This principle considers the importance of the audience's active participation and shared control over the design and execution of specific activities.<sup>13</sup>

#### **Applications of Social Marketing**

Social marketing principles & techniques can be used to benefit society in general & the target audience in particular in several ways. There are four major arenas that social marketing efforts have focused on over the years: health promotion, injury prevention, environmental protection, & community mobilization<sup>14</sup>.

**Health promotion-** related behavioral issues that could benefit from social marketing include tobacco use, heavy/binge drinking, obesity, teen pregnancy, HIV/AIDS, fruit & vegetable intake, high cholesterol, breastfeeding, cancers, birth defects, immunizations, oral health, diabetes, blood pressure, & eating disorders.

**Injury prevention-** related behavioral issues that could benefit from social marketing include drinking & driving, seatbelts, head injuries, proper safety restraints, for children in cars, suicide, drowning, domestic violence, gun storage, school violence, fires, injuries of deaths of senior citizens caused by falls,& household poisons.

**Environmental Protection**- related behavioral issues that could benefit from social marketing include waste reduction, wildlife habitat protection, forest destruction, toxic fertilizers & pesticides, water conservation, air pollution from automobiles & other sources, composting garbage & yard waste, unintentional fires, energy conservation, litter(such as cigarette butts), & watershed protection.

**Community mobilization-** related behavioral issues that could benefit from social marketing include organ donation, blood donation, voting, literacy, identity theft, & animal adoption. Philip Kotler and Nancy R. Lee, is developed a blueprint for organizations with an interest in developing and implementing programs for influencing public behaviors. It is very useful for those engaged in community and not for profit activities and, indeed, many impacts that such programs have had in modifying social behavior.

#### Conclusions

Social marketing puts the behavioral changing individual at the centre of the process and orchestrates a society wide network of relationships and partnerships to achieve such goals, using extensive research, evidence based information and evaluation in decision making. These insights suggest that, marketing practitioners and academics alike need to give serious attention to the marketplace context and social environment of the exchange, regardless of whether it is a profit or nonprofit organization engaging in the exchange.

#### References

- 1. Kotler, P., Roberto, N. and Lee, N. (2002), Social Marketing, Improving the Quality of Life, 2nd ed., Sage Publications, London.
- 2. Gordon, R., McDermott, L., Stead, M. and Angus, K. (2006), "The effectiveness of social marketing interventions for health improvement: what's the evidence?" Public Health, Vol. 120 No. 12, pp. 1133-9.
- **3.** Diamond, W. and Oppenheim, M.R. (2004), "Sources for special topics: social marketing, nonprofit organizations, service marketing and legal/ethical issues", Journal of Business and Finance Librarianship, Vol. 9 No. 4, pp. 287-99.
- **4.** Kotler, P., & levy, S.J. (1969). Broadening the concept of Marketing. Journal of Marketing. 33(1), 10-15.
- 5. Kotler, P., & Zaltman, (1971), Social Marketing: an approach to planned social change. Journal of Marketing 35(3), 3-12.
- 6. Kotler, P., Lee, N.R., & Rothschild, M., Personal Communication, September19, 2006.
- 7. Fine Seymour H., Needham, MA: Allyn & Bacon, 1990, p-360.
- 8. http://www.social-marketing.com/Whatis.html
- **9.** Lazarsfeld Paul F., & Merton Robert K., "Mass Communication, popular taste, & organized social action," in Mass communications, William Schramm, ed. P-459-480.
- **10.** Lazarsfeld Paul F., & Merton Robert K., "Mass Communication, popular taste, & organized social action," in Mass communications, William Schramm, ed. P-462.

- 11. Kotler Philip & Zaltman Gerald, "Social marketing: An approach to planned Social change" Journal of marketing, Vol.-35, P-3-15, (July, 1971).
- 12. Wiebe, G.D., "Merchandising commodities & citizenship on television" Public opinion quarterly, Vol.15, P-679-691.
- 13. http://injuryprevention.bmj.com/content/12/suppl\_1/i38.full
- 14. Kotler, P., & Lee, N. R. (2008). Social marketing: Influencing Behaviors for good, 3<sup>rd</sup> edition, Thousand Oaks, CA: Sage Publications.

# For Detecting and Combating Intentional Deception Like Fraud and Embezzlement at the Corporate Level in Developing Countries: Emerge Role Play in Forensic Accounting.

# Mr. Sonjoy Maitra<sup>1,</sup> Anzalina Shermin<sup>2</sup>

Abstract: The word 'Forensic accounting' is not just in the field of accounting, but also in other work fields' world over. The pervasiveness and cost of fraud and abuse is a problem in various fields of businesses, government and non-government organizations, non-profit organizations and the like. This article indicates that forensic accounting plays a great role for removing fraud and abuse from the organizations. In the prevailing world, financial conflict have raised dramatically in recent years. This becomes evident in viewing newspaper reports, which on an almost daily basis report of economic crimes committed in communities across the country. Forensic accounting can be defined as the science of gathering and presenting financial information in a form that will be accepted by a court of jurisprudence against perpetrators of economic crimes. This study covers that with the help of forensic accounting to detect and combat intentional deception at the corporate level. The demand for an interest in forensic accounting is expected to continue to increase; more universities are planning to provide forensic accounting education. It is widely viewed forensic accounting education as being relevant and beneficial to accounting students, the business community, the accounting profession, and accounting programs.

Key words: Forensic Accounting, white-collar crimes, Corporate Collapse, Fraud, Economic crimes.

#### Introduction

This study indicates that the current scenario of forensic accounting practice in developing countries to detect fraud, embezzlement at businesses, government and non-government organizations, non-profit organizations and the like. Different examples of corporate scandals and failure in near past have put the professional accounting bodies into a new perception that goes beyond statutory audit and in some ways even the trend of corporate governance. There is a magnifying trend of hiring forensic accountants by companies to probe allegations of fraud. Most of the companies are trying to appoint forensic accountant to detect and combat fraud and misappropriation committed by the management, employees of the organization. Corporate scandals, corporate collapses have taken place due to the failure of auditors in detecting frauds. Forensic accounting is very much important and a dynamic tools for combating deception for any type of business, government and non-government organizations. Sometimes Government can hire forensic accountant to ensure the compliance of corporations and others with various forms of regulations. But in Bangladesh, the use of forensic accounting system is now at the preliminary stage. Now, the time has come to apply this technique to reduce, even remove, fraud and white-collar crimes such as embezzlement from the corporate sectors.

We have attempted to give an overview of forensic accounting in this paper along with the suggestions of how to apply this technique in the corporate sector of Bangladesh to detect fraud and white collar crime like embezzlement.

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#### **Objective of the Study**

The major objectives of the study are-

- 1. To play the inevitable role for removing recent rash of corporate scandals, corporate collapses, and business failures in developing countries.
- 2. To know the procedures followed by the forensic accountants while doing their tasks.
- 3. To present a brief overview of status of forensic accountants in the developing countries.

#### Methodology of the Study

The major source for this study include an extensive review on published books, articles from academic and professional, local and international journals, papers, speeches and reports on newspapers. A good number of articles were collected through searching in the World Wide Web. However, this is very tiny attempt to detect fraud and embezzlement at corporate level with the help of forensic accounting. Actually, this study primarily based on secondary information.

#### **Literature Review**

In the area of fraud risk assessment attempted to gain an understanding of the factors associated with the increased likelihood of management fraud, or act as warning signals or ("red flags") that can help an auditor assess the risk of fraud in a given situation. However, much of this research studied novice rather than expert auditors. Also, there appears to be limited research into judgment processes involved in judgments about the risk of material management fraud. While there have been several process-oriented studies that have addressed other aspects of the audit process), there have been only a few process-oriented studies of management fraud risk assessment. For example, Jamal, Johnson and Berryman (1995) were interested in the way in which framing effects would contribute to the auditors ability to detect an embedded fraud within the financial statements presented as part of the case materials. Jamal et al. (1995) found that over half of their subjects were deceived by managements frame and thus failed to detect the fraud. Zimbleman (1997) investigated whether the AICPAs SAS No. 82 which requires auditors to separately assess the risk of fraud will lead auditors to spend more time reading fraud cues and design audit plans that are more sensitive to fraud risk.<sup>1</sup> Zimbleman provided practicing auditors from two Big 6 firms with cases containing cues indicating high fraud risk or low fraud risk and asked them to search information stored on a computer, make inherent risk assessments, prepare a staffing budget, and choose audit procedures to test the client's accounts receivable.

Computer software kept track of the time subjects spent reading and this time measure was used to test one of the hypotheses of interest; i.e., whether subjects would spend more time attending to fraud cues when conducting a separate assessment of fraud risk as compared with a holistic assessment of inherent risk. Zimbleman found this to be the case. Also, while subjects increased the numbers of hours budgeted for the higher risk case compared to the lower risk case; they did not produce significantly different audit plans for those cases in terms of the procedures selected. A follow up study by Glover, Prawitt, Schultz, and Zimbelman (2003) compared pre- and post-SAS 82 planning judgments, and found that post-SAS 82 planning judgments were more sensitive to fraud risk factors than in Zimbelman (1997). In their study, auditors adjusted the extent of planned audit tests in response to fraud risk, but made no changes to the nature of their planned tests. Houston et al. (1999) had auditors assess the audit risk and business risk for a case where specific errors or irregularities were present, then recommend audit investment and fees. They found that when the likelihood of an error was high, the fee did not contain a risk premium,

whereas when the likelihood of an irregularity was high, the fee did contain such a premium. This suggests that auditors are sensitive to the need for more investment in auditing when high risk of fraud is present, although Houston did not provide evidence on what specific procedures the auditors would perform to compensate for this risk.<sup>2</sup> Auditors could have the desire to compensate for identified risks, but not the ability to do so. Some have suggested that an effective way of addressing such risks is to use fraud specialists. Asare and Wright (2004) conducted a study wherein experienced auditors were provided with a case and asked to assess the risk of fraud, revise audit plans, and decide whether to consult fraud specialists. Some of the auditors were given structured guidance in the form of standard risk questionnaires, while other auditors who were provided with structured guidance underestimated the risk of fraud. In contrast, auditors who were not provided with structured guidance assessed the fraud risk at higher levels and were more likely to refer the file to fraud specialists.

Mock and Turner (2005) investigated fraud risk assessments and their effects on audit programs following the issuance of SAS No. 82.<sup>3</sup> They sampled clients over a two year period to identify how the auditors" actions changed when the client risk assessment was other-than-low risk versus low risk based on the number of fraud risk factors present. They found that the auditors in their study identified fraud risk factors and modified the nature, extent and/or timing of audit procedures, assigned more experienced audit team members to the audit, or added or deleted procedures. Mock and Turner's results showed that the more fraud risk factors were present, the more changes made to the extent of planned audit procedures.

Like Zimbelman and Glover et al. (2003), Mock and Turner (2005) determined that the decision to modify the audit program in response to the fraud risk assessment was influenced by SAS No. 82. They concluded that audits were being adjusted based on SAS No. 82. These findings are at odds with those of Asare and Wright (2004). In addition, Mock and Turner addressed a standard (SAS 82) that has been superseded (by SAS No. 99/CICA HB 5135), and they did not directly look into the use of forensic accountants or other fraud specialists in an audit context. Wells (2004) pointed out that large accounting firms have fraud specialists on staff but they are used reactively rather than proactively. He recommended that fraud specialists become involved during the audit to help identify key risk areas. The fraud specialist would identify the risk areas and communicate these to the auditor for "further consideration." Wells (2004) argued that the presence of fraud specialists on an audit would act as a deterrent to fraud-inclined client for there would be a perception that the likelihood of illegal activities being detected would increase. Wells (2004) does not support his conjectures with evidence, so it is difficult to know whether fraud specialists could contribute in the way he suggests.

In summary, previous studies indicate that auditors are able to identify fraud risk factors, but may not be able to translate this knowledge into an audit plan that effectively takes them into account and enhances chances of detecting the fraud if it exists. Fraud specialists may be able to compensate for such limitations, but there is no published research that provides evidence of this. Academics and practitioners may be over-estimating what fraud specialists can contribute to the effectiveness of an audit plan. They may be able to investigate a known fraud, but may not be able to design audit tests to detect a hypothesized fraud as well as auditors can. The usefulness of consultations with fraud specialists is often based on anecdotal evidence after a fraud has been discovered where it is suggested that the auditor should have sought the assistance of a fraud specialist. When auditors fail to detect a management fraud the public is usually left asking, where were the auditors? In recent years, there has been a focus on the auditors need to do a better job at assessing the potential fraud at their audit client. SAS 99 and CICA HB 5135

attempt to address this situation. However, once the auditor has assessed an increased potential risk, what is the next course of action? Presumably the auditor needs to revise the audit plan from the standard audit plan to one more likely to detect the existence of fraud. Auditors could either tailor the audit program themselves or seek the assistance of a fraud specialist. If they believe that the fraud specialist can do a better job, and they are right, then they should forward the file to the fraud specialist. However, if the fraud specialist is no more skilled at this than they are in adjusting the audit plan to increase the chance of fraud detection, then the auditors should revise the audit plan themselves, although they may need additional training or decision aids to do this effectively.

#### **Rationale of the Study**

The forensic test of the corporate failures have once again decorated the importance of accounting information, and specifically, for accounting information that is true and fair to allow various stakeholders to make informed decisions in regards to dealing with companies. Now here is this more evident than in real life as evidenced by the prompt knee-jerk reaction and response of legislators and corporate regulators in tightening corporate governance, accounting rules and industry practices. It has been recognized that there is a need for true and fair financial information, and as such, a balance must be struck between making those responsible for inaccurate and potentially negligent advice liable for economic damage, with the need for keeping such professionals in business by not forcing them to abandon their chosen profession because of unaffordable liability. Professional liability is an especially important issue for the accounting profession where market power has now.

# **Combating Recent Rash of Corporate Scandals, Corporate Collapses, and Business Failures in Developing Countries**

The market for forensic accounting continues to grow especially in the backdrop of the recent rash of corporate scandals, corporate collapses, and business failures. In fact these have prompted businesses houses to hire forensic accountants to combat through investigation, various types of wrongdoing, on one hand and prevent such occurrence, on the other. The plague of fraud has accelerated the need for a specialist trained specifically in investigation and detection. Forensic accounting has established itself as dynamic and strategic tool in combating corruption, crime and frauds through investigations and resolving allegations of frauds and embezzlements. It is seen to be engaged in evidence gathering, document findings, provide internal control assessment, internal risk assessments, design, implement and monitor fraud policies, loss recovery, due diligence and compliance studies, lost profit analysis, damage calculations, shareholder disputes, business damages, valuation, settlement negotiations, mediation, search for hidden assets, business or pension plan, etc.

Following the globalization of businesses in the early 1900s, and especially after the American stock market crash of 1929, auditors shifted their focus from fraud detection to public financial statement reporting. That created an expectation gap between auditors and the users of financial statements, who still viewed auditors as the first line of defense against fraud (Reason, 2001). This expectation gap was spectacularly exposed during the recent spate of corporate failures.

Since 9/11 Forensic Accountants have been playing a major role in tracing terrorists around the world. There is currently immense public pressure on the auditing profession to bridge this expectation gap coupled with regulatory support. The response to this situation, especially in the United States of America, has led to a dramatic increase in the number of forensic accountants

with an expanded rote and the enhancement of accounting curricula to improve the fraud detection skills of statutory auditors.

While the contributing disciplines have ensured the diversity of forensic accounting in Bangladesh, this emerging discipline lacks an academic and theoretical basis, as well as professional regulation. It is also high time for Bangladesh to consider the Forensic Accounting as strategic tool in combating as well as identifying fraud and corruption at all level of public and private sectors. The new caretaker government of Bangladesh following 1/11 has declared a crusade against corruption, which is likely to be assisted by Forensic Accounting.<sup>4</sup>

#### **Procedures followed by the Forensic Accountants for Performing Their Tasks**

Unearthing financial evidence and analyzing it to support litigation is an important element in numerous civil and criminal cases. Whether the forensic accountant is working on behalf of the prosecution or the defense, it is his/her responsibility to provide adequate support for the document presented at court. Various organizations appoint the services of these professionals' government agencies, banks, police forces, insurance companies, etc. Here are the basic responsibilities:

- Investigation and analysis of financial data
- Development of computerized applications that help in this analysis
- Presentation of the findings in a comprehensible manner
- Assistance in the litigation (by providing documentation or expert witness)

Every case is unique, and the specific circumstances dictate the steps in an assignment. However, there are certain common steps that every task follows.<sup>5</sup> Here are the details.

1) Meeting with the client is essential to understand the involved parties, the issues at hand and the facts.

2) Performing a dispute check is important to understand the basis of conflict between the two parties.

3) Performing a basic investigation is necessary to chalk out a plan of action that the accountant needs to complete the assignment.

4) Developing a strategy is creating the master plan on the basis of the facts you got from the initial investigation, keeping in mind the goal of the task.

5) Accumulating relevant evidence this involves locating data pertaining to the legal dispute. 6) Analyzing the evidence includes tasks like calculating damages, tracing assets, summarizing transactions, performing sensitivity analysis, calculating present value of assets as per discount rates, utilizing computer applications and other tools for explanation of the findings, and such others.

7) Preparing the report is necessary to explain the findings in a comprehensive manner.

The goal is forensic accounting litigation support. Therefore, the report needs to provide ample data analysis to support, or refute, the claim in question. While we looking for a professional providing such services, it is important that we keep in mind certain considerations. A qualified, certified and experienced forensic accountant is the suitable one to retain for counsel. It is better to consider someone who has an in-depth knowledge of the legal procedure. Timely counseling is imperative in case of forensic accounting. Otherwise, its scope as litigation support becomes limited. Moreover, the client needs to provide all necessary data to the accountant in order to maximize the opportunity of accurate investigation and analysis of the financial evidence.

#### Status Showing the Forensic Accountants in Developing Countries

Whether forensic accounting is a niche or a profession is integrally related to status. Williams (2002) states that forensic accounting is recognized as having a particular form of professional expertise and endowed with identifiable attributes among which are rationality, neutrality, and independence. Forensic accountants possess a particular social recognition, observes Williams that is critical to the translation of economic issues into symbolic displays of trust. The critical social value that forensic accountants possess is the symbolic capacity by which the translation is realized. Among the things that professions do, states Abbott (1988), is to measure our profits. It is often argued that the development of capitalism is rooted, among other things, in accounting.<sup>5</sup> The purpose of this paper is not to enter into that debate, but to recognize the importance of the debate within the context of answering the question, —is forensic accounting in the U.S. a profession? However, what is relevant is that any profession bearing such an important description must be perceived by society to be an essential part of society. At the very least, accounting has significant economic consequences for industry, commerce, and governments both national and international (Hopwood, 1992).

As Chiapello (2007) observes<sup>7</sup>, capitalism is inseparable from a representation of economic life from an accounting perspective, and thus accounting lies at the heart of our economic system which consists of entities and the commercial relationships between them. Accounting, states Chiapello (2009), is —the guardian of the firm's boundaries and determines the social construction of the organization.<sup>8</sup> Public accountants monitor expenditures of capital and are the —gatekeepers of capitalist ideology. The ideology of public accounting consists of a symbolic framework for decisions concerning capital investment and borrowing. The body of knowledge that public accountants control concerns political, economic, and social interests (Montagna 1986).<sup>8</sup>Equally important to the economic system, however, is forensic accounting. As suggested by Williams (2002), forensic accounting provides cultural mediation for economic and political logics. Forensic accounting is the venue within which the cultural mediation of legal and economic claims is accomplished.

The first decade of the twenty-first century experienced a -tsunami or -blizzard in the number of corporate scandals, frauds, and failures (Ball 2009).<sup>10</sup> These events precipitated and contributed to the Great Recession and significantly impacted the efficient functioning of free market capitalism. The cultural mediation of competing legal and economic claims reaches into the hundreds of billions of dollars. Legal proceedings related to the scandals, frauds, and failures have skyrocketed in both the number of cases and their complexity, and public accountants are not trained to deal with those types of issues.<sup>11</sup> some of which were actually facilitated by public accountants (cf. Enron and Arthur Andersen). The scandals, frauds, and failures have contributed to the loss of confidence by the public in the ability of public accounting to contribute viable solutions to the financial problems, and have fueled the growth in demand for forensic accountants. Fraud affects the efficient allocation of real and financial resources and the efficiency of the market to process information timely and accurately. The entire free, private, and competitive economic system is harmed. Competition is reduced and confidence in the total economic system is lost.<sup>12</sup> Public accounting is implicated, therefore, whether by intent or by negligence. However, if, as Montagna (1986) asserts, as a consequence of the enactment of the Securities Laws public accounting was given the responsibility of protecting the public from financial misrepresentations in corporate reporting, what happens when public accounting fails to fulfill its responsibility, as happened in the -decade of fraud and failures? That is when the services of forensic accountants are required. Thus, the role of forensic accountants today is no less daunting than that of public accountants.

While public accountants are licensed by the state, and forensic accountants are not licensed by the state (at least not yet), forensic accountants have basically become the successors in interest to public accountants when public accountants neglect to fulfill their responsibilities to protect the public, when they do not act as the gatekeepers of capitalist ideology, and when they fail to be guardians of firm boundaries. Forensic accountants have played an increasingly important role in the litigation and other legal disputes fomented by these recent frauds and failures. The importance of forensic accounting in a free-market society has been established and serves as the background.

#### Conclusion

Fraud is real and has so many branches now that modern day fraudulent activities go undetected for most of the time and or until it is too late. Forensic accounting is the new branch in accounting which has the sole aim of unearthing fraudulent activities within and outside an organization so far as the third party's action is in any way reflective on the activities of that organization. While this study agrees that financial scandals in business organization have raised the awareness that accountants should be alert to potential fraud and other illegal activities while performing their duties, they can also be made to provide significant assistance in preventing, investigating and resolving such issues. Forensic accounting is another aspect of accounting which tends to further highlight the natural relationship existing between accounting and law just as auditing. Forensic Accounting is one of the fastest growing areas of accounting; there is an increasing global demand for specialists with forensic accounting knowledge and skills.

#### **References:**

- 1. Zimbelman, M. F., "The Effects of SAS No. 82 on Auditors" Attention to Fraud Risk Factors and Audit Planning Decisions", Journal of Accounting Research, Vol. 35 Supplement, 1997, pp. 75-97.
- 2. Houston, R.W., M.F. Peters and J.H. Pratt, "The Audit Risk Model, Business Risk, and Audit Planning Decisions", The Accounting Review, Vol 74, No 3, July 1999.
- Mock, T.J. and J.L.Turner, "Auditor Identification of Fraud Risk Factors and their Impact on Audit Programs", International Journal of Auditing, Vol. 9, No. 1, pp. 59-77, March 2005
- 4. Financial Express, Dhaka, Sunday, April-2008(http://www.thefinancialexpressbd.com/2008/04/20/31181.html)
- 5. http://accountant.ezinemark.com/steps-involved-in-the-forensic-accounting-process-31c44063063.html
- 6. Abbott, A. 1988. The System of Professions: An Essay on the Division of Expert Labor. Chicago: University Of Chicago Press
- 7. Chiapello, E. 2007. Accounting and the birth of the notion of Capitalism. Critical Perspectives on Accounting, 18(3), 263-296.
- Chiapello, E. 2009. The Accounting Construction of the Economy. In D. Rainer, & K. Gertraude (Eds.), Dizskurs und Wirtschaft. Diskursanalytische Perspektiven auf die Ökonomie. Wiesbaden, Germany: Verlag für Sozialwissenschaften.
- 9. Montagna, P. 1986. Accounting Rationality and Financial Legitimation. Theory & Society.
- 10. Ball, R. 2009. Market and Political/Regulatory Perspectives on the Recent Accounting

Scandals. Journal of Accounting Research 47(2): 277-323.

- 11. Seda, M., and B. K. Peterson Kramer. 2008. The Emergence of Forensic Accounting Programs in Higher Education. Management Accounting Quarterly 9(3): 15-25.
- 12. Williams, J. W. 2002. Playing the Corporate Shell Game: The Forensic Accounting and Investigation Industry, Law, and the Management of Organizational Appearances.

## The Arena of Mobile Banking in Bangladesh

## Bushra Ferdousi<sup>1,</sup> Md.Rofiqul Islam<sup>2</sup>

**Abstract:** Mobile Banking is a banking process without branch which provides financial services to unbanked communities efficiently and at affordable cost. To provide banking and financial services, such as cash-in, cash out, merchant payment, utility payment, salary disbursement, foreign remittance, government allowance disbursement, ATM money withdrawal through mobile technology

devices. The mobile financial services market is at an early stage of development as providers are working to stabilize their technology build agent networks and acquire new customers. The mobile platform offers a convenient additional method for managing money without handling cash. For users in the developing world, however, the appeal of these m-banking/ m-payments systems may be less about convenience and more about accessibility and affordability.

Key words: MFS, telecos, GSM, financial inclusion rate, technological affordances.

## Introduction

Economic development depends on so many factors. Both micro and macro level mobile banking has a tremendous impact in today's world as lion share of human being are accustomed to use mobile phone as their daily necessary instrument. Economic development has consequences for the labor market in different ways depending upon the nature and extent of its impact and depth, and the development sectors that tend to have suffered from the worst impact if the mechanism in an economy does not work well. Mobile Banking is somehow are affecting the economy in a positive way. The terms m-banking, m-payments, m-transfers, mpayments, and m-finance refer collectively to a set of applications that enable people to use their mobile telephones to manipulate their bank accounts, store value in an account linked to their handsets, transfer funds, or even access credit or insurance products. Mobile Financial Services (MFS) is an approach to offering financial services that combines banking with mobile wireless networks which enables users to execute banking transactions.

This means the ability to make deposits, withdraw, and to send or receive funds from a mobile account. Often these services are enabled by the use of bank agents that allow mobile account holders to transact at independent agent locations outside of bank branches. MFS is still new in Bangladesh and this report aims to capture its early development and learn lessons.

This article uses the compound term m-banking / m-payments systems to refer to the most common features. The mobile platform offers a convenient additional method for managing money without handling cash. For users in the developing world, however, the appeal of these m-banking/ m-payments systems may be less about convenience and more about accessibility and affordability. The related areas of Mobile Banking are banks, mobile operators, hardware and software providers, regulatory agencies, donors, and users. Mobile phone operators have identified m-banking/m-payments systems as a potential service to offer customers, increasing loyalty while generating fees and messaging charges.

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## **Objectives** of the study

The major objective of this study is to establish a clear idea about mobile banking so that we can make a connection between economy and growth of mobile banking. Another aim is to analyze the impact of mobile banking, which can be seen by the effect of using technological improvement.

## Methodology

In this article, I tried to find out the arena of mobile banking in Bangladesh and the effect of mobile banking in the social and economy growth. The assessment is designed through a detailed assessment of the impact of m-payments which is also based on data collected from various sources. This report is the initial review of the impact of the role of m-banking in the economic development in Bangladesh. Basically secondary data are used here. The secondary source of information includes the available relevant review of literature, handout of DBBL's employee in mobile banking section; Bangladesh bank's published report of mobile banking and many national and international journals.

## **Literature Review**

Mobile Banking is a Banking process without branch which provides financial services to unbanked communities efficiently and at affordable cost. This article uses the compound term m-banking / m-payment system to refer the most common features. The first targets for these applications were consumers in the developed world. By complementing services offered by the banking system, such as checkbooks, ATMs, voicemail/landline interfaces, smart cards, point-of-sale networks, and Internet resources. The mobile platform offers a convenient additional method for managing money without handling cash.<sup>1</sup> For users in the developing world, however, the appeal of these m-banking/ m-payments systems may be less about convenience and more about accessibility and affordability. The related areas of Mobile Banking is banks, mobile operators, hardware and software providers, regulatory agencies, donors, and users, to determine the shape of m-banking/m-payments systems as a potential service to offer customers, increasing loyalty while generating fees and messaging charges.<sup>2</sup>

To provide banking and financial services, such as cash-in, cash out, merchant payment, utility payment, salary disbursement, foreign remittance, government allowance disbursement, ATM money withdrawal through mobile technology devices, such as Mobile Phone, is called Mobile Banking. The terms m-banking, m-payments, m-transfers, m-payments, and m-finance refer collectively to a set of applications that enable people to use their mobile telephones to manipulate their bank accounts, store value in an account linked to their handsets, transfer funds, or even access credit or insurance products. Collectively the process which bank can gave the mobile banking facility is known as Mobile Financial Services(MFS),with the help of Mobile Network Operator(MNO) .The related areas of Mobile Banking is banks, mobile operators, hardware and software providers, regulatory agencies, donors, and users, to determine the shape of m-banking/m-payments services in the developing world. Mobile phone operators have identified m-banking/m-payments systems as a potential service to offer customers, increasing loyalty while generating fees and messaging charges.

Mobile Network Operator -Airtel, Banglalink, Citycell, GrameenPhone, Robi, Teletalk. Mobile Financial Services up to March 2012 (excluding remittance-only deployments).<sup>3</sup> Which is shown in Table 1

Banks licensed by Bangladesh Bank	10
Live MFS deployments	5
Mobile Accounts Opened	4472269
Appointed Agents	9093
Total Value of Transactions (Crore Taka)	207

Table No. 1: Mobile financial services in Bangladesh

### **Role played by Central Bank**

A newly released overview report on Mobile Financial Services by Bangladesh's Central Bank highlights the progress achieved two years on. The central bank issued guidelines on "Mobile Financial Services for Banks" in September 2011 clearly stating a choice to make the market bank-led. The central bank issued guidelines on "Mobile Financial Services for Banks" in September 2011 clearly stating a choice to make the market bank-led.<sup>2</sup> BB has provided 10 license for banks to offer the full range of mobile financial services. This is shown in Table  $2^1$ 

Banks licensed to offer mobile financial services	Mobile Operator Partners	Launch Date	Registered Customers	Agents	Cumulative Transactions (\$ millions)
Trust Bank	Teletalk	Aug-10	1,104	329	0.02
Dutch Bangla Bank	Airtel Banglalink Citycell GrameenPhone	May-11	172,020	3,181	11.0
BRAC Bank/bKash	Banglalink Robi GrameenPhone	Jul-11	237,423	5,383	14.8
Mercantile Bank	GrameenPhone	Feb-12	1,392	170	12.5
Bank Asia	None	Mar-12	0	30	0.01
			442,289	9,093	25.9

Table: Overview of Market as of March 2012

Table 2:Bangladesh Bank, An overview of market development. As March 2012

#### The process involve in getting mobile Banking Services

The mobile financial services market is at an early stage of development as providers are working to stabilize their technology build agent networks and acquire new customers. This involves finding and training agents, marketing, helping customers transact and acquiring customers by using know-your-customer (KYC) and account opening processes.

Customer can register at any authorized agent point of the bank where mobile banking services has supported - at present these are the retailers of Citycell, Banglalink - Airtel, GrameenPhone, Robi, Teletalk throughout the country who can display the individual mobile banking facilities through 'Agent Certificate' and ' Mobile Banking Banner'.

# Most m-banking/m-payments systems in the developing world enable users to do three things: (Benefits)

(1) Store value (currency) in an account accessible via the handset. If the user already has a bank account, this is generally a question of linking to a bank account. If the user does not have an account, then the process creates a bank account for her or creates a pseudo (virtual) bank account, held by a third party or the user's mobile operator.

(2) Convert cash in and out of the stored value account. If the account is linked to a bank account, then users can visit banks to cash-in and cash-out. In many cases, users can also visit the GSM providers' retail stores. In the most flexible services, a user can visit a grocery store (perhaps the same one where he or she purchases airtime) and transact with an independent retailer working as an agent for the transaction system like bKash.

(3) Transfer stored value between accounts. Users can generally transfer funds between accounts linked to two mobile phones, by using a set of SMS messages (or menu commands) and PIN numbers. The new services offer a way to move money from place to place and present an alternative to the payment systems offered by banks, remittance firms, pawn shops, etc.

## **Type of Mobile Set required**

Handheld phone with more advanced computing power than a normal mobile phone and have the ability to undertake internet web based transactions with mobile network operators are likely used in mobile banking. But in Bangladesh root level people did not have smart phone so all types of mobile banking facilities are not available for them; here any type of mobile set can be used for mobile banking.

## **Requirement of initial deposit for mobile Banking**

Customers can open a mobile account with an initial deposit of Taka 100.00

## Fees & service charges

Registration Fee : Free Cash-in Charges : 1% of the transaction amount or Tk.5.00-, whichever is higher Cash-out Charges : 2% of the transaction amount or Tk.10.00, whichever is higher. Merchant Payment : Free for customer Mobile Top-up : Free for customer Salary Disbursement : Free Allowance Disbursement : Free Remittance Disbursement : Free

## **Economic and social benefits**

Social benefits include the supplementing of incomes through remittances, providing a safe means to store income during good times, and access to insurance. These impacts lead to larger social benefits, such as a reduction in financial exclusion, an increase in the poor population's resilience to shocks, and the improved ability to keep children in school should a financial shock occur.<sup>4</sup> Strong evidence that financial inclusion is positively associated with attainment of key economic and social goal<sup>5</sup>, This is represented in Fig -1.

# Strong evidence that financial inclusion is positively associated with attainment of key economic and social goals

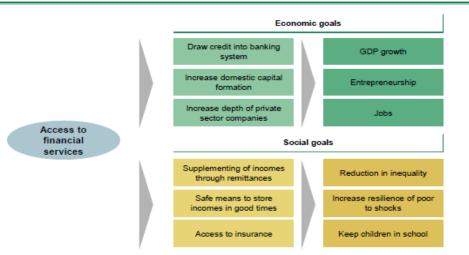


Fig. 1 Positive impact of financial inclusion.

## Bangladesh: A case study

Bangladesh currently has a 55 percent financial inclusion rate. This means that in Bangladesh today, 45 percent of adults have no access to formal financial services. Among the financially included, 16 percent are fully banked, meaning they are able to take advantage of a full range of financial services (including savings, insurance, credits and others); and 39 percent are under banked, with only basic access, such as a savings account. Bangladesh's inclusion rate, which is extremely high given its current level of economic development, is driven primarily by microfinance, and the percentage of active users of the full range of financial services is probably lower. Furthermore, the penetration of key services especially insurance remains quite low, and MFS is nearly nonexistent.<sup>6</sup>

The financial inclusion—the delivery of affordable banking services to a population—is associated with the attainment of a nation's crucial economic and social goals. Providing financial services draws credit into the banking system, leading eventually to GDP growth.<sup>7</sup> It increases the formation of domestic capital, spurring entrepreneurship and it develops the depth of a nation's private sector, which in turn builds new jobs. These financial developments reduce a nation's overall income inequality, increase income growth among the lowest paid quintile of the population and accelerate poverty alleviation.

From a social perspective, financial inclusion gives workers the means to make remittances, a key goal in promoting the reduction of inequality. It provides them with a safe way to save their income, increasing the resiliency of the poor to unexpected economic or political shocks and food shortages. And it gives the population access to insurance—a basic safety net for emergencies such as accidents or crop and weather catastrophes—making it possible for families to keep their children in school through difficult times.

## Benefits: From the individual to society

Mobile financial services can offer all Bangladeshi certain benefits. Banking becomes much more accessible and affordable. Products are tailored to customers and are thus more relevant and meaningful and MFS leads overall to a reduced reliance on cash. In addition, those MFS adopters who were previously unbanked will benefit from an enhanced ability to mitigate income volatility and expense shocks.<sup>9</sup>

Through the micro financial Services the social development goal can be achieved<sup>10</sup>, this is shown in Fig 2

## MFS can support Bangladesh's social development goals



Fig 2: Overview impact on society

As these improvements occur, Bangladesh will undergo economic and industrial development and poverty relief. MFS can support these changes and help enhance the country economically, culturally, and socially.<sup>11</sup>

### **Dutch Bangla Bank Ltd**

DBBL is the first bank in Bangladesh who introduces Mobile banking service to bring poor people form remote area under smart banking service. DBBL is operating this new innovative banking service through Banglalink and Citycell mobile operator and their approved agent throughout the country.

#### **Brack Bank Ltd**

bKash,a joint venture between Brac Bank and US-based Money in motion, will provide mobile banking with a frilly encrypted VISA technology platform for transactions through mobile phones. The bKash mobile wallet, a VISA technology platform which is fully encrypted to ensure most secure transactions, will be the customer account into which money can be deposited and out of which money can be withdrawn or used for various services. Customers will be able to receive electronic money into their bKash accounts through salary, loan, domestic remittance, and other disbursements and eventually will cash out the electronic money at any of the hundreds of cash out agents which bKash assign.

#### Islami Bank Bangladesh Ltd

Islami Bank Bangladesh Ltd has introduced its SMS banking service by mobile phone operator. The services that provided are

- Multiple Account Registration.
- International push-pull facility
- Account Balance
- Mini Account Statement
- Account Information.

## **Future Prospect of Mobile Banking in Bangladesh**

With the advent of technology and increasing use of smart phone and tablet based devices, the use of Mobile Banking functionality would enable customer connect across entire customer life cycle much comprehensively than before.<sup>12</sup> With this scenario, current mobile banking objectives of say building relationships, reducing cost, achieving new revenue stream will transform to enable new objectives targeting higher level goals such as building brand of the banking organization. Emerging technology and functionalities would enable to create new ways of lead generation, prospecting as well as developing deep customer relationship and mobile banking world would achieve superior customer experience with bi-directional communications.<sup>13</sup>

## **Findings & Recommendations**

Conceptualizing electronic money even the simplest handsets have features buried deep in menu structures. If navigating an m-banking/m-payments interface is difficult for experienced mobile users with bank accounts, even greater is the difficulty for first-time users in the developing world, many of whom will have only been using a mobile for a year or so. People coming to banking for the first time via the mobile handset require a command of abstract concepts about invisible/virtual money. Consider the lack of ways to wrap or 'gift' a digital money transfer. Beliefs, misunderstandings, habits, and concerns must be addressed if people who are used to storing money in cash are asked to store it 'in' a handset; the analogy remains.

To achieve the true objective of mobile banking this step must be taken ;

- We must made the user knowledgeable
- The query about mobile banking must be solved as early as possible
- The infrastructure of this sector yet to be improved so the govt. must take initiatives.
- Information about the services must be available so that any person can meet his or her query
- More promotional tools need to make this sector popular..
- Mobile banking means Banking with the bank, so every bank should offer this opportunity and transparency is needed for each transaction.
- International linkages needed in order to make success of this service.

## Conclusion

The emergence of m-banking/m-payments systems has implications for the more general set of discussions about mobile telephony in the developing world. The latest case of m-banking/ m-payment system is a reminder that an understanding of the role of the mobile in developing societies must include its role in mediating both social and economical transactions .The particular properties of m-banking/m-payment system in the developing world, merging mediated communication and financial transactions, unwritten norms and technological affordances, should make them appealing to researchers more interested in social capital or domestication or diffusion than in m-banking perspective.

## Reference

- 1. Policy paper by Bangladesh bank (2012).Mobile financial services in Bangladesh. An overview of market development.(p-10)
- 2. www.bangladeshbank.org-Guideline for mobile financial services.(p-3)

- 3. Zaman, H., Assessing the Poverty and Vulnerability Impact of Micro-Credit in Bangladesh: A case study on BRAC (p-3))
- 4. BRAC Development Institute, "State of the Sector Report 2011".
- 5. Masinge, Khumbula.(2010).Factors influencing the adoption of mobile banking services at the bottom of the pyramid in south Africa,(p-13). Center for Financial Services Innovation, *Mobile Financial Services and the Under banked: Opportunities and Challenges for Banking and Mpayments* (2007)
- 6. CGAP, Branchless Banking 2010: Who's Served? At What Price? Who's Next?
- 8. GSMA, What Makes a Successful Mobile Money Implementation? Learnings from M-PESA in Kenya and Tanzania
- 9. Deloitte, Economic Impact of Mobile Communications in Serbia, Ukraine, Malaysia, Thailand, Bangladesh and Pakistan (2008)
- 10. Microfinance Initiative for Asia, IFC and World Bank, *Bangladesh: Microfinance and Financial Sector Diagnostic Study* (2009)
- 11. Asian Development Bank, Low-Income Households' Access to Financial Services (2007)
- 12. Source: www.telenor.com
- 13. Link: http://telenor.com/en/news-and-media/press-releases/2011/banking-the-unbanked-mobile-financial-services-may-improve-the-lives-of-2-bn

# Small and Medium Business Performance of Korean companies in Bangladesh: a Case Study on analytical Comparison of Customer Value through a Principal Component Analysis

# Faruk Ahmed <sup>1\*</sup> Md.Ruhul Amin<sup>2</sup>

Abstract: As a marketing performance, measuring and evaluating customer value of small and medium businesses of South Korean companies in Bangladesh presents a case study on analytically comparative customer value of the departmental store, Korean Mart, through a principal component analysis. Bangladesh has a bit shifted into a knowledge society and is demanding enhanced and balanced value in products and services. The phenomenon of SME business is widely researched on supports from different government and other bodies in the world like Bangladesh. It is obvious that accurately measured and evaluated performance is a diagnosis of SME problems that provide certainly a curing and preventive measure to drive such organizations towards an increasingly upward ride in the interest of social and economic benefits of particular nations as well as the world. The paper revealed that the knowledge creators and practitioners should rethink and redefine customer value by realizing this information for exploring small and medium businesses of South Korean organizations in Bangladesh through the integrated knowledge creating channels spreading out the world. On the outcome of the study, skills and knowledge of the entrepreneurs and employees, supports of the different government and private bodies, the degree of SME prospect, and required research of the different research and academic professionals and practitioners have also been linked in a way that can stimulate advancing the SME business knowledge in developing countries like Bangladesh.

Key words: Small and Medium Businesses, Customer Value, Knowledge Creation, Principal Component Analysis, Marketing Performance.

## Prelude

Marketing performance means achievements through marketing activity and SME stands for small and medium size enterprise. Achievements through marketing may include major marketing dimensions like product and service quality, revenue and profits, ethics and social responsibility, marketing program integration, corporate image, vertical linkage and integration, and marketing research and development. Knowledge is a power for its only contribution to the desired fulfillments of human being through innovation and marketing practices, which leads to stronger and longer hold of any size organizations established at any place of the world. Strong business organizations significantly balance socio-psycho-economic aspects of people where SMEs are the significant fraction among them. In the productive system micro, small, medium and large firms with different industries are interdependently coexisted, where SME plays the pivotal role among them in activating micro and large firms' business processes. SMEs have a significant economic contribution to any type of country. ASEAN observed in the member states that "SMEs account for more than 96% of all enterprises, 50% to 85% of domestic employment, the contribution of SMEs to GDP between 30% and 53%, and the contribution of SMEs to exports between 19% and 31%" and inferred that "SMEs are the backbone of ASEAN and SME development is integral to achieve long-run and sustainable economic growth"<sup>1</sup>. But they face some critical problems in technology, research and development, finance, and human resource in developing countries. Government, institution and business organization are not mutually well supported and collaborated in solving those problems through basic research activities that can create a platform of doing applied or company research effectively. Industrial sector achieve a little success in exporting comparing to the natural resources of Bangladesh.

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It has spent around forty years after independence, but national income is not satisfactory due to cast out SMEs into severe challenges and difficulties. It seems to me that radical SMEs development is unpredictable. Marketing knowledge process can obviously take some time not to give up anything that leads to business failure.

According to the United Nations Economic Commission for Europe (UNECE), the majority of SMEs in countries in transition is microenterprises employing family members or close relatives.<sup>2</sup> It also shows that in the EU economy roughly 93% of SMEs are microenterprises.<sup>3</sup> In Bangladesh, enterprises of less than 100 employees account for 99% of firms and 58% of employment, and in OECD economies SMEs and microenterprises account for over 95% of firms, 60-70% of employment, 55% of GDP and generate the lion's share of new jobs, and in developing countries, more than 90% of all firms outside the agricultural sector are SMEs and microenterprises.<sup>4</sup> Unemployment of the world is now increasingly growing tension for people of the society since they do not see a solution in near future. Marketing can make a platform a step ahead from the back to be capable of challenging almost all hurdles and barriers lying around the environment. A business organization is born on marketing activity, exploiting resources integrating with marketing is a second birth of organization where it plays a teacher role of how to use resources. Very few of many new businesses are observed successful in developed and developing countries, but unsuccessful ones indicate wastages of resources and complicate business activities throughout the organizations, which leads to an unsound working environment. Developing countries should be more conscious than those of developed in marketing practices, because they possess little tangible and intellectual resources that are used in producing goods and other products least the core competence of the underprivileged runs short to survive or keep current growth. The study incorporates measuring present past and future of marketing performance and assessing it in a way SME finds outperforming ground in near and far future.

## Importance of the study

The information having been generated through the study is a measurement and evaluation of marketing performance of Korean SMEs derived of different marketing functions, which is undoubtedly reliable and valid source of information for SMEs. The importance of the study is much in some way, such as government, educational and social institutions, research firms, financial institutions, SMEs and other types of business organizations, international financial aid organizations and foreign investors—all can understand theoretical and practical situation of SMEs marketing and what should they do on SMEs of South Korea in Bangladesh. To formulate appropriate marketing strategies and policies so as to advance them individually and jointly from the present position for the long-term economic gain nationally and internationally has no alternative to measure and assess the marketing performance of them. Since it is evidently claimed that Small Businesses have a contribution to regional and international development, they require to be uncovered regarding business innovation so as to dynamically develop small enterprises of developing countries nationally and internationally (Ed. J.J. Obrecht and M. Bayad).

## **Problem of the study**

Significant scientific and technological advancement the large business organizations around the world embrace has moderately touched the SME with a greatest contribution in producing and delivering products to an economy. In developing countries like Bangladesh marketing can secure a robust position of SMEs by providing stakeholders with more value, trust, sustainability, accountability, transparency and responsibility. Knowledge approach is mostly derived initially, intermediately and eventually of marketing paradigm in any business organization. No one should repress a disease in his or her body, meaning that SMEs have many issues or problems that can be solved only by applying marketing concepts. Least supported SMEs are common in any country of the world, which requires strong hold in the society for the sake of its human betterment. Extremely supported large enterprises have been shrinking jobs with machine automation for several decades. Where do people go for job? Most of them certainly having shelters of SMEs desire to live by telling true words, feeling

independence and security. But how can it be? No proper attention is paid on marketing practices based on accurate insights that could advance SMEs more ahead from the old scenario. Innovative marketing practices can reveal what consumers really seek in marketing scopes every time when SME firms require. However this practice will face some difficulties and challenges that will be only treated to provide some implications. What should be imperative to marketing practices on basis of insightful relationships between strategic marketing and market opportunities requires investigation for SMEs of developing countries.

## **Objectives of the study**

Purpose of the research is to measure and evaluate the SMEs marketing performance of South Korean Companies and the objectives of that are set below so as to seek answers to the some research questions that must be constructive to further development of SMEs in different industries of the country as an outcome of sustainable economic and social benefits of the stakeholders.

1 To explore variables influencing the consumers by developing different scales that will help make ideas and descriptions of the SMEs marketing performance level.

2. To measure variances of them resulting from presently practiced marketing activities of SMEs in the dimensions of product, service and post purchase quality, marketing communication and integration, delivery, innovation, and ethical and social responsibility through a principal component analysis.

3. To propose some implication to develop hypotheses by statistically analyzing data collected from Korean Mart and other customers on a basis of random sampling.

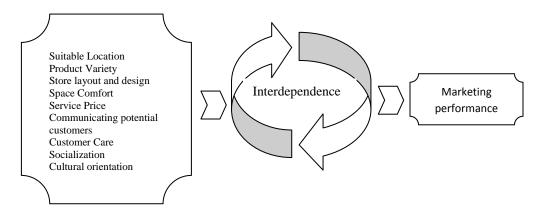
## **Literature Review**

The first research work was done in the south Asian region in 1979 titled "Small Entrepreneurial Development in Some Asian Countries: A Comparative Study" (Sharma, S.V.S. 1979). In the University of Georgia, Georgia, a doctoral dissertation titled "An Empirical Investigation into the Impact of SBDC - Strategic Planning Consultation Upon the Short-Term Effectiveness of Small Business" claims an insightful relationship between strategic consultation and short-term effectiveness (Jr. J.B. Robinson1981). In Philippines research paper incorporated further advancement of SME searching the subject titled "The Role of Small and Medium-Scale Industries in the Industrial Development in the Philippines (G Tecson, L. Valcarcel, and C. Nunez 1989). Small and Medium-Scale Enterprises in Industrial Development is the pioneer in SME research in Bangladesh (S. Reza, M.U. Ahmed, and W. Mahmud 1992). Growth and Development of Small Enterprise have been explored in the context of Bangladesh through case studies (M. A. Mannan1993, C Liedenholm and D. Mead (1987). Then here the nature and its support effectiveness of small enterprise was explored for the development of Bangladesh (J.H Sarder, and P. Rosa 1994), later support services of small enterprises in Bangladesh in his PhD thesis (J.H Sarder 1995). Basically support services to SMEs are widely studied in different angles, but marketing performance that is not studied is essential to change old paradigm into a new one which is marketing-oriented support at rapid growth of SMEs significantly contributive to the economy. A study on A measure of acculturation for Italian Canadians: scale development and construct validation conducted by Chankon Kima, Michel Larocheb, and Marc A. Tomiukc 2001 shows how much Italian immigrants have adopted the Canadian culture in media, ceremony, English language, community involvement and so on, while significant proportion of Italian could not adopted Canadian culture as it expects. So it difficult for every nationality to adopt another culture even if there is much support, however host country caring can ease the challenge of foreign investors, which will create an unprecedented opportunity of international business for SME investors.

## **Conceptual Framework**

Fig-1 presenting the nine variables that is considered in the study on marketing performance of small and medium businesses belonging to South Korean in Bangladesh allows researchers to overplay roles of doing extensive research activities for improving business performance in multicultural environment settings. Actually numerous variables are interacted in a business within an environment, the paper is limited to only nine variables due to a set of shortages in different dimensions. It is believed that since it important to require much

study in this area a bit exploratory study is highly likely to be start-up for opening a platform of continuing study effort. Variables are not tested here because they are used only for showing their nature in this context and concept of possible hypotheses through statistically analyzing them. So the considered variables provide some information regarding potential hypothesis on marketing phenomena so as to assist in creating new knowledge of marketing research and creating more customer value without bottlenecking business. In figure-1 there are nine independent variables that are interacted pair-wise to produce sufficient customer value if interdependence is balanced among variables: Suitable Location, Product Variety, Store layout and design, Space Comfort, Service Price, Communicating potential customers, Customer Care ,Socialization, Cultural orientation. Principal component analysis is applicable where only necessitating variance analysis that can portray an overview of behavior of variables and their importance. Neither descriptive nor causal experiments can come to play roles of testing hypothesis in survey-only research pursue but to do only for gaining ideas or insights about international SME product markets.



## Fif-1 Interdependence of nine variables

Actually numerous variables are simultaneously blended while organization provides with a particular marketing offers. Scaled importance of variables has been excluded though it would through level of importance of service stimuli. Nevertheless what the study focuses is the understanding the status of service value for securing long-term strong hold dependent on strategic service gap.

## Methodology

The level of digging down the knowledge of multicultural consumer and personnel behavior that is set can allow researchers to take a case study on the selected Korean Mart, Departmental store, as a descriptive or natural experimentation so that at least easily understandable and conceivable buying-selling influencing variables can be searched and analyzed without a more formalized exploration and artificial experimental treatment pursue. A moderate representation of the case is expected though it has considered consumers heading the said store, because cultural and other variables included here are applicable to almost every foreign firm in Bangladesh. The research is followed by a survey for depicting what is happening with consumers in consumption part of life with some in-depth interviews to two salesmen and three customers for gaining idea of identifying particular variables associated with buying. The design basically is descriptive in nature by which SME marketers can pick knowledge from business marketing information of South Korean SMEs in developing countries to gain insights between consumers' buying and its factors as a deductive study philosophy. Research problem is converted into several working variables to have been traced and attributed depending on statistical and theoretical ground. Primary and secondary data are used for the validity and reliability so as to truly achieve the research objectives. Different published and unpublished material on SME has been collected as a theoretical guide. To generate primary data in this descriptive study, 70 heads of customers interviewed through a questionnaire with 10 point scale of 9 interdependent variables have been considered as a random sampling. Moreover primary data are also picked from observation and discussion with people of Korean mart about basic

idea of business and research activities. To develop hypothesis or test or both is not an attempt at this study but an analysis of interdependence of selected variables, which is also a significant part of buying process.

## **Findings of the Study**

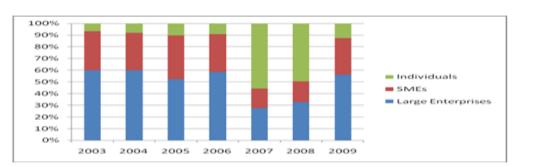
What is found from pursuing may be useful information for foreign SME investors to create knowledge about situation of business development while a lot of firms far and wide fail due to lack of understanding these variables as a form of information and knowledge.

## South Korean FDI and SMEs in Bangladesh:

In 2006, the FDI of Korean SMEs abroad amounted to \$34.72 billion in 2005 projects, which shows 20.6% of increase in projects and 41.2% growth in amount. However, the ratio of SMEs in total outward FDI in 2006 has fallen from 37.5% of last year to 32.4%. Investment of SMEs increased in all the industries and especially the investment in manufacturing, construction and real estate has largely expanded. To alleviate financial difficulties for SMEs, the Bank increased financial supports for SMEs during 2009 by remarkable levels. As of the end of 2009, disbursements to SMEs increased by 103.7% from the previous year to total KRW 13.7 trillion (USD 11.7 billion). This represents 41.7% of total loan disbursements provided by the Bank. With regard to guarantees, the Bank's commitments of guarantees to SMEs also increased by 1.1% from the previous year to total KRW 2.1 trillion (USD 1,838 million). Loans outstanding towards SMEs increased by 104.7% from the previous year to KRW 7.4 trillion (USD 6,306 million), which was 20.9% of total loans outstanding by the end of 2009. Investment of individuals reached 2,960 projects with \$985 million, which shows a 17.1% increase of projects and 48.1% of monetary amount. Individual investment has increased mainly in construction, wholesale and retail, and real estate. Regional distribution of individuals was led by Asia, North America and Middle East.

Country	No. of	Proposed Investment
	Projects	(US\$ m)
Saudi	3	478.652
Arabia		
South Korea	12	33.768
China	12	21.000
Hong Kong	5	14.805
Netherlands	5	8.544
T 1'	0	0.451

Table-1: Foreign and joint venture investment during 2009



**Source**: Bangladesh Economic Review

Fig-3: Korea Export-Import Bank, 2009

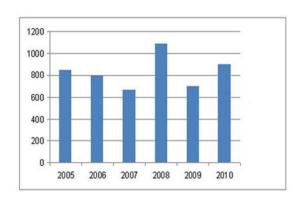


Fig-2: World Investment Report 2011, World Bank(US\$b)

Table-1 shows foreign and joint venture investment during 2009-2010 of above mentioned six countries that

are surfaced by Bangladesh Economic review while Saudia Arabia is the highest figure of US\$ 478.652 million with 3 large projects South Korea and holds 2<sup>nd</sup> and 3<sup>rd</sup> with US\$ 33.768 and US\$21.000 million respectively , where India was lowest at US\$ 8.451 million. **Fig-2** presents the world investment from 2005 to 2010 with more than US\$ 800 b and in 2006 was at peak with US\$1050b, total trend is a remarkable fluctuation. **Fig-3** depicts data about Individuals, SMEs and Large enterprises that was surfaced by Korean export- Import Bank, 2009, where between 2003 and 2006 SMEs and individual investment change did not occur but a little fluctuation in large enterprises. From 2007 onwards individuals investment at highest with around 45% among three types in year 2007 and in 2009 proportion of Individuals, SMEs and Large enterprises are 10% ,30% and 70% respectively , which is reverse from the years 2006 and 2007.

## **EPZ and NON-EPZ FDI**

There is significant fraction in non-EPZ Korean investment over an entire period 2005-2008. The trend of EPZ and non-EPZ Korean Investment in Bangladesh shows that Korean investors keep a stronger hold of habituated living in open places in Bangladesh than that of any other country. They try to understand this culture and socio-political structure that are the most important environmental factors for future businesses of foreign investors. Entrepreneurial and managerial Challenges could not thwart their business growth over the long period. Service organization like this requires more adaptation with culture than manufacturing one. Unknown factors may hit the service organizations not to grow more, which may lead those to shorter lives of businesses. Challenges and difficulties may be derived of hidden relationship between socio-cultural variables so they should continue to monitor and follow up the socio-cultural behavior of consumers in service sectors.

Table: 2 EPZ and non-EPZ FDI

	200	2005 2006		)6		20	07		2008		
	Jan-	Jul-	FY-05	Jan-	Jul-	FY-	Jan-	Jul-	FY-	Jan-	FY-08
	Jun	Dec		Jun	Dec	06	Jun	Dec	07	Jun	
EPZ	62.99	47.83	90.23	26.68	44.35	74.51	66.43	39.01	110.70	49.13	88.14
Non- EPZ		315.71	713.55	354.39	367.07	670.10	314.91	246.02	681.98	434.53	680.55
Total	481.72	363.54	803.79	381.07	411.41	744.61	381.34	285.03	792.75	483.66	768.69

## Description of Significant variables associated with marketing performance

## **Suitable Location**

Korean Mart, a medium-size departmental store at Banani, Dhaka, Bangladesh, started its functioning in 2011. Location of Korean Mart is situated near diplomatic zone as well as different commercial offices with market places in Dhaka City, and surrounds residents of affluent class of society. Among the different classes of 12 million inhabitants of the mega city, there are some Bangladeshi departmental stores nearby Korean Mart, among them Agora and Mina Bazar are worth mentioning.

## **Product Variety**

Categories of consumer products are slightly limited to Cosmetics, Toiletries, Toys, Foods, Spices, vegetables, frozen fish and meet, bakery products, candy, stationery with a wide range of items of which most of them are made in Korea.

## Store layout and design

Store layout and design is made of materials of modern technology and its space is furnished and decorated world class objects for interior design and around three quarter square of total the space in the 1<sup>st</sup> floor. It seems to customers that the store is may be beautiful or maybe not.

## **Space Comfort**

Its space is around 3000 square feet in the 1<sup>st</sup> floor with a shared car parking with other space owners of 6 storied building and until now at the start up time there is no problem for store or car parking space insufficiency according to the present number of customers, and their waiting time.

## **Service Price**

Price is tagged on packages and it seems to customers that prices of products are moderately fair but to attract more customer lower price may help any size of firms to manage the risks of businesses. Korean product is more quality than those of Asia and less the several developed countries, but some are equal to and exceeding the quality of those developed countries according to the criteria of ISO.

## **Customer Care**

CRM software helps firm to unveil phenomena of buying by analyzing past customer data, Korean Mart uses only a database that is used to record every day sales, nonetheless it will help to find out the trends of sales for a certain period to make effective decision for more growth of the store.

## **Communicating potential customers**

There are numerous potential customers whom can be attracted by taking some promotional programs as Bangladeshi stores do sometimes. They are not using promotional tools except word of mouth marketing with visiting cards.

## Socialization

Management employed few Bangladeshi male young for cordial and worm relationship between store people and customer; they do many activities concerning customer service.

## **Cultural orientation**

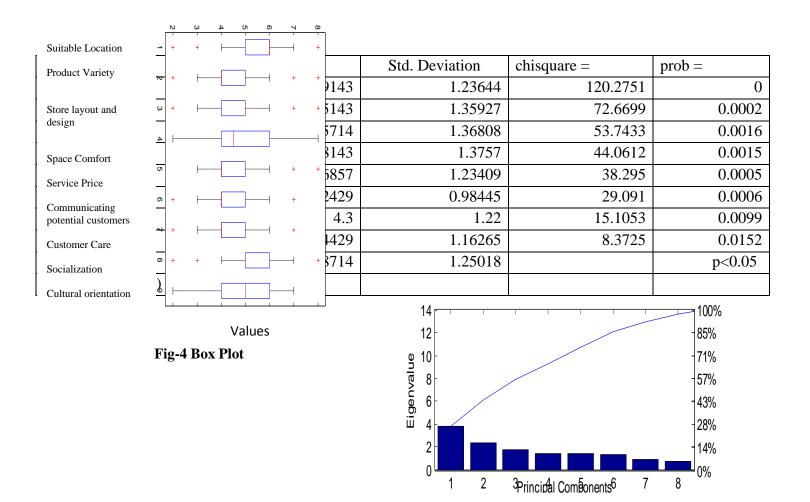
Bengali and English culture is using in store's customers where greeting are exchanged in English culture. Sales approach of sales promoters is standardized and adjusted on basis of behavior of customers.

## **Analysis of Marketing Performance**

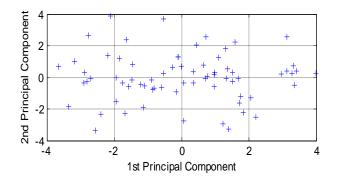
Most of the service dimensions are below than average in 1-10 point scale except the dimensions suitable location and socialization, so those dimensions are around average in value. In Bartlett's Test sample is adequate and their customer service is in nine dimensions not significantly different. Chi-square observed value is larger than tabular value which indicates marketing performance is moderately balanced.

## Table-3: Variables analysis

In range study it is found that space comfort range or variance is the highest in value and space comfort is the least in value. Greater value of variance should be considered how to reduce for short-term and long-term. In pareto chart nine Eigen value and cumulative Eigen value is shown, from component 1 through 9 an descending order of value is observable, but first 4 component value is around .60 or 60% in rescaled from 1-10 point scale. In figure-6 1-10 point scale value is scattered and partial scale value of 70x9=663 is shown for a closer visualization of customers' less than average value. Output demonstrated in the table-3, 4, and figure-5, 6, 7 and 8 are generated from Matrix lab software. There are eighty one principal component scores in table-4 with nine columns and 9 rows of variables, first two and first three column components are considered to visualize the variance in rescaled value 1. In rescaled points in 1 from 1-10, .To change nine vectors' plus or minus direction does affect the result of distance from the mean. Negative variance is below from average and positive value of variance is above the average where 0 is average value.



**Fig-5 Pareto Chart** 



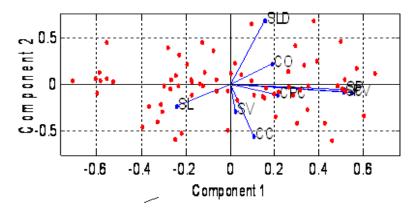
**Fig-6** Components

In **Fig-4** there are nine variances from nine variables where cultural and space comfort are widely varied in case of providing service values from consumer to consumer, while others are moderate variance from one customer to onother.

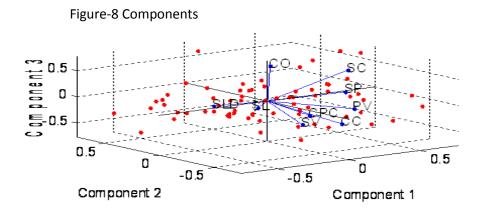
Variables/PC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9
Var1	0.242208	-0.2292	0.062843	0.33126	-0.382	0.7684	-0.18	-0.044945	0.070962
								-	
Var2	-0.54744	-0.09	-0.2882	0.268849	-0.249	-0.148	-0.25	0.6025115	-0.168
Var3	-0.15683	0.69297	-0.46751	0.069449	-0.1953	0.24	0.358	0.1160382	0.185406
Var4	-0.50973	-0.082	0.453355	0.378226	0.13319	0.151	0.49	0.2032771	-0.25142
Var5	-0.51466	-0.0502	0.025167	-0.0887	0.26171	0.1733	-0.45	0.2958237	0.580708
Var6	-0.21289	-0.1118	-0.29887	-0.38168	-0.1253	0.1971	-0.21	0.4503296	-0.63714
Var7	-0.10468	-0.5524	-0.20788	-0.16204	-0.4865	-0.212	0.417	0.1875749	0.352207
								-	
Var8	-0.02432	-0.2899	-0.31563	-0.29573	0.54796	0.4022	0.342	0.3861047	0.015483
								-	
Var9	-0.18839	0.21958	0.506066	-0.63471	-0.3392	0.1786	0.056	0.3249673	0.041201

## Table-4 Principle component Score p-by- p

**Figure-7** Components



In both axes nine curves are drawn where 1<sup>st</sup> principal component will occupy a particular value of the total variance, which can observed from nine dimensions, but only 60-70% Eigen value fits the curve best. From more than three dimensions it is very difficult to visualize the variance value. In component 1 of two dimension view variable suitable location demonstrates highest variance below the average and other variables, Product Variety, Store layout and design, Space Comfort, Service Price, Communicating potential customers, Customer Care, Socialization, and Cultural orientation indicate long distance above average, but in component 2 variable 1 is below the average, variable-3 and -9 higher than average and the rest are lower than mean value.



In three dimensional views principal component 3 is demonstrated in height axes, the 3<sup>rd</sup> vector space comfort service price, and cultural orientation are higher than average value and the rest variables higher variance value in lower half of data array.

**Table-5** Correlation analysis portrays inter correlations between these variables exposed from SPSS software package that is used to produce a p-by-n matrix correlation to find out whether there are strong correlations between nine variables. Variable 2 and 5 and variable 5 and 2, and Variable5and 6 are moderately correlated,

	Var.1	Var.2	Var.3	Var.4	Var.5	Var.6	Var.7	Var.
Var.1	1			·		·	·	
Var.2	-0.18897299	1						
								P
Var.3	0.141980248	0.17479768	1					
	-	0.00000011	2 00 2 2 0 0 2					P
Var.4	0.120258075	0.39283211	0.0033002	1				
Vor 5	-	0 50201647	0.05640057	0 50202236	1			I
Var.5	0.245862045				1			I
Var.6	-0.06599584	0.27354776	0.1322041	0.02308398	0.42160865	1		I
	1		-		-			
Var.7	0.05572447	0.23771299	0.26049587	0.05958213	0.00385037	0.300464955	1	
	1	-	-	-				
Var.8	0.016706628	0.01781705	0.10673486	0.02032261	0.12871248	0.208562706	0.1093262	
							-	
Var.9	0.110366344	0.03094634	0.07747312	0.18815571	0.1800889	0.131718789	0.05036107	0.1397336
which i	which indicates that those stimuli are performing better, but other pairs are not performing well.							

#### **Table-5 Correlation analysis**

#### **Overall analysis**

From principal component analysis it is observed that the discussed variables are playing critical roles and may pose investment risk due to a business operation on other culture. Like the Korean Mart, other service businesses are also critical in the same reason. Location, customer service, cultural orientation, socialization are very important to potential customers. The need to increase customers completely depends on requirement of business investors.

#### Conclusions

The study on the phenomenon is near about completely obvious that a well-tuned combination of those variables is the essence for knowledge society. The study may be a mark of exploring potentiality of Korean SMEs business, which reasonably can strongly motivate enhancing its marketing and research activities of it. Management of Small and medium businesses can do that as easily as they do work normally. Cultural clash and miscommunication must not lengthen for decades. Methodological reliability and validity are achievable since my confidence drives me for a reliable research work. The research outcome will guide further research on South Korean SMEs marketing and other discipline concept development in more specific way. Hypotheses that are proposed to further development can be tested in both natural and artificial experimentations to establish the truth behind Bangladesh-Korea SMEs business marketing.

## References

- 1. http://www.aseansec.org/12877.htm, Accessed in 21st October, 2011.
- 2. United Nations Economic Commission for Europe (UNECE), Accessed in 21st October, 2011
- 3. http://www.unece.org/indust/sme/sme-role.htm, Accessed in 21st October, 2011.
- 4. African Development Bank and OECD Development Centre. African Economic Outlook (2004-2005).

## **Further Reading**

1. Bhatt, V.V. (1988). "Financial Institutions and Technical Consultancy Services: The Indian Expe

2. Bolton Committee (1971). Small Firms - Report of the Committee of Inquiry on Small Firms. Cmnd. 4811. London:

HMSO.

- 3. Chrisman, J.J., and J. Leslie (1989). "Strategic, Administrative and Operating Problems: The Impact of Outsiders on Small Firm Performance," Entrepreneurship Theory and Practice 13 (3), 37-51.
- 4. Chrisman, J.J., F. Hoy, and R.B. Robinson Jr. (1987). "New Venture Development: The Costs and Benefits of Public Sector Assistance," Journal of Business Venturing 2, 315-328.
- 5. Ed. J.J. Obrecht and M. Bayad. Strasbourg, France: Institute of Business Management
- 6. Farbman, M, and W.F. Steel (1992). "Research Issues for Small Enterprise Development," Small Enterprise Development 3 (2), 26-34.
- Government of Bangladesh, United Nations Development Program, and International Labour Organization (1993). "Survey of Organizational Support Mechanisms for Small and Cottage Industries in Bangladesh," BSCIC (Internal Report). Dhaka, Bangladesh.
- 8. Gibb, A., and M. G. Manu (1990). "The Design of Extension and Related Support Services for Small Scale Enterprise Development," International Small Business Journal 8(3), 10-23.
- 9. Gibb, A., and M. Scott (1985). "Strategic Awareness, Personal Commitment and the Process of Planning in the Small Business," Journal of Management Studies 22 (6), 597-631.
- 10. Hossain, M.Z., and J.H. Sarder (1992). "Financing Small Businesses: A Study of Some Selected Enterprises," Finance and Banking 1(1), 67-79.
- 11. International Labour Organization (1992). Small Enterprise Development Programme Integrated Strategies for Small Enterprise Development. A policy paper. Geneva, Switzerland: ILO.
- 12. Jackson, J. E., A User's Guide to Principal Components, John Wiley and Sons, 1991, p. 592.
- 13. Jolliffe, I. T., Principal Component Analysis, 2nd edition, Springer, 2002.
- 14. Krentzman, H.C., and J.N. Samaras (1960). "Can Small Businesses Use Consultants?" Harvard Business Review 38 (3), 126-136.
- 15. Krzanowski, W. J. Principles of Multivariate Analysis: A User's Perspective. New York: Oxford University Press, 1988.
- 16. Little, I.M.D., D. Mazumder, and J.M. Page (1987). Small Manufacturing Enterprises in Developing Countries A Study of India and Other Economies. New York: Oxford University Press.
- Liedenholm, C., and D. Mead (1987). Small Scale Industries in Developing Countries: Empirical Evidence and Policy Implications. Michigan State University International Development Papers, No. 9. East Lansing, Michigan.
- 18. Mannan, M. A. (1993). Growth and Development of Small Enterprise: Case of Bangladesh. London: Avebury.
- 19. Mulford, C.L., B. Sharder, and H.B. Hansen (1989). Operational and Strategic Planning in Small Business. Iowa: Iowa State University.

- 20. Reza, S., M.U. Ahmed, and W. Mahmud (1992). Small and Medium-Scale Enterprises in Industrial Development. Dhaka, Bangladesh: Academic Publishers.
- 21. Seber, G. A. F., Multivariate Observations, Wiley, 1984.
- 22. Sarder, J.H. (1995). Small Enterprise Development in Bangladesh: A Study of Nature and Effectiveness of Support Services. Phd Thesis. Stirling, Scotland: University of Stirling.
- 23. Sarder, J.H., and P. Rosa (1994). "Support Services for Small Enterprises in Bangladesh,"
- 24. Sharma, S.V.S. (1979). Small Entrepreneurial Development in Some Asian Countries: A Comparative Study. New Delhi, India: Light and Life Publishers.
- 25. Tecson, G., L. Valcarcel, and C. Nunez (1989). The Role of Small and Medium-Scale Industries in the Industrial Development in the Philippines. Manila, Philippines: Asian Development Bank.
- 26. Timberg, T. (1992). "Missing Research on Small and Microenterprise Promotion Programmes," Small Enterprise Development 3 (2), 42-46.
- Kima ,Chankon, Larocheb ,Michel and Tomiukc, Marc A(2001). A measure of acculturation for Italian Canadians: scale development and construct validation. International Journal of Intercultural Relations. 25 607–637.

# DWT-Based Semi-Blind Image Watermarking with Band Dependent Thresholds

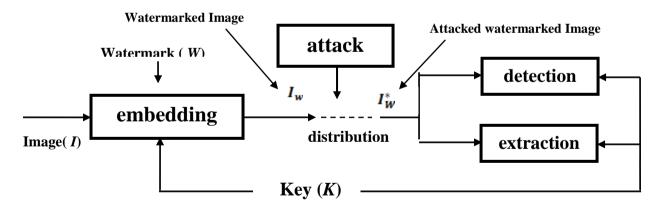
## K. M. Ibrahim Khalilullah<sup>1</sup>, Most. Shelina Aktar<sup>2</sup>, Delowar Hossain<sup>1</sup>

Abstract: In this paper, Digital image watermarking process has been analyzed to add watermark into several sub bands (LH and HL). In traditional Discrete Wavelet Transform (DWT) method, watermark is embedded in three bands excluding the low pass sub bands using coefficients that are higher than a given threshold  $T_1$ . During watermark detection, all coefficients higher than another threshold  $T_2$  ( $T_2 \ge T_1$ ) are chosen for correlation with the original watermark. In addition, we have extended the idea to embed a watermark into middle frequency sub band (LH and HL) with different thresholds. Our experiments show that for one group of attacks (i.e., JPEG compression, resizing, adding Gaussian noise, salt and pepper noise, and low pass filtering), the correlation with the real watermark is higher than the calculated thresholds of LH and HL bands. A biterror calculation equation has been used to calculate the number of damaged bits of the extracted watermark.

Keywords: Watermark, DWT, PSNR, Correlation, Semi-blind Digital Image Watermarking.

## Introduction

Digital Watermarking is a process that embeds data called watermark into a multimedia object i.e. audio, images and video such that watermark can be detected or extracted later to make a decision about the object. Any watermarking algorithm consists of three parts: The watermark- which is unique to the owner, the encoder for embedding the watermark into the data and the decoder for extraction and verification. The components of a watermarking system are shown in Fig.1. After embedding watermark into an image, the embedded image is called watermarked image. In this process, the embedded data should maintain the quality of the host image. A watermarked image is likely to be subjected to certain intentional and unintentional attacks such as compression, noise, resizing, cropping, filtering etc. The watermarked data should not be removed or eliminated by unauthorized distributors, thus it should be robust to resist the intentional and unintentional attacks.



#### Fig.1: Watermarking System

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According to Working Domain, the watermarking techniques can be divided into two types: spatial and spectral-based approaches <sup>1</sup>. All methods are fighting to satisfy two basic requirements: watermark perceptual invisibility and watermark robustness against different group of attacks. According to the watermarking extraction process, techniques can be divided into three types: Non-blind, Semi-blind and Blind. Non-blind watermarking schemes require original image and secret key for watermark detection whereas semi-blind schemes require secret key and watermark bit sequence for extraction. Blind schemes need only secret keys for extraction.

Recently, due to great progress in computer and internet technology, multimedia data have found broad applications. Digital watermarking is one of the best solutions to stop illegal copying, modifying and redistributing multimedia data. Practitioners had already recognized two different technologies for multimedia data protection: encryption and digital watermarking <sup>2-5</sup>. Encryption of multimedia products prevents the contents from unauthorized access without a proper decryption key. But once the data is decrypted, it can be duplicated and distributed illegally. To implement IP rights and to prevent illegal duplication, interpolation and distribution of multimedia data, Digital watermarking is an effective solution. Copyright protection, data authentication, covert communication and content identification can be accomplished by Digital watermarking. Some proposed or actual watermarking applications are <sup>6</sup>: broadcast monitoring, owner identification, proof of ownership, transaction tracking, content authentication, copy control, and device control. Some applications such as content authentication, ownership verification have been presented for copyright protection of electronic multimedia data by hiding secret information, such as text and images, in images, videos, audios or 3-D models.

## **Literature Review**

The previous watermarking techniques were mostly spatial-domain approaches. The simplest approach was to alter the least significant bits (LSBs) of image pixels; however, such a technique still has comparatively low-bit capacity and can't defy the loss data compression and image processing. The frequency-domain techniques can embed more bits of watermarks and resist more attacks than the spatial-based watermarking techniques. One of the first watermarking techniques is based on the block-DCT is proposed by Koch and Zhao<sup>7</sup>. Pseudorandom subsets of the blocks are chosen, and triplets of midrange frequencies are slightly modified to embed a binary sequence. Cox et al.<sup>1</sup> used the spread spectrum communication in multimedia watermarking. They embedded random number sequence drawn from a Gaussian distribution into the perceptually most significant frequency components of the original image. Hsu and Wu<sup>8-9</sup> encoded the watermarks with visually recognizable patterns in images by selectively modifying the middle-frequency parts of the host image. Discrete cosine transform are used here. Wu and Hsieh <sup>10</sup> also proposed an efficient DCT-based watermarking technique but they have taken the advantage of zero-tree to reorganize DCT coefficients to encode watermark in images. In recent times, the discrete wavelet transform  $(DWT)^{11-15}$  has been used to embed data in the frequency domain. Wavelet transformation has the excellent properties to reduce the data loss in the frequency transformation of images, to minimize noise and bias generation in images, and to offer extra robustness against asymmetrical attacks.

The fundamental idea for the DWT of a 2-D image is that it decomposes an image into four parts of high, middle, and low frequency (i.e., LL (Low-Low), HL (High-Low), LH (Low-High), HH (High-High)) subbands by cascading the image horizontally and vertically with critically subsampled filter banks. The subbands labeled HL1, LH1, and HH1 are attained by first decomposition that represents the finest-scaled wavelet coefficients. The subband LL1 can be further decomposed if it is necessary to obtain the coarser-scaled wavelet coefficients. This decomposition process is repeated a number of arbitrary times which is determined by the application at hand. Fig. 2 shows the original *Lena* image and its three levels decomposition.

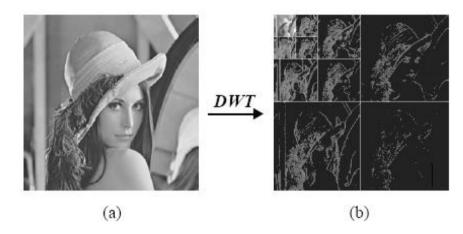


Fig. 2. *DWT* decomposition. (a) The original 512 ×512 *Lena* image. (b) Its *DWT* decomposition

Dugad <sup>11</sup> used a wavelet transform domain spread spectrum watermarking method, which embed the random number sequence in select coefficients with significant thresholds in the transform domain in order to guarantee non-erasability of the watermark. Kundur and Hatzinakos also address the multiresolution wavelet decompositions.

Elbasi et al.<sup>16</sup> follows DWT approach also, but was used two bands (LL and HH).

## **Analytical description**

A DWT-based semi-blind image watermarking scheme follows a similar approach of Dugad's algorithm <sup>11</sup>. We have analyzed to embed and detect watermark in two stages. In the first stage, we have implemented Dugad's approach to compare with the proposed approach. Dugad <sup>11</sup> excluded low pass bands and embedded the watermark into high pass bands. Since high pass bands typically contain edge related information of the image, each coefficient in the high frequency bands affects only a spatially limited portion of the image. Therefore, adding the watermark to significant coefficients in the high frequency bands is equivalent to embedding the watermark to only the edge areas of the image. In Dugad's work threshold values of T<sub>1</sub> was 40.0 and T2 was 50.0 and were obtained after three levels decomposition. Adding watermark to the high pass band is more sensitive to common image processing attacks. Therefore, in our implementation of the Dugad's algorithm we have found some false detection response for the resizing and median filtering attacks.

In the second stage, we have used HL and LH bands according the proposed approach by excluding LL and HH bands (only LL was excluded by Dugad) with different threshold values to increase attack tolerance. The threshold value of  $T_1$  is 35.0 for HL and 30.0 for LH and the threshold value of  $T_2$  is 45.0 for HL and 35.0 for LH. In the second stage, we have added more noise than the first stage and we have got accurate results, in case of resizing attack also (shown in fig.18 & fig.19). Since we have used two bands and obtained two levels decomposition, less execution time is required than the first stage. We have also measured the quality of the watermarked image by calculating peak signal-to-noise ratio (PSNR) value which is larger and maintain better image quality. In general, a watermarked image is acceptable by human perception if its *PSNR* is greater than 30 *dBs* <sup>17-18</sup>. The calculated PSNR value is greater than the first stage (shown in figs.3 & 4).

After two levels decomposition of the experimental image we have taken only middle frequency sub bands (i. e., LH and HL band) to embed watermark using the similar equation used in <sup>10</sup>:

$$V_i' = V_i + \alpha |V_i| x_i \tag{1}$$

Where i run over all DFT coefficients of the LH and HL sub bands  $> T_1$ 

 $V_i$  refers to the corresponding DWT coefficient of the original image and  $V_i$  refer to the DWT coefficient of the watermarked image.  $x_i$  is the watermark value at the position of  $V_i$ .  $x_i$  is generated from a uniform distribution of zero mean and unit variance.  $\alpha$  is taken as 0.2.

The correlation z between the DWT coefficients  $\hat{V}$  of the corrupted watermarked image and a possibly different watermark Y is computed as:

$$z = \frac{1}{M} \sum_{i} \hat{V}_{i} y_{i}$$
<sup>(2)</sup>

Where i run over all DFT coefficients of the LH and HL sub bands>  $T_2 > T_1$  and M is the number of such coefficients. The threshold S is defined as:

$$S = \frac{\alpha}{2M} \sum_{i} \left| \dot{V}_{i} \right|$$
(3)

If z exceeds S, the conclusion is the watermark is present. The PSNR is defined as:

$$PSNR = 10\log_{10}\frac{255^2}{MSE}(db) \tag{4}$$

where mean-square error (MSE) is defined as :

$$MSE = \frac{1}{mn} \sum_{i=1}^{m} \sum_{j=1}^{n} (V_{i,j} - V_{i,j})^2$$
(5)

Where  $V_{i,j}$  and  $V_{i,j}$  are the gray level of pixels in the host image and watermarked image respectively. Bit Error ( $\beta$ ) can be calculated to examine extracted watermark by the following equation:

$$\beta = \frac{\sum_{j} |w(j) - w''(j)|}{2L} \tag{6}$$

Where,  $w, w^{"}$  are original watermark and extracted watermark respectively, *L* is the length of the watermark. The minimum value of  $\beta$  is 0 and maximum value of  $\beta$  is 1.

### **Experimental Results**

In this study, well-known Lena image has been used as an experimental image. The original Lena image (host image), the watermarked image, and their difference of the first stage analysis are shown in Fig. 3. The original Lena image, the watermarked image, and their difference of the second stage analysis are shown in Fig. 4.





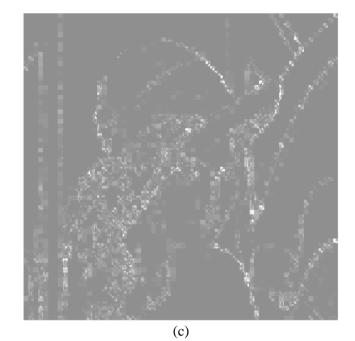
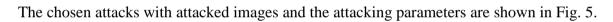


Fig.3: Embedding watermark into Lena image. (a) Original Lena image. (b) Watermarked Lena (PSNR=39.5108). (c) Difference image.





Fig.4: Embedding watermark into Lena image. (a) Original Lena image. (b) Watermarked Lena (PSNR=43.4515). (c) Difference image.





(a)



(b)



Fig.5: Attacked watermarked images. (a) Gaussian noise (mean=0, variance=0.006),
(b) Salt & Pepper noise (mean=0, variance=0.006), (c) Low pass filtering (Window size =3×3),
(d) Median filtering (Window size=3×3), (e) Jpeg Compression (Quality= 70),
(f) Resizing (half sizing i.e. 512→256→512).

In following figures (Fig.6-21), y-axis represents the detector responses (correlation values z) and x-axis represents randomly generated watermark. The original image has been watermarked with a seed of 100. Therefore, in each figure, the correlation with the real watermark located at 100 on the x-axis is greater than the value of the threshold indicated using the blue dashed line. The red circle markers indicate the correlation values of the corresponding watermarks.

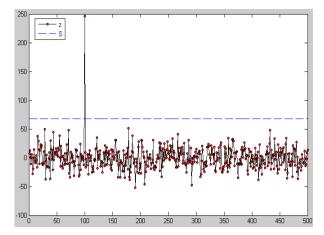


Fig.6: Detector response for unattacked watermarked Lena in first stage analysis.

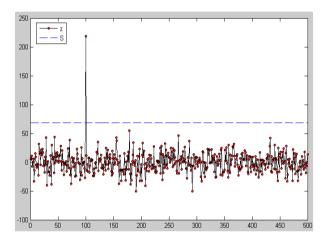


Fig.8: Detector response for Gaussian noise watermarked Lena in first stage analysis with mean=0, variance=0.001.

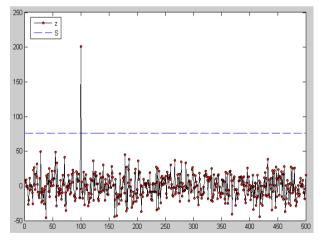


Fig. 10: Detector response for Salt & Pepper noise watermarked Lena in first stage analysis with mean=0, variance=0.001.

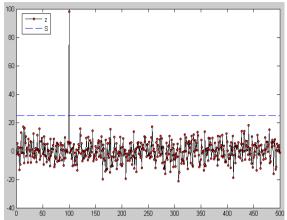


Fig.7: Detector response for unattacked watermarked Lena in second stage analysis.

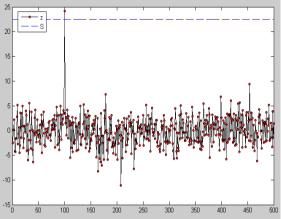


Fig.9: Detector response for Gaussian noise watermarked Lena in second stage analysis with mean=0, variance=0.006.

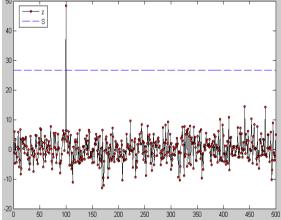


Fig. 11: Detector response for Salt & Pepper noise watermarked Lena in second stage analysis with mean=0, variance=0.006.

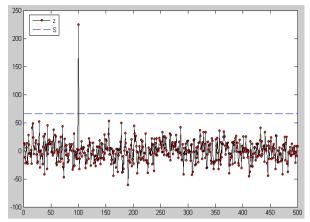


Fig. 12: Detector responses for Low pass filtering of watermarked Lena in first stage analysis.

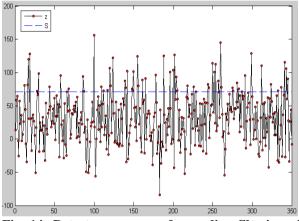


Fig. 14: Detector responses for median filtering of watermarked Lena in first stage analysis (false detection).

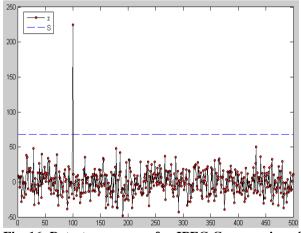


Fig. 16: Detector response for JPEG Compression of watermarked Lena in first stage analysis.

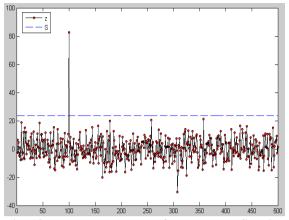


Fig. 13: Detector responses for Low pass filtering of watermarked Lena in second stage analysis.

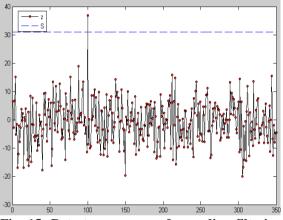


Fig. 15: Detector responses for median filtering of watermarked Lena in second stage analysis.

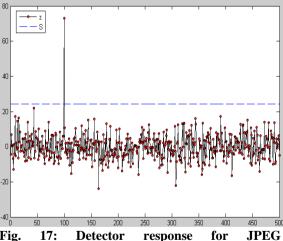


Fig. 17: Detector response for JPEG Compression of watermarked Lena in first stage analysis.

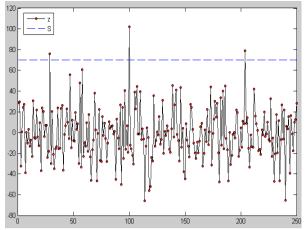
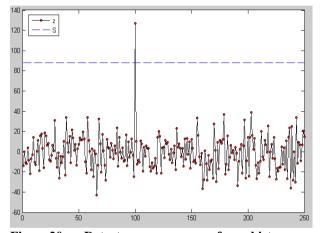


Fig.18: Detector response for resizing (half sizing) watermarked Lena in first stage analysis (false detection).



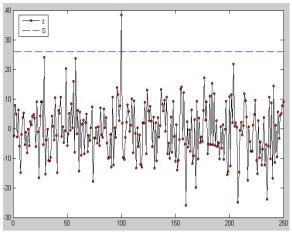


Fig.19: Detector response for resizing (half sizing) watermarked Lena in second stage analysis.

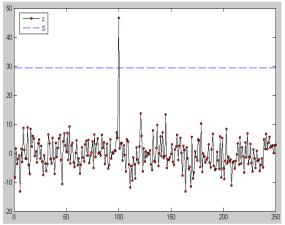
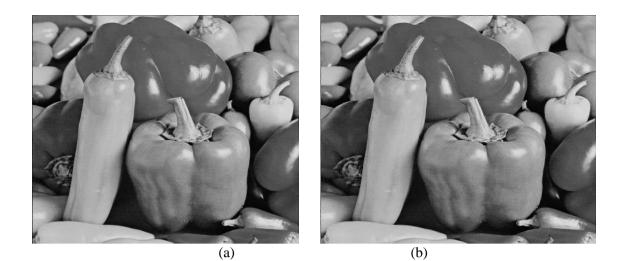


Fig. 20: Detector response for histogram equalization (automatic) of watermarked Lena in first stage analysis.

Fig. 21: Detector response for histogram equalization (automatic) of watermarked Lena in second stage analysis.

The peppers image has been also used in our experiment for the proposed approach (second stage analysis). The original peppers image, watermarked image, and their difference image of our proposed approach are shown in Fig. 22.



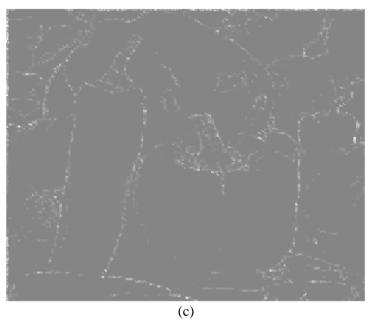


Fig. 22: Embedding watermark into peppers image. (a) Original peppers image. (b) Watermarked peppers (PSNR=40.4505). (c) Difference image.

The following figures (Fig.23-28) display the detector responses for our proposed approach of the attacked watermarked peppers image. The original peppers image has been watermarked with a seed of 100:

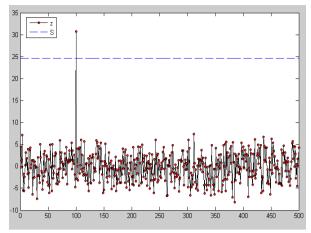


Fig.23: Detector response for Gaussian noise with mean=0 and variance=0.006.

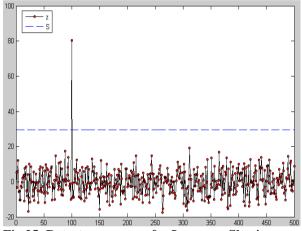


Fig.25: Detector response for Low pass filtering.

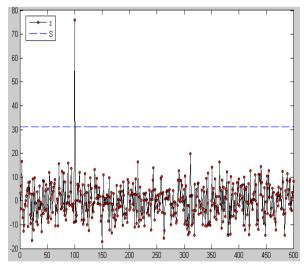


Fig.27: Detector response for JPEG compression.

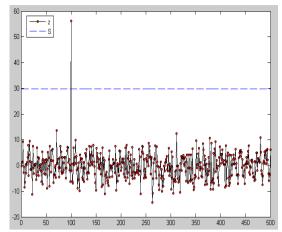


Fig.24: Detector response for salt pepper noise with mean=0 and variance=0.006.

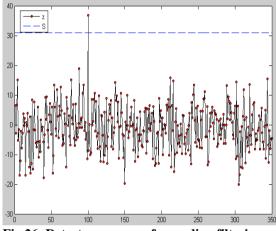


Fig.26: Detector response for median filtering.

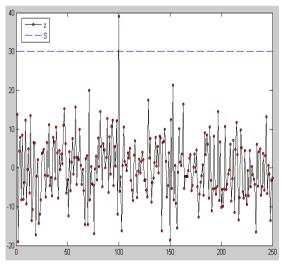


Fig.28: Detector response for resizing.

The values of the scaling parameters and thresholds of the proposed study have been shown in Table-1.

Bands (→ ) Scaling Parameters (↓)	HL	LH
α	0.2	0.2
$T_1$	30	35
<b>T</b> <sub>2</sub>	35	45

 Table-1: Scaling parameters and threshold values

## Conclusions

This paper has extended the previous idea by using band dependent thresholds and embedding the watermark into the middle frequency sub bands. The efficiency of the proposed algorithm has been shown by a series of experiments. Further work will concentrate on video watermarking using significant sub bands.

## References

- 1. I. J. Cox, F. T. Leighton, and T. Shamoon, Dec. 1997, Secure spread spectrum watermarking for multimedia, *IEEE Transactions on Image Processing*, vol. 6, pp. 1673-1687.
- 2. A. M. Eskicioglu and E. J. Delp, April 2001, Overview of Multimedia Content Protection in Consumer Electronics Devices, *Signal processing: Image Communication*, 16(7), pp.681-699.
- 3. M. Eskicioglu and E.J. Delp, April 2003, Security of Digital Entertainment Content From Creation to Consumption, *Signal Processing : Image Communication, Special Issue on Image Security*, 118 (4), pp.237-262.
- 4. E. T. Lin, A. M. Eskicioglu, R. L. Lagendijk, and E. J. Delp, 2004, Advances in Digital Video Content Protection, *Proceedings of the IEEE, Special Issue on Advances in Video Coding and Delivery*.
- 5. I. J. Cox, M. L. Miller, and J. A. Bloom, 2002, Digital Watermarking," Morgan Kaufmann Publishers.
- 6. Content Protection Status Report III, November 7, 2002, available at *http://judiciary.senate.gov/special/mpaal10702.pdf*.
- 7. Koch, E. and J. Zhao, 1995, Toward robust and hidden image copyright labeling, *presented at the Nonlinear Signal Processing Workshop, Thessaloniki, Greece.*
- 8. Hsu, C.T. and J.L. Wu, Aug. 1998, Multiresolution watermarking for digital images, *IEEE Trans. Circuits and Systems II: Analog and Digital Signal Processing*, vol. 45, no. 8, pp. 1097-1101.
- 9. Hsieh, M.-S., D.-C. Tseng, and Y.-H. Huang, Oct. 2001, Hidden digital watermarks using multiresolution wavelet transform, *IEEE Trans. Industrial Electronics*, vol. 48, no. 5, pp.875-882.
- 10. A. Piva, M. Barni, F. Bartolini, and V. Cappellini, 1997, DCT-based watermark recovering without restoring to the uncorrupted original image, *in International Conference on Image Processing*, vol. III, pp. 520-523.

- 11. Dugad, R., K. Ratakonda and N. Ahuja, 1998, A new wavelet-based Scheme for watermarking images, *in Proc. Int. Conf. on Image Processing*, vol. 2, pp. 419-423.
- 12. Inoue, H., A. Miyazaki, A. Yamamoto and T. Katsura, 1998, A digital watermark base on the wavelet transform and its robustness in image compression, *in Proc. IEEE Int. Conf. Image Processing*, vol. 2, pp. 391-395.
- 13. Kaewkameerd, N. and K. R. Rao, Feb. 2000, Wavelet based image adaptive watermarking scheme, *Electronic Letters*, vol. 36, no. 4, pp. 312-31.
- 14. Kundur, D. and D. Hatzinakos, Oct. 2001, Digital watermarking using multiresolution wavelet decomposition, *IEEE Trans. Signal processing, Letter Symbols for Quantities, ANSI Standard Y10.5-1968.* vol. 49, no. 10, pp. 2383-2396.
- 15. Wu, C.-F. and W.-S. Hsieh, 2000, Digital watermarks using zerotree of DCT, *IEEE Trans. Consumer Electronics*, vol. 46, no. 1, pp. 87-94.
- 16. Ersin Elbasi, Ahmet M. Eskicioglu, *January*, 2006, A DWT-Based Robust Semi-Blind Image Watermarking Algorithm Using Two Bands, *IS&T/SPIE's 18th Annual Symposium* on Electronic Imaging, Security, Steganography, and Watermarking of Multimedia Contents VIII Conference, San Jose, CA.
- 17. John N. Ellinas, 2007, A Robust Wavelet-Based Watermarking Algorithm Using Edge Detection, *Proceedings of World Academy of Science, Engineering and Technology*, volume 25, November , issn 1307-6884.
- 18. Ming-Shing Hsieh, 2001, Wavelet-based Image Watermarking and Compression, Institute of Computer Science and Information Engineering National Central University, Chung-li, Taiwan 320 R.O.C, Phd Thesis.

#### THERMOPHORETIC PARTICLE DEPOSITION ON UNSTEADY MHD FREE CONVECTION AND MASS TRANSFER FLOW ALONG AN ACCELERATED INFINITE INCLINED POROUS PLATE WITH TIME DEPENDENT TEMPERATURE AND CONCENTRATION

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#### Abstract

This paper deals with the effect of thermophoresis on an unsteady MHD free convective heat and mass transfer flow along an accelerated inclined porous plate taking into account the plate temperature and concentration to be functions of time. In the analysis, the suction velocity is also taken to be time dependent. The governing non-linear partial differential equations are transformed into a set of coupled ordinary differential equations, which are solved numerically by applying shooting method with sixth-order Runge-Kutta integration scheme. The effects of governing parameters on the nondimensional velocity, temperature and concentration profiles as well as the local skinfriction coefficient, the local Nusselt number and the local Sherwood number are displayed in graphically to show interesting aspects of the solutions. The obtained numerical results shows that the time dependent temperature and concentrations has stronger decreasing effect on the velocity, temperature and concentration fields compared to constant temperature and concentration of the plate and the fluid. The local skinfriction coefficient decreases whereas the local Sherwood number increases with an increasing value of thermophoretic parameter.

*Keywords:* Thermophoresis, Unsteady flow, Time dependent temperature and concentration.

#### Introduction

Thermophoresis refers to the behavior in which small particles suspended in a gas acquire a velocity in the direction of decreasing temperature due to collisions with the surrounding gas molecules. For a non-isothermal system in which the bounding surfaces are relatively cool, thermophoresis causes small particles to move toward the surface and deposit. Such thermophoretic deposition plays an important role in a variety of applications such as the production of ceramic powders in high temperature aerosol flow reactors, and the production of optical fiber performs by the modified chemical vapor deposition (MCVD) process. In the optical fiber process, high deposition levels are desired since the goal is to coat the interior of the tube with particles. On the other hand, in ceramic powder production, low deposition levels are desired as deposits lead to reduced product yield and potential pipe blockage. Thermophoretic deposition of radioactive particles is considered to be one of the important factors causing accidents in

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nuclear reactors. In light of these applications, Nazaroff and Cass<sup>1</sup> used a similarity transformation to obtain the deposition rates due to the coupling of thermophoresis and natural convection. Pratsinis and Kim<sup>2</sup> studied simultaneous diffusion, thermophoresis, and coagulation of submicron aerosols in nonisothermal laminar tube flows. Lin and Choi<sup>3</sup> studied the optical fiber fabrication process in three dimensions, and included the effects of thermophoresis as well as buoyancy forces. Tsai and Lin<sup>4</sup> proposed an approach through numerical integration for evaluating the particle deposition rates. Selim et al.<sup>5</sup> investigated the effect of surface mass transfer on mixed convection flow past a heated vertical flat permeable plate with thermophoresis. Seddeek<sup>6</sup> studied the influence of viscous dissipation and thermophoresis on Darcy-Forchheimer mixed convection in a fluid saturated porous media. Recently Alam et al.<sup>7</sup>, analyzed similarity solutions for hydromagnetic free convective heat and mass transfer flow along a semi-infinite permeable inclined flat plate with heat generation and thermophoresis. Very recently, Rahman et al.<sup>8-9</sup> studied the thermophoresis particle deposition on unsteady twodimensional forced convective heat and mass transfer flow along a wedge with variable fluid properties and variable Prandtl number.

In all the above studies, however, considered constant plate temperature and concentration. But for practical purposes one should also consider a plate having time dependent variable wall temperature and concentration. In this light, Sattar and Hossain<sup>10</sup> and Sattar and Maleque<sup>11</sup> took a time dependent plate temperature and concentration for unsteady MHD flow along an accelerated porous plate. Recently, Alam et al.<sup>12</sup> studied the Diffusion-thermo and thermal-diffusion effects on free convective heat and mass transfer flow in a porous medium with time dependent temperature and concentration. Hence, the objective of the present paper is to investigate the effect of thermophoresis on

an unsteady MHD free convection and mass transfer flow past an accelerated inclined porous flat plate having variable suction with time dependent temperature and concentration.

#### Mathematical formulation and similarity analysis

We consider an unsteady MHD free convection and mass transfer flow of a viscous incompressible fluid past an infinite porous plate that is inclined with an acute angle  $\alpha$  from the vertical direction.. The flow is assumed to be in the *x*-direction, which is taken along the inclined plate, and the *y*-axis is taken to be normal to the plate. Initially the plate and the fluid are at same temperature  $T_{\infty}$  in a stationary condition with concentration level  $C_{\infty}$  at all points. At time t > 0 the plate is assumed to be moving in the *x*-direction with a velocity U(t) and the plate temperature and concentration are raised to T(t) and C(t) respectively. A magnetic field of uniform strength  $B_0$  is applied in the *y*-direction that is normal to the streamwise direction. We further assume that (a) due to the boundary layer behaviour the temperature gradient in the *y*-direction is much larger than that in the *x*-direction and hence only the thermophoretic velocity component which is normal to the surface is of importance, (b) the fluid has constant kinematic viscosity and thermal diffusivity, and that the Boussinesq approximation may be adopted for unsteady laminar flow and (c) the magnetic Reynolds number is small so that the induced magnetic field can be neglected. It is assumed that the inclined plate is infinite in extent and hence

all physical quantities depend on y and t only. Thus accordance with the above assumptions, the governing equations describing the conservation of mass, momentum, energy and concentration respectively can be written as follows:

$$\frac{\partial v}{\partial y} = 0, \tag{1}$$

$$\frac{\partial u}{\partial t} + v \frac{\partial u}{\partial y} = v \frac{\partial^2 u}{\partial y^2} + g\beta(T - T_{\infty})\cos\alpha + g\beta^*(C - C_{\infty})\cos\alpha - \frac{\sigma B_0^2}{\rho}u,$$
(2)

$$\frac{\partial T}{\partial t} + v \frac{\partial T}{\partial y} = \frac{\lambda}{\rho c_p} \frac{\partial^2 T}{\partial y^2},$$
(3)

$$\frac{\partial C}{\partial t} + v \frac{\partial C}{\partial y} = D \frac{\partial^2 C}{\partial y^2} - \frac{\partial}{\partial y} \left[ V_T \left( C - C_{\infty} \right) \right], \tag{4}$$

where u, v are the velocity components in the x and y directions respectively, v is the kinematic viscosity, g is the acceleration due to gravity,  $\rho$  is the density,  $\beta$  is the coefficient of volume expansion,  $\beta^*$  is the volumetric coefficient of expansion with concentration,  $\alpha$  is the angle of inclination to the vertical direction, T and  $T_{\infty}$  are the temperature of the fluid inside the thermal boundary layer and the fluid temperature in the free stream, respectively, while C and  $C_{\infty}$  are the corresponding concentrations. Also,  $B_0$  is the magnetic induction, D is the coefficient of mass diffusivity,  $c_p$  is the specific heat at constant pressure,  $\lambda$  is the thermal conductivity of the fluid and  $V_T$  is the thermophoretic velocity, which is defined by as follows:

$$V_T = -k\upsilon \frac{\nabla T}{T_r} = -\frac{k\upsilon}{T_r} \frac{\partial T}{\partial y}$$
(5)

where k is the thermophoretic coefficient and  $T_r$  is some reference temperature.

The appropriate initial and boundary conditions relevant to the problem are: For  $t \le 0$ :  $\mu = \nu = 0$ , T = T, C = C, for all  $\nu$ 

$$u = U(t), v = v(t), T = T(t), C = C(t) at y = 0$$
  

$$u \to 0, T \to T_{\infty}, C \to C_{\infty} \quad as y \to \infty$$
for t>0. (6)

In order to obtain a local similarity solution (in time) of the above problem, we introduce a similarity parameter  $\delta$ , which is a time dependent length scale as

(7)

$$\delta = \delta(t).$$

In terms of this length scale, a convenient solution of the equation (1) is considered to be in the following form

$$v = v(t) = -v_0 \frac{\upsilon}{\delta},\tag{8}$$

where  $v_0$  (> 0) is the suction velocity of the fluid through the porous plate.

To make the momentum, energy and concentration equations (2), (3) and (4) dimensionless, the following similarity transformation are then introduced:

$$\eta = \frac{y}{\delta},$$

$$u = U_0 \delta_*^{2n+2} f(\eta),$$

$$T = T_{\infty} + (T_0 - T_{\infty}) \delta_*^{2n} \theta(\eta),$$

$$C = C_{\infty} + (C_0 - C_{\infty}) \delta_*^{2n} \phi(\eta),$$
(9)

where *n* is a non-negative integer and  $U_0, T_0, C_0$  are respectively the free stream velocity, mean temperature and mean concentration.

Here 
$$\delta_* = \frac{\delta}{\delta_0}$$
 where  $\delta_0$  is the value of  $\delta$  at  $t = t_0$ .

Thus using equations (7), (8) and (9) the equations (2), (3) and (4) are obtained [also by using the analysis of Hasimoto<sup>13</sup>, Sattar and Hossain<sup>10</sup> and Alam et al.<sup>12</sup>] in the following non-dimensional form:

$$f'' + (2\eta + v_0)f' + Gr\theta\cos\alpha + Gm\phi\cos\alpha - (4n + 4 + M)f = 0, \qquad (10)$$

$$\theta'' + \Pr(2\eta + v_0)\theta' - 4n\Pr\theta = 0, \qquad (11)$$

$$\phi'' + Sc(2\eta + v_0)\phi' - 4nSc\phi + \tau(\phi\theta'' + \phi'\theta')Sc = 0, \qquad (12)$$

where  $M = \frac{\sigma B_0^2 \delta_0^2}{\nu \rho}$  is the local Magnetic field parameter  $\Pr = \frac{\rho \nu c_p}{\lambda}$  is the Prandtl

number, 
$$Gr = \frac{g\beta(T_0 - T_\infty)\delta_0^2}{\upsilon U_0}$$
 is the local Grashof number and  $Gm = \frac{g\beta^*(C_0 - C_\infty)\delta_0^2}{\upsilon U_0}$  is

the local modified Grashof number,  $Sc = \frac{v}{D}$  is the Schmidt number and  $\tau = \frac{k(T_0 - T_{\infty})}{T_r}$  is

the thermophoretic parameter..

The corresponding boundary conditions for t > 0 are obtained as:

$$\begin{cases} f = 1, \ \theta = 1, \ \phi = 1 & at \quad \eta = 0, \\ f \to 0, \theta \to 0, \phi \to 0 & as \ \eta \to \infty. \end{cases}$$

$$(13)$$

#### Local skin-friction coefficient, local Nusselt number and local Sherwood number:

Now it is important to calculate the physical quantities of the primary interest, which are the local wall shear stress, local surface heat flux and the local surface mass flux respectively from the following definitions:

$$\tau_{w} = \mu \left(\frac{\partial u}{\partial y}\right)_{y=0},\tag{14}$$

$$q_{w} = -\lambda \left(\frac{\partial T}{\partial y}\right)_{y=0},\tag{15}$$

$$M_{w} = -D\left(\frac{\partial C}{\partial y}\right)_{y=0} \,. \tag{16}$$

Using Eq. (9), (14)-(16) can be written as

$$\tau_w = \mu U_0 \frac{\delta_*^{2n+2}}{\delta} f'(0), \tag{17}$$

$$q_{w} = -\lambda (T_{0} - T_{\infty}) \frac{\delta_{*}^{2n}}{\delta} \theta'(0), \qquad (18)$$

$$M_{w} = -D(C_{0} - C_{\infty}) \frac{\delta_{*}^{2n}}{\delta} \phi'(0).$$
<sup>(19)</sup>

Hence the dimensionless local skin-friction coefficient, local Nusselt number and local Sherwood number for accelerated plate are given by

$$Cf = \frac{2\tau_{w}}{\rho U_{0}^{2}} = 2\delta_{*}^{2n+2} (\operatorname{Re}_{\delta})^{-1} f'(0),$$
(20)

$$Nu = \frac{q_w \delta}{\lambda (T_0 - T_\infty)} = -\delta_*^{2n} \theta'(0), \tag{21}$$

$$Sh = \frac{M_{w}\delta}{D(C_{0} - C_{\infty})} = -\delta_{*}^{2n}\phi'(0),$$
(22)

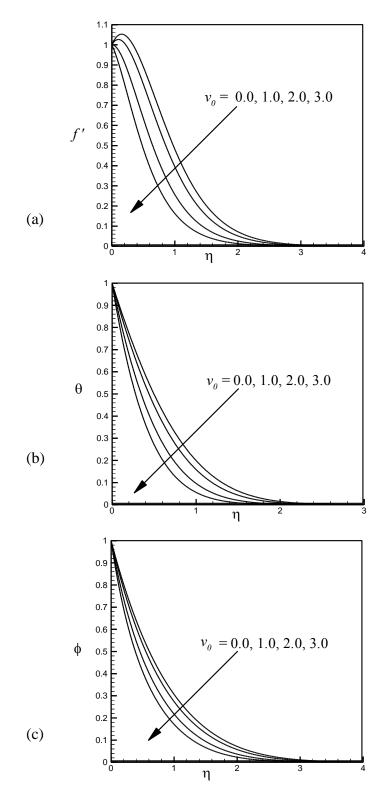
where  $\operatorname{Re}_{\delta} = \frac{U_0 \delta}{\upsilon}$  is the local Reynolds number.

#### Numerical results and discussion

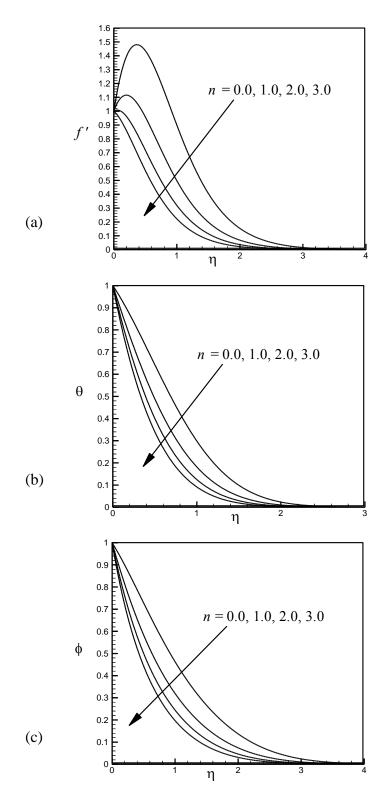
Numerical solutions to the transformed set of non-linear ordinary differential equations (10)-(12) with boundary conditions (13) have been obtained, using Nachtsheim-Swigert<sup>14</sup> [for detailed discussion of this method see Alam et al.<sup>15</sup>] shooting iteration technique along with sixth order Runge-Kutta integration scheme. A step size of  $\Delta \eta = 0.01$  was selected to be satisfactory for a convergence criterion of  $10^{-6}$  in all cases. The numerical results for the dimensionless velocity, temperature and concentration profiles as well as the local skin-friction coefficient, the local Nusselt number and the local Sherwood number are displayed in Figs. 1-10.

The effects of suction parameter  $(v_0)$  in the velocity field are shown in Fig. 1(a). It is seen from this figure that the velocity profiles decrease monotonically with the increase of suction parameter indicating the usual fact that suction stabilizes the boundary layer growth. The effect of suction parameter  $(v_0)$  on the temperature and concentration field is displayed in Figs. 1(b) and 1(c) respectively and we see that both the temperature and concentration decrease with the increases of suction parameter. Sucking decelerated fluid particles through the porous wall reduce the growth of the fluid boundary layer as well as thermal and concentration boundary layers.

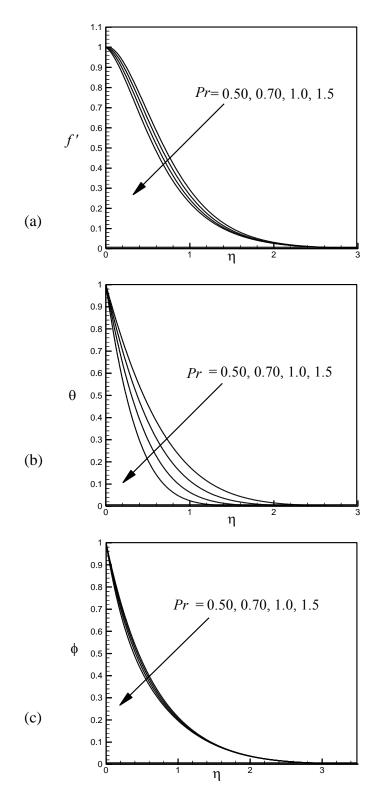
In Figs. 2(a)-(c), the effects of the heat/mass exponent n on the velocity, temperature and concentration profiles are shown. Because n = 0 defines the case for constant temperature and concentration i.e. time independent, it appears from Figs.2 (a)-(c) that as the plate temperature and concentration are changed from constant value (n = 0) to variable values (n = 1, 2 and 3), the velocity, temperature and concentration decrease significantly for all other fixed parameters values. Thus, time dependent temperature and concentration has stronger decreasing effect on the velocity, temperature and concentration fields compared



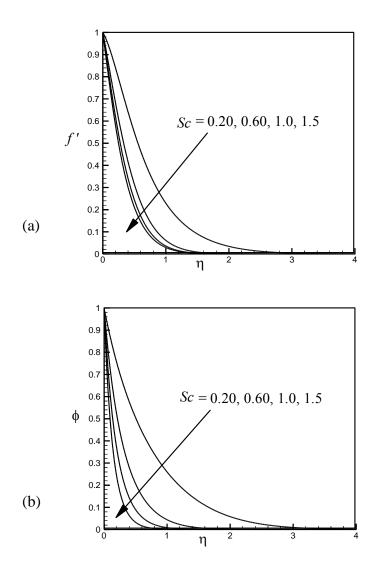
**Fig.1**: Dimensionless (a) velocity, (b) temperature and (c) concentration profiles for different values of  $v_0$  and for Gr = 4, Gm = 10, Pr = 0.70, Sc = 0.30, M = 0.50, n = 0.50,  $\tau = 1.0$  and  $\alpha = 30^0$ .



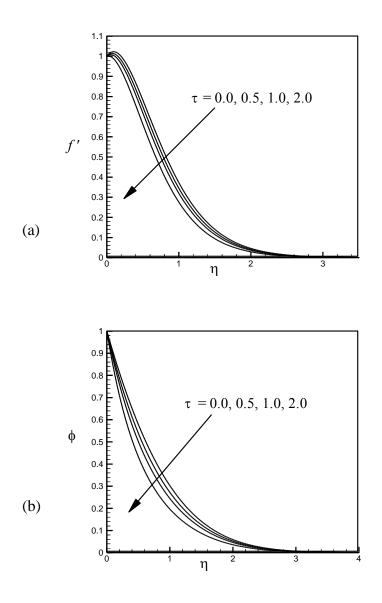
**Fig.2**: Dimensionless (a) velocity, (b) temperature and (c) concentration profiles for different values of *n* and for Gr = 4, Gm = 10, Pr = 0.70, Sc = 0.30, M = 0.50,  $v_0 = 0.50$ ,  $\tau = 1.0$  and  $\alpha = 30^0$ .



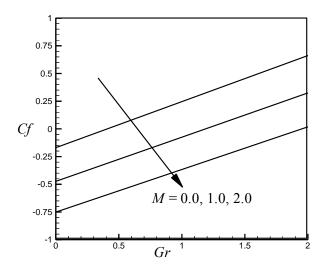
**Fig.3**: Dimensionless (a) velocity, (b) temperature and (c) concentration profiles for different values of *Pr* and for Gr = 4, Gm = 10, n = 0.5, Sc = 0.30, M = 0.5,  $v_0 = 0.50$ ,  $\tau = 1.0$  and  $\alpha = 30^{\circ}$ .



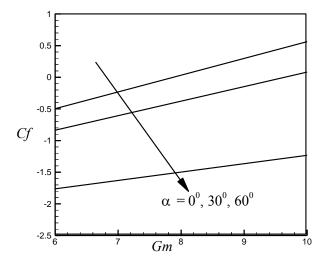
**Fig.4**: Dimensionless (a) velocity and (b) concentration profiles for different values of *Sc* and for Gr = 4, Gm = 10, n = 0.5, Pr = 0.70, M = 0.5,  $v_0 = 0.50$ ,  $\tau = 1.0$  and  $\alpha = 30^0$ .



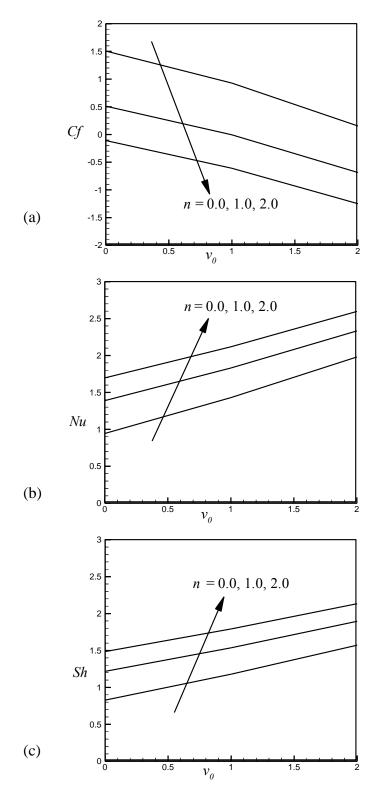
**Fig.5**: Dimensionless (a) velocity and (b) concentration profiles for different values of  $\tau$  and for Gr = 4, Gm = 10, n = 0.5, Pr = 0.70, M = 0.5,  $v_0 = 0.50$ , Sc = 0.30 and  $\alpha = 30^0$ .



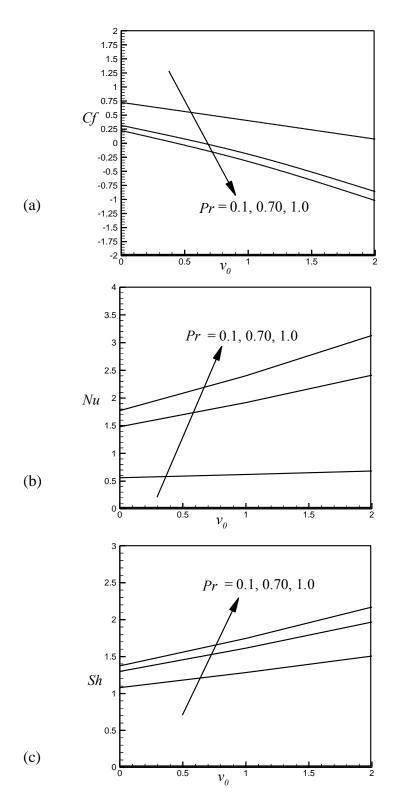
**Fig.6**: Effects of *M* and *Gr* on local skin friction coefficients for *Gm* = 10, Pr = 0.70, n = 0.5,  $v_0 = 0.50$ , Sc = 0.30,  $\tau = 1.0$  and  $\alpha = 30^0$ .



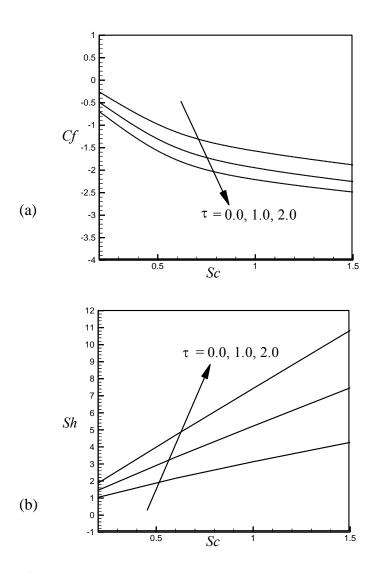
**Fig.7**: Effects of  $\alpha$  and *Gm* on local skin friction coefficients for Gr = 4, Pr = 0.70, n = 0.5,  $v_0 = 0.50$ , Sc = 0.30,  $\tau = 1.0$  and M = 0.50.



**Fig.8.** (a)-(c): Effects of  $v_0$  and *n* on local skin-friction coefficients, local Nusselt number and local Sherwood number respectively, for Gr = 4, Gm = 10, Pr = 0.70, Sc = 0.30,  $\tau = 1.0$ , M = 0.5 and  $\alpha = 30^{\circ}$ .



**Fig.9.** (a)-(c): Effects of  $v_0$  and Pr on local skin-friction coefficients, local Nusselt number and local Sherwood number respectively, for Gr = 4, Gm = 10, n = 0.5, Sc = 0.30,  $\tau = 1.0$ , M = 0.50 and  $\alpha = 30^{\circ}$ .



**Fig.10.** (a)-(b): Effects of *Sc* and  $\tau$  on local skin-friction coefficients and local Sherwood number respectively, for Gr = 4, Gm = 10, Pr = 0.70, n = 0.5, M = 0.5,  $v_0 = 0.50$  and  $\alpha = 30^0$ .

to the time independent case. From Fig. 2 (a) we see that for  $0 \le n < n_{crit}$ , velocity profile first reaches a maximum near the leading edge of the plate then decreases to zero. For  $n \ge n_{crit}$  (not precisely determined) the velocity profiles decrease monotonically within the boundary layer. The case n = 0 signifies to the higher buoyancy effect. It is to be noted that the thicknesses of the hydrodynamic, thermal and concentration boundary layers decrease with the increase of n.

The effect of Prandtl number Pr on dimensionless velocity, temperature and concentration distributions inside the hydrodynamic, thermal as well as concentration boundary layer are displayed in Figs. 3(a)-(c) respectively. From these figures we observe that all the hydrodynamic, thermal as well as concentration boundary layer thickness

decrease with the increasing values of Pr. Prandtl number defines the relative effectiveness of the momentum transport by diffusion in the hydrodynamic (velocity) boundary layer to the energy transported by thermal diffusion in the thermal boundary layer. Thus larger Pr values, thermal diffusivity is much less than the momentum diffusivity causing a decrease in temperature in the boundary layer.

Figs. 4(a)-(b) show the effect of Schmidt number *Sc* on the dimensionless velocity and concentration profiles respectively. It is seen from Fig. 4(a) that increasing the Schmidt number decreases the velocity boundary layer thickness. We note that the Schmidt number embodies the ratio of the momentum to the mass diffusivity. Schmidt number therefore quantifies the relative effectiveness of the momentum and mass transport by diffusion in the hydrodynamic (velocity) and concentration (species) boundary layers. From Fig. 4(b) we see that the concentration profiles decrease with the increasing values of Sc and this is the analogous to the effect of increasing the Prandtl number on the thickness of the thermal boundary layer.

The effects of thermophoretic parameter  $\tau$  on the velocity and concentration distributions are displayed in Figs. 5(a)-(b) respectively. It is observed from these figures that an increase in the thermophoretic parameter ( $\tau$ ) leads to a decrease in the velocity as well as concentration across the boundary layer. This means that the effect of increasing  $\tau$  is limited to increasing the wall slope of the convection profile without any significant effect on the concentration boundary layer.

Fig. 6 shows the local skin-friction coefficient for different values of magnetic field parameter M and Grashof number (free convection current) Gr keeping all other parameters fixed. From this figure we see that the local skin-friction coefficient is found to decrease due to an increase in the magnetic field strength. This is expected, since the applied magnetic field tends to impede the flow motion and thus to reduce the surface friction force. It is also seen from this figure that for a fixed M, the drag coefficient Cf increases as Gr increases, which is usually expected.

The effects of angle of inclination  $\alpha$  and modified Grashof number Gm on the local skinfriction coefficient are shown in Fig. 7. From this figure we observe that for fixed Gm, the local skin-friction coefficient decreases as the angle of inclination increases. This is due to the fact that as  $\alpha$  increases, the buoyancy force in the direction along the plate decreases since the component of g in that direction decreases, and accordingly the local skin-friction coefficient decreases. Form this figure we also see that for increasing Gm, buoyancy forces increases consequently the surface friction force increases.

Figs.8 (a)-(c) depict the effects of suction parameter  $v_0$  and wall temperature as well as concentration exponent *n* on the local skin-friction coefficient, the local Nusselt number and the local Sherwood number respectively. An increase in the value of *n* results in a decrease of the local skin-friction coefficient, as shown in Fig. 8(a). Heat transfer results are shown in Fig. 8(b) at selected values of *n*. Higher heat transfer rates can be obtained by increasing the value of *n*. Moreover, at a given exponent *n*, the local Nusselt number is increased as the suction parameter increases. Figure 8(c) presents the effects of *n* and  $v_0$ on the local Sherwood number. From this figure it is seen that increasing the value of *n* and  $v_0$  enhances the mass transfer rate. The effects of Prandtl number and wall suction parameter on the local skin-friction coefficient, the local Nusselt number and the local Sherwood number are demonstrated in Figs. 9(a)-(c) respectively. As can be seen from Fig. 9(a), the friction factor decreases with increasing Prandtl number. Again from Fig. 9(b) we see that the local Nusselt number increases as *Pr* increases. This can be explained from the fact that as the Prandtl number increases, the thermal boundary layer thickness decreases (see Fig. 3(b)) and the wall temperature gradient increases. From Fig. 9(c) we also see that the local Sherwood number increases as the Prandtl number increases.

Finally, the combined effects of Schmidt number Sc and thermophoretic parameter  $\tau$  on the local skin-friction coefficient and the local Sherwood number are shown in Figs. 10(a)-(b) respectively. From these figures we see that the local skin-friction coefficient decreases whereas the local Sherwood number increases with an increasing value of thermophoretic parameter for all values of Schmidt number.

## Conclusions

In this paper the effects of thermophoresis on an unsteady MHD free convective heat and mass transfer flow along an accelerated infinite inclined porous plate taking into account the suction velocity, plate temperature and concentration as functions of time has been investigated numerically. The governing nonlinear partial differential equations are transformed into a set of coupled ordinary differential equations by using similarity transformation, which are then solved numerically by applying shooting method with sixth-order Runge-Kutta integration scheme. From the present numerical investigations the following major conclusions may be drawn:

- 1. Suction stabilizes the hydrodynamic, thermal as well as concentration boundary layer growth.
- 2. Time dependent temperature and concentrations has stronger decreasing effect on the velocity, temperature and concentration fields compared to constant temperature and concentration of the plate and the fluid..
- 3. Hydrodynamic, thermal as well as concentration boundary layer thickness decrease with the increasing values of Prandtl number.
- 4. An increase in the thermophoretic parameter  $(\tau)$  leads to a decrease in the velocity as well as concentration across the boundary layer.
- 5. The local skin-friction coefficient decreases with the increasing values of magnetic field parameter as well as the angle of inclination to vertical.
- 6. The local skin-friction coefficient decreases whereas the local Sherwood number increases with an increasing value of thermophoretic parameter for all values of Schmidt number.
- 7. The local skin-friction coefficient decreases whereas both the local Nusselt number and the local Sherwood number increase with the increasing values of exponent n.
- 8. Higher flow rate is found for the case of time independent temperature and concentration

#### Nomenclature

$B_0$	Magnetic induction
C	Concentration
Cf	Local skin-friction coefficient
$c_p$	Specific heat at constant pressure
Ď	Mass diffusivity
f	Dimensionless stream function
8	Acceleration due to gravity
Gr	Local Grashof number
Gm	Local modified Grashof number
Μ	Magnetic field parameter
Nu	Local Nusselt number
Pr	Prandtl number
$Re_{\delta}$	Local Reynolds number
Sc	Schmidt number
Sh	Local Sherwood number
Т	Temperature
$T_r$	Reference temperature
и, v	Velocity components in the <i>x</i> - and <i>y</i> -direction respectively
х, у	Axis in direction along and normal to the plate

#### Greek symbols:

η	Pseudo-similarity variable
ά	Angle of inclination to the vertical
β	Coefficient of thermal expansion
$\beta^*$	Coefficient of concentration expansion
$\sigma$	Electrical conductivity
ρ	Density of the fluid
υ	Kinematic viscosity
λ	Thermal conductivity of fluid
τ	Thermophoretic parameter
$\theta$	Dimensionless temperature
$\phi$	Dimensionless concentration

#### References

- 1. Nazaroff, W. W. and Cass, G. R. (1987): Particle deposition from a natural convection flow onto a vertical isothermal flat plate, J. Aerosol Sci., Vol. 18, pp. 445-455.
- 2. Pratsinis, S. E. and Kim, K.S. (1989): Particle Coagulation, Diffusion and Thermophoresis in Laminar Tube Flows, J. Aerosol Sci., Vol. 20(1), pp. 101-111.
- 3. Lin, Y. T. and Choi, M. (1992): A 3-Dimensional Analysis of Particle Deposition For the Modified Chemical Vapor-Deposition (MCVD) Process, ASME J. Heat Transfer, Vol. 114(3), pp. 735-742.

- 4. Tsai, R. and Lin, Z. Y. (1999): An approach for evaluating aerosol particle deposition from a natural convection flow onto a vertical flat plate, J. Hazardous Materials, 69(2), pp. 217-227.
- 5. Selim, A., Hossain, M. A. and Rees, D. A. S. (2003): The effect of surface mass transfer on mixed convection flow past a heated vertical flat permeable plate with thermophoresis, Int. J. Thermal Sci., Vol. 42, pp. 973-982.
- 6. Seddeek, M. A. (2006): Influence of viscous dissipation and thermophoresis on Darcy-Forchheimer mixed convection in a fluid saturated porous media, J. Colloid Interface Sci., Vol. 293, pp. 137-142.
- 7. Alam, M. S., Rahman, M. M. and Sattar, M. A. (2007): Similarity solutions for hydromagnetic free convective heat and mass transfer flow along a semi-infinite permeable inclined flat plate with heat generation and thermophoresis, Non-linear Analysis: Modelling and Control, Vol. 12, pp.433-445.
- 8. Rahman, ATM. M., Alam, M. S. and Chowdhury, M. K.(2012a): Effects of variable thermal conductivity and variable Prandtl number on unsteady forced convective flow along a permeable wedge with suction/injection in the presence of thermophoresis, Int. J. Energy and Technology, Vol. 4(4), pp. 1-10.
- Rahman, ATM. M., Alam, M. S. and Chowdhury, M. K.(2012b): Thermophoresis particle deposition on unsteady two-dimensional forced convective heat and mass transfer flow along a wedge with variable viscosity and variable Prandtl number, Int. Communications in Heat and Mass Transfer, Vol. 39, pp. 541-550, 2012b.
- Sattar, M. A. and Hossain, M. M. (1992): Unsteady hydromagnetic free convection flow with hall current and mass transfer along an accelerated porous plate with time dependent temperature and concentration, Can. J. Phys. Vol. 70, pp. 369-374.
- 11. Sattar, M. A. and Maleque, M. A. (2000): Unsteady MHD natural convection flow along an accelerated porous plate with hall current and mass transfer in a rotating porous medium, J. Energy, Heat and Mass Transfer, Vol. 22, pp. 67-72.
- Alam, M. S., Rahman, M. M., Ferdows, M., Kaino, K., Mureithi, E. and Postelnicu, A. (2007): Diffusion-thermo and thermal-diffusion effects on free convective heat and mass transfer flow in a porous medium with time dependent temperature and concentration, Int. J. Appl. Engng. Res., Vol. 2(1), pp. 81-96.
- 13. Hasimoto, H. (1957): Boundary layer growth on a flat plate with suction or injection, J. Phys. Soc. Japan, Vol. 22, pp.68-72.
- 14. Nachtsheim, P. R. and Swigert, P. (1965): Satisfaction of the asymptotic boundary conditions in numerical solution of the system of non-linear equations of boundary layer type, NASA TND-3004.
- 15. Alam, M. S., Rahman, M. M. and Samad, M. A. (2006): Numerical study of the combined free-forced convection and mass transfer flow past a vertical porous plate in a porous medium with heat generation and thermal diffusion, Non-linear Analysis: Modelling and Control, Vol. 11, pp.331-343.

# Feature Selection for Face Recognition System Using Principle Component Analysis and Genetic Algorithm

# Md. Shahjahan kabir

**Abstract:** Identifying an individual from his or her face is one of the most nonintrusive modalities in biometrics. However, it is also one of the most challenging ones. This thesis discusses why it is challenging and the factors that a practitioner can take advantage of in developing a practical face recognition system. Principle Component Analysis, a statistical technique to reduce the dimensionality and are used to extract features with the help of covariance analysis to generate Eigen components of the images. Genetic Algorithm represents intelligent exploitation of a random search within a defined search space to solve a problem.

Keywords- Feature Selection, Face Recognition, Principle Component Analysis, Genetic Algorithm.

#### Introduction

Feature extraction plays an important role in law enforcement forensic investigation, security access control system, security monitoring Banking system, Face Recognition, intelligent robotic, safety alert system based on eye lid movement & it has various other applications. To better use the Face Recognition for this purpose, compression of data is mandatory. Images can be compressed as structural features such as contours and regions<sup>2</sup>. Images have been exploited to encode images at low bit rates. The method of Eigen faces uses Principal Components Analysis (PCA) to a low dimensional subspace (Eigen space). This subspace is defined by the principal components of the distribution of face images. Each face can be represented as a linear combination of the Eigen faces. Given an image, sub-images of different size are extracted at every image location. To classify images to any other face, its distance from the Eigen space vector is computed. Face recognition can typically be used for verification or identification. In verification an individual image is already enrolled in the reference database. In identification, an input image is matched with a biometric reference in the database. There are two outcomes: the person is not recognized or the person is recognized. Two recognition mistakes may occur: false reject (FR) which indicates a mistake that occur when the system reject a known person, false accept (FA) which indicates a mistake in accepting a claim when it is in fact false. These algorithms are two types: two dimensional (2D) approaches and three dimensional (3D) approaches. Mainly, the traditional 2D approaches are divided into six algorithms: eigenfaces (PCA), linear discriminant analysis (LDA), independent component analysis (ICA), support vector machine (SVM), Genetic Algorithm (GA) neural network and hidden Markov model  $(HMM)^{1}$ .

Genetic algorithm was developed by John Holland- University of Michigan to provide efficient techniques for optimization<sup>7</sup>. Human face recognition is currently a very active research area with focus on way to perform robust and reliable biometric identification. Face Recognition means matching the original face from a set of face previously stored in the knowledge base. In earlier times, people have tried to understand which features help us to perform recognition tasks, such as identifying a person<sup>6</sup>.In the genetic algorithm, the problem to be solved is represented by a list of parameters which can be used to drive an evaluation procedure, called chromosome or genomes.

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The face of our primary focus of attention in social intercourse, playing a major role in conveying identity and emotion. Although the ability infer intelligence or character from facial appearance is suspect. Face Recognition System convey to provide the intelligence power to the

computer so that it can recognize the faces to identify and differ from other faces through the heuristically learned faces. In the area of surveillance, secure trading terminals, credit verification and criminal identification, Close Circuit Television (CCT) control and user authentication uses the Face Recognition system, it draws considerable interest and attention from many researchers. To ensure legal voter identification and avoid corruption and duplicates voters as well as illegal votes, face attached voter id card is implemented by the Face Recognition system.

#### Methodology

**In Principle Component Analysis**, the probe and gallery images must be the same size. Each image is treated as one vector. All images of the training set are stored in a single matrix and each row in the matrix represents an image. The average image has to be calculated and then subtracted from each original image. Then calculate the eigenvectors and eigenvalues of the covariance matrix. These eigenvectors are called eigenfaces. The eigenfaces is the result of the reduction in dimensions which removes the unuseful information and decomposes the face structure into the uncorrelated components (eigenfaces). Each image may be represented as a weighted sum of the eigenfaces. A probe image is then compared against the gallery by measuring the distance between their represent vectors. Distance can be measure using city block distance, Euclidian Distance and so on.

Block Diagram of Face Recognition System using Principle component analyses are:

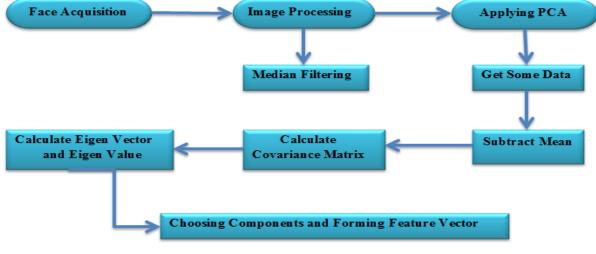


Fig.1. Block Diagram of PCA

A Genetic Algorithm is a problem solving method that uses genetics as its model of problem solving. It's a search technique to find approximate solutions to optimization and search problems. Fitness function is first derived from the objective function and used in successive genetic operations. Certain genetic operation requires that fitness function be non-negative, although certain operators don not have this requirement. A fitness function must be devised for each problem to be solved. Then, the genetic algorithm loops over an iteration process to make the population evolve. Each iteration consists of the following steps<sup>5</sup>: Selection: The first step consists in selecting individuals for reproduction. This selection is done randomly with a probability depending on the relative fitness of the individuals so that best ones are often chosen for reproduction than poor ones. Reproduction: In the second step, offspring are bred by the selected individuals. For generating new chromosomes, the algorithm can use both recombination and mutation. Evaluation: Then the fitness of the new chromosomes is evaluated.

**Replacement:** During the last step, individuals from the old population are killed and replaced by the new ones. This cycle can be summarized as<sup>8</sup>.

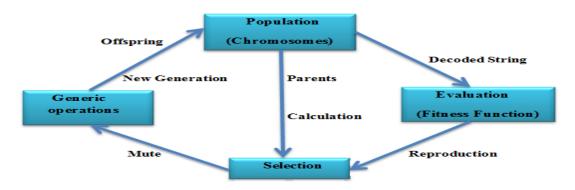


Fig.2. Cycle of Genetic Algorithm

The basic genetic algorithm is as following:

- 1. The algorithm begins by creating a random initial population.
- 2. The algorithm then creates a sequence of new populations. At each step, the algorithm uses the individuals in the current generation to create the next population. To create the new population, the algorithm performs the following steps:
  - a. Scores each member of the current population by computing its fitness value.
  - b. Scales the raw fitness scores to convert them into a more usable range of values.
  - c. Selects members, called parents, based on their fitness.
  - d. Some of the individuals in the current population that have lower fitness are chosen as *elite*. These elite individuals are passed to the next population.
  - *e.* Produces children from the parents. Children are produced either by making random changes to a single parent—*mutation*—or by combining the vector entries of a pair of parents—*crossover*.
  - f. Replaces the current population with the children to form the next generation.
- 3. The algorithm stops when one of the stopping criteria is met.

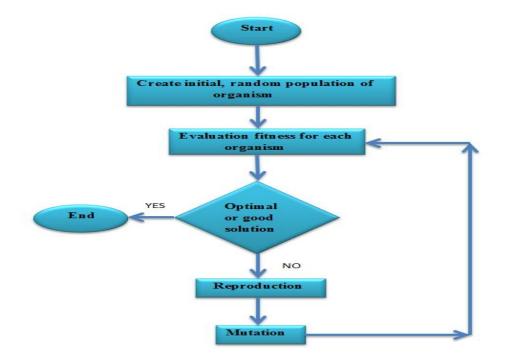
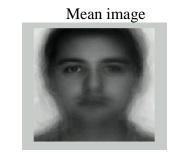


Fig.3: Flow chart of Genetic Algorithm

#### **Mathematical Approach**

PCA: In this paper, Japanese Female Facial Expression Standard Database has been used. A 2-D facial image can be represented as 1-D vector by concatenating each row (or column) into a long thin vector. M vectors of size N representing a set of sampled images. Obtain M training images it is very important that the images are centered. Represent each image as a vector . The images are mean centered by subtracting the mean image from each image vector.



 $\Psi = 1/M \sum_{i=1}^{M} T_i$ 

to get a set of vec $\Re rs_{i}^{=}T_{i}-\Psi$ Subtract the mean face from each face vector,  $C = N^2 * N^2$  $A = N^2 * M$ Find the covariance matrix  $C = AA^{T}$ where  $[\Phi_1, \Phi_2, \dots, \Phi_N]$ but . C And is huge. Find  $^{T}Odt = M * M$ , can get V eigenvector and then have to calculate the eigenvector of C using this equation,  $U_i = AV_i$ 

(2)

(1)

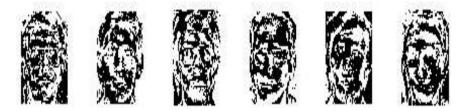


Fig.4: Six Eigenfaces

Weight calculation for each training image using this formula  $W_j = U_j^T \Phi_i$ , at last calculated the individual weight vector for each training images

 $\Omega_i = \begin{bmatrix} w_1 \\ w_2 \\ w_N \end{bmatrix}$ (3)

For test image also calculate  $\underline{\Phi}$ , at the last step distance measured from test image to every training image. Using Euclidean or city blocks distance. Which distance is minimum that's are result,

$$Eudist = \sqrt{(test - train)^2}$$

(4)

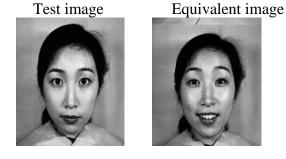


Fig. 5: Recognized image using PCA

GA: For the Genetic Algorithm first use the most frequent occur gray level in image figure 6.



Fig. 6: Gray level Image

Calculate the frequency of each gray level. Then eliminate the gray values that have the probability less than 0.003. After the preprocessing the image, get the figure 7.



Fig.7: Preprocessed Image

At first take the input image and then take each database image. Assign the zero values for some rows and column of input image and database image. Find the deviation between both images. Zero values of 3 rows and column of the input image are assigned. Calculate the deviation values for five times. Each time the eliminated row and column of the database image increase 3 factors. 3 crossover factors and generation is 5 is considered. The resultant images are figure 8.



Fig.8: The resultant Image after crossover between input image and database image for five generation

Fitness values for each database and input images are find. If the total database image is 25 then we will find the 25 fitness values. Then take each fitness value for each database image and input image for each generation. At last add all fitness value. Sort the Fitness value. The minimum fitness value is selected. The corresponding index image is selected.

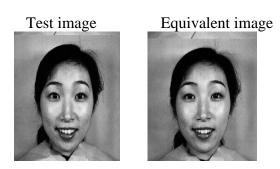


Fig.9: Recognized image using GA

Table 1: Efficiency calculation for PCA
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No. of Face Image	Successfully Recognized Face Image	Unrecognized Face Image	Efficiency (%)
10	9	1	90%
20	18	2	90%
25	22	3	88%

Therefore the efficiency of Face Recognition System by using PCA is 89.33%.

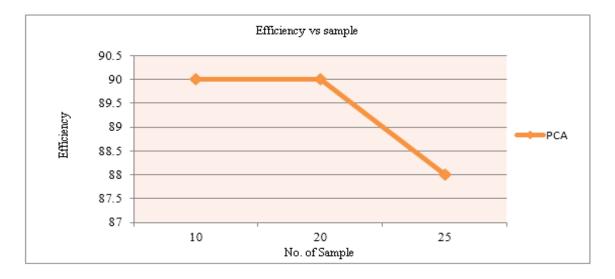


Fig.10: Efficiency versus No. of Sample graph using PCA

**Table 2:** Efficiency calculation for GA

No. of Face	Successfully	Unrecognized Face	Efficiency (%)
Image	Recognized	Image	
	Face Image		
10	10	0	100%
20	19	1	95%
25	23	2	92%

Therefore the efficiency of Face Recognition System by using Genetic Algorithm is 95.6%.

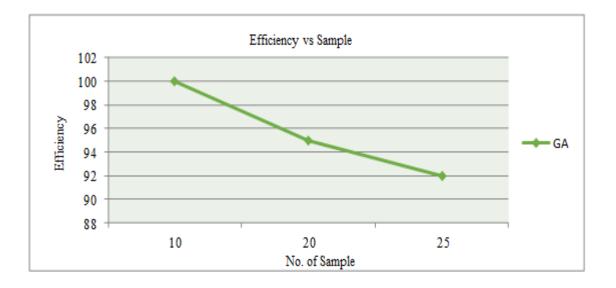
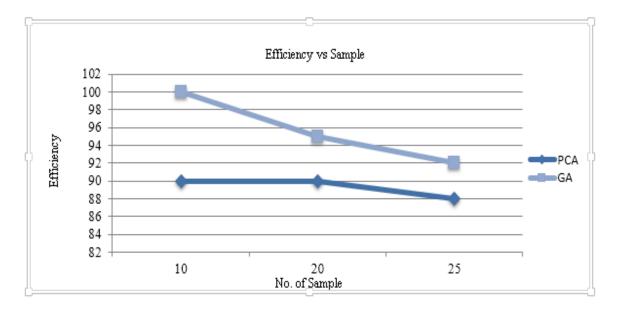


Fig.11: Efficiency versus No. of Sample graph using GA

Principle Component Analysis and Genetic Algorithm are shown in the same figure 12.



**Fig.12:** Efficiency versus No. of Sample graph for comparison between PCA and GA.

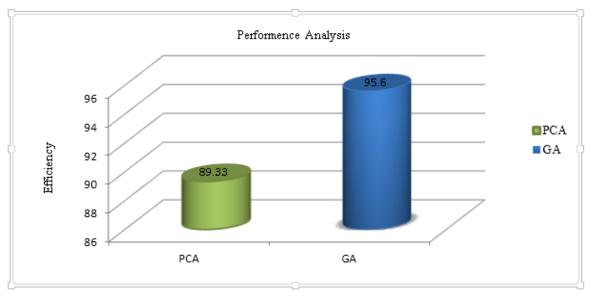


Fig.13: Performance Analysis chart for PCA and GA

Draw the Performance analysis graph for Face Recognition System using principle component analysis and Genetic algorithm. In above figure 13 shown that Genetic Algorithm is better than Principle Component Analysis. This Efficiency is so much higher than any other research<sup>5, 2, 8</sup>.

## Limitation

In **principle component analysis**, the dimension of the resized image is critical: If it is too large, the system may diverge, whereas if it is too small, the images cannot be discriminated from each other. **Genetic Algorithm** is a run time searching technique which takes a lot of time to search a image from train database.

## **Summary And Conclusions**

Face Recognition System using the concept of Principle Component Analysis and Genetic Algorithm has been discussed. The maximum efficiency for Face Recognition System by using Genetic algorithm is 95.6% and the maximum efficiency for Face Recognition System by using PCA is 89.33%. The whole software is dependent on the database and the database is dependent on resolution of camera. So if good resolution digital camera or good resolution analog camera is used, the results could be increased.

## References

- 1. Manal Abdullah1, Majda Wazzan1 and Sahar Bo-saeed2, "Optimizing Face Recognition using PCA", International Journal of Artificial Intelligence & Applications (IJAIA), March 2012.
- 2. Mahima Agrawal1,Shubangi.D.Giripunje2,P.R.Bajaj3, "Recognizing Facial Expression using PCA and Genetic Algorithm", International Journal of Computer & Communication Technology, April 2011.
- 3. Jonathon Shlens, "A Tutorial on Principal Component Analysis", Systems Neurobiology Laboratory Salk Institute for Biological Studies, April 22, 2009.
- 4. M. Thomas1, S. Kumar2, and C. Kambhamettu3, "Face Recognition Using a Color PCA Framework", University of Delaware, Newark, Bell Laboratories, Lucent Technologies, November 05, 2007.

- 5. S.Venkatesan and Dr.S.Srinivasa Rao Madane, "Face Recognition System with Genetic Algorithm and ANT Colony Optimization", International Journal of Innovation, Management and Technology, December 2010.
- 6. Luigi Rosa L.S. Ettore Majorana, "Face Recognition Based on Genetic Algorithms for Feature Correlation", URL: http://www.advancedsourcecode.com
- 7. C.R Vimal Chand, "Face and gender Recognition Using Genetic Algorithm and Hopfield Neural Network", Global Journal of Computer Science and Technology, April 2010.
- Sarawat Anam, Md. Shohidul Islam, M.A. Kashem, M.N. Islam, M.R. Islam, M.S. Islam, "Face Recognition Using Genetic Algorithm and Back Propagation Neural Network", Proceedings of the International MultiConference of Engineers and Computer Scientists (.Hong Kong), March 18 - 20, 2009
- 9. Ajoy Kumar Dey, Susmita Saha, Avijit Saha, Shibani Ghosh, "A Method of Genetic Algorithm (GA) for FIR Filter Construction: Design and Development with Newer Approaches in Neural Network Platform", (IJACSA) International Journal of Advanced Computer Science and Applications, May 11, 2010.
- 10. Rafael C. Gonzalez and Richard E Woods, "Digital Image Processing" (2<sup>nd</sup> Edition).

# The Traveling Wave Solutions of Compound Burgers' KdV Equations by

 $\left(\frac{G'}{G}\right)$ -Expansion Method

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Abstract : In this study, the  $\left(\frac{G'}{G}\right)$  expansion method is used for solving the exact traveling wave solutions of

the Compound Burgers-Korteweg-de Vries(KdV) equations. The  $\left(\frac{G'}{G}\right)$ -method is very powerful and easy tool

for solving non-linear partial differential equations.

**Keywords:** Exact solution,  $\left(\frac{G'}{G}\right)$ -expansion method, Compound Burgers KdV equations.

#### Introduction

It has recently become more interesting to obtain exact solutions of nonlinear partial differential equations through using symbolical computer programs such as Maple, Matlab and Mathematica that facilitate complex and tedious algebraic computations. Calculating the exact solutions, in particular traveling wave solutions, of nonlinear equations in mathematical physics appear in various areas such as fluid dynamics, plasma physics and other applications. Many powerful methods have been used to work the nonlinear equations such as the sine-cosine function method<sup>1,2</sup>, Jacobi elliptic method<sup>3</sup>, the inverse scattering method<sup>4</sup>, the standard tanh and extended tanh methods <sup>5-7</sup> and so on.

Some most powerful and direct methods for solutions of non-linear equations is the  $\left(\frac{G'}{G}\right)$ -

expansion method <sup>8-10</sup>. Wang and Zhang<sup>11</sup> introduced this method first and it has been widely used for finding various exact solutions of non-linear partial differential equations. Later Ranjan and Yadav <sup>12</sup> developed this method for traveling wave solutions of Burgers' KdV and generalization of Huxley equations. The parameter m (m being a positive integer) plays

an important role in the  $\left(\frac{G'}{G}\right)$ - expansion method. However, for non-integer values of *m*, a

transformation formula is usually applied to overcome this difficulty. One study has been started by examining the Compound Burgers-KdV equation  $^{13-15}$  in the rest of this paper.

Consider the compound Burgers-KdV equation

$$u_t + \alpha u u_x + \beta u^2 u_x + \mu u_{xx} - s u_{xxx} = 0$$

(1)

where  $\alpha$ ,  $\beta$ ,  $\mu$ , and *s* are real constants, which can be regarded as a composition of the KdV, modified KdV and Burgers' equation, involving nonlinear, dispersion and dissipation effects<sup>1</sup>. The choices

$$\beta = 0, \mu = \beta \text{ and } s = -s \text{ lead Eq. (1) to the Burgers-KdV quation } u_t + \alpha u u_x + \beta u_{xx} + s u_{xxx} = 0$$
(2)

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Eq. (2) is applied as a nonlinear model of the propagation of waves on an elastic tube filled with a viscous fluid<sup>2</sup>, the flow of liquids containing gas bubbles<sup>3</sup> and turbulence<sup>4</sup>. It can also be regarded as a combination of the Burgers' equation and KdV equation, since the choices  $\alpha = 0$ ,  $\beta = 0$ , and s = 0 lead Eq. (2) to the Burgers' equation

 $u_t + \alpha u u_x + \beta u_{xx} = 0$ (3)

# The $\left(\frac{G'}{G}\right)$ -Expansion Method Analysis

For the computation of exact traveling wave solutions of Partial differential equations (PDEs) (G')

the  $\left(\frac{G'}{G}\right)$ -expansion method [8-10] is very important & powerful.

Now let, the non-linear partial differential equations (PDEs) for u(x,t) is:

 $P(u, u_t, u_x, u_{xx}, u_{tt}, u_{xt}, \dots) = 0,$ (4)

where 
$$u(x,t)$$
 is an unknown function & P is non-linear polynomial in  $u(x,t)$  and its partial derivatives,  $u(x,t)$  depending on space variable  $x$  & time  $t$ .

To find the traveling wave solution of PDE (4), we consider the variable z = x - vt, where v is a constant, i.e u(x,t) = U(z). Then change the following partial derivatives

 $\frac{\partial}{\partial t} = -v \frac{d}{dz}, \frac{\partial}{\partial x} = \frac{d}{dz}, \frac{\partial^2}{\partial x^2} = \frac{d^2}{dz^2}, \text{ and so on the other highest order derivatives. So using these terms the PDE (4) reduces to an ordinary differential equation (ODE) <math>Q(U, U', U'', U''', ...) = 0,$ 

(5)

where the prime denote the derivative with respect to z.

Thus equation (5) is integrated providing all the terms contain derivatives, where the integrating constants are considered to be zero.

Suppose, the solution of the ODE (5) can be expressed as a polynomial in  $\left(\frac{G'}{G}\right)$  as follows:

$$U = \sum_{i=1}^{m} \alpha_i \left(\frac{G'}{G}\right)^i + \alpha_0 \quad , \tag{6}$$

where  $\alpha_i (i = 1, 2, ..., m)$  and  $\alpha_0$  are real constants which are to be determined and G = G(z) satisfies the 2<sup>nd</sup> order linear ordinary differential equation in the form  $G'' + \lambda G' + \mu G = 0$ , (7)

where  $G' = \frac{dG}{dz}$ ,  $G'' = \frac{d^2G}{dz^2}$ ,  $\alpha_m \neq 0$ ,  $\lambda$  and  $\mu$  are real constants to be determined. Now from equation (6) & equation (7), we get

$$U' = -\sum_{i=1}^{m} i\alpha_i \left[ \left( \frac{G'}{G} \right)^{i+1} + \lambda \left( \frac{G'}{G} \right)^i + \mu \left( \frac{G'}{G} \right)^{i-1} \right],\tag{8}$$

$$U'' = \sum_{i=1}^{m} i\alpha_{i} \left[ (i+1)\left(\frac{G'}{G}\right)^{i+2} + (2i+1)\lambda\left(\frac{G'}{G}\right)^{i+1} + i(\lambda^{2}+2\mu)\left(\frac{G'}{G}\right)^{i} + (2i-1)\lambda\mu\left(\frac{G'}{G}\right)^{i-1} \right] + (i-1)\left(\frac{G'}{G}\right)^{i-2}$$

(9)

The general solution by using equation (7) will be obtain, when

$$\lambda^{2} - 4\mu > 0, \left(\frac{G'}{G}\right) = \frac{\sqrt{\lambda^{2} - 4\mu}}{2} \left(\frac{A \sinh \frac{1}{2}\sqrt{\lambda^{2} - 4\mu}z + B \cosh \frac{1}{2}\sqrt{\lambda^{2} - 4\mu}z}{A \cosh \frac{1}{2}\sqrt{\lambda^{2} - 4\mu}z + B \sinh \frac{1}{2}\sqrt{\lambda^{2} - 4\mu}z}\right) - \frac{\lambda}{2},$$
(10)

when  $\lambda^2 - 4\mu < 0$  we get,

$$\left(\frac{G'}{G}\right) = \frac{\sqrt{4\mu - \lambda^2}}{2} \left(\frac{-A \sinh \frac{1}{2}\sqrt{4\mu - \lambda^2} z + B \cosh \frac{1}{2}\sqrt{4\mu - \lambda^2} z}{A \cosh \frac{1}{2}\sqrt{4\mu - \lambda^2} z + B \sinh \frac{1}{2}\sqrt{4\mu - \lambda^2} z}\right) - \frac{\lambda}{2},$$
(11)

where *A* and *B* are arbitrary constants. Moreover when  $\lambda^2 - 4\mu = 0$ ,

$$\left(\frac{G'}{G}\right) = -\frac{\lambda}{2}.$$

On the way to determine U(z) explicitly, we can obtain the following four steps: Step 1. Determine the integer *m* by balancing the highest order nonlinear term(s) and the highest order partial derivative of U(z).

Step 2. By substituting (6) and (7) into (5) with the value of *m* obtained in Step 1, and collecting all term(s) with the same order of  $\left(\frac{G'}{G}\right)$  together, the left-hand side of (5) converts

into polynomial in  $\left(\frac{G'}{G}\right)$ . Then setting the coefficients of  $\left(\frac{G'}{G}\right)^i$  (i = 0, 1, 2) to zero, we obtain

a set of algebraic equations in  $\alpha_1, \alpha_0, \nu, \lambda$  and  $\mu$ .

Step 3. Solve the system of algebraic equations obtained in step 2 for  $\alpha_1, \alpha_0$  and  $\mu$  by use of *Mathematica*.

Step 4. By substituting the results in the above steps, the exact traveling wave solutions of (4) can be obtain.

# Applications of the $\left(\frac{G'}{G}\right)$ -expansion method

In this section, the  $\left(\frac{G'}{G}\right)$ -expansion method has been applied to construct the traveling wave solution of Compound Burgers-KdV equations.

#### The Compound Burgers-KdV equation

The Burgers-KdV equation is given by  $u_t + \alpha u u_x + \beta u^2 u_x + \mu u_{xx} - s u_{xxx} = 0.$ (12) By using the transformation u(x, t) = U(z), where z = x - vt, the partial differential equation (PDE) is reduced to an ODE

$$-vU'(z) + \alpha U(z)U'(z) + \beta U^{2}(z)U'(z) + \mu U''(z) - sU'''(z) = 0,$$
(13)

where prime denotes the derivatives with respect to z,

Integrating (13) w. r. to z and taking integration constant to be zero, then equation (13) gives

$$-\nu U(z) + \frac{1}{2}\alpha U^{2}(z) + \frac{1}{3}\beta U^{3}(z) + \mu U'(z) - sU''(z) = 0,$$
(14)

$$-\omega U(z) + cU^{2}(z) + bU^{3}(z) + aU'(z) - U''(z) = 0,$$
  
where  $a^{(15)} = \frac{v}{s}, a = \frac{\mu}{s}, b = \frac{\beta}{3s} \& c = \frac{\alpha}{2s}$ 

Balancing U''(z) and  $U^2(z)$ we get m+2 = 3m or, m = 1

We obtain the value of m = 1. Thus suppose the solution of (15) in the form

$$U(z) = \alpha_0 + \alpha_1 \left(\frac{G'}{G}\right), \quad (16)$$

where  $\alpha_1 \neq 0$ .

$$U'(z) = -\alpha_{1} \left(\frac{G'}{G}\right)^{2} - \alpha_{1} \lambda \left(\frac{G'}{G}\right) - \alpha_{1} \mu,$$
(17)  

$$U''(z) = 2\alpha_{1} \left(\frac{G'}{G}\right)^{3} + 3\alpha_{1} \lambda \left(\frac{G'}{G}\right)^{2} + (\alpha_{1} \lambda^{2} + 2\alpha_{1} \mu) \left(\frac{G'}{G}\right) + \alpha_{1} \lambda \mu,$$
(18)  

$$U^{2}(z) = \alpha_{0}^{2} + 2\alpha_{0} \alpha_{1} \left(\frac{G'}{G}\right) + \alpha_{1}^{2} \left(\frac{G'}{G}\right)^{2},$$
(19)  

$$U^{3}(z) = \alpha_{0}^{3} + 3\alpha_{0}^{2} \alpha_{1} \left(\frac{G'}{G}\right) + 3\alpha_{0} \alpha_{1}^{2} \left(\frac{G'}{G}\right)^{2} + \alpha_{1}^{3} \left(\frac{G'}{G}\right)^{3},$$

(20)

Using (16) to (20) in equation (15) and equating the coefficients of

$$\left(\frac{G'}{G}\right)^{i}.$$
 (where  $i = 0, 1, 2, 3$ ) to zero, we obtain a system of algebraic equations in  
 $\alpha_{1}, \alpha_{0}, \nu, \lambda$  and  $\mu$  as follows:  

$$\left(\frac{G'}{G}\right)^{0}: -\omega\alpha_{0} + c\alpha_{0}^{2} + b\alpha_{0}^{3} - a\alpha_{1}\mu - \alpha_{1}\lambda\mu = 0,$$
(21)

$$\left(\frac{G'}{G}\right): -\omega\alpha_{1} + 2c\alpha_{0}\alpha_{1} - a\alpha_{1}\lambda - \alpha_{1}\lambda^{2} - 2\alpha_{1}\mu = 0,$$
(22)
$$\left(\frac{G'}{G}\right)^{2}: -a\alpha_{1} + 3b\alpha_{0}^{2}\alpha_{1} + c\alpha_{1}^{2} - 3\alpha_{1}\lambda = 0,$$
(23)
$$\left(\frac{G'}{G}\right)^{3}: -2\alpha_{1} + b\alpha_{1}^{3} = 0.$$
(24)

By using *MATHEMATICA* and fixing a = 0, b = 0, b = 0, then solving the system of equations (21) to (24), we obtain the following two sets of solutions :

Set 1 :  $\omega = -1, \mu = -\frac{3}{2}$  $\alpha_0 = -\frac{\sqrt{2}}{\sqrt{b}} \& \alpha_1 = \frac{\sqrt{2}}{\sqrt{b}}$  $\omega = -1, \mu = -\frac{3}{2}$ 

Set 2:

$$\alpha_0 = \frac{\sqrt{2}}{\sqrt{b}} \& \alpha_1 = -\frac{\sqrt{2}}{\sqrt{b}}$$

$$U(z) = -\frac{\sqrt{2}}{\sqrt{b}} + \frac{\sqrt{2}}{\sqrt{b}} \left(\frac{G'}{G}\right) \quad . \tag{25}$$

Thus, for set 1:

When  $\lambda^2 - 4\mu > 0$ , we obtain hyperbolic function solution of the Compound Burgers-KdV equation (12) as : , ` h

$$U(z) = -\frac{\sqrt{2}}{\sqrt{b}} + \frac{\sqrt{2}}{\sqrt{b}} \left\{ \frac{\sqrt{\lambda^2 - 4\mu}}{2} \left( \frac{A \sinh \frac{1}{2} \sqrt{\lambda^2 - 4\mu} z + B \cosh \frac{1}{2} \sqrt{\lambda^2 - 4\mu} z}{A \cosh \frac{1}{2} \sqrt{\lambda^2 - 4\mu} z + B \sinh \frac{1}{2} \sqrt{\lambda^2 - 4\mu} z} \right) - \frac{\lambda}{2} \right\}$$

(26) When  $\lambda^2 - 4\mu < 0$ , we obtain the trigonometric function of the Compound Burgers-KdV equation (12) as : 5

$$U(z) = -\frac{\sqrt{2}}{\sqrt{b}} + \frac{\sqrt{2}}{\sqrt{b}} \left\{ \frac{\sqrt{4\mu - \lambda^2}}{2} \left( \frac{-A \sinh \frac{1}{2} \sqrt{4\mu - \lambda^2} z + B \cosh \frac{1}{2} \sqrt{4\mu - \lambda^2} z}{A \cosh \frac{1}{2} \sqrt{4\mu - \lambda^2} z + B \sinh \frac{1}{2} \sqrt{4\mu - \lambda^2} z} \right) - \frac{\lambda}{2} \right\}.$$
 (27)

Moreover when  $\lambda^2 - 4\mu = 0$ ,

$$U(z) = \pm \frac{\sqrt{2}}{\sqrt{b}} \mp \frac{\sqrt{2}\lambda}{2\sqrt{b}}.$$
(28)

By putting  $A \neq 0 \& B = 0$  in equation (26), we get

$$U(x,t) = -\frac{2\sqrt{6s}}{\sqrt{\beta}} \left\{ 1 - \frac{\sqrt{10}}{4} \tanh(x+st) \right\}.$$
(29)

By putting  $A = 0 \& B \neq 0$  in equation (26), we get

$$U(x,t) = -\frac{2\sqrt{6s}}{\sqrt{\beta}} \left\{ 1 - \frac{\sqrt{10}}{4} \coth(x+st) \right\}.$$
(30)

Similarly for set 2: putting  $A \neq 0 \& B = 0$  in equation (26), we get

$$U(x,t) = \frac{2\sqrt{6s}}{\sqrt{\beta}} \left\{ 1 - \frac{\sqrt{10}}{4} \tanh(x+st) \right\}.$$
(31)

Again put  $A = 0 \& B \neq 0$  in equation (26), we get

$$U(x,t) = \frac{2\sqrt{6s}}{\sqrt{\beta}} \left\{ 1 - \frac{\sqrt{10}}{4} \operatorname{coth}(x+st) \right\}.$$
(32)

#### CONCLUSION

In this paper, Two types of traveling wave solutions in terms of hyperbolic & trigonometric functions by using the  $\left(\frac{G'}{G}\right)$ -expansion method have been observed. The solution method is very simple and effective. The  $\left(\frac{G'}{G}\right)$ -expansion method is more powerful, effective and convenient. The performance of this method is reliable, simple and gives many new solutions. It is also a standard method which allows us to solve nonlinear evolution equations in the mathematical physics.

#### REFERENCES

- 1. Borhanifar, A., Jafari, H., Karimi and S.A. 2009. New solitary wave solutions for the bad Boussinesq and good Boussinesq equations, Numer. Methods for Partial Differential Equations 25, pp. 1231–1237.
- 2. Borhanifar, A., Jafari, H., Karimi and S.A. 2008. New solutions and periodic solutions for the Kadomtsev–Petviashvili equation. Nonlinear Sci. Appl. 4, pp.224–229.

- 3. Liu, G. T., Fan and T. Y. 2005. New applications of developed Jacobi elliptic function expansion methods. Phys. Lett. A 345, pp. 161-166.
- 4. Ablowitz, M.J., Segur and H. 1981. Solitons and Inverse Scattering Transform. SIAM, Philadelphia.
- 5. Wazwaz and A.M. 2005. Exact solutions to the double sinh-Gordan equation by tanh method and a variable separated ode method. Compt. Math. Appl. 50, pp.1685-1696.
- 6. Malfliet, W., Hereman and W. 1996. The tanh-method: exact solutions of nonlinear evolution and wave equations. Phys. Scr. 54, pp. 563–568.
- 7. Malfliet, W., Hereman and W. 1996. The tanh method: II. Perturbation technique for conservative systems. Phys Scr. 54, pp. 569-575.
- 8. Wang, M.L., Li, X. Zhang and J. 2008. The  $\left(\frac{G'}{G}\right)$  expansion method and traveling wave solutions of nonlinear evolution equations in mathematical physics. Phys. Lett. A 372,

pp.417-423.

- 9. Aslan, İ. 2009. Exact and explicit solutions to some nonlinear evolution equations by utilizing the  $\left(\frac{G'}{G}\right)$ -expansion method. Appl. Math. Comput. 215, pp.857–863.
- 10. Bekir, A. 2008. Application of the  $\left(\frac{G'}{G}\right)$ -expansion method for nonlinear evolution equations. Phys. Lett. A 372, pp.3400-3406.
- 11. Wang, M.L., Li, X. Zhang, J. 2008. The  $\left(\frac{G'}{G}\right)$ -expansion method and traveling wave solutions of nonlinear evolution equations in mathematical physics. Phys. Lett. A 372,

pp.417-423.

12. Rajan A. and S. Yadav . The  $\left(\frac{G'}{G}\right)$ -Expansion Method for Traveling Wave Solutions of

Burgers' Kdv and Generalization of Huxley Equations.A.Math., 2(3), pp.119-123.

- 13. Wang and M.L.1996. Exact solution for a compound KdV-Burgers equations. Phys. Lett. A 213, pp.279–287.
- 14. C. David and R. Fernando . A Note On Solitary Wave Solutions of the Compound Burgers-Korteweg-de Vries Equation. Math. TX 78541.
- 15. Wang and M.L.1996. Exact solution for a compound KdV-Burgers equations. Phys. Lett. A 213, pp.279–287.

# **Photovoltaic System Simulation by Orcad-PSPICE**

# Mohammad Tareq<sup>1</sup>; Safiqul Islam<sup>1</sup>; D.M. Motiur Rahaman<sup>1</sup>

**Abstract:** A photovoltaic (PV) system directly converts sun energy into electrical energy. This simple principle involves sophisticated technology that is used to build efficient devices, namely solar cells, which are the key components of a PV system and require semiconductor processing techniques in order to be manufactured at low cost with high efficiency. For the development of PV system simulation is necessary before the experimental testing. Simulation of PV system with the help of Orcad-PSPICE has been carried out in this paper based on mathematical equivalence circuit and available data. **Keywords:** PV System, Solar Cell, PSPICE

# Introduction

Fossil fuel energy is not sufficient for the future demand of energy. Renewable energy sector is developing rapidly. One of the main sectors of renewable energy is solar energy, in short PV system. Many countries are trying to use PV power system. Orcad-PSPICE is a good choice for simulating PV system and it has worldwide reputation. Although there are many tools are available for simulating the photovoltaic systems such as matlab, simulink, homar, proteus etc. Orcad-PSPICE has both free version and paid version. In this paper all of the simulations have been done by using the student version of Orcad-PSPICE which is completely free to download. Another reason to use this tool is its simplicity and user friendliness. This simulation software could be useful to the students to learn PV system or to solve technical problems of design, sizing or analysis. The effects of series and shunt resistances, irradiance, and temperature have been discussed with the help of PSPICE shortcircuit current cell model.

# **PSPICE Solar Cell Model**

The equivalent circuit of a solar cell has been shown in the figure 1 which has been used for simulation.

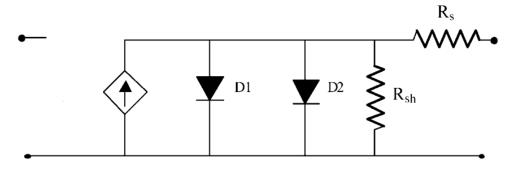


Fig. 1: Solar Cell Model

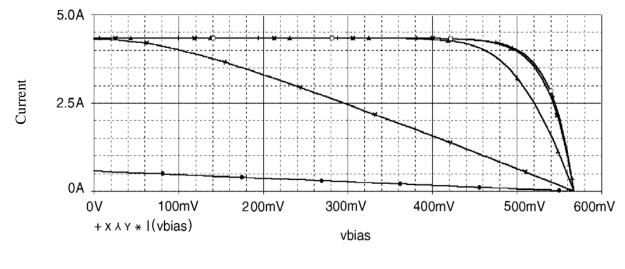
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Relationship between current and voltage can be written as follows: <sup>1</sup>

$$I = I_L - I_0 \left( e^{\frac{V + IR_s}{nV_T}} - 1 \right) - I_{02} \left( e^{\frac{V + IR_s}{2V_T}} - 1 \right) - \frac{V + IR_s}{R_{sh}}$$
(1)

The simulation results have been shown in the figure 2 for series resistance of  $1\Omega$  (bottom graph),  $0.1\Omega$ ,  $0.01\Omega$ ,  $0.001\Omega$ ,  $0.0001\Omega$  (top graph) at equivalent value of the irradiance and the temperature. It has been shown in fig. 2 that large differences are observed in the I-V characteristics as the value of the series resistance increases. In particular the values of the short-circuit current and of the fill factor can be severely reduced.



Voltage

Fig. 2: V-I Characteristics for series resistance

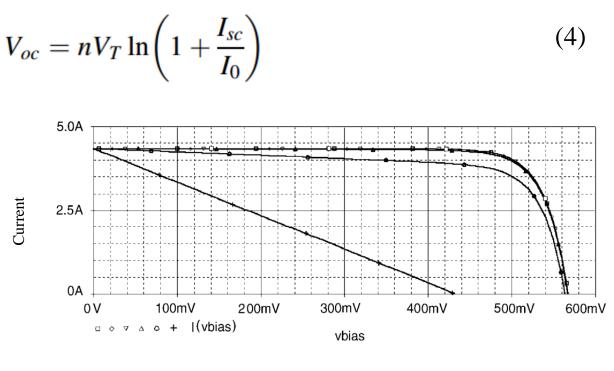
The value of the short-circuit current is not equal to the photocurrent  $I_L$ . By replacing V = 0 in previous equation (1) following equation has been found.

$$I_{sc} = I_L - I_0 \left( e^{\frac{I_{sc}R_s}{nV_T}} - 1 \right) - I_{02} \left( e^{\frac{I_{sc}R_s}{2V_T}} - 1 \right) - \frac{I_{sc}R_s}{R_{sh}}$$
(2)

The open-circuit voltage can be derived from equation (1) setting I = 0.

$$0 = I_L - I_0 \left( e^{\frac{V_{oc}}{nV_T}} - 1 \right) - I_{02} \left( e^{\frac{V_{oc}}{2V_T}} - 1 \right) - \frac{V_{oc}}{R_{sh}}$$
(3)

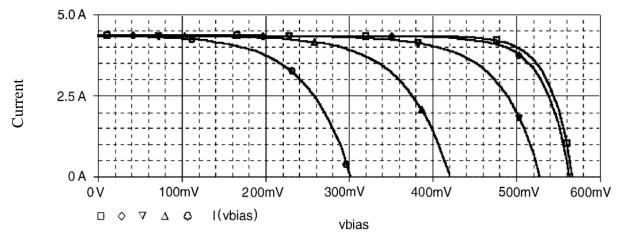
The third and fourth terms in equation (3) have been neglected and the open-circuit voltage equation becomes,



Voltage

Fig. 3: V-I characteristics for shunt resistance

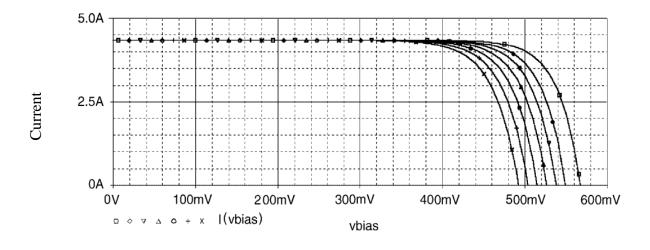
The simulation results are shown in fig. 3 for the shunt resistances of  $0.1\Omega$ ,  $1\Omega$ ,  $10\Omega$ ,  $10\Omega$ ,  $100\Omega$ ,  $1000\Omega$ . It is clear that unless the parallel resistance takes very small values, the open circuit voltage is only very slightly modified.



#### Voltage

Fig. 4: Effects of recombination diode

The open circuit is degraded when the recombination diode becomes important. This can be seen in fig. 4 where in order to isolate the recombination diode effect; a high value of the parallel resistance and a low value of the series resistance have been selected. The simulation results have been shown in fig. 5 for the temperatures 27 °C, 35 °C, 40 °C, 45 °C, 50 °C, 55 °C, 60 °C.



Voltage

Fig. 5: V-I Characteristics for temperature

Series connection of solar cells has the same value as the short circuit current due to the same irradiance value and has equal value of the series and shunt resistance<sup>2</sup>. The result has shown in fig. 6.

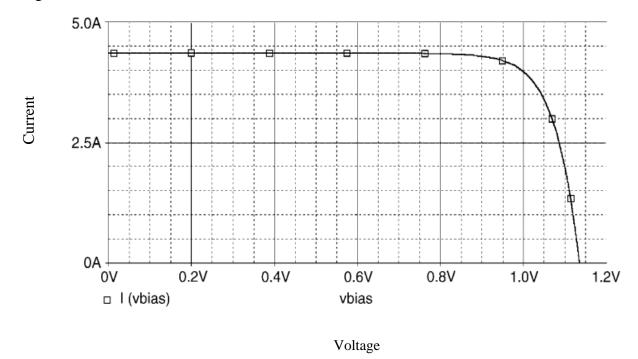


Fig. 6: V-I Characteristics of two solar cells in series

Fig. 7 shows V-I characteristics of the two solar cells which are not subject to the same value of the irradiance, namely 1000 W/m<sup>2</sup> and 700 W/m<sup>2</sup> respectively.

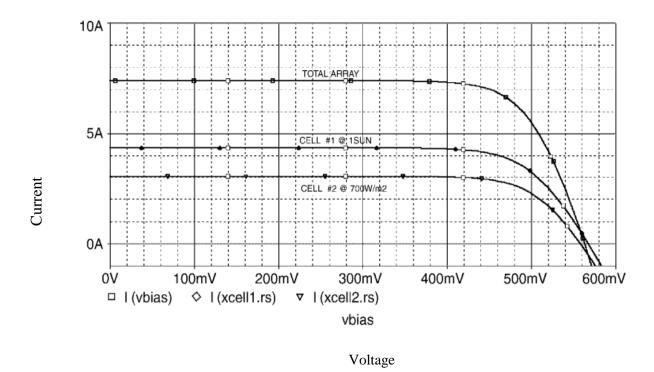


Fig. 7: V-I Characteristics of two solar cells in parallel with different irradiances

# Conclusion

Photovoltaic system developers are very keen to observe efficient result of their system. It is a great option to identify the probable output by simulating the system. In that case PSPICE plays an important role. In this paper, simulations of performance and stability have been carried out using the simulation software. For the simulation PSPICE version 9.1<sup>5</sup> has been used which is free to download. Simplified PSPICE modeling of the short-circuit current of solar cells where the basic concepts of quantum efficiency has been introduced. The effects of series and shunt resistances, irradiance, and temperature and space radiation are also important for the developer.

# References

- Lasnier F. and Ang T.G., Photovoltaic Engineering Handbook. Boston, MA:Adam Hilger, 1990. Ross, R.G. and Smockler, M.I. 'Flat-Plate Solar Array Project Final Report, Volume VI: Engineering – Sciences and Reliability, Jet Propulsion Laboratory, Publication 86–31, 1986.
- 2. Green M.A., Solar Cells, University of New South Wales, Sydney, 1992.
- 3. Castaner Luis and Silvestre Santiago. Modeling Photovoltaic Systems Using PSPICE, John Wiley and Sons, 2002.
- 4. Bett A.W., in Next Generation Photovoltaic-High efficiency through full spectrum utilization, edited by A. Marti and A, Luque (Institute of Physics Publishing, 2004)
- 5. http://www.electronics-lab.com/downloads/schematic/013/

# **Rectangular and Polar Conversion of Basis Functions**

#### Md. Serajul Islam Prodhan

**Abstract:** In this study, the rectangular and the polar conversion of basis functions were estimated in the frequency domain. The rectangular-to-polar conversion into MagX[k], and PhaseX[k] was anticipated whose amplitudes are 733.33 unit (arb.), and  $\pm$  3.20 unit respectively. Conversely the polar-to-rectangular conversion into ReX[k], and ImX[k] was calculated which have amplitudes of 518.64 unit, and  $\pm$  527.44 unit respectively. **Keywords**: Basis functions, Rectangular and polar conversions, DFT, FFT, Time domain, and Frequency domain.

#### Introduction

The sine and cosine waves used in the DFT (Discrete Fourier Transform) are commonly called the DFT basis functions<sup>1</sup>. In other words, the output of the DFT is a set of numbers that represent amplitudes. The basis functions are a set of sine and cosine waves with unity amplitude. Fundamentally a signal can be observed from two different perspectives namely the frequency domain and the time domain<sup>2-5</sup>. It is obvious that the frequency domain is a group of amplitudes of cosine and sine waves. This is called rectangular notation.

**Abstract:** Wireless Power Transmission (WPT) is the process that takes place in any system where electrical power is transmitted from a power source to an electrical load without the use of wire through vacuum or an atmosphere. This can be used for applications where either an instantaneous amount or a continuous delivery of energy is needed, but where conventional wires are unaffordable, inconvenient, expensive, hazardous, unwanted or impossible. The power can be transmitted using microwaves, millimeter waves or lasers. Study of different theories and strategies of electromagnetic fields and waves and apply these theories and strategies to the implementation of wireless power transfer are the main objective of this paper. The main problem of WPT system now is its limited range and system efficiency. The power diminishes tremendously at a short distance and efficiency is also very low. Observation of different facts that are responsible for attenuation of electromagnetic fields and low efficiency of wireless power transfer is also an objective of this paper.

#### Keywords: WPT, Efficiency, Attenuation

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The result is a cosine wave of the same frequency, but with new amplitude and a phase shift. In educational form, the two representations are related as  $A\cos(\alpha) + B\sin(\alpha) = M\cos(\alpha + \theta)$ . In this equation, the addition of a cosine and a sine wave results in a cosine wave with a different amplitude and phase shift. The information contained in *A* and *B* is transferred to two other variables, *M* and  $\theta$ . The important point is that no information is lost in this process; given one representation we can calculate the other. In other words, the information contained in the amplitudes *A* and *B*, is also contained in the variables *M* and  $\theta$ .

## **Simulation Method**

In polar notation, MagX[ ] holds the amplitude of the cosine wave, while PhaseX[ ] holds the phase angle of the cosine wave. The following equations convert the frequency domain from rectangular to polar notation, and vice-versa:

$$MagX[k] = \left(\operatorname{Re} X[k]^{2} + \operatorname{Im} X[k]^{2}\right)^{1/2}$$
(1)

$$PhaseX[k] = \arctan\left(\frac{\operatorname{Im} X[k]}{\operatorname{Re} X[k]}\right)$$
(2)

The equations (1) and (2) are rectangular-to-polar conversion. The rectangular representation of the frequency domain, ReX[k], and ImX[k] are changed into the polar form, MagX[k], and phaseX[k] respectively.

$$\operatorname{Re} X[k] = Mag X[k] \cos(Phase X[k])$$
(3)

$$\operatorname{Im} X[k] = Mag X[k] \sin(Phase X[k])$$
(4)

The equations (3), and (4) are polar-to-rectangular conversion. The two arrays, MagX[k], and PhaseX[k] are converted into ReX[k], and ImX[k] respectively.

To perform the simulation, the sum of the DFT basis functions, was produced over 1024 data array. The FFT was performed to extract the frequency contents from the summed signal over the frequency range 0 to 512. These frequency contents were used to calculate MagX[k], and phaseX[k]. Afterwards multiplying MagX[k] with cosine of PhaseX[k] and sine of PhaseX[k] results ReX[k], and ImX[k] respectively.

#### **Results and Discussions**

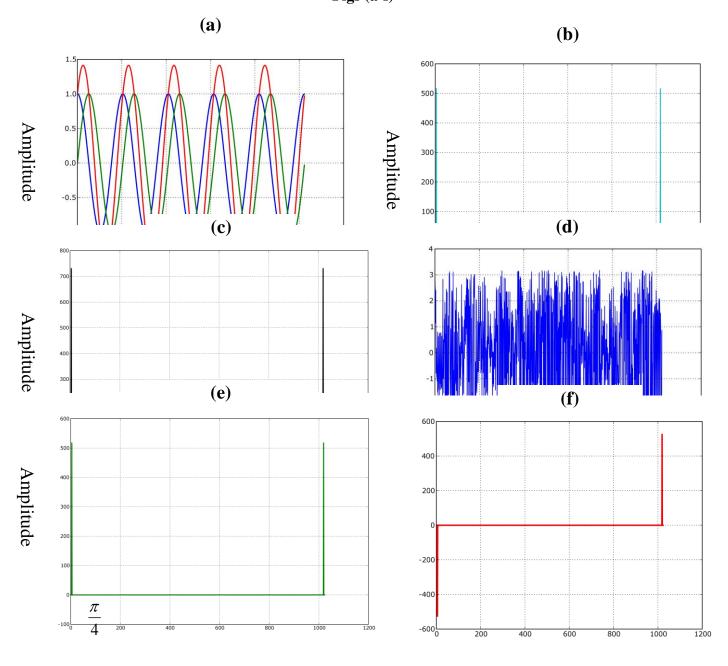
In this surveillance, the sum of two basis functions both of them have same frequency (k = 5) with amplitudes of  $\pm 1.0$  have been generated over the sample numbers from 0 to 1024. It is obvious that the addition of these two basis functions results in a cosine wave with the same frequency (k = 5), rather a new amplitude of  $\sqrt{2}$  unit (arb.) and a phase shit of  $\frac{\pi}{4}$  which has been shown in Fig. (**a**). Here the blue, green, and red colored curves are corresponding to

cosine, sine, and resultant waves respectively. The FFT (Fast Fourier Transform) of the resultant wave of Fig. (a) was performed which is depicted in Fig. (b) whose two spikes at 3.56 and 1017.61 has the same amplitude of 518.55 unit. The magnitude spectrum of the resultant wave was estimated by using the equation (1) which has been shown in Fig. (c) with amplitude 733.34 unit. Similarly the phase spectrum of the resultant wave has also been calculated by utilizing equation (2) which has been exposed in Fig. (d) having amplitude of  $\pm$  3.2 unit spreading over the sample points from 0 to 1024. The Fig. (c) and Fig.(d) are the rectangular-to-polar conversion into Mag*X*[*k*], and Phase*X*[*k*] respectively. On the other hand, the polar-to-rectangular conversion into Re*X*[*k*], and Im*X*[*k*] by using equations (3), and (4) was calculated which have been depicted in panels (e), and (f) respectively. The Fig. (e) has two sharp spears at sample numbers 3.2 and 1019.2 whose amplitude is 518.64 unit as well as the Fig. (f) has also two narrow peaks at sample numbers 3.65 and 1017.6 with amplitude of  $\pm$  527.44 unit.

#### Conclusion

The conversion between rectangular to polar and vice-versa was observed. For this purpose, we have added basis functions of the same frequency (k = 5) over the 1024 samples. Afterwards the FFT of this resultant wave was performed to estimate the rectangular and polar representations in the frequency domain. The amplitudes of the rectangular and the polar notations are as 733.33 unit, and  $\pm$  3.20 unit as well as 518.64 unit, and  $\pm$  527.44 unit respectively.







of Panel (a) whose amplitude is 518.55 unit. Panels (c), and (d) are the rectangular-to-polar conversion into MagX[k], and PhaseX[k] respectively. The polar-to-rectangular conversion into ReX[k], and ImX[k] have been depicted in panels (e), and (f) respectively.

# References

 The Scientist and Engineer's Guide to Digital Signal Processing By Steven W. Smith, Ph.D.

- Brenner, N.; Rader, C. (1976). "A New Principle for Fast Fourier Transformation". IEEE Acoustics, Speech & Signal Processing 24 (3): 264–266. doi:10.1109/TASSP.1976.1162805.
- 3. Brigham, E. O. (2002). The Fast Fourier Transform. New York: Prentice-Hall
- 4. Duhamel. P and M. Vetterli, 1990, Fast Fourier transforms: a tutorial review and a state of the art, Signal Processing **19**: 259–299.
- Sorensen, H. V.; Jones, D. L.; Heideman, M. T.; Burrus, C. S. (1987). "Real-valued Fast Fourier Transform algorithms". IEEE Trans. Acoust. Speech Sig. Processing 35 (35): 849–863.
- 6. Elliott. D. F & K. R. Rao, 1982, Fast transforms: Algorithms, analyses, applications. New York: Academic Press. Carl Friedrich Gauss, 1866. "Nachlass: Theoria interpolationis methodo nova tractata," Werke band 3, 265–327. Göttingen: Königliche Gesellschaft der Wissenschaften.
- Guo. H, G. A. Sitton, C. S. Burrus, 1994, The Quick Discrete Fourier Transform, Proc. IEEE Conf. Acoust. Speech and Sig. Processing (ICASSP) 3: 445–448.
- Shentov. O. V, S. K. Mitra, U. Heute, and A. N. Hossen, « Subband DFT. I. Definition, interpretations and extensions, » Signal Processing 41 (3), 261–277 (1995).

# Design and Implementation of a Wireless Power Transmission System

# D.M. Motiur Rahaman<sup>1</sup>, Must. Asma Yasmin<sup>1</sup>

**Abstract:** Wireless Power Transmission (WPT) is the process that takes place in any system where electrical power is transmitted from a power source to an electrical load without the use of wire through vacuum or an atmosphere. This can be used for applications where either an instantaneous amount or a continuous delivery of energy is needed, but where conventional wires are unaffordable, inconvenient, expensive, hazardous, unwanted or impossible. The power can be transmitted using microwaves, millimeter waves or lasers. Study of different theories and strategies of electromagnetic fields and waves and apply these theories and strategies to the implementation of wireless power transfer are the main objective of this paper. The main problem of WPT system now is its limited range and system efficiency. The power diminishes tremendously at a short distance and efficiency is also very low. Observation of different facts that are responsible for attenuation of electromagnetic fields and were facts that are responsible for attenuation of electromagnetic fields and by efficiency of wireless power transfer is also an objective of this paper. **Keywords:** WPT, Efficiency, Attenuation

#### Introduction

The efficiency of an energy transferring system is the percentage of energy sent which reaches the destination. Sending energy through wires is often more efficient because wires represent a low loss way to confine and guide the energy to where it is needed.<sup>1</sup> Still, generally, wireless energy transfer works very well at short range; and efficient long-distance transfer is possible if the transmitters and receivers are physically large, or if the energy can be formed into a tight beam. A great concern has been voiced in recent years over the extensive use of energy, the limited supply of resources, and the pollution of the environment from the use of present energy conversion systems. Electrical power accounts for much of the energy consumed. Much of this power is wasted during transmission from power plant generators to the consumer.<sup>2,3</sup>

The resistance of the wire used in the electrical grid distribution system causes a loss of 26-30% of the energy generated. This loss implies that our present system of electrical distribution is only 70-74% efficient. There are areas of the world where the need for electrical power exists. Yet there is no method for delivering power. Africa is in need of power to run pumps to tap into the vast resources of water under the Sahara desert. Rural areas such as those in China require the electrical power necessary to bring them into the 20th Century and to equal standing with western nations.<sup>4</sup>

Space Solar Station can provide a great advantage in minimizing the future energy crisis. Here solar plant will be set at satellite and electrical energy will be transmitted wirelessly, in ground receiving station will receive power.<sup>5</sup>

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In limited range application mobile phone, laptop etc. can be charged without plugged in. These eliminate extra wire.

The main problem of WPT system now is its limited range and system efficiency. The power diminishes tremendously at a short distance and efficiency is also very low. So the main problem is to increase range and efficiency and also reduce overall cost.<sup>6,7</sup>

#### **Basic Concept**

The contactless coupling induction system is based on the electromagnetic induction coupling concept in which current and electromagnetic field transmission of primary side coil to independently isolated equipment's. The theories are based on Faraday's law and Ampere's circuital law. This type of transmission power and energy from the electromagnetic field is similar to theoretic basis as wireless microwave transmission. The only difference in wireless microwave transmission is higher system frequency and lower energy, while in the contactless power transmission system the frequency is lower and the energy is higher.<sup>6,8</sup>

# System Design

The structure of the primary side and the secondary side of the contactless power transmission system is shown in fig.1 and its equivalent circuit diagram is shown in fig.2. The primary side includes three parts: power source, controller, and converter. The converter frequency design is set such that it ensures maximum transmission power. The controller offers detection and protection functions during abnormal conditions such as over-current and circuit shortage. The current of the primary input passes through the track of the transmission wire. According to Ampere's Law, flux is produced in the peripheral of the conductor. If the iron core of secondary output is setup nearby the conductor and also according to Faraday's Law, voltage will be induced by secondary output.<sup>9,10</sup> Voltage induced by secondary winding is converted to DC voltage by the converter. Finally, it is added to load output.<sup>7,11</sup>

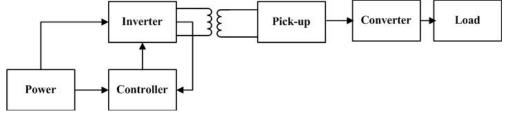


Fig. 1: Contactless power transmission system

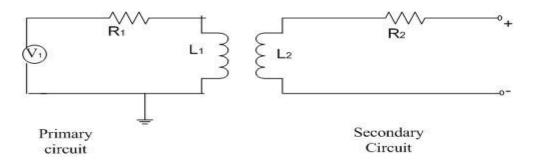


Fig.2: Equivalent circuit of contactless power transmission system

Contactless power transmission system design steps and processes are conducted based on the flowchart in fig. 3.

Designs of respective processes are described below:

# **A. Selection of Frequency**

System working frequency selection is the first step in contactless power transmission design. Therefore, work frequency is selected based on present power electronic technique standards, power components and related system design experiences. In terms of the present power electronic technique standards and system costs, selection of frequency between 10 kHz  $\sim$  100 kHz is more reasonable.<sup>5</sup>

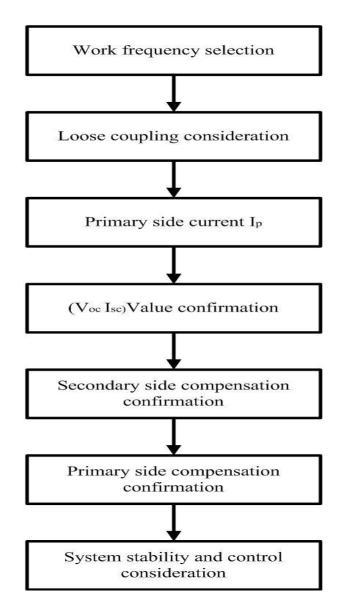


Fig. 3: Design flowchart of the contactless power transmission system

#### **B.** Loose Coupling Consideration

At present, the widely adopted transformer is tight coupling model since it is likely to be limited by existing iron core material and structure. However, the contactless power transmissions system adopts loose coupling inductance. It is less likely to be limited by iron core structure. Since loose coupling inductance is selected based on related design experiences. After confirming the structure of loose coupling Inductance device, basic parameters should be set such as primary input and secondary output coil inductance volume, coupling coefficient, mutual inductance and so on.<sup>8</sup>

#### C. Primary Side Current $I_p$ Selection

In the contactless power transmission system, transmission electrical energy size, and primary input power source transformer structure are closely related to current  $I_p$  generally,  $I_p$  selection begins from smaller value of currents. After calculation, when  $I_p$  value of current fails to meet system electrical energy transmission requirements, value of current can be further increased.<sup>9</sup>

### D. V<sub>oc</sub> and I<sub>sc</sub> Value Confirmation

Based on electromagnetic device selected, when using  $I_p$  selected from primary side current, the open circuit voltage  $V_{oc}$  and short circuit  $I_{sc}$  are tested. During experiment conduction, avoid inadequate rated current of pickup coil which might cause the instability to perform action.<sup>10</sup>

#### **E. Secondary Side Compensation Confirmation**

When secondary side circuit is not compensated, load is able to attain the maximum power transmission which is equal to  $V_{oc}I_{sc}/2$  load required power value is exceeded, the secondary side needs to adopt compensated circuit. The quality factor of the compensated circuit is calculated as shown below.

$$Q_s = \frac{P}{V_{oc} I_{sc}} \tag{1}$$

where P is the transmission power at the load end. The secondary side required VA

$$S_S = P_{\sqrt{Q_S + 1}} \tag{2}$$

If the rate of the secondary side, VA, is higher than the value of quality factor; the system will be able to transmit the required power. If the opposite is true, the design will not be able to transmit required power P. In that case, the design has to be adjusted to enhance the power transmission capability. After secondary side coil rated meets design requirements, the next step is to confirm secondary side compensated circuit and topology adopted. The selection of compensated circuit topology is determined by application. Parallel compensation current source features are suitable for battery charging site; series compensation voltage source features are more suitable for electrically-driven power supply sites.

#### F. Primary Side Compensation Confirmation

The transmission power is divided by the VA rated to derive the quality factor  $Q_p$  of primary side coil. As mentioned, the primary coil compensated circuit is also determined by application. When primary side coil adopts longer cables, series compensation adoption is preferable; when primary side coil is in concentrated winding, parallel compensation adoption is preferable.

### G. System Stability and Control Consideration

If  $Q_p < Q_s$ , stability analysis should be conducted on the system. If system cannot guarantee stability control under all work conductions, the system parameters must be adjusted. Common methods include increasing primary side coil current, improving loose coupling inductance device structure or changing system work frequency etc.

## **Circuit and Working Procedure**

One copper coil was connected to the oscillator and other was connected to the LED as shown in fig. 4. Then the results had been observed for various conditions such as varying distance, varying number of turns, taking external objects between the coils, varying frequency and connecting several LEDs. Finally, a mobile phone charger was designed to charge a mobile phone wirelessly.

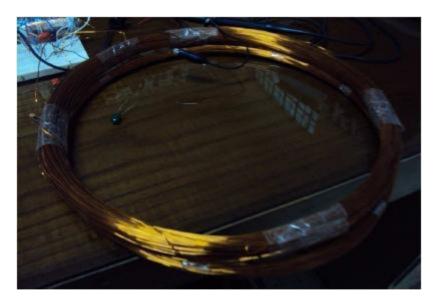


Fig. 4: Transmitter and receiver coil

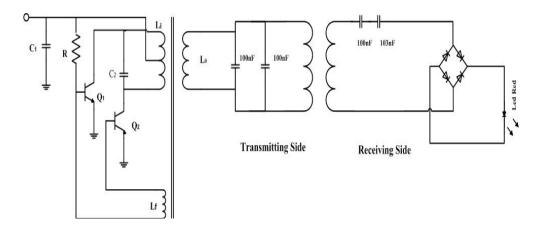


Fig. 5: Circuit for LED lighting

One coil had 200 turns and other had 50 turns. Transmitter coil had inductance 4.68 mH and receiver coil had inductance 11.905 mH. An oscillator was made by L-C combination. The oscillator generates 8 kHz signal. Oscillator was connected to 50 turns coil. Two 100 nF capacitors were connected in parallel with transmitter coil and one 103 nF and one 100 nF capacitor were connected in series with receiver coil. Receiver coil had 200 turns. A bridge rectifier was connected with receiver coil, as shown in fig. 5. LED was connected with rectifier output and result was observed.

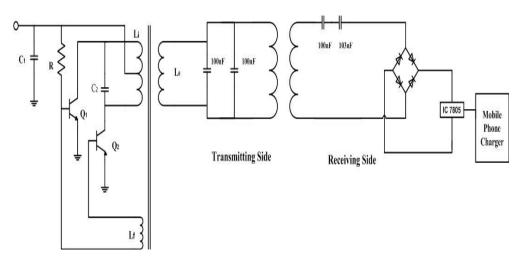


Fig. 6: Mobile phone charger circuit

Now a 7805 IC was connected with rectifier output as shown in fig.6. Output was connected with mobile phone battery charger.

# Result

It had been seen that receiving power diminishes as distance increases. At first power diminishes slowly but at a certain distance power drops rapidly to zero. With increasing frequency the distance was increased as shown in figs. 7, 8. Designed mobile phone charger charges mobile phone slowly because the output current was low.

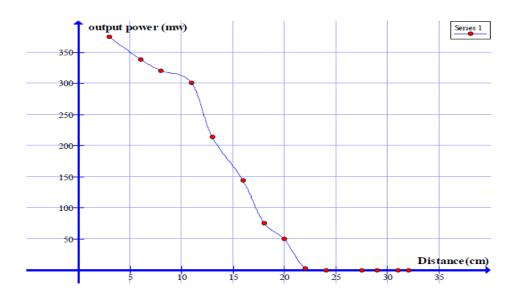


Fig. 7: Graph of output power Vs distance for 8 KHz signal.

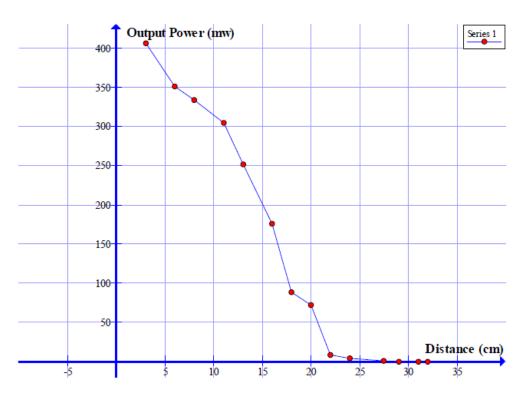


Fig. 8: Graph of output power Vs distance for 30 KHz signal.

# Conclusion

The main problem of wireless power transfer is its low range and low efficiency. Strongly coupled magnetic resonance is a good solution to this problem. In systems of coupled resonances, there is often a general "strongly coupled" regime of operation. If one can operate in that regime in a given system, the energy transfer is expected to be very efficient. For efficient power transfer we must consider some factors. The quality factor, coupling co-efficient and decay constant are major factors to be considered. All of them are function of

frequency. The increase in frequency causes increases quality factor, coupling co-efficient and decay constant, so a frequency must be selected for which coupling co-efficient is greater than decay constant and quality factor is also better. Therefore 30 kHz is the optimum frequency with respect to cost, coupling co-efficient, decay constant and quality factor.

#### References

- 1. Castelvecchi, 2011, The Power of Induction, Science News., 172(3), p. 87-93.
- 2. Gregg E. and Maryniak, 2006, Status of international experimentation in wireless power transmission, *Sunset energy counsel*, Solar energy, 56(6),p.77-80.
- 3. Bryan R., 2006. International cooperation for the acquisition of space based energy, *Solar Energy*, 56(2), p.33-37
- 4. Cheney, 2011 '*Master of Lightning*' Margaret Tesla.
- 5. John M. and Osepchuk, 2007, Health and safety issues for microwave power transmission, *Solar energy*, 56(2),p. 29-32.
- 6. Bubimir D. and Marincic A., 2006, Research Activities and future trends of microwave wireless power transmission, *International symposium Nikola Tesla*, 4(3)p.79-86.
- 7. John M., 1997, The results of NASA Fresh look at the feasibility, *Space Solar Power*, 10(2), p.23-30.
- 8. Bryan R., 2001, Solar power? Ok but why capture it in space?, *Fourth international symposium on space means for power utilities*,8(3), p.57-63.
- 9. Andrey P., and Smakhtin, Valentin V. Rybakov, 2010, Comparative analysis of wireless systems as alternative to high voltage power lines for global terrestrial power transmission, IEEE, p.53-59.
- 10. John M., 2011, Comparison of intercontinental wireless and wired power transmission, *Richard M. Dickinson, Jet Propulsion Laboratory*, NASA.
- 11. Martin F., 2002, *Patterns of Enterprise Application Architecture*, first edition, New York, 5-10

# PAPR Reduction Technique for 3GPP LTE OFDMA System

# Mahfuza Khatun<sup>1</sup>, Must. Asma Yasmin<sup>1</sup>

**Abstract:** LTE (Long Term Evolution) is the last step toward the 4th Generation (4G) of radio technologies designed to increase the capacity and speed of mobile telephone networks. Where the current generation of mobile telecommunication networks are collectively known as 3G (for "Third Generation"), LTE is marketed as 4G. LTE uses Orthogonal Frequency Division Multiplexing (OFDM) for the downlink – that is, from the base station to the terminal. OFDMA meets the LTE requirement for spectrum flexibility and enables cost-efficient solutions for very wide carriers with high peak rates. However, one of the main drawbacks of the OFDMA modulation technique is the large Peak-to-Average Power Ratio (PAPR) of the transmitting signals. This high PAPR causes interference when the OFDM signals are passed through an amplifier which does not have enough linear range. Several PAPR reduction techniques such as magnitude clipping, block coding, and Partial Transmit Sequence (PTS) and pulse shaping have been proposed to reduce the PAPR. In this paper, we evaluate a clipping based PAPR reduction technique. The Complementary Cumulative Distribution Function (CCDF) of the PAPR, which can be used to evaluate the PAPR reduction performance, is derived for OFDMA signals.

Keywords: 3GPP, LTE, OFDMA, CCDF and PAPR.

#### Introduction

At present time the demand on high data rate is increasing in order to support broadband services. Long Term Evolution (LTE) is a project of Third Generation Partnership Project (3GPP) and is an evolution to existing 3G technology in order to increase the capacity and speed of mobile telephone networks. Current working assumptions in 3GPP LTE are to use Single Carrier Frequency Division Multiplex Access (SCFDMA) for uplink and Orthogonal Frequency Division Multiplexing Access (OFDMA) for downlink<sup>1</sup>. SCFDMA is a promising technique for high data rate transmission that utilizes single carrier modulation and frequency domain equalization. Single carrier transmitter structure leads to keep the Peak-to Average Power Ratio (PAPR) as low as possible that will reduced the energy consumption as well as increase battery life time of the mobile to transmit signal from mobile terminal to the base station. SCFDMA has similar throughput performance and essentially the same overall complexity as OFDMA<sup>2,3</sup>

Orthogonal Frequency-Division Multiple Access (OFDMA) is a multi-user version of the popular Orthogonal Frequency-Division Multiplexing (OFDM) digital modulation scheme. Multiple access is achieved in OFDMA by assigning subsets of subcarriers to individual users i.e. the enter channel is divided into many narrow sub –channel, which are transmitted in a parallel, thereby increasing the symbol duration and reducing the Inter Symbol-Interference (ISI). Through OFDMA comprises many benefits (for high data rate) they also suffer many problems higher sensitivity to frequency offsets and phase noise high, envelop fluctuation in the time domain, leading to large PAPR. Therefore SCFDMA is used instead of OFDMA for uplink data transmission to reduce PAPR as well as increasing battery life time as well as reducing power consumption trends.

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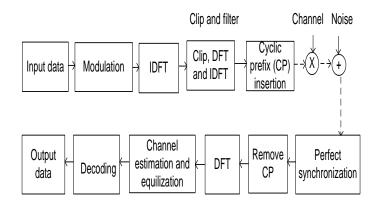
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Recently, OFDMA has received much attention due to its applicability to high speed wireless multiple access communication systems. The problems associated with OFDM also suffers OFDMA inherently such as high PAPR. Some existing PAPR reduction techniques, which were originally designed for OFDM, process he whole data block as one unit, thus making downlink demodulation OFDMA systems more difficult since only part of the subcarriers in one OFDMA data block are of demodulated by each user's receiver <sup>2</sup>. If downlink PAPR reduction is achieved by schemes designed for OFDM, each user has to process the whole data block and then demodulate the assigned subcarriers extract their own information. This introduces additional processing for each user's receiver. In the following we describe some modifications of PAPR reduction techniques for an OFDMA downlink. The PAPR problem for an OFDMA uplink is not as serious as that for downlink transmission since each user's transmitter modulates its data to only some of the subcarriers in each data block.

Before OFDMA modulation the time domain signal is converted into the frequency domain by Discrete Fourier Transform (DFT) method therefore this is called DFT-spread OFDMA (DFTS-OFDM).Therefore the main benefit of DFTS-OFDM compare to scheme is reduced variations in the instantaneous transmit power, implying the possibility for increased power – amplifier efficiency ,low-complexity high quality equalization in the frequency domain and flexible bandwidth assignment.<sup>3</sup> Rest of the paper is organized as follows: section II discussion of LTE system model, section III PAPR reduction techniques, section IV simulation result, section V conclusion.

# LTE OFDMA system model

A simplified block diagram of the 3GPP LTE OFDMA transceiver is shown in Figure 1.





A baseband modulator transmits the binary input to a multilevel sequences of complex number x(k) in one of several possible modulation formats including, Binary Phase Shift Keying (QPSK), and 16 level-QAM at the transmitter side. BPSK is the simplest form of Phase Shift Keying (PSK). It uses two phases which are separated by 180° and so can also be termed 2-PSK. It does not particularly matter exactly where the constellation points are positioned, and in this figure they are shown on the real axis, at 0° and 180°. This modulation is the most robust of all the PSKs since it takes the highest level of noise or distortion to make the demodulator reach an incorrect decision. It is, however, only able to modulate at 1 bit/symbol and so is unsuitable for high data-rate applications when bandwidth is limited. These modulated symbols, are perform an N-point Discrete Fourier Transform (DFT) to produce a frequency domain representation <sup>4</sup>:

$$S_1(n) = \frac{1}{1} x(k) e^{\frac{(-j2\pi kn)}{N}}$$
(1)

(2)

And inverse Discrete Fourier Transform for time domain expression  $x(k) = 0^{1} S1(n) e^{\frac{(j \equiv \pi kn)}{N}}$ 

where k is the sample index, j is the imaginary unit, x is the discrete symbol and x(k) is the data symbol. From IDFT time domain signal is passes for clipping and filtering. The clipping is followed by filtering to reduce out of band power. The DFT transform the clipped signal into frequency domain signal. The in-band frequency domain signals are passed to the second IDFT while out-of band signal components are null. Therefore it doesn't causes interference to the in- band OFDMA signal <sup>1</sup>. Then cyclic prefix inserted and transmitted through the channel. In the same way at the receiver side the signal is receive and the cyclic pre fix is remove then this incoming signal is DFT and we get the base band signal after decoding. Peak to average power ratio (PAPR )is a comparison of the peak power detected over a period of sample occurs over the same time period and defined as

$$PAPR = \frac{\max_{0 \le m \le T} |s(m)|^{2}}{\frac{1}{TN} \int_{0}^{TN} |s(m)|^{2} dm}$$
(3)  
Expressing in decibels  
$$PAPR_{dB} = 10 \log_{10}(PAPR)$$
(4)

Where s(m) is the transmitted signal, T is the symbol period of the transmitted signal . One of the most frequently used performance measures for PAPR reduction techniques is Cumulative Distribution Function (CDF) . But in this paper we use, the complementary CDF (CCDF) is commonly used instead of the CDF . The CCDF of the PAPR denotes the probability that the PAPR of a data block exceeds a given threshold<sup>7</sup>. There is another performance parameter bit error rate analysis. Although QPSK can be viewed as a quaternary modulation, it is easier to see it as two independently modulated quadrature carriers. With this interpretation, the even (or odd) bits are used to modulate the in-phase component of the carrier, while the odd (or even) bits are used to modulate the quadrature-phase component of the carrier. BPSK is used on both carriers and they can be independently demodulated. Generally bit error rate of BPSK is lower than the QPSK.<sup>8</sup>

#### **PAPR Reduction Technique**

Amplitude clipping is commonly used the simplest technique for PAPR reduction .In a amplitude clipping the peak envelope of the input signal limits to a predetermined level or otherwise passes the input signal through without change that is,<sup>1</sup>

$$X(y) = \frac{1}{y}, \qquad \text{if absolute value } x(y) \text{ less than or equal W and} \\ \text{if absolute value } x(y) \text{ greater than W}$$
(5)

Where q(y) is the phase of transmitted signal x

Without filtering noise produced due to amplitude clipping falls both in-band and out of band

Out-of- band radiation reduces spectral efficiency and in-band distortion cannot be reduced by filtering and results in an error performance degradation <sup>8</sup>. Though at first clipping and then filtering can reduce out-of-band radiation which may also cause some peak re-growth. As a result the signal after clipping and filtering will exceed the clipping level at some points. We can use iterative clipping-and-filtering operation to reduce overall peak re-growth in our desired level. When the signal converted into the time domain again, the signal is recovered with some error, though it is close to the original signal. An improvement can be made by repeating the above procedures. <sup>9</sup>

# **Mathematical expression for BER**

For determining error-rates mathematically, some definitions will be needed:

- E<sub>b=</sub> Energy-per-bit
- E<sub>s=</sub> Energy-per-symbol=n E<sub>b</sub>
- $T_b$ = Bit duration
- $T_s$ = Symbol duration
- = Noise power spectral density (W/Hz)
- $P_b$ = Probability of bit-error
- P<sub>s</sub>= Probability of symbol-error

Q(x) will give the probability that a single sample taken from a random process with

zero-mean and unit-variance Gaussian probability density function will be greater or equal to x. It is a scaled form of the complementary Gaussian error function<sup>8</sup>

$$Q(x) = \frac{1}{\sqrt{2\pi}} e^{-t^2/2} dt$$

$$= \frac{1}{2} \operatorname{erfc}\left(\frac{x}{\sqrt{2}}\right), x \ge 0$$
(6)

The error-rates quoted here are those in additive white Gaussian noise (AWGN). These error rates are lower than those computed in fading channels, hence, are a good theoretical benchmark to compare with.

The equation for bit error rate (BER) can be calculated as follows

$$P_{b} \frac{2E_{b}}{N_{o}}$$
or  $\frac{1}{2}$  erfc

# Simulation result

Complementary cumulative distribution function (CCDF) of PAPR, which is the probability that PAPR is higher than a certain PAPR value PAPR0, is calculated by Monte Carlo simulation. The parameters used for the calculation of PAPR are illustrated in Table 1.

Table:1 The system parameters used for simulations

SIZE OF OFDM	256
Symbol	
Interpolation factor	2
(Oversampling factor)	
SIZE OF FFT	512
modulation	BPSK
iteration	8
Maximum symbol	1e^4

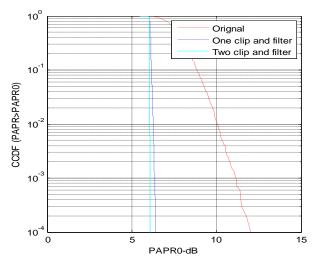


Fig.2: Comparison of CCDF of PAPR for LTE OFDMA using clipping method only.

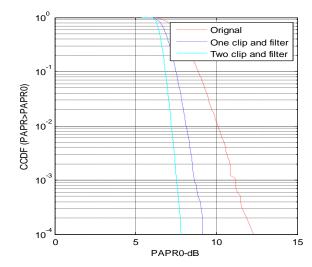


Fig.3 Comparison of CCDF of PAPR for LTE OFDMA using clipping and filtering method.

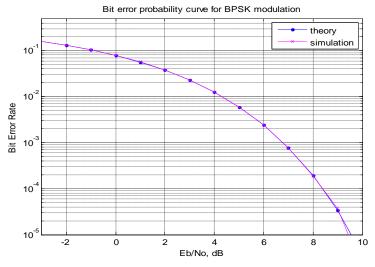


Fig.4: BER vs. SNR using ideal channel.

The simulation result of this method is shown in figure 2 and 3. It can be observe that OFDM signal is has higher PAPR and after applying this method PAPR is reduced significantly. This PAPR is decreases as the number of clip and filtering is increased. Because the clipping is followed by filtering to reduce out of band power. The bit error rate (BER) is an another important Performance parameter in wireless communication system for quality measurement of recovered data. Next we evaluate the BER performance for BPSK or QPSK modulation.

## **Comparison between Simulation Results and Theoretical Results**

In this simulation result, the BER shows good agreement as shown in figure 4 (for ideal channel).Noise produced due to amplitude clipping falls both in-band and out of band. Out-ofband radiation reduces spectral efficiency and in-band distortion cannot be reduced by filtering and results in an error performance degradation. Though at first clipping and then filtering can reduce out-of-band radiation .This may also cause some peak re-growth. As a result the signal after clipping and filtering will exceed the clipping level at some points. Iterative clipping-andfiltering operation can be uesd to reduce overall peak re-growth in our desired level.

### Conclusion

Multicarrier transmission is a very attractive technique for high-speed transmission over a dispersive communication channel. The PAPR problem is one of the important issues to be addressed in developing multicarrier transmission systems in LTE. In this article ,PAPR reduction techniques are described for multicarrier transmission. From the computer simulations the conclusion can be said that this proposed clipping method reduced the PAPR significantly as well as increase average transmitted power ,improve amplifier efficiency and reduced cost.

# References

- 1. Han S. H., Lee J. H., April 2005 "An overview of peak-to-average power ratio reduction techniques for multicarrier transmission," *IEEE Personal Communications*, vol. 12, iss.2,pp.56-65.
- 2. Karakaya B., Arslan H., and Cirpan H. A., April 2008, "Channel estimation for LTE uplink in high Doppler spread," *Proc. WCNC*, pp. 1126-113.
- 3. Rappaport T. S., 1998, Wireless communications principles and practice, *Prentice Hall*, 2nd Edition.
- 4. Deng Shang-Kang 1998, Mao-Chao Lin ,Graduate Institute of Communication Engineering National Taiwan University
- 5. Venkataraman A., Reddy H., and Tolga M. Duman .Department of Electrical Engineering, Arizona State University, USA Received 11 January 2005; Revised 25 July 2005; Accepted 1 September 2005, Tempe, AZ 85287-5706.
- Myung H. G., Lim J., and Goodman D.J., September 2006 "Single carrier FDMA for uplink wireless transmission," *IEEE Vehicular Technology Magazine*, vol. 1, pp. 30-38,no. 3.
- 7. Salah M, Abdel-Fadeel G., and Zaki B. Nossair , Peak to Average Power Ratio Reduction in Single Carrier OFDMA Systems.

- 8. Panicker R. Alex. and Joseph M. Kahn, Fellow, Algorithms for Compensation of Multimode FiberDispersion Using Adaptive Optics, *IEEE*
- 9. Sari H. ,Karam G. and Jeanclaude, June 1994 "An analysis of Orthogonal Frequency Division Multiplexing for Mobile Radio Applications," *Proc.IEEE VTC*, pp. 1635-1639.

# The Greek Spirit in Milton's Samson Agonistes

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**Abstract:** This article is an attempt to show in *Samson Agonists* how John Milton dramatizes an Old Testament myth in the form of Greek tragedy. Life has been depicted in this play as a Puritan struggle, for the survival of the good and virtuous. Milton builds the tension between the potentiality of action and the intensities of verbal and intellectual expression. For this he achieves the tone or 'spirit' of classical tragedy. The dramatic structure of *Samson Agonistes* provides a case in point where the complexities of Hellenic and Hebraic are mingled together. **Key Words: Tragedy, Struggle, Drama, Action, Complexity**.

# Introduction

In *Samson Agonistes* Milton dramatizes for a Christian audience an Old Testament myth in the form of Greek tragedy. Thus because the play seeks to harmonize the traditions Milton was heir to, it has elicited a variety of conflicting critical approaches. Basically, they may be grouped into five categories concerned with (1) The physical and circumstantial similarities between Milton and his protagonist and with, (2) The play's sources, (3) Its dramatic structure (4) its spirit and (5) its meaning in the present essay, while tracing the development of these approaches, will attempt to evaluate them and the light they throw on *Samson Agonistes*. Milton has based his poem on the design of classical epic of Homer, Virgil, Aeschylus, Sophocles and Euripides. Johnson made a comment on the drama that:

"it is only by a blind confidence in the reputation of Milton that a drama can be praised in which the intermediate parts have neither cause nor consequence, neither hasten nor retard the catastrophe."

Milton's use of chorus, his observance of the three unities, following the theory of catharsis, faith in gods, a use of irony, an so many things show Milton's great affinity with Greek tragedy. The subject of Greek tragedy like the conflict between the free will and destiny, between an absolute inward liberty and an inexorable external necessity are also shown in *Samson Agonistes*. In fact Milton has very successfully recaptured the form and spirit of the ancient Greek tragedy and Old Testament in this drama.<sup>1</sup>

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#### The subject and matter

The story of Samson is probably one of the most familiar Old Testament stories, event today. The story is modified, not simply in the interests of children at Sunday school but to make it suitable as a Christian story for an audience of any age: Samson's sexual adventurism and barbaric violence fit awkwardly into any regular pattern of a Christian hero. In fact, the history of the Samson legend, from earliest times, is one of modification and interpretation. The oral tradition behind the first written version of the legend is probably as old as twelve centuries B.C. The revision stressed monotheism (the true God versus Dagon), divine justice (the Israelites punished for their sins), and divine mercy (God sending Samson as a champion to deliver Israel out of the hands of the Philistines).

Samson's birth becomes an event specially ordained by God, marked by the appearance of an angel. He becomes, not just an exceptionally strong man, but a man whose strength is supernatural, God-given, granted in order that the divine purpose for Israel, the Chosen People of God, should be advanced. In this story Samson has transformed from a national folk-hero into a special agent of God.

During the scholastic period (roughly A.D. 1000-1500) there was a development in interpretation which foreshadows Milton's treatment. Less attention was paid to Samson's sensational feats, and more to the psychology of the Dalila episode. The scholastics gave much more attention than previous interpreters to the last period of Samson's life his betrayal and capture, his blindness, his labour at the mill, and his death. The last phase of Samson's career was on at least one occasion compared with the last days of Christ, in a Palm Sunday sermon.<sup>2</sup>

The comparison of Samson with Christ was widely accepted from the scholastic period until Milton's own time. Thomas Hayne's *General View of the Holy Scriptures*, published in 1640, tabulates nine allegorical parallels. For example, the births of both Samson and Christ were foretold by angels; both had enemies who sought to do them mischief; both obtained their victories by the spirit of God, without men's aid; Samson was betrayed by the kiss of Dalila, Christ by that of Judas and so on. We should remember that the allegorical tradition, in which Samson was treated as a figure of Christ, was still very much alive in the seventeenth century, and that Milton must have been aware of it.

Milton was not the first to notice the suitability of Samson for a tragic hero. He was the hero of many plays, in Latin and the modern European languages, written during the sixteenth century. Salianus had discussed the last days of Samson in terms of the theory of tragedy given by Aristotle in the *Poetics*. In other respects the current of thought in the seventeenth century was

flowing towards *Samson Agonistes*: stress was increasingly laid on Samson as one whose tragedy came about through a failure to live up to the call from God; and emphasis on his physical suffering was giving way to interest in the spiritual and psychological aspects of his ruin. Any tragedy arising out of these tendencies of thought would necessarily stress Samson's inner life rather than the events of his career.

# A Note on the Title

The form of Milton's title is of course common in Greek tragedy the hero's name followed by some distinguishing word or phrase: *Oedipus the King, Oedipus at Colonnus, Prometheus Bound,* and so on. It is worth considering briefly what significance the epithet *Agonistes* may have had for Milton.

The *agonist* was a contender in the Greek games, the forerunner of the modern Olympic athlete. The word agonistes in Milton's title must refer primarily to Samson's physical prowess: his feats in the celebrations organized for Dagon, and his final wrestling with the pillars which upheld the 'spacious Theatre' sheltering the Philistian lords. We might paraphrase this sense by rewording the title *Samson at the Games*. It seems unlikely however, in view of Milton's general treatment of this theme, that he would have chosen a title with reference only to Samson's physical participation in Dagon's games; and tradition offers numerous examples of a symbolic extension of the idea of the athlete.<sup>3</sup>

A further aspect of Milton's drama is suggested by the related word 'agonistic', which is a rhetorical term denoting the attempt to overcome an adversary in argument. If we compare *Samson* with any Shakespearean tragedy, we immediately notice an absence of action, or plot, in Milton's drama, and realize how much it hinges upon discussions which often become 'arguments.

Another related word is of course 'agony', and no special insight is required to see that Samson's agony, particularly his agony of mind and spirit, is quite central in Milton's presentation so much so that many critics have been deflected by its expression to thinking about Milton's own sufferings rather than about his art. Also the word 'agony' is traditionally used in a context which some critics regard as having great relevance to Milton's conception of his hero. In Gethsemane, immediately before Christ's arrest, trial and crucifixion, he suffered '**the agony in the garden**.'

## Samson's relationship with Greek Tragedy

In the preface to *Samson Agonistes*. Milton makes a general statement on that sort of Dramatic Poem which is call'd Tragedy'. He makes it clear that in writing his drama, he gave careful consideration both to Aristotle's classical theory of tragedy, and to actual examples of Greek drama, particularly the works of '*Aeschulus, Sophocles and Euripides, the three Tragic Poets unequall'd yet by any*'. The relationship of *Samson* with Greek theory and practice cannot be discussed at all fully here.

Structurally, *Samson* is obviously much closer to Greek tragedy than to contemporary English works; indeed it is even more regular in construction than most Greek tragedies! Milton limits the action to the final episode in Samson's life, limits the duration of the action to a few hours only, keeps Samson on stage for almost the whole time, and has the final event occur off stage. The chorus is used in the Greek way, to provide a commentary on the action from the standpoint of the ordinary man, to point significances and sometimes to lament, to give 'flashbacks' on Samson's past career, thus rooting the drama in the Biblical story while avoiding reference to the more embarrassing episodes in Samson's career.<sup>4</sup>

# **Concentration and Milton's language**

Some critics may say that the most important single quality *Samson* derives from its 'Greek' construction, but it should say 'concentration'. It is short enough to be read at a single sitting; there is no 'sub-plot' to complicate our response; everything has a direct relation to the hero. The language of the verse, shorn of connotative exuberance, demarcates the action like a spotlight: for the time *this* is all matters. Some critics have objected to the poem's diction, declaring that it denies the resources of language, depriving English of its natural richness and sap. *Samson's* language has been compared unfavourably with that of *Comus*, with little consideration for the very different kinds of decorum required by each.

Defenders of *Samson's* language have pointed to Milton's 'up-to-dateness', pointing out that Shakespearean richness in diction was generally avoided in the age of Dryden, and that this was the age when members of the Royal Society were imposing on themselves a '**close, naked, natural way of speaking'**. It is interesting that the language of *Samson* can be linked with contemporary practice and aspiration in this way, but it is critically not very relevant. The austerity of Milton's language is perfectly in accord with the nature of his subject; it has the strength and honesty and lack of superficial 'attractiveness' of a mind purged of self-deception and compromise. Those who object to the language of *Samson* are tacitly urging the claims of the 'sensibility' which enjoys poetic language in and for itself; but the action of this drama takes

place in a region where sensibility is not enough. It should be remembered though that Milton unquestionably designed the work to be read at a single sitting; and we shall not feel its peculiar intensity and power until we respond to this intention.<sup>5</sup>

## Samson and the Chorus

Through Samson's own eyes we have seen the contrast between his divinely ordained birth and upbringing and his present plight, through the eyes of the Chorus we have a more 'external' view. They emphasise the contrast between what he now looks like physically, 'with languish head unpropt,' and the 'irresistible Samson' of earlier days, 'whom unarmd / no strength of man, or fiercest wild beast could withstand'. They speak of him tearing the lion, working havoc with the jawbone of a dead ass, removing the gates of Azza. And, as people do in the presence of misfortune, they go on to philosophies about it. 'Samson is not just the medieval tragic hero cast down by Fortune, but the Aristotelian hero ruined by a moral flaw'. If the theory is Aristotelian, it is also modern in its in its insistence that it is human potentialities and weaknesses which make a tragic hero, rather than something fortuitous like being a king.

Samson's first words to the Chours apparently but only apparently contradict what he has earlier said about the loss of his sight:

Yet that which was the worst now least afflicts me, Blindness, for had I sight, confus'd with shame, How could I once look up, or heave the head.

Psychologically, the movement is entirely natural. Previously Samson had been immersed in himself; now his mind moves outwards, and as he imagines his situation in the eyes of his people, he is filled with shame. It is a painful moment, but represents a necessary step towards his regeneration, a turning towards renewed fellowship with his own people. At first the shame is more than he can bear, and he retreats by implying a condemnation of God for giving him strength without wisdom. However plausible Samson's words are psychologically, what they imply is unacceptable. The task God had set him was not too hard for his intelligence; it merely required common prudence; and if we recall the Biblical story, Samson had plenty of warning of the Philistines' intentions before he finally succumbed to Dalila.<sup>6</sup>

The reply of the Chorus is very human, embracing a Jewish commonplace (Don't call God into question); a universal cliché (Many wise men have been deceived by women); and something like vulgar curiosity (But why did you do it?)

In putting into Samson's mouth the answer to this last question, of why he had married a woman of the Philistines, Milton makes a subtle and significant point. Samson explains, of his first marriage, to the woman of Timna, that he knew '**From intimate impulse**' that the marriage was God's will. This was, of course, an excellent reason. We must rely upon, as we must obey, the inner light. Old Testament prophets and seventeenth-century Puritans agree on that. Yet the responsibility is an awful one; for nothing is easier than to mistake the promptings of our own unregenerate natures for the inward call from God. T.S. Eliot has reminded us that sex, the most imperative of the instincts, '**may simulate to perfection the voice of the Holy Spirit**' ("Thoughts after Lambeth'). That is what happened to Samson, as he confesses:

.... The next I took to Wife (O that I never had! Fond wish too late) Was in the Vale of *Sorce, Dalila*, That specious Monster, my accomplisht snare. I thought it lawful from my former act, And the same end; still watching to oppress *Israels oppressours*.'

The next (brief) speech of the chorus takes up Samson's words 'still watching to oppress / *Israels* oppress-sours'. Psychologically it is very natural. It says the kind of thing we are all apt to say to someone to whom we are trying to be kind, but toward whom we have an underlying hostility. It begins with balm and ends with gall: 'Yet *Israel* still serves with all his sons.'

Dalial's account of her dealings with 'the Magistrates/And- Princes of my country is plausible'. There seems no particular reason for us to prefer Samson's view that she betrayed him through her inability to resist '*Philistian* gold' to her statement that 'to the public good/ Private respects must yeild'. Some readers may wish to side with Dalila here, and ask why, when Samson married a Philistian woman with hostile intent toward her people ('still watching to oppress/ *Israels* oppressous') it was so wicked of her to co-operate with the Magistrates and Princes of her county in the way she did. (One does not need to read far into the annals of counter-espionage to realise that governments nearer home to us than the ancient Philistines have employed women in rather similar ways.) Much of the answer is given explicitly by Samson.

(1) Samson loved her and therefore presumably intended her no harm, whereas her 'patriotism' involved her in directly harming her husband.

- (2) He employed no deceit when he married her, made no pretence of having abandoned his hostility to her nation.
- (3) A wife marrying outside her nation takes the nationality of her husband (and therefore Dalila and not owe allegiance to the Philistines.
- (4) If her nation chose to ignore the well established custom, the it acted impiously and illegally, and should not have been obeyed.
- (5) The gods of the Philistines could not be genuine gods, if they needed to emply ungodly deeds; and were therefore to be rejected.

If we accept, as of course we must, the convention that the wife owes allegiance to her husband's country, all this is logical; and if Dalila had been more amenable to logic, she could not have so complacently looked forward to her future fame ' In *Ecron, Gaza, Asdod*, and in *Gath*'. It seems to me that our assent to Samson's statement of the ethical principles involved by no means depends upon an inert acceptance of the fact that Samson's God is the true God, and those of Dalila false.

In Milton's poetry there is a nice fusion of elements both of the Renaissance and the Reformation. The Renaissance was characterized by renewed interest in the writings of the ancient Greeks and Romans. The scholars of the Renaissance period infused into English the beauties of Greek and Roman literature. Under the influence of the Renaissance they adored beauty, romance, and plastic arts. Love for beauty, music and art became the governing passions of writers during the Renaissance. This glorification of beauty, music, art, love and exuberance of life is also known as Hellenism or classicism. Milton's poetry reveals such classicism at every step. *Samson Agonistes* may fairly be called classical both in language and in structure.<sup>7</sup>

# A great critic Jebb declares

"A more interesting inquiry than any regarding the form of the *Samson Agonistes* is that regarding its spirit., Granting it to be in diction and in structure representative of that Greek drama which was its model, how far, we ask, is it animated by the spirit, by the dominant idea, of its original? This point appears to have been too little considered by the critics of Milton's great poem".

Jebb is quite correct in saying that imitating the form of classical tragedy is one thing, but capturing the spirit of classical tragedy is another and a greater thing. How far has Milton succeeded? Jebb would contend that he has failed. He devotes a paragraph to Mathew Arnold's

definitions of '**Hebraism**' and '**Hellenism**' and then proceeds to the dangerous but fascinating business of classifying Milton.

"Milton's mind was, in the literal and proper sense, Hebraic. When a man with this bent of thought selected as the subject for a poem an episode of Hebrew history, the treatment of the subject was sure to be genuinely Hebraic. Samson is the champion of the Israelites against the Philistines. Jehovah is the God of the Israelites; Dagon is the protecting deity of the Philistines. Samson, though disloyalty to himself, has been permitted to fall into the hands of the idolaters; and Israel shares in his humiliation. Yet, even in this abasement, Samson is confident that Lord of Hosts will finally assert his own majesty against the idol. This confidence is justified: the honour of the true God and of His chosen people are vindicated by the catastrophe which punishes the weakness, as it closes the penance, of His individual minister. This is the issue of the drama Jehovah has prevailed over Dagon; Israel is avenged on Philistia'.

Jebb offers a comparison of Samson with Herakles, the point of which he expresses as follows: "The central idea of Samson's history and in harmony with that history, the central idea of Milton's poem, is the idea of a national champion, first victorious, then abased then finally triumphant in a national cause. The feeling uppermost in Samson's mind is this that the strength entrusted to him for the honour of God and of Israel has, through his own weakness, been betrayed and crushed; and that the great cause which he was commissioned to uphold has thereby been dishonoured. The central idea of the story of Herakles is that of a champion of the whole human race, persecuted throughout his mortal life by a cruel destiny. Samson in his death triumphs over the Philistines; Herakles in his last agony is the victim of fate".

The Greek spirit other than aesthetic is a combination, a blend, of all the aspects we have been considering, and doubtless of many more. It is possible to find un Hellenic drama which possesses one or more of these qualities; it is the combination which is truly Hellenic. Shakespearian tragedy is the combination which is truly Hellenic. Shakespearian tragedy is both thoughtful and sublime; but it is not didactic or religious or serious in the Greek way. Certain religious dramas, such as those of Calderon, are deficient in depth and meaning. In more modern tragedies, the note of sublimity is tragically absent. At best we can say, with regard to artists like Ibsen and Tehekov, that we are inspired by the sheer integrity which faces life as it is. But much has disappeared and it is not merely splendor. Milton was one of the last men whose intellect comprehended all the aspects of the Greek spirit and whose genius caught that spirit in a piece of living art.<sup>8</sup>

# Conclusion

Lastly *Samson Agonistes* may fairly be called classical both in language and in structure. It is obvious that Milton represents not only the highest, but the completest type of Puritanism. But it should never be forgotten that the culture of the Renaissance was never totally exterminated by his puritanical bent of mind. He was thoroughly imbued with classical learning and scholarship. He sometimes expresses the undesirable aspects of Puritanism, its narrowness of outlook, its want of humour and its intolerance. Moreover, Milton is devoid of the wide humanity and the all embracing sympathy. The Renaissance elements are seen in his love of beauty, his classical learning, and his use of classical forms of poetry.

# References

- Cruden's Concordance (Lutterworth, rev.ed., 1954), The Oxford Classical Dictionary (Oxford, Clarendon Press, 1949).
- 2. Hanford. J.H, *A Milton Handbook* (Appleton-Century-Crofts, New York, 4<sup>th</sup> ed., 1946.
- Radzinowicz. M. A. N, 'Samson Agonistes and Milton the Politician in Defeat', Philological Quarterly, vol. 44 (1965).
- 4. *Milton's Dramatic Poems*, ed. Geoffrey and Margaret Bullough (Athlone Press, 1958).
- 5. *The Poetical Works of John Milton*, ed. Helen Darbishire (Oxford, Clarendon Press, vol.ii, 1955).
- Krouse. F. M, *Milton's Samson and the Christian Tradition* (Princeton University Press, 1949).
- 7. Parker. W. R, *Milton's Debt to Greek Tragedy in Samson Agonistes* (Johns Hopkins Press, 1937).
- 8. Parker. W. R, '*The Date of Samson Agonistes Again*', in Joseph Wittreich (ed), *Calm of Mind* (Case Western Reserve Press, 1971).

# English Correct Pronunciation: Obstacles for Bengali Speaking People

# Md. Ziaur Rahman<sup>1</sup>, Sazzad Hossain<sup>2</sup>

**Abstract:** This study regarding obstacles of English Correct pronunciation for Bengali speaking people is one of the recently discussed issues. This paper attempts to find out problems of correct pronunciation and to provide possible solutions . However, through a vivid and thorough comparative study between English sounds and those of Bengali, it is minutely represented from phonetic, phonological, morphological, syntactic, semantic and pragmatic points of view. Actually, confusion of pronunciation for Bengali speaking people is mainly from the place and manner of articulation as all Bengali sounds do not match in case of pronunciation with those of English. Moreover, overgeneralization is another reason for incorrect or diverted pronunciation which is very meticulously reflected in this paper. With a view to making this work more ornamental and informative, some relevant examples between correct and incorrect pronunciation have been inserted.

Key Words: Phonological, Phonetic, Semantic, Articulation, Over-generalization

# Introduction

Pronunciation is "making sounds of speech the way in which a sound, word or language is articulated, especially in conforming to an accepted standard"<sup>1</sup>. But it is often noticed problematic to pronounce correctly when the target language is a second or a foreign language. "Actually foreign language learning occurs in the formal situation of a classroom, and the learner has hardly any access to the target language beyond the classroom door"<sup>2</sup>. Everybody is acquainted with a set of sounds of his/her mother tongue. Organs of speech have also been matured up according to his/her language 1 since the birth. So second language or foreign language specially speaking correctly is always a difficult aspect to a greater extent. Both as a learner and a teacher-researcher of EFL, I have had first-hand experience and the opportunity to observe that the Bengali speaking learner confronts difficulty in learning English pronunciation including sounds, stress and intonation related to the phonetic and phonological level. He/she often finds English word formation and sentence construction, respectively concerned with the morphological and syntactic level, quite problematic. Moreover, the learner faces problems in learning vocabulary items and to convey meanings through and/or receive meanings of words, phrases, clauses, sentences/ utterances, discourse, and so forth related to the semantic and pragmatic level. Such problems obviously seriously retard the learning of EFL by the Bengali speaking learners. Therefore, it seems reasonable to take account of and identify what linguistic problems the Bengali speaking EFL learner encounters and why the consideration and interpretation of the issue in question are completely based on my practical experience as a learner and on my observation as a teacher-researcher of EFL. Finally, a number of suggestions have been made so as to address and lessen the problems, on the one hand, and to ensure the smooth and optimal learning of EFL on the other.

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# Objective

To ensure good pronunciation that radiates the beauty of one's elegant personality. As English is gradually assuming the status of a lingua franca or a common language, so my intention is to focus out the importance and usefulness of correct pronunciation to the careless learners as well as unaware practitioners of our country. This scenario reflects the importance and usefulness of learning a spoken language correctly and more specifically picking up a standard/ received pronunciation(RP), because the aim of learning a language should, therefore, be to make one capable of expressing oneself flawlessly both in written and oral expressions.

## **Bengali English Phonology**

feature	explanation	sound file
retroflex tapped <i>R</i>	<r> is pronounced by flicking (i.e. tapping) the tip of the tongue against the roof of the mouth — thus making only</r>	and I was studying for electronic Engineering.
unaspirate	there is no release of air when precedes a vowel in words like <i>pin</i> and <i>pot</i>	_ and uh, so what happened, uh, that my parents found a suitable match
unaspirate <t></t>	d there is no release of air when <t> precedes a vowel in words like <i>tin</i> and <i>top</i></t>	my, our two sisters met in a party in different town where our parents lived
	<v> and <w> are pronounced nterchangeably regardless of spelling</w></v>	I just realised that, uh, Indian food is becoming so popular that one day it will land on the shelf of the supermarket with vengeance-and it
$V \sim W$		did!
		and the housewife- be it British or Caribbean or Indian or anyone they were able to, with confidence they are able to pick up a pack of Indian food in their trolleys for their weekly shopping.
F <i>TH-</i> s stopping t	<pre> in words such as thumb and three is oronounced using a <t> sound and in words uch as this and that using a <d> sound — here is often no release of air when &gt; orecedes a vowel in words like thick and hin</d></t></pre>	I just could not think that I could marry anybody in this country.
rhoficity	he <b><r></r></b> sound is pronounced after a vowel n words like <i>hard, corn and nurse</i>	and I know, I remember when I when my first visit in early sixties there were hardly in Central London.

## Phonetic and phonological problems

No language exactly matches with another because of phonological differences. Bengali .consists of 51 alphabets where as English has only 26 which are 50% of the Bengali sounds. Moreover, English has 44 IPA symbols but Bengali does not have these types of symbols to get correct pronunciations. Since English is a non-phonetic language and there is no one-to-one correspondence between the graphemes (the letters of the alphabet) and the sounds actually produced and realized, at the phonetic and phonological level, the Bengali speaking EFL learner usually faces difficulties in, firstly, 'speech production' encompassing which articulator(s) to use how to pronounce speech sound and how to pattern speech sounds to convey meaning and, secondly, in 'speech perception' covering how to receive speech sound(s) to perceive meaning. It is commonly found in the elementary learner that he/she endeavors to learn pronunciations of words by looking at their spellings, and consequently learns mispronunciations of many of them, for example, adjective, adjustment, future, knee, knowledge, lamb, comb, lieutenant, calm, palm, pneumonia, Psychology, Wednesday, etc. This mainly happens due to faults in teaching, indifference of the teacher to how the learner learns pronunciations of difficult words/expressions and the teacher's lack of training.

## **Aspirated Consonant Phonemes**

Emphatic expressions are very difficult for Bengali speaking people. In English /p, t, k/ are called aspirated sounds as they are typically accompanied by aspiration, especially when initial in a stressed syllable. Examples of aspiration are; part, temper, key. As the Bengali speaking learner is naturally trained to articulate Bengali consonants and as there are a lot of differences between Bengali and English consonants, he/she finds the pronunciations of a number of English consonants difficult in both production and perception.

Firstly, while the Bengali language has as many as twenty plosives, the English language possesses six /p b t d k g/. The Bengali speaking learner is used to using both aspirated and unaspirated sounds in his/her mother tongue as it has separate aspirated and unaspirated phonemes producing different meanings. Unlike Bengali, the English language has no corresponding aspirated plosives, and the voiceless plosives /p t k/are aspirated in the initial position of the stressed syllable but unaspirated in other positions. As a result, the Bengali speaking learner cannot exactly pronounce the aspirated allophones of English voiceless plosives /p t k/

Secondly, the Bengali speaking EFL learner cannot exactly articulate and even perceive English inter-dental fricatives since there are no inter-dental fricatives in the Bengali language. Rather, he/she uses Bengali dental stops instead of English inter-dental fricatives. Likewise, he/she generally uses Bengali aspirated bilabial stops /ph/ and /bh/ in place of English labio-dental fricatives /f/ and /v/ respectively because the Bengali language lacks labio-dental fricatives.

Thirdly, the Bengali speaking learner is generally found to pronounce Bengali alveolar retroflex stops in place of English alveolar plosives It /and /d/. This happens owing to the absence of alveolar plosives like English /t /and /d/in his/her first language.

Fourthly, the English approximants /w/ and /j / are problematic to the Bengali speaking EFL learner. He/she cannot correctly articulate them as they are not present in his/her first language. Thus the English consonants which are absent from the Bengali language are difficult to the

Bengali speaking learner and substantially negatively affect his/her pronunciation as well as perception,

## **Stress and intonation**

Stress and intonation are two essential aspects of the pronunciation of English words and utterances. "Stress means prominence in pronunciation usually resulting from four factors loudness, length, pitch and quality operating individually or in combination"<sup>3</sup>. English words in isolation or in connected speech receive stress that results in intonation. Intonation is used to carry information over and above that which is expressed by the words in the utterance. Hence, "English is a stress-timed language possessing a speech rhythm in which the stressed syllables recur at equal intervals of time" <sup>4</sup>. On the contrary, the Bengali language is a syllable-timed language having a speech rhythm in which all the syllables recur at equal intervals of time. This difference between the two languages causes many a problem to the Bengali speaking EFL learner. The Bengali speaking learner faces difficulties in the stress placement in English words because, on the one hand, English stress placement varies according to grammatical categories, for example, 'abstract, conduct, contract, contrast, import, incline, insult, perfect, present, and on the other, he/she is used to assigning stress almost invariably on the first syllable of every word in his/her first language.

Unlike the Bengali language, the English language has strong and weak forms, such as articles, pronouns, auxiliaries, prepositions, etc which are usually unstressed in connected speech. The Bengali speaking learner can hardly use them appropriately because he/she is not accustomed to the practice in his/her mother tongue.

Intonation basically resulting from the rising and falling of the tone accompanied by relatively greater degree of loudness and length plays varied unavoidable functions in the English language, such as attitudinal, accentual, grammatical and discourse functions which have limited importance in the Bengali language. Due to mother tongue interference and inadequate training, the Bengali speaking learner of EFL can hardly master English intonation, and his/her speech, therefore, sounds unnatural and even unintelligible.

# **Over-generalization**

Many English words are mispronounced because of over-generalization. As most Bengali speaking people do not get proper formal training for English especially in speaking skill in their primary, secondary and higher secondary levels, their basic knowledge of English are still backward and ineffective. That is why, many of them imitate different common rules of pronunciation while uttering difficult words. For examples, procedure, vision, mission, beautiful, handful. Over-generalization is also noticed from semantic points of view, as many learners mispronounce blessed(adjective) /blest/ in place of/blesid/ like blessed(verb) / blest/ ) and cursed(adjective) / k3:st/ in place of / ko:sid/ like cursed(verb)

# Semantic and pragmatic problems

"Pragmatics is the study of the relations between language and context that are basic toan account of language understanding"<sup>5</sup>. So contextual meanings are a must to understand one's speech which is very difficult for EFL/ L2 learners to perceive meanings of and to

produce meanings by using English words/phrases and utterances/sentences in isolation or with reference to the context of situation often pose serious problems to the Bengali speaking EFL learner since he/she has to mostly depend on his/her mechanical memorization of meanings of isolated words as they are mainly non-contextually and unscientifically designed in the lesson and presented by the teacher in the classroom.

In other words, the learner evidently encounters semantic and pragmatic difficulty in learning vocabulary items and using them for effective communication in the real life situation. In the Bangladeshi classroom, the learner is usually instructed to learn English words/phrases including synonyms, antonyms, hyponyms, homonyms, etc and their meanings mainly through non-contextualized ways, such as memorizing isolated words/phrases and their meanings, translating from the mother tongue to the target language, and vice versa. As a result, his/her stock of words/phrases is very limited, on the one hand, and on the other, he/she cannot effectively and efficiently use even the limited number of words/phrases that he/she retains in his/her day-to-day life communication.

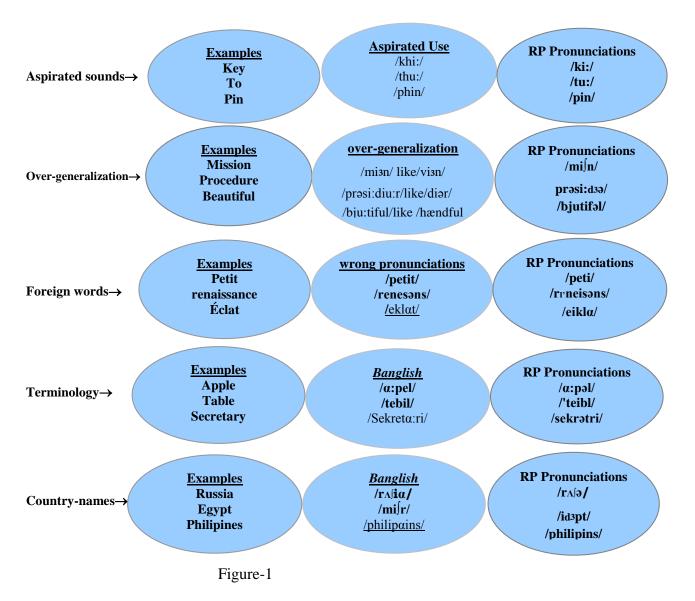
Moreover, English phrasal verbs being constituted of Verb plus particle', e.g. carry out, get into, lay by, look up, make up with, put up, set forth, take after, etc and idiomatic expressions, e.g. by the by, on the whole, cats and dogs, blue blood, a storm in a tea pot, etc having special meanings and functions often pose serious problems to the learner and substantially hamper his/her learning. In this connection, Roza (2005: 95)<sup>6</sup> maintains -Words that are different in form and represent meanings that are 'strange' to speakers of a particular native language, that is, meanings that represent a different grasp of reality, are classified as difficult. In English, 'first floor' is different in form from Bengali 'prothom tala' because European houses have an extra floor in the ground.

In short, semantic and pragmatic problems seriously hamper the learning of the target language by Bengali speaking EFL/ L2 learner since he/she is exposed to a limited number of isolated words/phrases and utterances/sentences and not made accustomed to using them in performing actual speech acts in real life situations.

# **Terminological Problems**

Bengali is a mixed or heterogeneous language evolved in around 7<sup>th</sup> Century AD. As a result, many English words entered into it without or partly changing their meanings and these are widely being used in our day to day life. But these terminological words pose difficulties to a greater extent in terms of pronunciation. For examples, Apple is

pronounced by a Bengali learner as/ $\alpha$ :pel/ in place of /aspl/ table /tebil/ in place of /teibl/. So it is often seen that most of the terminological words are perversely pronounced by many Bengali speaking people ,clearly speaking they utter their own-made *Banglish* pronunciations. This is because of the influence of their mother tongue.



## **Possible solutions**

Exact native pronunciation with hundred percent accuracy in use of a sound system with its stress, rhythm intonation, fluency and pause in speaking like the educated native speakers may not be possible to master by our common people. However, through the foregoing explication, exemplification, analysis and interpretation I have tried my level best to identify the problems of received pronunciation (RP) which the Bengali speaking EFL learner encounters especially in phonetic, phonological, morphological, terminological, redundant, semantic and pragmatic aspects. Due to two fundamental causes, we notice difficulties in speaking correctly - one resulting from the differences between the mother tongue and the target language and the other from the teaching process basically constituted of the syllabus, the teacher, the teaching method, material, equipment and testing. To address and lessen the problems, on the one hand, and to ensure the smooth and optimal learning of EFL on the other, proper measures have to be taken to reduce the causes to a substantial extent.

The difficulties created by the differences between the first language and the target language and/or by the mother tongue interference are natural and can be mitigated by only appropriately treating them in the teaching process which explicitly deals with linguistic elements. The learner's needs and wants therefore have a conspicuously direct relation to syllabus construction, the teacher's qualification and training, materials development, use of equipment and the testing

instrument as "the learners' needs and wants tremendously control the whole package of teaching materials, aids and equipment and the application of teaching techniques and strategies, the employment of classroom activities and most importantly, the method of teaching and the construction of the syllabus"<sup>7</sup>.

That is, the teaching process has to take into account of what linguistic items the learner needs to learn when and why, how he/she can easily learn what he/she wants to learn, and how he/she can be used to using what he/she has learned in his/her real life situations. "It is inevitable that the syllabus has to contain the linguistic items the learner lacks and wants in the sequence in which he/she will best learn and internalize them in order to use them correctly, appropriately and spontaneously in his/her real life communication"<sup>8</sup>

Afterwards, "interesting and appropriate drills can be exploited for helping the learner"<sup>9</sup>. However, as controlled practice having mechanical drills may sometimes be boring and as this type of practice cannot ensure the learner's communicative ability, we should involve the learner in some meaningful, purposive and communicative activities, such as role-play, pair work, group work, etc to make learning interesting and motivating.

## Imitation

"Since imitation is the soul of adopting a correct speech habit, one should imitate correctly and properly"<sup>10</sup>. It is a kind of intuitive mimicry on the part of the students. That is to say, the individual teacher's pronunciation of a word (which is taught) should be closely imitated by the students through listen-and repeat method. It is, therefore, essential that an opportunity of hearing a language spoken correctly be made available to the learners.

This can be done, at the first stage, by a teacher who must be able to make correct sound. If possible, this teacher should be from those whose mother tongue is

English, i.e. he/she should be a native speaker of the language. In the context of Bangladesh, though it may be difficult but definitely not an impossible one. However, in the absence of such a native speaker, efforts should be made to find out a local/non-native teacher who has at least a fair knowledge of the sound system of English. No audio-lingual approach can, however, achieve complete success in the absence of qualified, trained teachers. Machines cannot replace teachers however effective they may be. A teacher is a teacher and he/she is a model before his/her pupils and can shape his/her students in a desired way. The approach is and ought to be teacher-centered; that is to say, the aids require planned utilization by specially trained teachers. The state of poorly qualified teachers not only causes wastage of students' time but also of public resources.

# **Careful listening**

Listening being one of the four basic skills of language learning, a habit of listening carefully and not mere hearing the sounds should be instilled into the learners before they pick up a language. Unless one can hear the sound accurately and tell them apart, on cannot hope to reproduce them in correct pattern. This habit demands proper training of the ear for hearing the new sounds correctly. In modern times this may be achieved through the audio-visual aids. However, a regular habit of listening to British Broadcasting Corporation (BBC) or Voice Of America (VGA) programmes, television programmes, taped materials, and watching films will improve one's English pronunciation .Books from standard sources like Oxford and Cambridge University Press are now equipped with both and visual features that help a learner pick up standard pronunciations.

## **Constant practice**

Practice makes a man perfect- goes the proverb. Proper habit of speech is not instilled in to the learners at the early stage. Because of the wrong teaching at the lower levels of study, the learners form incorrect habit in speech and it takes indeed a very hard effort to get rid of the wrong habit already formed. Thus learning and unlearning syndrome affects this group of learners and paves the way for indifference to the subject. A deliberate and determined effort in the form df constant practice may overcome the impediments standing in the way. In the language of Leonard Bloomfield 'The command of a language is not a matter of knowledge ...(It) is a matter of practice.

# Conclusion

Eventually to recapitulate, correct English pronunciation is very difficult especially for EFL/L2 learners because of phonological, semantic, cultural and other differences. To speak the truth, knowledge of pronunciation as well as its application is fundamental to teaching English. But in the context of Bangladesh, the picture takes a different hue. Teaching pronunciation is not only most neglected but also totally absent in the syllabi of teaching English. Hence, first of all our syllabi should be reshuffled giving the importance of correct pronunciation from primary to university levels ,because the world is , now, a global village and here English functions as a global language. So, to get access to the international arena, there is no alternative but to learn English, to master correct pronunciation and to apply it in right time and in right place.

## References

- 1. Encarta World English Dictionary.1999. Bloomsbury Publication, London, W1V5DF
- 2. Brown, E. 2001. Teaching by Principles. New York: Longman
- 3. Roach, P. 2000. English Phonetics and Phonology. Cambridge: Cambridge University Press.
- 4. Richards, J., J. Platt and H. Weber. 1985. Longman Dictionary of Applied Linguistics. England: Longman Group Limited.
- 5. Levinson, S.C.1983. 'Pragmatics' Cambridge University Press.
- 6. Roza, G. M. 2005. 'Problems of learners' difficulties in acquisition of Bengali as a foreign language'. The Bangla Academy Journal 2-1: 90 -104.
- 7. Haque, S. M, F. and M. Maniruzzaman. 1994. "Needs analysis: problems and consideration'. Harvest: Jahangirnagar Studies in Literature, 12: 79-88.
- 8. Corder, S. P. 1973. Introducing Applied Linguistics. Harmondsworth, Middlesex: Penguin.
- 9. Baker, A. 1981. Ship or Sheep?: An Intermediate Pronunciation Course. Cambridge: Cambridge University Press.

10. Amanullah, S.M.2010 ' A Guide to Correct Speech' Albatross Publication, Dhaka

# William Blake: The Arch Myth-Maker

# Syed Ainal Huque<sup>1</sup>, Dr. Shah Alam Chowdhury<sup>2</sup>

Abstract : This article seeks to explain some of the intersections between Blake's visionary ideas and mythological systems that were current in the latter half of the eighteenth century. The value of considering this subject lies in revealing some fresh insight into Blake's aesthetic theory and to respond to the thesis that either writing or art begins with the effacement of mythology or art equates with mythology. The article reveals that Blake's approach to mythology is such that myths become subsumed within myths, and that from a desire to critique the art of the mythographers from his period, Blake was able to deepen his own enquiry into his aesthetic theorization. Thus, by the time he had started composing his long poem, Jerusalem, he was aware that in order to develop a new creative system it was necessary to clear away the classical mythological remnants of the past and challenge some of the more ancient systems of belief such as Druidism, which predated most forms. As a consequence, Blake demonstrates a need to eradicate the possibility of mythical ossification at every stage of his myth. The ossification of mythology is my specific interest and we aim to explore Blake's aesthetic practices helped him to maintain the freshness of his vision over a long time period and how he learned to adjust his own perspective in opposition to the theoretical, philosophical and psychological opinions of his day. As our thesis consists in researching Jungian psychology and Blake's ideas about medical knowledge and forms of mental disturbance, we are particularly interested in the study of archetypes inherent in a variety of mythological research and stories in both Blake's day and other historical periods.

Key words: Blake's aesthetic theory, mythology, Druidism, Jungian psychology.

#### Introduction

William Blake acted as a conscious interpreter of mythologies in order to explore the nature of the Poetic Genius of, the prophet as a *vates* or seer and the teacher of higher truths than reason knows. William Blake's mythology has been explained in diverse ways, due to the complexity of its sources and Blake's tendency to absorb mythical stories into his narrative and transform them within the context of his own mythical system. Previous scholarship has tended to accept this without explaining the rationale behind Blake's absorption of such mythological ideas.

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As a result, in this paper we wish to explore one aspect of this subject, arguing that for this process of absorption to occur and to avoid contamination by what Blake perceived to be failed mythologies, the poet needed to establish an original mode of creativity. I intend to focus mainly on those mythologies that were of contemporary interest to Blake and an overview of Blake's relationship to myth will at first be necessary to clarify the issues involved.

#### **Blake's Great Task**

The Blakean scholar Jason Whittaker has investigated the revival of interest in aspects of British mythology in the eighteenth century and the way in which Blake interpreted these myths and absorbed ancient stories into his descriptions of historical events in his own period.<sup>1</sup> Blake's attempts to appropriate aspects of ancient rituals, such as those of the Druids and ideas of sacrifice, in order to demonstrate the connections between them and the Napoleonic Wars or the terror of the French Revolution, reveal a strong interest in utilizing ancient myth to reinterpret historical events. Blake had a fascination for ancient stories that were retold in his period, most famously by Jacob Bryant in A New System or Analysis of Antient Mythology (1774-76). Blake, as both artist and poet, had a hand in engraving Bryant's book and was familiar with the references to Egyptian, Grecian, and Druidic mythologies outlined in this compendious threevolume work. In describing a painting entitled, "The Ancient Britons" in his Descriptive *Catalogue* of his only public art exhibition in 1809, Blake argues that, "The antiquities of every Nation under Heaven, is no less sacred than that of the Jews. They are the same thing as Jacob Bryant and all antiquaries have proved...All had originally one language, and one religion, this was the religion of Jesus, the everlasting Gospel. Antiquity preaches the Gospel of Jesus.<sup>2</sup> Just as Bryant had argued that an original Old Testament Monotheism had degenerated into pagan sects, Blake believed that the heroes of British Mythology, such as King Arthur, were representative of an ancient glory that would revive again and act as an inspiration to artists.

Blake also helped to engrave Richard Gough's *Sepulchral Monuments in Great Britain*, Part 1 (1786) and exhibited an interest in Ossian's works that had been revived in the latter half of the eighteenth century. In his annotations to Wordsworth's poetry Blake states, "I own myself an admirer of Ossian equally with any other Poet whatever, Rowley & Chatterton also".<sup>3</sup> Further sources for Blake include Pierre Henri Mallet's *Northern Antiquities* (1770), which purports to describe the customs of the ancient Danes and explains the origins of references in Blake's

Milton, a Poem and his longer epic poem, Jerusalem, the Emanation of the Giant Albion (1820) to the Scandinavian sacrificial ceremony of "The Wicker Man".<sup>4</sup> References to Stonehenge also abound in this major work, one possible source material for which is William Stukeley's A Temple Restor'd to the British Druids (1740), a text that argues that an ancient patriarchal religion once dominated as a single influence and fell into idolatrous practices, divine redemption by sacrifice - this the most ancient nations had a knowledge of, from patriarchal tradition. When they lapsed into idolatry, they applied these good notions to their new idolatry, sacrificing the ram, beating the ram, burying him in a sacred urn: all most evidently pointing out the notions they had of the suffering statue of the Messiah. This notion accords with Blake's theology of Jesus that he considered to be explicated in ancient mythical sources and, as the human imagination is associated with Christ in Blake's works, he makes a case for the poets as those who, animated all sensible objects with Gods or Geniuses. The poets possessed a "Poetic Genius that was the first / principle and all the others merely derivative".<sup>5</sup> For Blake, the degeneration of this original poetic imagination is represented in the growth of the church attempting to realize or abstract and the mental deities from their objects: thus began Priesthood and choosing forms of worship from poetic tales. In the eighteenth century, there was a resurgence in the writing of religious poetry and an attempt to view the poet as divinely inspired. In this climate, Blake's agenda to reinstate the poetic imagination in defiance of the Moral Law took shape and required a reinvestigation of mythological origins. As a result, Blake promoted his mythology of Albion, the Ancient Man of British Mythology as an original embodiment of later myths and a representative of the Golden Age.

#### Artist as Myth-maker

In 1810, Blake clearly stated his agenda as an artist, "The Nature of my Work is Visionary or Imaginative it is an Endeavour to restore, what the Ancients called the Golden Age".<sup>6</sup> This announcement, as part of the artist's additional commentary for the first public exhibition of his paintings, reveals three facts about William Blake's aesthetic beliefs. Firstly, he regarded his visual and verbal art as imaginative and understood the nature of the 'Visionary' in these terms. Secondly, he considered 'Visionary' art to be a possible conduit for what he regarded as eternal and uncorrupt. Thirdly, it reflects the fact that Blake's main artistic agenda was to recover the eternal through the completion of his visionary art. Blake specifically defines the world of

Imagination as that into which we shall all go after the death of the vegetated body, which implies that the objective of imaginative striving is synonymous with the experience of an afterlife. For Blake then, true imaginative endeavor has no connection with corporeality, but it is possible to achieve a state of vision that can produce perfection in a work of art or literature. The redefining of imagery, beliefs, geography, and history is common in Blake's art, and to this list should be added the fact that Blake comments upon his own visionary experience and life experience. Myth itself becomes a fluid, unsystematic set of images in Blake's artistic imagination and, in placing elements of aesthetic, cultural and social life in his dynamic evershifting mental landscape, Blake is consciously redefining mythical traditions that structure his visionary system.

Blake's aesthetic principles suggest a belief in the timeless quality of significant artworks, and this is encapsulated in his notion of a *Last Judgment*, which he states as being not fable or allegory but vision. The *Last Judgment* refers to a moment of imaginative clarity which a poet or an artist might experience. Blake's fable or allegory is dependent on memory, and thus belongs to the corporeal realm and is inferior to Blake's sense of inspiration that is required for a truly imaginative act to occur. Blake permits the idea that fable or allegory can contain vision and yet refutes the possibility that this can be placed in the same category as truly imaginative art. One conclusion to which this leads is that certain forms of art, mythology and literature, did not herald a "Golden Age" for Blake, and he is specific about what he regards as perfect: Milton, Shakespeare, Michael Angelo, Rafael, the finest specimens of Ancient Sculpture and Painting, and Architecture, Gothic, Grecian, Hindoo and Egyptian, are the extent of the Human mind. To this list Blake added a number of artists and writers, and in particular, the Biblical prophets who were admired for their sublime and Divine Images. Other writers, such as Ovid, are regarded as producers of fables that contain vision in a Sublime degree being derived from real vision in more ancient writings. Evidently, the essence of visionary art is regarded as transferable from one artist or writer to another, in the sense that it is inspirational. Blake considers mythology and art to be differentiated according to their purity of vision and the medium of mythology known as fables and allegory is therefore only valued if it is the result of a visionary tradition.

#### **Albion: Primal Mythical Man**

Blake's description of art serves as a basis for his conception of the nature of mythology, as he regarded different mythologies and belief systems as surrendering to the corruptions of their age. As myth might be regarded as a set of organizing images that are used to make sense of both the inner and outer chaos of existence, what is considered to be mythological, from Blake's perspective, might be questioned in the same way as art. Blake's Albion, the primal, 'Universal Man' is presented as the predecessor of all later mythologies, and when Blake describes this spiritual fall and redemption, the former of which occurs when Christ is rejected, the subjects of mythographers (such as Stukeley's Druidic mythology) are depicted as expressions of this fall. The reason for this is Blake's belief that there are different expressions of an original universal mythology. Albion, as the progenitor of all men, is to be seen as the true man, who was faithful to the 'Poetic Genius', as are Blake's favored artists, such as Michael Angelo, Rafael, or Albrecht Durer. However, there are corruptions of the original ancient mythology, found in the sacrificial rites of the Danes or the Druids. In Blake's poem Jerusalem, there are many references to the Druidic mythology reflecting their stone circles and oaks as reminiscent of a corruption across Albion's land: "O God of Albion descend! Deliver Jerusalem from the Oaken Groves!"<sup>7</sup> Albion's sons and daughters become forces of evil within Blake's mythology, and represent despised figures from Blake's life and characters from ancient British mythology. Significantly, they are associated with what Blake views as Druidic corruption, "the senses of men shrink together under the Knife of flint, / In the hands of Albions Daughters, among the Druid Temples".<sup>8</sup>

Albion is represented throughout history, just as Sublime art is discovered in the works of modern genius as in the works of the ancients. For example, in his *Descriptive Catalogue*, Blake cites Arthur as a figure whose actions and experiences resemble those of Albion. This suggests that Blake had a notion of archetypal recurrence, and applied similar, if not identical, principles to his conceptions of mythology as he did to art. He states that "The giant Albion, was Patriarch of the Atlantic, he is the Atlas of the Greeks, one of those the Greeks called Titans. The stories of Arthur are the acts of Albion, applied to a Prince of the fifth century".<sup>9</sup> This reflects Mark Schorer's view that, great literature is impossible without a previous imaginative consent to a ruling mythology which makes intelligible and unitive the whole of that experience from which particular fables spring and from which they, in turn, take their meaning. The figure of Albion, from this critical perspective, can be viewed as a binding mythological force in the universe,

whose wholeness is realized when the *Last Judgment* takes place. However, prior to the *Last Judgment* and with the blight of Albion's errors, all mythology is corrupted and acts as a corrupting force: "Of Albions Spectre the Patriarch Druid! where are all his Human Sacrifices / For Sin in War & in the Druid Temples of the Accuser of Sin".<sup>10</sup> It is only at the end of *Jerusalem*, with Blake's one hundredth engraved plate that Blake's Zoas, the powers of Albion, set about the task of renovating the cosmos, which consists of stars and a Druidic 'Serpent Temple' in the background. Los is carrying the sun, Urthona is holding a callipers and a large blacksmith's hammer and Enitharmon is hanging a veil or curtain across the starry backdrop in order to accomplish this task. This suggests that Blake's own mythological figures are those that are fit to reconfigure the universe and other mythologies, such as the Druidic one, have been unsatisfactory and thus corrupting. The emblems of druidic sacrifice, as representative of human error, are dispensed with by the harmonious work of the archetypal forms that have been in opposition to each other for the majority of the narrative.

#### **Two Competing Forms**

The latter point is crucial in representing Blake's consciousness as a mythical rebuilder, as the Druid culture in Blake's period was viewed as being the most ancient, and as Northrop Frye argues, the word 'Druid' would be practically synonymous with 'inspired bard'. The decline of civilization since what Blake interpreted as a Golden Age, traceable to the Giant Albion, heralds a decline of Vision, art and literature, as a result of a loss of imagination, summarized in the figure of Christ. This corruption of the Visionary insight is explained with reference to other cultures, such as the Roman and the Grecian, whereby the inspiration behind mythological storytelling, such as in Homer, is contaminated by a culture devoted to war. In his short prose piece, On Homer's Poetry, Blake states, "The Classics, it is the Classics! And not Goths nor Monks, that Desolate Europe with Wars",<sup>11</sup> a sentiment that is extended in another prose work, On*Virgil*, in which the "Gothic is Living Form and the Grecian and Roman is Mathematic Form".<sup>12</sup> Here, art, culture and mythology are considered to be inseparable from each other, and this argues that, Blake's poetic may be said to be radical in the sense that it challenges and subverts the ideologies and conventions of classical and neo-classical aesthetic paradigms expressing living form that inheres in the internal unity of the parts as opposed to an externally and imposed order. Mathematical Form is conceived of as what is most restricting in art, life and mythology,

as represented in the Druidic temples, which are associated with vengeance that cannot be healed and the violence of Greek and Roman culture.

#### Vision as Myth

Blake incorporates familiar mythical structures in the form of frequently negative symbolic referents within his later writing, such as Milton, The Four Zoas, and Jerusalem. Biblical and mythical names are placed alongside Blake's less familiar mythical creations of the Zoas, the four powers that constitute the original man, Albion. In Blake's Jerusalem, place names, or locations are decontextualized so that geography itself becomes a visionary landscape in which places and figures of the Holy land are removed to London: "To Islington & Paddington & the Book of Albions River / We builded Jerusalem as a City & a Temple; from Lambeth / We began our Foundations; lovely Lambeth!" Names of Hebraic origin are placed within Blake's own mythology and are thus transmuted into an aspect of an alien, private mythology, which does not allow the Biblical myth the luxury of remaining as a defined untouched monolith of meaning. This is but one example of a consistent urge in Blake to reshape history by re-contextualizing mythical or historical personages or places. This involves a vision of the human psyche that includes the rebranding and reshaping of the artistic persona and, in doing so, places the mythmaker at the heart of his myth. On one hand, Blake's myth can seem to take on a life of its own, free from the constraints of other myths, but the artist also feels an incessant need to reinvent his mythical figures. In this regard, Arianna Antonielli has noted that, "Blake's quest towards a mystical vision of reality reveals his constant attempt to overcome the material world and, by means of his spiritual existence, to reach and observe the immanence of the Eternal One".<sup>13</sup> Such a striving accounts for Blake's constant need to reject or revise the mythical systems popular in the eighteenth century and any aspect of his own mythology that remains enslaved by the circumstances of history.

#### Conclusion

In order to establish a new system of mythology which might avoid the possibility of being enslaved by another man, Blake needed to investigate the aesthetic, philosophical, and mythological traditions that informed his period. His 'Gothic' artwork attempts to efface rationalistic systems such as Classicism and to replace them, but at the same time remains in a debate with these diverse mythologies. Blake struggles to escape from the constraining influences of philosophical, mythical, and aesthetic systems that arise from historical conflict, arguing that where culture is devalued by acts of violence, pecuniary practices and thoughts of vengeance, no sense of Last Judgment or a visionary Pulsation of the Artery can be discovered. Thus, in attempting to reshape myth, Blake asserts that no organizing set of images used to make sense of culture can develop into an aesthetically pleasing system until the Golden Age returns. In his poem, *Milton*, Blake asserts that the world of artistic Vision lies within what he refers to as the vegetative world, and in terms of the present discussion, that which is corporeal and Mathematical is denuded of its significance within the flux of history, acting as a passive symbol and reduced to its most basic form. Thus, the 'Druidic Temples' are used for cruel sacrifice rather than a bardic symbol, Classicism is affiliated with war rather than art, and mythical fables are devoid of vision. In arguing thus, Blake defies the classical, mythological and symbolic inheritance of the eighteenth century and establishes himself as an arch myth-maker.

#### References

- 1. Whittaker, Jason. *William Blake and the Myths of Britain*. Basingstoke: Macmillan Press, 1999.
- 2. Frye, Northrop. *Fearful Symmetry: A Study of William Blake*. New Jersey: Princeton University Press, 1947.
- 3. Erdman, David. *The Complete Poetry and Prose of William Blake*. New York: Anchor Books, 1988.
- 4. Davis, Michael. William Blake: A New Kind of Man. London: Paul Elek, 1977.
- 5. Whittaker, Jason. *William Blake and the Myths of Britain*. Basingstoke: Macmillan Press, 1999.
- 6. Ostiker, Alicia. Vision and Verse in William Blake. University of Wisconsin Press, 1965.
- 7. Heringman, Noah. *Romantic Rocks: Aesthetic Geology*. Cornell: Cornell University Press, 2004.
- 8. Farrell, Michael. *William Blake: Reading and Writing the Law.* Basingstoke: Macmillan Press, 2002.
- 9. Frosch, Thomas. The Awakening of Albion. Cornell: Cornell University Press, 1984.

- 10. Stukeley, William. A Temple Restor'd to the British Druids. London: W. Innys & R. Maney, 1740.
- 11. Paley, Morton D. *Energy and the Imagination: A Study in the Development of Blake's Thought*. Oxford: Clarendon Press, 1993.
- 12. Damon, S. Foster. A Blake Dictionary: The Ideas and Symbols of William Blake. London: Thames and Hudson, 1999.
- 13. Gilchrist, Alexander. Life of William Blake. New York: Dutton, 1995.

# Desdemona and other Female Characters of William Shakespeare's Tragedies

### Md. Atiqur Rahman Mamun<sup>\*</sup>

**Abstract:** The main purpose of this paper is to provide an analysis of the female characters of William Shakespeare's Tragedies namely Othello, Hamlet and Macbeth. In the first place, I have given a comparative analysis of the characters of Desdemona and Ophelia, Desdemona and Lady Macbeth, Desdemona and Emilia, showing how the process of Othello's Desdemona, Hamlet's Ophelia and Macbeth's Lady Macbeth tears away the gender barriers of the Venetian patriarchal society and poses a threat to male authority. At the same time, I have shown that the construction of female characters in Shakespeare's plays reflects the Elizabethan image of woman in general and display some tendencies that resemble present day female attributes closer than attributes of the woman of the Renaissance era.

Keywords: Desdemona, Venetian society, Kulturgeschichte, gender and race. Renaissance expectations.

#### Introduction

In many of Shakespeare's tragedies, Shakespeare creates female characters that are presented to be clearly inferior to men. Shakespeare gives each of them a sense of power by giving their minds the ability to change world around, use multiple meanings and answer wisely to the men surrounding them. Shakespeare's tragedies often put emphasis on the role of the female characters and their influence on the male protagonists. Whether it is the impact Ophelia's insanity had on Hamlet, the devastating result of Romeo's love for Juliet, or the horrid behavior of Macbeth under Lady Macbeth's influence, the women play an important role<sup>1</sup>. In Shakespeare's Othello Desdemona is no different; Othello's love and jealousy regarding his wife made this play a tragedy. Desdemona represent women of the seventeenth century who surpassed the norms of sexual morality set for Venetian women of that time. Desdemona break the molds of Elizabethan women and pursue their goals with force and a unique indifference to traditional behavior<sup>2</sup>. Why should one choose to examine the female characters of three of the most prominent Shakespeare plays although men are the protagonists in all of them? Maybe because one may find certain parallels in the construction of woman characters in these Shakespeare plays which reflect the Elizabethan image of women in general. Maybe because Desdemona, Ophelia and Lady Macbeth are rather tragic figures with a developed character. All main female characters seem to have the same tragic element attached to them namely their early unnatural death. All women seem to have loaded guilt upon them prior to their death. Lady Macbeth is guilty of at least helping in carrying out a murder. Desdemona is found guilty by her husband but the audience knows she is not, while Ophelia may be found guilty by the reader to have betrayed Hamlet by not requiting his love. Apart from guilt obedience seems to play a major role in the context of the female characters. Othello wants his wife to be obedient and fears she is not independent of whether he is present or not - but when he is present he uses force to make her obedient. Ophelia is also very obedient to her brother and her father, which constitutes the falsehood of her character and may thus play a major role in Hamlet's development. Lady Macbeth may be an exception, but in the light of the reversal of order in Macbeth we may state that Macbeth is the obedient figure when he follows his wife's command.

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When we consider Macbeth to be a photonegative of the world we can find the obedience motive again. One may argue that when a lack of obedience persists "chaos is come again" which is exactly the consequence of all acts of disobedience of women in the three plays. Lady Macbeth and the consequences of Desdemona's felt disobedience may serve as an example for the consequences of female disobedience<sup>3</sup>.

#### Women in Shakespeare's Tragedies

Shakespeare, it is claimed by many modern critics, was a feminist. It is believed that Shakespeare because of his extraordinary genius for portraying human behavior, necessarily depicted the condition of women within a patriarchal system and created women characters which in their richness, transcend the limitations of his time. Shakespeare's treatment of the three heroine's Ophelia, Desdemona and Lady Macbeth of the tragedies Hamlet, Othello and Macbeth, beginning with an exploration of Shakespeare's representation of the effects of a patriarchal system upon the characters<sup>4</sup>. Ophelia is a beautiful and simple-minded woman, easily molded by the more powerful opinions and desires of others. The thoughts of her father and her brother influenced her the most. The love letters from Hamlet also swayed her opinions and confused her mind. Ophelia wasn't able to realize herself because of all the pressures exerted on her to be something she's not. That weakness of mind and will, which permitted her obedience to her father and thus destroyed her hope for Hamlet's love, finally resulted in her insanity and death. When her father had challenged the honor of Hamlet's intentions. Ophelia could only reply "I do not know, my lord, what I should think" (III, iii). Used to relying upon her father's direction and brought up to be obedient, she can only accept her father's belief, seconded by that of her brother, that Hamlet's "holy vows" of love were simply designed for her seduction. She was to obey her father's orders not to permit Hamlet to see her again. Her father also wanted to prove Hamlet's madness to the king. He used Ophelia as bait so he and the king could listen to Hamlet's words. Ophelia willingly obliged to her father's desires. By not thinking for herself and only doing as her father wished, she ruined her chances of love with Hamlet. Hamlet put pressure on Ophelia by expecting her to surpass his mother's shortcomings and be an epitome of womankind. He searched her innocent face for some sign of loving truth that might restore his faith in her. He took her mute terror for a sign of her guilt and found her to be a false person, like his mother. In his letter to her, he addressed the letter to "the most beautified Ophelia" and he terminated the letter with "I love thee best, O most best, believe it" (II, ii). He used the word "beautified" to display a sincere tribute, and it is apparent he still loves her. His attempts to win her affection are not triumphant. Ophelia is still too much under the influence of her father to question his wisdom or authority, and she has no mind of her own to understand how much she has made her lover suffer.

No matter how much it pained her to not see Hamlet; all she could see in his present behavior is the madness that terrified her. Ophelia's insanity was a mixture of love and hate caused by her father and Hamlet. An example of hate is when she sings about a "baker's daughter"(IV, v). Ophelia is referring to the way her father used to treat her before the tragic incident of his death. The love within her madness is when she speaks about the events on "Valentine's Day"(IV, v). When Ophelia speaks about Valentine's Day she is referring to the events of romance that she was denied. Ophelia's madness is brought on by her lack of being able to demonstrate any maturity in trying to cope with her losses and in return can only inflict her madness on the court. Abused by her lover, and bereft of her father's protection she loses control of her mind. In her insane state she came to believe that the seduction her family tried so hard to protect her from has passed. Her father's admission of error might have embittered a more independent Ophelia. This explains Hamlets rejection of her. Being tormented of scenes of death and the burial, she reaches out to the beauty of hanging flowers in a willow tree and somehow drowns. Ophelia was never able to understand exactly what Hamlet was suffering from, and in a way he created a situation for her to relate; death of a father and betrayal by a loved one. Hamlet managed to rise above insanity and feelings of suicide, but her weaker spirit could not hold the burden.

In Othello, it can be argued that the tragedy occurs from adherence to patriarchal rules and stereotypes. The tragedy of Othello stems from 'men's misunderstandings of women and women's inability to protect them from society's conception of them'. Certainly Desdemona's very much feminized qualities of passivity, softness and obedience are no match for Othello's masculine qualities of dominance, aggression and authority<sup>5</sup>. After Othello in his jealousy has struck Desdemona and spoken harshly to her, she tells Iago, 'I am a child to chiding'. Protected by a system which makes women the weaker, dependent sex, Desdemona is unequipped to deal with such aggression; she is helpless against Othello. Desdemona thus retreats into childlike behavior to escape from reality. At the close of the play Othello attempts to vindicate himself from intentional murder by claiming that he did nothing 'in malice', but is simply a man 'that loved not wisely but too well'. This speech illustrates the precarious position of love in a society submerged in stereotypes. Othello's excessive, 'unwise' love for Desdemona is tied up with his perception of her as representing perfect womanhood, and his underlying fear of her - endorsed by society - as whore. Like Hamlet, who tells Ophelia 'get thee to a nunnery' in order to protect her chastity and remove his fear of woman's infidelity, Othello too wishes to erase Desdemona's sexuality and potential for infidelity. His decision to kill her, he claims, is to prevent her from a further transgression - 'Yet she must die, else she'll betray more men'. As Iago's insinuations build, the gulf between this perception of Desdemona as angel and the fear of her as whore grows, leaving Othello in a void of confusion and doubt. In Othello's refusal to hear Desdemona's own protestations of innocence, Othello is very much a tragedy in which the female is subordinated by the male.

In the play Macbeth, Lady Macbeth is a very persuasive person. One of the only Shakespearian women who can compare to Goneril in her villainy is Lady Macbeth. While she is presented as the partner of the main character, Macbeth, she surpasses her husband in ambition and strength<sup>6</sup>. In effect, the first time she is presented in the play she is seen already plotting the murder of King Duncan.

In a frightening soliloquy she reveals her plan to make her husband the new king by having him murder his good friend Duncan. One reservation she has is that he is "too full o' the milk of human kindness" (I.v.18), a problem which she plans to fix by manipulating him. When word comes that Duncan is to make a visit to her home, Lady Macbeth reveals in yet another soliloquy just how ruthless she wishes to be. The phrase "unsex me here" reflects her desire to lose any weaknesses associated with being a woman - and gain the aggression and cruelty of man. Lady Macbeth's scheme is not only a testament to her strength as a female, but also bucks the traditional masculine system of appointing kings. "Lady Macbeth's engineered murder of Duncan engenders the unlawful succession of a bastardized Macbeth, altering, in turn, the matrilineal as well as political order within the world of the play" (Chamberlain 1). In other words, Lady Macbeth's plans not only represent an attack on one man, but on the entire political system. Lady Macbeth proceeds in the play to successfully convince her husband that he must murder Duncan. In doing so she initiates the downward spiral that would eventually result in both their deaths. It is apparent that after the deed is done Lady Macbeth has a very hard time managing the guilt she feels. She is seen repeatedly walking the house at night attempting to wash clean blood from her hands that is not there. Macbeth's murder of Duncan has initiated a series of seemingly endless murders to attempt to cover his tracks, - and Lady Macbeth simply cannot deal with the bloodshed she has caused. She evidently goes somewhat mad towards the

end of the play and in Act five kills herself. With the impending battle at hand Lady Macbeth chooses to kill her rather than be captured and forced to face consequences for the destruction she had caused. Lady Macbeth went the route of most of Shakespeare's tragic female characters and took her life rather than face shame and ridicule<sup>7</sup>. Lady Macbeth may therefore be looked upon as possessing two personalities, which appear and disappear according to the oscillations of her mental level. In her normal, waking state, repression and an assumed bravery are marked. In the sleeping or somnambulistic state, the repression gives way to free expression and her innate cowardice becomes dominant. In her waking condition, she shows no fear of blood, but shrinks from it when in a state of somnambulism. Her counsel to her husband while awake is that of an emotionless cruelty, while in somnambulism she shows pity and remorse. If one could believe in the womanliness of Lady Macbeth, then her sleeping personality must be interpreted as the true one, because removed from the inhibition and the censorship of voluntary repression. Thus Shakespeare, with most remarkable insight, has made the sleep-walking scene exactly conform to all the characteristics of a pathological somnambulism - that is - the subject sees and hears everything, there is a regularity of development, as the subject repeats the same words and gestures as in the original experience and finally, on a return to the normal personality after the attack is over, there is no memory for the attack, in other words, amnesia has taken place. Lady Macbeth's actions during the sleepwalking scene are very complicated; show a clear memory of her past repressed experiences, in fact, they are an exact reproduction and rehearsal of these experiences. Finally, she shows an amount of reasoning and association which would be impossible during the annihilation of consciousness during sleep and which only could have taken place when consciousness was very active<sup>8</sup>.

#### A comparison of Desdemona and Emilia with modern female qualities

Shakespeare's Othello has been studied exhaustively, yet most character analyses focus on the two male figures, Othello and Iago. The two main female characters, Desdemona and Emilia, are often overlooked and viewed as secondary actors to the jealous Moor and conniving villain. During the time of Shakespeare, females were often treated and regarded in society as inferior to men<sup>9</sup>. Presently as a society, we generally feel that we have progressed beyond this archaic attitude and have reached a point where females are treated more equally to males in America. Women are allowed to vote, are given opportunities for careers that were previously reserved for men, and are allowed a greater expression of their identity and sexuality. However, women cannot truly regard themselves as equal to males in our society because of all of the disparities. There seems little chance of voting for a female candidate for President, women's salaries across the country are comparatively lower than men's salaries, and sexual harassment, physical abuse of women, and rape are still prevalent in American society. Shakespeare may have been precognizant in shaping the characters of Desdemona and Emilia for Othello. Both characters display some tendencies that resemble present day female attributes closer than attributes of the women of the Renaissance era<sup>10</sup>. The reader of Othello would never outwardly suspect that the female characters are modern models while perusing the text, meaning Desdemona and Emilia are not so out of character that they differ greatly from what we know and understand of women's roles in the past. It might be that little has changed in our treatment of females in society today compared to their treatment back in Shakespeare's day. We know that Shakespeare tried to create characters that resembled real-life individuals and reflected lifestyles and personalities accurately. "...Shakespearean dramas are structured in a very specific way that mirrors patterns observed in real human interactions". The two females are representative of women in early modern literature and we can assume that they would not have been the exact same characters if the story of Othello took place in a modern setting. A case can be made, however, that Desdemona and Emilia are similar to females of the modern era and that there would be little difference in their actions if indeed the story was told using modern renditions of

female characters. Shakespeare managed to simultaneously give an accurate portrayal of the roles of women in relationships during his period and those of our period, despite the progression that females have enjoyed in this modern era. Shakespeare might have been able to deduce how the future of female roles in relationships would progress or we might conclude that progression of their roles has moved more slowly than we might believe. The question of which is definitively true cannot be thoroughly answered, but we can make some assumptions based on a look at the two characters as they relate to modern female characteristics. We can deduce that the actions and decisions of the two female characters in Othello are integral to the events of the plot, perhaps more so than the two male characters of Othello and Iago. We can also conclude that the characters of Desdemona and Emilia are highly believable and realistic. There can be little doubt of the fallibility of their characters as it relates to the events of the plot, even though the story concludes with their death. Othello is the protagonist, but he is not the idealized romantic hero. Throughout the story, he matches the characteristics of the chivalric hero of medieval literature. Once he succumbs to the spell of jealous rage, though, he falls out of the role of hero and into that of witless dupe. "His change from a chivalric knight to a cuckolded husband armed only with the power of his position corresponds to the change in his regard for Desdemona, with the implication...that injustice implements hate" (Hays 186).

The role of hero slides over to Desdemona, who maintained the idealistic tendencies of love and devotion that are necessary to the romantic hero. Her death at the hands of the beast is noble and symbolic. Her rage at the betrayal of her husband is vindictive and merited. The grief the reader experiences at the conclusion is for Desdemona, not Othello. Desdemona is the vital character of Othello. Shakespeare could not have created such a tragic outcome without a character as wellformed as Desdemona. Othello and Iago were tools used to fashion a door, but Desdemona was the key. Similarly, Emilia is essential to the events of the play. Her role is important because she provides a female character that contrasts sharply with the character of Desdemona. The expectations of Emilia as wife to Iago differ greatly from those of Desdemona to Othello. Whereas Desdemona is immersed with her love of Othello to the point where she loses her own identity, Emilia is able to maintain a strong, self-aware persona in which Iago is not necessary to her identity. Emilia is a stronger female character and resembles the modern female character in American society through her actions and desires. Emilia has revealed to Desdemona in this passage that she understands an independent woman's desires. She has told Desdemona that she could understand the motivation of a woman to be apart from her husband's desires and form her own wants. Emilia understands why a woman might want someone other than her husband. In doing so, she has challenged Desdemona's contention that a woman must be pure and devoted only to one man. Desdemona does not understand how a woman could actively engage in the "whore" persona. Emilia herself does not align herself with the "whore," but admits that she can visualize a scenario where a woman might be justified in serving herself rather than devoting her entire being into the needs and pleasures of one man. Emilia is more open-minded and holds many similarities to the feminist ideals of a modern woman. "(Emilia) ... sympathizes with female promiscuity. She corrects Desdemona's occasional naiveté but defends her chastity. Although she comprehends male jealousy and espouses sexual equality, she seems remarkably free from jealousy herself. She wittily sees cuckoldry and marital affection as compatible. She understands, but tolerates, male fancy..." (Neely 87).

It is important for Emilia to be worldlier in the knowledge of relationships as a friend to Desdemona so that her eyes can be opened before the final confrontation with her husband. Emilia's feminist perspective allows Desdemona's character to be aware of the Madonna-whore dichotomy that she has firmly rooted herself within. If Emilia had not spoken with Desdemona about her views, Desdemona would seem entirely ignorant of the plight she was in and would

not entirely fill the qualifications for the heroine she was meant to be. Shakespeare created a character in Emilia that acts both as a utilitarian foil for Desdemona and a precursor to the modern feminist ideal. Simply because she admitted she was aware of the thoughts of an independent woman, Emilia was more attuned to the median between the Madonna-whore dichotomies whereas Desdemona found herself at either extreme. Emilia's entire attitude toward the misplaced reflects the contemporary stance of materialism that runs rampant throughout American society. Emilia desired the hander kerchief. Rather than return to Desdemona, who she knew was the rightful owner, she kept it. When Iago took it, she fabricated the idea that he was merely replacing it with a duplicate for her own amusement. Emilia did not intend any harm to come to Desdemona, or Othello by extension. She merely had a materialistic want for some inanimate object that she fancied. These ideals of materialism run rampant in consumerist America today. The modern female character of Emilia was also necessary to reveal her husband's plot. She was the only character privy to several of the underlying details of Iago's scheme.

Rather than withhold the details to her and protect her husband, she maintained her status as an independent person and betrayed her husband's trust because it was what was right to her. Her moral need to bring her friend's killer to justice overrode any desire she had to protect her husband from harm. If Desdemona's wholly devoted character had been Iago's paramour, it is conceivable to see where she may have hesitated to reveal the truth merely because she would do anything to maintain the image of the pure, devoted wife. Emilia held no such compunctions. Both of these main female characters died at the end of the story by their husband's hand. When violent acts occur in literature, scholars always attribute meaning to the actions; usually what motivates the characters to do so. In reality, violence usually occurs spontaneously without little thought to the act's meaning. We can assume that Shakespeare had a reason for having both of his female characters killed specifically by their husbands. Their deaths reflect the displeasure that both men had for the roles that the women played in their lives. Both Desdemona and Emilia are integral entities that are essential for the story of Othello to have the significance and impact that it has had on Shakespearean studies and literature in general<sup>11</sup>. Both women have subtle characteristics that can be associated with modern female qualities, but none of them are so out of character with women from the Renaissance period as to believe that the women of Othello could not pass a feasibility test. Both women did nothing out of character for females of the Shakespearean era. However, both women could easily exist in a story set in modern times. The female character in literature and reality is forever changing and improving, yet many aspects of their character remain steadily the same.

#### A Comparison of Desdemona and Ophelia

Ophelia, the dominated daughter, is completely dependent. Although a flash of her potential selfwill shines through at the beginning of the play, when we learn that Ophelia has entertained Hamlet without paternal consent, this is stifled very quickly by Polonius and Laertes - the double voice of the patriarchy - telling her that she is naive and that her behavior is unsuitable. Ophelia, daunted by their claims that she has mistaken Hamlet's love, assumes that her father and brother necessarily know best and replies simply 'I will obey'. Shakespeare shows, however, that it is this obedience of Ophelia's that leads to her own destruction, and illustrates that when the guiding male is like the cynical Polonius or the unperceptive Laertes, the fate of the subordinate female is considerably threatened. While Ophelia then, silently and obediently accepts the oppression of male power, turning her distress in upon herself in her madness, Desdemona does display some traces of a more like self-assertion. In her choosing of Othello as her husband, she exercises her own desire, subverting the female role of passivity within the patriarch, and marries him without parental consent. This is a rather courageous act of will, which could have resulted in much strife. However, she handles the situation with cleverness and a manipulation which outwits the male judges who listen to her. When her father questions her about her marriage she answers forcefully, first pacifying him and then justifying her disobedience on the very grounds of patriarchal obedience and duty.

Shakespeare shows Desdemona's behavior in her relationship with Othello before the marriage to be slightly manipulative also. For Desdemona tells Othello in a very suggestive way after she has fallen in love with him, as Othello himself relates - 'if I had a friend that loved [me]/ I should but teach him how to tell [your] story,/ And that would woo [me]'. However, when she is married she slips into the role of the submissive wife. Obedient to Othello's every command, she savs to Emilia - after Othello tells her peremptorily 'Get you to bed on th'instant' - 'we must not now displease him'. At this point Desdemona becomes more of a stereotype, her identity disappearing as Othello's jealousy becomes more defined. Her identity diminishes until she fits into the stereotype of the silent woman. Othello denies her right to a voice when he soliloquizes 'Was this fair paper, this most goodly book,/ Made to write 'whore' upon?' The relative weakness of the characters of Desdemona and Ophelia is due to artistic device, as opposed to Shakespeare's misrepresentation of womanhood. They are 'psychologically neutral characters who take on the coloration of the plays' moods'. Thus, their personalities are not fully developed. James Hill similarly says of the heroines of the tragedies that we are not shown 'their inner lives' or their 'inner conflicts'. However, in the case of Desdemona, I think it is a mistake not to recognize her as an active force within the play. Othello's punishment of Desdemona becomes the crime itself, subverting the domestic tragedy of the Elizabethan stage. Desdemona's goodness furthermore is not simply passive or weak but an act of will. Her refusal to blame Othello for his terrible treatment of her, when he suspects her of betrayal, must not be viewed as simple subservience but as a self-willed refusal to accept a bad opinion of the husband she has chosen. When he is behaving deplorably towards her she refuses to acknowledge his identity - 'My lord is not my lord,' she says 'nor should I know him / Were he in favor as in humor altered'. She stands by her acceptance of her love for him as something sacred, with a martyr-like determination: she tells Emilia 'his unkindness may defeat my life, / But never taint my love.' She thus obeys her own heart rather than patriarchal rules, extending this determination through to death, so that with her last breath - when Emilia asks 'who hath done this deed?' she can reply 'Nobody, I myself'. Othello's conviction that even upon dying she lies by claiming this self-death bears witness to the whole tragedy of the play, Othello's inability to see beneath the surface of stereotypical conceptions of femininity<sup>12</sup>. By claiming this death for herself she re-affirms her self-hood. Metaphorically then she dies for her love which cannot be tainted, not from Othello's hands. In Hamlet too, Ophelia's death can perhaps be seen as an act of assertion and escape from the confining patriarchal world.

## A Comparison of Desdemona and Lady Macbeth

In Shakespeare's plays Othello and Macbeth it is evident that the titled characters have a very close bond with their mates that are crucial to the development of the plot. Both wives are a significant consideration in the choices that their husbands make and directly or indirectly, willfully or unwittingly impact their spouses' ultimate fates. After examining the characters and actions of these two ladies and the influence they had upon their husbands' decisions it is clear that they were both instrumental in bringing about their husbands' tragic ends.

The audience's first impression of Desdemona in Shakespeare's Othello is that of a woman who refused to conform to the norms of the 17th century Venetian society concerning gender and social roles. Without her father Brabantio's knowledge or consent, Desdemona exhibits her independence and strength of character as she defies convention by secretly wedding Othello. In addition to challenging Venetian male authority, this miscegenation was an affront to the prejudicial Venetian social order and a major perturbation to Brabantio who is convinced that his daughter must have been bewitched by the Moor. However, Desdemona's choice to wed Othello is not a result of witchcraft and much more than the mere political statement of a liberated woman. With passion and conviction, "the summoned witness" Desdemona unabashedly makes a public declaration of her love for and devotion to Othello: "I saw Othello's visage in his mind, And to his honors and his valiant parts Did I my soul and fortunes consecrate." (I. iii. 286-289) Evidently, Desdemona's affection for Othello was multifaceted - she loved him for his bravery, his reputation, his intellect and his body. The Macbeths are the original power couple: where her husband is a courageous, skillful warrior, she's charming, attractive, and completely devoted to her husband's career. Lady Macbeth is a teensy bit worried that her man isn't quite man enough to do what it takes to be king; he's "too full o' the milk of human kindness" (1.5.1). If her husband's going to be the powerful figure she wants him to be, Lady Macbeth's got to take things into her own hands. In fact, Lady Macbeth's whole "unsex me" speech aligns her with witchcraft and the supernatural (calling on spirits and talking about "smoke of hell" and "murdering ministers" sure sounds witchy to us). She also intends to "pour [her own] spirits in [Macbeth's] ear" when he returns home from battle (1.5.1). Literally, she means she's going to fill her husband's "ear" with harsh words that will help convince him to take action against Duncan, but there's also a sense that Lady Macbeth will "fill" her husband's body in the same way that women's bodies are "filled" or, impregnated by men. All of this is to say that Lady Macbeth is portrayed as masculine and unnatural. It's pretty explicit: she asks the spirits to "unsex" her, stripping her of everything that makes her a reproductive woman. She wants her "passage to remorse" to be stopped up—i.e., her vagina. (What? Well, being a woman and a mother makes her compassionate, so she wants the "passage" of childbirth to be blocked.) She wants her blood to be make thick, meaning both the blood in her veins but also her menstrual blood, the "visiting's of nature." Finally? She asks that her breast milk be exchanged for "gall," or poison. In Lady Macbeth's mind, being a woman —especially a woman with the capacity to give birth and nurture children ----interferes with her evil plans. Femininity means compassion and kindness, while masculinity is synonymous with "direst cruelty." When Lady Macbeth says that her husband is "too full o' the milk of human kindness," she's implying that Macbeth is too much like a woman in order to wield a monarch's power (1.5.1). And she uses this notion of Macbeth's "kindness" against her waffling husband when she pushes him to murder the king: "When you durst do it, then you were a man" (1.7.4). Soon after Macbeth proves his "manhood" by killing Duncan and becoming king, Lady Macbeth disappears into the margins of the story and becomes the kind of weak, enfeebled figure she herself would probably despise<sup>13</sup>. And by Act V, Lady

Macbeth has been reduced to a figure who sleepwalks, continuously tries to wash the imaginary blood from her hands, and talks in her sleep of murder (5.1.1-6). She's grown so ill that the doctor says there's nothing he can do to help her. "The disease," he says, "is beyond" his "practice," and what Lady Macbeth needs is "the divine" (a priest or, God), not a "physician" (5.1.12-13).

Would easily read this as a kind of psychological breakdown? Lady Macbeth is so consumed by guilt for her evil acts that she eventually loses her mind. But we could also say that her transformation from a powerful and "unnaturally" masculine figure into an enfeebled woman reestablishes a sense of "natural" gender order in the play. In other words, Lady Macbeth is put in her place, sleepwalking through the palace while her man makes all the decisions. Depending on the production, Lady Macbeth is portrayed as a virago (a brazen, war-like woman) and a manipulator, as the seed of Macbeth's evil thoughts, or as his devoted queen. In some productions she weeps incessantly, in some she sneers, and in some no one's really sure what she's doing. In some interpretations, she uses sexuality to convince Macbeth to do the murder the King.

### Conclusion

Female characters play an important role for the dramatic run of events in Shakespeare's plays. Just as in reality, women of Shakespeare's dramas have been bound to rules and conventions of the patriarchal Elizabethan era. Therefore, it was very common back in Elizabethan England to compel woman into marriages in order to receive power, legacy, dowry or land in exchange. Even though the Queen herself was an unmarried woman, the roles of woman in society were extremely restricted. Single women have been the property of their fathers and handed over to their future husbands through marriage. In Elizabethan time, women were considered as the weaker sex and dangerous, because their sexuality was supposedly mystic and therefore feared by men. Women of that era were supposed to represent virtues like obedience, silence, sexual chastity, piety, humility, constancy, and patience. All these virtues, of course, have their meaning in relationship to men. The role allocation in Elizabethan society was strictly regulated; men were the breadwinners and woman had to be obedient housewives and mothers. However, within this deprived, tight and organized scope, women have been represented in most diverse ways in Shakespearean Drama.

The construction of female characters in Shakespeare's plays reflects the Elizabethan image of woman in general. For all that, Shakespeare supports the English Renaissance stereotypes of genders, their roles and responsibilities in society; he also puts their representations into question, challenges, and also revises them. Shakespeare's Tragedies can be seen typically, it presents a steep fall from prosperity to misery and untimely death, a great change occasioned or accompanied by conflict between the tragic characters and some superior power. Those, for tragedies typical early, unnatural deaths are considered as an erotic quality, which seems to be slumbering in all of Shakespeare's female characters<sup>14</sup>. What is more, all of them appear to have guilt upon them. Feminist criticism appears to be the fastest-growing and most widespread of all recent approaches to Shakespeare. The women's point of view raises several questions; how is meaning related to gender? How is 'maleness' related to feminism? What are the females' functions? Are there any at all? Hence, feminist approaches to Shakespeare and all those questions are best understood in the context of feminism itself: the drive to achieve rights and equality for women in social, political and economic life. However, this does not mean that

feminism is anti-men; it is more against sexism. Consequently, it is against the beliefs and practices that structure and maintain the subordination and oppression of women.

Further, feminism reveals and challenges the cultural shaping of gender roles in all social institutions like family, work, politics, religion, and, of course, in literature and drama. Feminist criticism examines how female experience is portrayed in literature and drama. It tries to expose how, in plays, in novels and other writing, patriarchal ideology often stereotypes, distorts, ignores or represses that experience, misrepresenting how women feel, think and act (Gibson, 1998, pp.30-31). Shakespeare's plays are full with resourceful and self-confident women, who create their own space and achieve or represent a spirited independence. There are several different personalities in Shakespeare plays, who assert themselves in very different ways: Desdemona, Ophelia and Lady Macbeth just to mention a few of them<sup>15</sup>. Thus, the focus of this paper lies in the tragic female characters Ophelia, Lady Macbeth and Desdemona who merit equal, if not to say more attention than male characters. It always seems that there is a tragic burden and guilt attached to their characters that ends in their deaths. Looking at Ophelia and Desdemona, it appears to be harder to find their guilt that caused their deaths. Ophelia may or may not be found guilty by the audience in betraying and rewarding Hamlet's love. Concerning Desdemona, although the audience knows she is not guilty. Desdemona is falsely found guilty by her husband Othello.

# References

- 1. A b c d e f g h Shakespeare, William (1988). Four Tragedies: Hamlet, Othello, King Lear, Macbeth. Bantam Books.
- 2. Shakespeare, William (1995) (in French and English). Oeuvres Completes. Tragedies II ( Bouquins ed.).Robert Laffont.
- 3. Gehrmann, Timm (2006), Female Characters in Macbeth, Othello and Hamlet. P19
- 4. Baker, W. Brodie's notes ed.(1991), Graham Handily
- 5. Colin, Philip C. (1991), Shakespeare and Feminist Criticism. P 122-129
- 6. Cox, Catherine.(1990), "An Excellent Thing in Women: Virgo and Viregas in King Lear." Modern Philology. PP 143
- 7. Hankey, Julie. "Victorian Portias: Shakespeare's Borderline Heroines." Shakespeare Quarterly Vol. 45. 1993. pp 426-448.
- 8. Kahn, Coppolia. "Roman Shakespeare: Warriors, Wounds, and Women." Theater Research International. 2000. pp 194.
- 9. Allen, Jeffner (1984), Motherhood: The Annihilation of Women. P 315.
- 10. Foakes, R. A. (2003), Shakespeare and Violence, Cambridge: Cambridge University Press.
- 11. Brandt, Galina A. (1999), Women's Nature as a Problem, Russian Social Science Review. P 73-94.
- 12. Colin, Philip C. (1991), Shakespeare and Feminist Criticism. P 142-153
- 13. Essay by player, High School, 12<sup>th</sup> grade, A, April 2002
- 14. Ekici, Sara (2009), Feminist Criticism: Female Characters in Shakespeare's Plays Othello and Hamlet. P24.
- 15. Gehrmann, Timm (2006), Female Characters in Macbeth, Othello and Hamlet. P35

# **Rights-Based Approach to Development: Are there any Constant Common Features?**

Quazi MH Supan

# Abstract

One of the difficulties in conceptualizing a rights-based model lies in its 'so called' essential features. Invoking distant international human rights standard presents its own problem. This problem is also amplified by the changing principles of international human rights law. Some suggest to treat this approach with caution as they think 'rights-based' has become the latest development fashion and fear that it is being used to dress up the same old development. This cautious approach led many development thinkers to propose various basic features for this model to draw a demarcating line between this model and other contemporary models. Ironically, this attempt has helped a little – basic features of a rights-based model are rarely common.

**Key words:** human rights, development, rights-based approach, development model, human development, common features

## Introduction

The valuable efforts of the theorists and the practitioners in establishing and realizing the link between human rights and development have led to the emergence of an unlimited number of terminologies in this field. They include elements, requirements, conceptual/ substantive/ operational issues, added values, characteristics, essential oils, basic features, *sine qua nones*, and numerous others. Whatever these terminologies may intend to mean, they are overlapping and to some extent, may create considerable confusion. Moreover, the wide differences in the understanding of the model among writers and practitioners may arguably suggest that there may be some common features, but still there do not exist any widely acceptable features for a rights-based approach.<sup>1</sup>

The features, which are common in practice now, were in use before human rights intervention. An approach does not necessarily mean to be right-based simply because those features are derived from international human rights principles. The current human principles are: universality and inalienability; indivisibility; inter-dependence and inter-relatedness; non-discrimination and equality; participation and inclusion; accountability and the rule of law. More principles will appear in near future. And this expanding tendency of principles may indicate that the basic features of rights-based approach will never remain constant. The sole objective of the present article is to examine the unstable nature of the so called common features of the rights-based approach. In doing so my exploration will be limited two major areas, namely, features derived from correlation between human rights and development and features extracted from international human rights normative framework.

#### Features derived from correlation between human rights and development

The notion of the rights-based approach to development is deeply rooted in the relationship between human rights and development<sup>2</sup> – the understanding of this relationship is still emerging, expanding and evolving. While the proponents think such a relationship can be used to achieve the common goals of human rights and development, some remain sceptic about use of human rights in development. For example Peter Uvin argues:

... [T]here is less to the emerging human rights approach in the development regime than meets the eye. Much of it is about the quest for moral high ground: draping oneself in the mantle of human rights to cover the fat belly of the development community while avoiding challenging the status quo too much, crossexamining oneself, or questioning the international system... The people in whose name the innovations are adopted did not fight for this change.<sup>3</sup>

Peter Uvin's statement is an admission of a relationship which exists between human rights and development. There may be an interesting academic debate as to which one appeared first in the world – human rights or development. Whichever appeared last, there was a relationship between the two from the date of appearance. Before the human rights in development discourse actually took off, the idea of underdevelopment had been linked to depressive socioeconomic conditions and absence of sustainable justice and freedom.<sup>4</sup> Thus underdevelopment was very much linked to non-realization of human rights. Since the early 1990s, there has been an enormous endeavour to relate human rights with development – in theory and in practice. The notable inconsistencies in the understanding of this relationship among various agencies may compel Peter Uvin to compare this endeavour to a constant search for high moral ground to compete in the tough competition for scarce resources. Nevertheless, a relationship exists and much depends on how we realize this relationship in theory and in practice. Uvin's realization that 'the people in whose

name the innovations are adopted did not fight for this change' is also true and history in his favour. People fought and actively participated in four great revolutions that had profound impact on the evolution of today's human rights: the Glorious, the French, the American and the Bolshevik revolution.<sup>5</sup> In those societies, people knew their opponents, they fought localised fights and the fight did not cross the state boundary. In today's increasingly globalized world, frontiers are numerous and opponents are many. Where at least half of the population of the Sub Saharan Africa and South Asia fight and spend their lives only to secure their daily bread, it is neither rational nor practical to think they will fight for changes. This does not mean they do not want change - the voice of the poor provides conclusive evidence that the poor demand voice and change.<sup>6</sup> If the poor knew (knowledge), had there been no unequal and inequitable power and resource distribution in national and international order, they would have been in a much better condition (development) – if they had the proper tools to fight (accountability, participation and empowerment) - they would have certainly fought for change. Until that happens, it is the moral and legal obligation (human rights) of others to fight for the cause of the poor, 'in whose name the

On an international level the linkage was first established by the Declaration on the Right to Development. For the first time, the Declaration on the Right to Development declares the right to development as 'an inalienable human right', defines development in human rights terms and recognizes that "development is a comprehensive economic, social, cultural and political process" and this process "aims at the constant improvement of the well-being of the entire population and of all individuals on the basis of their active, free and meaningful participation in development and in the fair distribution of benefits resulting therefrom." Thus the Declaration begins an era of human development putting the western orthodox view of economic development into question if not to an end.

innovations are adopted', and to prepare them to fight for change.

From the adoption of the Declaration on the Right to Development up to the adoption of the United Nations Millennium Declaration this 'comprehensive economic, social, cultural and political process' has been made more comprehensive, strengthened, or complexed, as some may argue, by a number of Declarations, namely the Vienna Declaration and Programme of Action, the Declaration on Social Progress and Development, Copenhagen Declaration on Social Development, Cairo Declaration on Population and Development and the Beijing Declaration and Platform for Action. These Declarations, which constitute the mainstream of the evolution of this debate, have added new 'elements', 'contents', 'keys', 'essential oils' 'principles', 'issues' and 'values' to this model.

The Declaration on the Right to Development may be regarded as the foundation stone of the RBA model since it explicitly links development to human rights<sup>7</sup>, declares the centrality of the human person in the development process,<sup>8</sup> emphasises on the indivisibility and interdependence of civil and political and economic, social

and cultural rights<sup>9</sup> and reaffirms the principle of non-discrimination<sup>10</sup>. The later declarations reaffirm all these and propose provisions for the creation of suitable national and international conditions where the right to development can be better realized and these include mainly democracy, rule of law, good governance and poverty eradication.

The RBA model bridges between human rights and development – the missing link in the previous development models. Human rights have been widely considered 'to be those fundamental moral rights of the person that are necessary for a life with human dignity.'<sup>11</sup> The Vienna Declaration recognizes and affirms that:

"all human rights derive from the dignity and worth inherent in the human person, and that the human person is the central subject of human rights and fundamental freedoms, and consequently should be the principal beneficiary and should participate actively in the realization of these rights and freedoms."<sup>12</sup>

The Declaration on the Right to Development states:

"The human person is the central subject of development and should be the active participant and beneficiary of the right to development."<sup>13</sup>

And moreover, the concept of development is also founded on human dignity. Thus there are at least five points of intersection:

- 1. both are founded on human dignity;
- 2. human person is the central subject of both;
- 3. human person should be the principal beneficiary and active participant for the realization of both;
- 4. The right to development is also a universal and inalienable right and an integral part of fundamental human rights;<sup>14</sup>
- 5. Both have the common objective of human development.

Theoretically there is a complex circular relationship between human rights and development - achievement of each is linked to the achievement of the other - development promotes human rights and the realization of human rights achieves development.

In the words of Niall MacDermot, the former Secretary-General of the International Commission of Jurists:

"One of the problems in this field is the lack of contacts between those work in the field of development strategies and those concerned with promoting human rights. At first, development economists regarded the concepts of human rights as irrelevant and disruptive to their attempts to make development policies 'non-political'. This attempt was, of course, futile because no decision has such far-reaching political consequences for a country and, indeed, for the human rights of its people, as the choice of its development strategy. Nevertheless, this was the attitude in the era when the primary emphasis was on economic growth. Now the pendulum has swung, and new development polices are being advocated with their stress on meeting basic needs, eliminating absolute poverty and promoting 'selfreliance'. There is still some reluctance to admit that this means that economic development has to concern itself with human rights. An exception is acceptance of the right of those concerned to participate in the decision making process, however little this right is realised in practice."<sup>15</sup>

This view was echoed in the 1995 Australian study, A Rights Way to Development:

"Human rights and development are not distinct or separate spheres. Development should in fact be properly seen as a subset of human rights. This runs counter to the current approaches to aid and human rights which treat development and human rights as separate. Therefore, the question is not how to identify points of actual or potential intersections, nor to 'link' the two by way of conditionality. The flawed assumption results in fruitless quests."<sup>16</sup>

This model recognizes that human rights and development are interdependent, consistent and mutually re-enforcing. Development and human rights are directly related, both are people-centred and for both, respect for human dignity and human life is the guiding principle. The dialectal relationship here is self-evident in that one is enriched by the other, and in that there can be no understanding of one unless there is understanding of the other.<sup>17</sup> In the Oslo Symposium, it was argued that to dwell on the distinctions between the two can be confusing, misleading, and unnecessary. Furthermore it was suggested that:

"a "human rights-based approach to development" is "human development." Human development can be seen as "practically synonymous with human rights" and the differences tend to be found in terminology, as well as in the means and instruments that the two perspectives emphasize. The two perspectives focus on the same ends (human life and human dignity), and on the same processes and key characteristics (people-centered, participatory, equitable, nondiscriminatory and empowering). Only the means and instruments tend to differ. The human rights approach focuses on norms and standards, legal instruments, responsibilities and obligations, and on the notions of entitlement of the rights-holders, accountability of the duty bearers, and the rule of law and respect for rights. The human development approach focuses on meeting basic needs for all, poverty eradication, investing in human capabilities, equitable economic growth and democratic governance. Combining these two sets of means and instruments will strengthen the process of achieving the human right to human development for all.<sup>18</sup>

#### Features extracted from international human rights normative framework

A rights based approach to development is a development model grounded in human rights legislation and this makes it distinctively different to other previous or contemporary models.<sup>19</sup> Although some of the basic elements and requirements of an RBA model, for example, interdependence of rights, democracy, good governance, non-discrimination and sustainability, may be found in the provisions of the Universal Declaration of Human Rights, the genuine debate on a possible human rights framework for development processes began in the last decade of the twentieth century. Prior to that the debate was only about mainstreaming human rights in development activities as many national and international NGOs were engaged in such activities.<sup>20</sup>

There are various rights based approaches<sup>21</sup> and they have evolved and joined together from several streams of thought and practice. One of these is based on the international legal human rights framework, a set of United Nations conventions and covenants. Another stream has grown primarily out of a myriad of social, cultural and political struggles and debates in both North and South. This stream of rights-based approaches are inspired by autonomous movements such as of those of women, the landless and indigenous peoples which often include demands for participation in decisions which affect their lives. A third trend, identified by political scientists, emphasises an historical evolution from clientelism to citizenship. In reality, the practice of development agencies is a blend of all these - which stream dominates the others largely depends on the governance structure of the agency and its institutional culture. The meaning and importance of rights-based approaches are often contested within an agency and official policy statements tend to reflect a compromise between views.<sup>22</sup>

According to Mary Robinson:

"A rights-based approach is a conceptual framework for the process of human development that is normatively based on international human rights standards and operationally directed to promoting and protecting human rights. The rights-based approach integrates the norms, standards and principles of the international human rights system into the plans, policies and processes of development."<sup>23</sup>

And she continues: 'it should be emphasized that at the heart of a human rights approach must be the legal character of the international treaties that create rights and duties.'<sup>24</sup> Incorporation of this legal character of international human rights law into a rights-based approach connotes a shift from previous development paradigm. This legal character distinguishes obligations and rights from charity and needs. Whoever wants to apply a rights-based approach must understand and accept this legal character. And this can be done by an explicit recognition of the national and international human rights normative framework. With this recognition, a duty-bearer not only recognises the human rights of right-holders, but also positively acknowledges and asserts its obligation under national and international human rights law. This is not to say duty-bearers can escape their obligation by non-recognition of this framework, they will still be under obligation, as they are now.

The OHCHR borrows Mary Robinson's language in defining a rights-based approach to development.<sup>25</sup> Definitions are abundant<sup>26</sup> and the 'missing link' is present everywhere. What is missing is the willingness to incur obligation. It is in this context Peter Uvin wrote: 'insightful and stimulating conceptual formulations, but zero practical guidelines or obligations', and Hugo Slim probably misunderstood him.

#### **Search for Common Features**

While listing the basic features, elements or characteristics of a rights-based approach, there is a growing trend of recognition that some common features or elements do exist.<sup>27</sup> However, a closer look at a selected definitions and features of a rights-based approach proposed by various agencies and academics may shed considerable doubt on the existence of such common features.<sup>28</sup> While there are some common features in academic works, uncommon features are more common in the language of development agencies. Only two things are common: human rights and development. This only reveals the wider recognition of the relationship between human rights and development and also exposes a remarkable variance in the understanding of this relationship. A question essentially arises here: to what extent this variance is theoretically permissible? After all, we are linking human rights have a specific normative framework. And one of the reasons why we are opting for a rights-based approach is its normative clarity.

There certainly exists, in its generic sense, 'a rights-based' approach, by whatever name we call it: human rights-based approach, human rights approach, rights approach, human rights perspective, rights perspective and rights way to development. Different elements and features have been attributed to each of these names. The level of these elementary inconsistencies is so high that at some point human rights may disappear from a rights-based approach. As Piron argues, rights 'can also be 'legal' or 'customary' rather than universal, and may conflict with international standards.'<sup>29</sup> And not surprisingly, a DFID key sheet categorizes rights

regimes into five different levels and places international human rights in the fifth.<sup>30</sup> Pointing to this approach, Philip Alston rightly remarks: this wide-ranging and eclectic approach is not at all what is generally intended by the expression 'rights-based approaches'. If we accept this approach as a rights-based approach to development, development becomes the vanishing point of human rights. But we desire just the opposite to happen where human rights become the vanishing point of development. It is pertinent here to quote from Hugo Slim:

... [F]inally perhaps, we could also do away with the very word development. The common struggle for human rights and social justice would at last bring the end of the era of development. We could begin to talk a proper moral and political language of equality, fairness, social justice, right, and responsibility.<sup>31</sup>

The language and concepts surrounding human rights-based approaches are so different, especially among the development agencies, that attempts have been made to single out a 'true' or 'genuine' rights-based approach from 'other' rights-based approaches. For example, distinction has been offered between a 'human rights-based approach' and a 'rights-based approach': the former is more explicitly grounded in international law, in particular legally binding instruments rather than just the UDHR. It recognises that the realisation of all human rights for all is a responsibility of aid agencies. On the other hand, the latter may be used to indicate a certain distance from the body of international and national legal standards and mechanisms, and a preference for a mostly social, community-based or advocacy-based approach.<sup>32</sup>

Again distinction has been made between a rights-based approach and 'integration of human rights' or 'adopting a human rights perspective' or 'taking human rights into account': the former refers to a systematic approach through which human rights help set the objectives and modalities of development, taking into account states' obligations. The implication is that development agencies may need to go through institutional changes to fully adopt this new approach. By contrast, the others do not require such an institutional transformation. Human rights may offer valuable insights, but need not systematically be taken into account in all aspects of policy, programming, implementation and monitoring of aid.<sup>33</sup> Thus institutional transformation appears to be an important factor to determine who is applying a rights-based approach and who is not. Again, if we accept that in a human rights perspective, human rights need not be systematically be taken into account that will encourage us to use human rights arbitrarily – a feature of old development assistance paradigm which we want to change. A growing number of development co-operation organisations claim to be applying a rights-based approach. There is a suggestion that the majority are actually applying a human rights perspective to development assistance and poverty reduction which may be a first step in the gradual process towards a full-scale application of a rights-based approach. Thus, arbitrary use of human rights may constitute the first step towards a rights-based approach. Another

definition of a human rights perspective may be cited here, which is much inline with Piron's view:

A human rights perspective typically recognises that there is an intrinsic link between poverty and human rights at the policy and strategy level. It may be contributing to the realisation of human rights and may also embrace the human rights principles... At best, however, a human rights perspective tries to apply human rights concepts consistently throughout the development co-operation process but is not guided by the realisation of *all* human rights for *all* people as the first and foremost goal. Moreover, a human rights perspective does not shift from the traditional development philosophy to a new paradigm where the concept of rights-holders and duty-bearers would permeate every aspect of development co-operation...<sup>34</sup> (italics original)

The author goes on to say that until an organisation's capacities and methodologies have been adequately developed, a rights-based perspective may be a first step towards a rights-based approach. The intention is clear – to draw a demarcating line between a perspective and an approach and the line is largely drawn on adequate institutional capacities. Thus, we can trace at least two factors which are offered to distinguish between a perspective and an approach: institutional transformation and adequate institutional capacities. Institutional transformation may be necessary to apply a rights-based approach and human rights may require such transformation, but institutional transformation may occur without any reference to or intervention of human rights. Institutions change over time and adopt to new situations to compete, cooperate and survive. Such changes may be beneficial or detrimental to human rights. Moreover, it will be extremely difficult to determine what exactly constitutes an adequate institutional capacity. A general sense suggests that bigger institutions have better institutional capacity than the smaller ones. In that sense, smaller institutions cannot apply a rights-based approach.

Proponent	Approach	Critical issues/features
Amartya Sen	Human development	Human development and fulfilment of human
		rights have a common motivation - claims,
		entitlements and enhancement of capabilities. <sup>35</sup>
Independent	Human rights-based	Right to Development is an inalienable human
Expert on the	approach	right - national and international responsibility -
Right to		expansion of opportunities and capabilities -
Development		claims or entitlements of rights-holders - duty-
		bearers - human development, participation -
		accountability - transparency - non-discrimination,
		equity and justice. <sup>36</sup>
Peter Uvin	Rights-based approach to	organizational capacity – mutual influence –

Table 1: Common/uncommon features of right based approach

bility – mechanism
ss – inclusive
increased
nprovements in
nments and the
os among the actors
of global actors. <sup>37</sup>
o poverty – explicit
l human rights
erment,
tion, participation –
operation – legal
ons. <sup>39</sup>
uality, contract and
ial political
goods, natural rights
al human rights
naracter of the
e rights and duties
h – participation,
non-
in terms of rights –
n-discrimination -
identally contributes
hts does not
rights-based
ards contained in,
ne UDHR and other
ruments guide all
programming -
s – obligations,
ionship between
rsality and
inter-dependence
and non-
and inclusion -
43
lopment in Article 1
t to Development -
multidisciplinary -
accountability,
-
erived from human
ions -
ions -
ions - ckling poverty -

Proponent	Approach	Critical issues/features
		aggregate gain - greater accountability from all
		actors in the development process. <sup>45</sup>
Australian	Human rights approach to	Poverty is a violation of human rights -
Government	development	elimination of poverty is the primary goal of
		development assistance. <sup>46</sup>
Norwegian	Rights based approach to	Integration of all human rights including the RTD
Government	development	into the plans, policies and processes of
	-	development.47
SIDA	Rights based approach	Consideration of people's economic, cultural,
		civil, political, and social rights in all aspects of
		the development process - democratization of
		society. 48
ODI	Rights-based approach to	Claims and obligations or duties – power - the
	development	definition, interpretation, and implementation of
	-	rights are dynamic processes that are inherently
		political in their nature. <sup>49</sup>
International	Rights approach, rights-	The legal and normative character of rights and the
Human Rights	based approach	associated governmental obligations are based on
Internship		international human rights treaties and other
Program		standards, and national constitutional human rights
Tiogram		provisions - accountability of governments – claim
		and obligation – empowerment. <sup>50</sup>
Human Rights	Rights way to	Based on UN principles and international human
Council of	development, human	rights law – obligations – accountability -
Australia	rights approach to	participation - human rights provide a lens to look
110001000	development	at poverty – poverty is a denial of human rights -
	ar (rispinent)	more comprehensive policy response to the
		structural causes of poverty. <sup>51</sup>
ActionAid	Rights based approach	Poverty analysis and understanding, legal and
		moral entitlements, fair share of society's
		resources – national, intergovernmental and
		transnational obligations, power. <sup>52</sup>
CARE	Rights-based approach,	empowerment – claim – inherent rights validated
	rights approach	by international law – recognition of poor,
	ingino approach	displaced, and war-affected people's inherent
		rights essential to livelihood security – systematic
		or structural root causes of vulnerability at societal
		and global levels underpinned by vested
		interests. <sup>53</sup>
Oxfam	Rights-based approach	Approach grounded in and gains legitimacy from
Oxfain		the rights enshrined in international and national
		law - multi-level nature of rights obligations and
		violations - need to address them systematically
		and strategically – accountability and
		responsibility – empowerment. <sup>54</sup>
Save the Children	Rights-based approach	Combines standards, principles and approaches of
Save the emilaten	and cubed upprouch	human rights, development and social activism to
		promote justice, equality and freedom - duty-
		bearers, obligations and accountability –
		entitlements – non-discrimination – empowerment
		– power issues lie at the root of poverty and
		- power issues ne at the root of poverty and

Proponent	Approach	Critical issues/features
		exploitation. <sup>55</sup>

Apart from the basic characteristics of the model, there are other lines of thoughts and arguments, which are not necessarily the basic features of the model but form the basis of the model and have gained prominent space in the current rights-based debate. They include: linkage between human rights and development, interdependence and indivisibility among human rights, democracy, good governance, participation and poverty reduction. In many existing literature these too has been referred to as basic features of a rights-based approach and this pattern exemplifies the proposition that the common features of a rights-based approach are yet to be confirmed.

### References

- 1. See Table A.
- 2. Sano, Hans-Otto, 2000, Development and Human Rights: The Necessary, but Partial Integration of Human Rights and Development, *Human Rights Quarterly* 22 (2000), pp. 734–752.
- 3. Uvin, Peter, 2004, Human Rights and Development, Kumarian Press, page 64.
- 4. Chew, Sing C. and Denemark, Robert A., 1996, On Development and Underdevelopment in Sing C. Chew and Robert A. Denemark (eds.), *The Underdevelopment of Development: Essays in Honor of Andre Gunder Frank*, Sage Publications.
- 5. For historical analysis of the French Revolution, see Schama, Simon, 1989, Citizens: A Chronicle of the French Revolution, Penguin, London; Fudge, Thomas, 2002, The French Revolution: A History. 1837, New York: The Modern Library; Doyle, William, 2002, Oxford History of the French Revolution, 2nd ed., Oxford: Oxford University Press; for the British Revolution, see Vallance, Edward, 2006, The Glorious Revolution: 1688 Britain's Fight for Liberty, Brown Little; Israel, Jonathan I., 2003, The Anglo-Dutch Moment: Essays on the Glorious Revolution and its World Impact, Cambridge University Press; for American Revolution, see Shankman, Andrew, 2004, Crucible of American Democracy: The Struggle to Fuse Egalitarianism and Capitalism in Jeffersonian Pennsylvania, University Press of Kansas; Nash, Gary B., 2005, The Unknown American Revolution: The Unruly Birth of Democracy and the Struggle to Create America.
- See generally, D. Narayan with R. Patel, K. Schafft, A. Rademacher and S. Koch-Schulte, 2000, Voices of the Poor. Volume 1 - Can Anyone Hear Us?, New York, published for the World Bank by Oxford University Press.
- 7. Declaration on the Right to Development, Article 1.
- 8. Ibid. Article 2(1).
- 9. Ibid. Article 1.
- 10. Ibid. Article 2.

- 11. Forsythe, David P., 2000, Human Rights in International Relations, Cambridge, p. 3; see also, the first preambular paragraph of the UDHR.
- 12. The second preambular paragraph to the Vienna Declaration and Program of Action.
- 13. See, Article 1 and the 13<sup>th</sup> preambular paragraph. This has been reaffirmed by Article 10 of the Vienna Declaration.
- 14. Article 1 of the Declaration on the Right to Development, Article 10 of the Vienna Declaration and Program of Action.
- 15. MacDermot, Niall, 1981, Human Rights and the Rule of Law, Pergamon Press, Oxford, p. 29.
- 16. The Human Rights Council of Australia, 1995, The Rights Way to Development; A Human Rights Approach to Development Assistance, p.26.
- 17. For a brief discussion on the various justifications for the value of rights in development, see Celestine Nyamu-Musembi and Andrea Cornwall, What is the "rights-based approach" all about? Perspectives from international development agencies, IDS Working Paper 234, November 2004.
- 18. See, Report of the Oslo Symposium.
- 19. Ferguson, C., 'Global social policy principles: human rights and social justice', London: DFID, 1999. See also, Eyben, R., 'Donors, Rights-based Approaches and Implications for Global Citizenship: A Case Study from Peru', in N. Kabeer (ed.), Meanings and Expressions of Citizenship, London: Zed Books, 2004; Eyben, R., 'International development organizations and rights based approaches', presentation to 'Rights and Power' workshop, IDS, November 2003.
- 20. Rights, citizenship and participatory development, Escor Research Report 7183, Maxine Molyneux and Sian Lazar (1999).
- Stephen P. Marks, the Human Rights Framework for Development: Seven Approaches, François-Xavier Bagnoud Center for Health and Human Rights, 2003.
- 22. Eyben, R and Ferguson, C, 2004: 'Can donors be more accountable to poor people?' in Leslie Groves and Rachel Hinton (eds), Inclusive Aid: power and relationships in international development, London, Earthscan.
- 23. Mary Robinson, A Voice for Human Rights, University of Pennsylvania Press, 2006., p. 303.
- 24. Ibid.
- See, the official WebPages of the OHCHR (http://www.unhchr.ch/development/approaches-04.html, last visited 12.04.2013).
- 26. For various definitions and understandings of rights-based approaches, see Susan Appleyard, A Rights-Based Approach to Development: What the policy documents of the UN, development cooperation and NGO agencies say, OHCHR Asia-Pacific, September, 2000.
- 27. Paul Gready and Jonathan Ensor (eds.), Reinventing Development?: Translating Rights-Based Approaches from Theory into Practice, Zed Books, 2005.

- 28. See Table A
- 29. Laure-Hélène Piron and Francis Watkins, DFID Human Rights Review: A review of how DFID has integrated human rights into its work, Overseas Development Institute, July 2004, p.114.
- 30. Department for International Development, Key Sheet 18: Rights-based Approaches, July 2003, p. 1.
- Hugo Slim, A Response to Peter Uvin, Making Moral Low Ground: Rights as the Struggle for Justice and the Abolition of Development, **PRAXIS** The Fletcher Journal of Development Studies VOLUME XVII – 2002, p. 5.
- 32. Laure-Hélène Piron and Francis Watkins, DFID Human Rights Review: A review of how DFID has integrated human rights into its work, Overseas Development Institute, July 2004.
- 33. Ibid.
- 34. Cecilia M. Ljungman, A Rights-Based Approach to Development, November 2004, based on a chapter by Cecilia M. Ljungman in Britha Mikkelsen's forthcoming Methods for Development Work and Research - A New Guide for Practitioners, Second Edition, Sage Publications, New Delhi, February 2005.
- 35. Sen, Amartya, 2000, Human Rights and Human Development in Human Development Report.
- 36. Arjun Sengupta. "Realizing the Right to Development" Development and Change Vol. 31, 2000; Third Report on the Independent Expert on the Right to Development, Arjun Sengupta, January 2001; E/CN.4/2002/WG.18/2, 4th report of the Independent Expert.
- 37. Peter Uvin, Human Rights and Development, Kumarian Press, 2004, see especially, Chapter 6: A Rights-Based Approach to Development.
- 38. Although the authors mainly refer to a human rights approach to poverty reduction strategies, there is also reference to a human rights approach to development.
- 39. OHCHR, 2004, Human Rights and Poverty Reduction: A Conceptual Framework, United Nations, New York and Geneva, p. 33.
- 40. Slim, Hugo, 2001, Not Philanthropy But Right Rights-Based Humanitarianism and the Proper Politicisation of Humanitarian Philosophy, Paper presented at a Seminar on Politics and Humanitarian Aid: Debates, Dilemmas and Dissension. Commonwealth Institute, London, 1st February 2001; Slim, Hugo, 2002, Not Philanthropy But Rights: The Proper Politicisation of Humanitarian Philosophy in War, The International Journal of Human Rights 6 (2), Frank Cass, London; Slim, Hugo, 2000, Dissolving the Difference between Relief and Development: The Making of a Rights-Based Solution, Development in Practice, Vol. 10.3, Oxfam.
- 41. Robinson, Mary, 2006, Chapter 18: Mainstreaming Human Rights in A Voice for Human Rights, University of Pennsylvania Press.
- 42. Marks, Stephen P., 2003, The Human Rights Framework for Development: Seven Approaches, François-Xavier Bagnoud Center for Health and Human Rights.

- 43. Report on the Second Interagency Workshop on Implementing a Human Rights-Based Approach in the Context of UN Reform, Stamford, CT, USA, 5-7 May, 2003;, Attachment 1: The Human Rights Based Approach to Development Cooperation: Towards a Common Understanding Among the UN Agencies; Report of the Secretary General to the ECOSOC, 1998; Workshop on the Implementation of Rights-based Approach to Development: Training Manual, UN Office of the Resident Coordinator, Philippines. 2002.
- 44. Comments of the High Commissioner for Human Rights at 2nd Interagency Workshop on Implementing a Rights-based Approach in the Context of UN Reform, May 2003.
- 45. Laure-Hélène Piron, The Right to Development: A Review of the Current State of the Debate for the Department of International Development, DFID/ODI, April 2002; DFID, Realising Human Rights for Poor People, October 2000, pg. 7; Department for International Development-UK in OHCHR Asia-Pacific Human Rights Roundtable No. 1: A rights-based approach to development, October 2002.
- 46. Human Rights Policy and Strategy Paper, Australian Council for Overseas Aid, June 2001, p. 2.
- 47. Norwegian Agency for International Development in OHCHR Asia-Pacific Human Rights Roundtable No. 1: A rights-based approach to development" October 2002
- 48. Swedish International Development Cooperation Agency in OHCHR Asia-Pacific Human Rights Roundtable No. 1: A rights-based approach to development, October 2002.
- 49. ODI Briefing Paper, 1999 (3) September, Caroline Moser and Andy Norton, To Claim our Rights: Livelihood Security, Human Rights and Sustainable Development, 2001.
- 50. Ripple in Still Water, International Human Rights Internship Program, 1997; Circle of Rights, 2000.
- 51. The Human Rights Council of Australia, The Rights Way to Development; A Human Rights Approach to Development Assistance, 1995; The Human Rights Council of Australia, The Human Rights Based Approach to Development Cooperation, Stockholm Workshop 16–19 October 2000.
- 52. The Hua Hin Declaration on Rights Based Approach, ActionAid Asia, August 2000; Stockholm Workshop, ActionAid India, February 2003.
- 53. CARE Workshop on Human Rights and Rights-based Approaches to Programming" August 2000 in Promoting Rights and Responsibilities, June 2001; Andrew Jones, A Rights Approach and Responsibility Analysis in Promoting Rights and Responsibilities October, 2000.
- 54. Oxfam America RBA Workshop. October 2002.
- 55. Theis, Joachim, 2003, Rights-based Monitoring and Evaluation: A Discussion Paper, Save the Children.

### New International legal Order in the New world Order: Role of Comparative Law in Resolving Emerging Issues

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Abstract: In the modern era of globalized new world order, we visualize a neo-phase of human dealings from polar to polar which has squeezed the territorial boundary and germinates innovative application of international law where comparative law has an important role to have resolution setting aside the conflicts of various nationals' laws and for win milieu in ensuing conflict. The principles of democracy and rule of law are increasingly finding support across the world. Democracy, the rule of law and human rights enjoy an almost undisputed position. Yet others see in globalization a threat to social cohesion. Global networks effect unequal distribution of wealth and erode local communities. Herein within the rhetoric of new international legal order in the new world order, comparative law has remarkable role to play to eradicate or alleviate the challenges within the reality of it for win existence.

**Key words:** New world order, new international legal order, neo-colonialization, comparative law and global governance.

**Introduction:** Comparative law with its proactive discourse and functions are hyper active to solve multifaceted dimensions of global reality with new international legal order in the new world order. Globalization has been defined as the "process of denationalization of markets, laws, and politics in the sense of interlacing peoples and individuals for the sake of the common good"<sup>1</sup>. The interdisciplinary work between international relations and international law of the last decade<sup>2</sup> is well suited for handling the topic of global regulation because of the increasing trend towards cooperation between domestic regulatory agencies to secure compliance with internationally agreed standards. One of the major manifestations of globalization is the new force and importance of public international law, particularly in the fields of human rights, international criminal law, international trade law and international environment law. In the modern discourse of global village with new international legal order with new world order, there is no alternative of comparative law to solve multifarious problem within the context.

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**Objectives:** The core and pivotal objective of this article is to demonstrate the importance and prolific application of comparative law in the modern unipolar<sup>3</sup> and multipolar<sup>4</sup> world with neophase of global new order imbedded with neo-legal order for the ulterior purpose of peaceful coexistence minimizing conflicts and disputes between and among various nations, nationals and sovereign entities.

**Methodology:** Only the secondary methodology of research, viz, Published statistics, Published texts, Media and Personal documents has been followed to accomplish this article.

**New world order:** A new world order is a vision of the world in which greater peace and stability is achieved through a new political order following the end of the cold war. The new international system in the post-Cold War period has been marked by a seeming contradiction: on the one hand, fragmentation; on the other, growing globalization. This trend will likely to be holding.

On the level of the relations among states, the new world order is based on major power cooperation. The international system contains at least five major powers – the United States, Europe, Russia, Japan, and China. There appears to be no serious challenger to these powers. That means the world politics in the near future will largely be shaped by the above-mentioned major powers.

Among major powers, the United States will continue to be the greatest hegemonic power in the short run, but its military and economic power will gradually decline. In the long run, some growing states or integrations will likely to get close to the United States' power. Hence, the international system will possibly gain a multipolar character in the future, though it may take some decades to reach that point.

International relations have become truly global in the post-Cold War world. Communications are instantaneous and the world economy operates on all continents simultaneously. A whole set of issues has surfaced that can only be dealt with on a worldwide basis, such as nuclear proliferation, the environment, the population explosion, and economic interdependence. In conjunction with increasing international cooperation, inter-state wars have declined and "low politics" gained greater importance in international affairs. The years to come, however, are likely to witness severe competition of major powers on natural resources, particularly, energy resources. In this regard, disputes about unfair trade practices and worries about dependence on externally concentrated or monopolistic sources of goods, services and technologies will remain to be addressed. But the prospects for collective rules and regulations, rather than unilateral accusations and restrictions, will seem to be improved.

With the spread of global market economy and rapid expansion of foreign investments, developing countries, though they are cautious about foreign investments, are likely to be doing better in the future. But structurally-rooted North-South inequalities will seem to remain as a potential source of international conflict. The North-South conflict aside, the post-Cold War world faces several other threats, most notably, ethnically-driven conflicts, religious militancy and terrorism, supported by some revisionist powers. These are particularly challenging threats as they are beyond the full control

of nation-states, calling for international cooperation if they are to be effectively dealt with. Thus, the future of the world will depend on whether major powers, in particular, and the international community, in general, are able to show the will to cooperate on these serious problems.

Historical background of new world order: The term "New World Order" was actually first used many years ago. Adolf Hitler said: "National Socialism will use its own revolution for the establishing of a new world order." With the collapse of communist regimes in Eastern Europe and disintegration of the Soviet Union, the bipolar international system dominating the Cold War period disappeared, leaving its place to basically a unipolar system under the leadership of the United States, speaking especially from a military/political point of view. The former rivals of the United States, especially the Soviet Union and China, have either collapsed or jettisoned the central features of their ideologies that were hostile to the United States. Other countries have turned to American military protection.

The "American Empire" may best be seen operating in the Persian Gulf, Iraq, and the Middle East, in general, where the armed forces of the United States have established a semi-permanent foothold and thousands of soldiers deployed at bases keep a watch on Iran, Syria, and other "potential enemies."

Albeit widely criticized, American military power serves a number of critical functions. In some areas, in the Persian Gulf for example, it guarantees weak states against attacks by their stronger neighbors. After the demise of the Soviet Union in the 1990s, the sole superpower has been trying to put the world in order, the way it wants it to be, rearranging the pieces on the global jigsaw board. But the American vision of a new international order has remained a dream in the post-Cold War era with so many puzzles pregnant with political problems, economic inequalities, social tensions and regional imbalances.

In Asia, the presence of the United States stabilizes the region in which a number of states might otherwise feel compelled to develop much larger military forces than they currently have. American military power in Japan does only protect Japan against foreign enemies. It indirectly protects China and other Asian states against the consequences that might flow from a heavily re-armed Japan. Moreover, American military power serves as an organizer of military coalition, both permanent (such as NATO) and ad hoc (such as peacekeeping missions). American military participation is often necessary to the command and control of coalition operations. When the Americans are willing to lead, other countries often follow, even if reluctantly. However, this is certainly not to argue that American intervention occurs in every large conflict around the world. But it means that almost any country embarking on the use of force beyond its borders has to think about possible reactions of the United States.

From an economic/political point of view, on the other hand, the international system can be said to be multicolor, rather than unipolar. The United States certainly a great economic power, but it is not the only power. There are other power centers, most notably, the European Union, the Organization of Asia-Pacific Economic Cooperation, as well as many nation-states outside of these integrations or

organizations. As a matter of fact, when the United States exercised military operations to "stable" the world in Kuwait, Afghanistan, Iraq and elsewhere, it insisted on sharing the costs of the operations with other major powers or relevant countries. Thus, the international system of the post-Cold War era actually reflects a mixture of both unipolar and multipolar system in which at least five major powers, the United States, Europe, China, Japan, and Russia, dominate international affairs.

**Outline of new international legal order:** The current international situation on the whole is moving towards relaxation, characterized by a rapid advancement of a trend towards a plural world and a globalized economy anchored on the giant strides achieved by modern science and technology with the information and life science and technology at its core. In this regard, an especially influential mode of theorizing the interaction between international law and politics in the global systems is the notion of an international regime.<sup>5</sup> According to Krasner, an "international regime" refers to a set of implicit or explicit principles, norms, rules, and decision making procedures around a particular set of issues in a range of international policy areas.<sup>6</sup> Stone, who has used this framework<sup>7</sup> to explore the "constitutionality" of international regimes, maintains that international regimes differ to the degree to which they codify norms and institutionalize decision making procedures. <sup>8</sup> As noted above, "harmonization"<sup>9</sup> is enjoying unrivalled popularity.

Internationalizing tendencies have been in existence for thousands of years. One such tendency, colonialism, was instrumental in spreading Western concepts of law around the world. However, the depth and extent of at least two modern manifestations of internationalization — globalization and regionalization — merit their classification as separately denominated phenomena. The present post-communist, high technology based changes, which go by the name of globalization, are much discussed, and 16 years on from 1989, despite its numerous critics, its pace shows no sign of abating. Regionalization hits the headlines less, but is just as important. These phenomena have produced a depth of change in municipal law and international legal practice not seen since the heyday of colonialism. 'Harmonization'<sup>10</sup> pressures grow and harmonization efforts abound.

The international legal system is the foundation for the conduct of international relations. It is this system that regulates state actions under international law. The principal subjects of international law are states, rather than individuals as they are under municipal law. The International Court of Justice acknowledged in the Reparation for Injuries case that types of international legal personality other than statehood could exist and that the past half century has seen a significant expansion of the subjects of international law.<sup>11</sup> Apart from states, international legal personality is also possessed by international organizations and, in some circumstance, human beings. In addition, non-governmental organizations and national liberation movements have also been said to possess international legal personality.

Since 1945 the international legal system has been dominated by the United Nations and the structures that were established as part of that organization. While the UN has been the object of significant criticism, it has nevertheless played a pivotal role both in the progressive development and codification of international law.

The General Assembly of the UN has sponsored and promoted some of the most important developments of the last fifty years through the adoption of multilateral treaties and instruments. The Convention on the Law of the Sea 1982 and the Vienna Convention on the Law of Treaties 1969 are two of the most prominent examples.

A significant role in the legal work of the UN is played by the Sixth Committee (Legal), one of the six committees of the General Assembly. The Committee deals with international law under Article 13(1) (a) of the Charter, which authorizes the General Assembly to initiate studies and make recommendations to encourage the progressive development and codification of international law.

Landmark phases of new international legal order: As the nineteenth century gave way to the twentieth, Peace Conferences held at The Hague in 1899 and 1907 sought to humanize our world and to introduce rules to mitigate human suffering during armed conflict. The quest for the peaceful settlement of disputes had as its raison d'être the reduction of human suffering wrought by war.

The efforts of the League of Nations and the United Nations to codify and progressively develop international law have seen their greatest vindication in the twentieth century in the international legal regime for the protection of human rights. Today, declarations, conventions, treaties, bodies of principles and codes of conduct cover almost every conceivable aspect of the relationship between the individual and the State. Legal instruments exist to protect the rights of the child, to protect the rights of women to equality of treatment, to spell out the duties of Governments in respect of the observance of civil and political rights and economic, social and cultural rights, to proscribe racial discrimination, to prevent torture, to protect minorities and to promote and protect cultural diversity. We enter the new millennium with an international code of human rights that is one of the great accomplishments of the twentieth century. Alas, human rights are flouted wantonly across the globe. Genocide, mass killings, arbitrary and summary executions, torture, disappearances, enslavement, discrimination, widespread debilitating poverty and the persecution of minorities still have to be stamped out. Institutions and mechanisms have been established at the United Nations to eradicate these blights on our civilization. They include the working groups and special rapporteurs of the Commission on Human Rights, the institutions and mechanisms established to promote the realization of economic, social and cultural rights and the right to development, and the Office of the United Nations High Commissioner for Human Rights. When we face egregious violations of human rights, documenting and exposing them has been, and will remain, of the utmost importance.

In the future, it is our hope that the International Criminal Court, building on the examples set by the International Tribunals already established, will not only bring criminal despots and tyrants to justice but also act as a deterrent against gross violations of human rights everywhere. The agreement reached to establish the International Criminal Court is a watershed in the history of international cooperation for the promotion of human welfare and for the universal realization of human rights. Developments in this area are of such great potential import for the international legal order that they warrant detailed attention. The ECJ in Van Gend en Loos v. Nederlandse Administratie der Belastigen,<sup>12</sup> which is one of its most important judgments at all, said that Community law must

respect general legal principles common to the tradition of the member states. This statement means that comparative law has changed its role of informant about foreign law into the role of collaborator in defining what is commonly shared.<sup>13</sup>

**Role of comparative law:** The importance of comparative law has increased enormously in the present age of internationalism, economic globalization and democratization. In consequence, Lord Goff could write recently that comparative law, which was 'the hobby of yesterday, is destined to become the science of tomorrow".<sup>14</sup>

Several disciplines have developed as separate branches of comparative law, including comparative constitutional law, comparative administrative law, comparative civil law (in the sense of the law of torts, delicts, contracts and obligations), comparative commercial law (in the sense of business organizations and trade), and comparative criminal law. Studies of these specific areas may be viewed as micro- or macro-comparative legal analysis, i.e. detailed comparisons of two countries, or broad-ranging studies of several countries. Comparative civil law studies, for instance, show how the law of private relations is organized, interpreted and used in different systems or countries. Despite the differences between comparative law and these other legal fields, comparative law helps inform all of these areas of normativity. Comparative law would be applicable to private international law when developing an approach to interpretation in a conflicts analysis. Comparative law may contribute to legal theory by creating categories and concepts of general application. Comparative law may also provide insights into the question of legal transplants, i.e. the transplanting of law and legal institutions<sup>15</sup> from one system to another.

Also, the usefulness of comparative law for the sociology of law (and vice versa) is very large. The comparative study of the various legal systems may show how different legal regulations for the same problem function in practice. Conversely, sociology of law may help comparative law answer questions, such as: How do regulations in different legal systems really function in the respective societies? Are certain legal rules comparable? How do the similarities and differences between legal systems get explained?

Comparative law is a very important discipline in communication between legal systems. It may provide the basis for the production of bilingual dictionaries that include the information necessary to make legal communication across borders successful. It also helps mutual understanding and the dispelling of prejudice and misinterpretation.

In this globalized world, comparative law is indispensable as it provides a platform for intellectual exchange in terms of law and it cultivates a culture of understanding in a diverse world. Furthermore, comparative law helps in broadening horizons for law reformers and legislators around the world. It can also be helpful in international relations in shaping foreign policies. Comparative legal methodology is used to acquire insight into foreign legal systems, to find solutions for problems of a specific c legal system, or to promote the unification of law between national legal systems. Its methods consist of a comparison of different legal systems or legal traditions (external comparison), or of fields of law within national legal systems (internal comparison). With the proliferation of

regulatory regimes at the international level (e.g. in the context of the United Nations or the WTO), comparative legal research has expanded its focus to include international law.

**Challenges:** The globe is beset by crises --war on terror,<sup>16</sup> doctrine of pre-emptive strike,<sup>17</sup> climate change, resource scarcity, food and financial crises, nuclear proliferation, and failing states. Ever the years, the challenges to such an effort have only increased both on political and economic front and threatened to undermine the values Americans cherish most: Freedom and democracy, the two pillars on which the American society has been built. So, the attacks on American defence, economic and financial power centers in September 2001 not only shook the country's foundations but the people's psyche as to what has gone wrong. What followed is a new American perspective of the world seen through the prism of terrorism that challenges the establishment, political, economic and military power of individuals and nations. Terrorism is born out of extremism and fundamentalism which have little respect for liberalism. They are poles apart and have no place in an egalitarian society; for that matter in a world for which the future is more important than marching backward. It's a clash of ideologies, political systems and a question of supremacy that pits raw strength against sophisticated hi-tech weaponry.

In more than half a century of pre- and post-Cold War era, the US has played a significant role in changing the course of histories of countries around the world, not necessarily for the benefit of people living there but to fit them in its scheme of things. Or, to usher in a new world order, both political and economic. In the process, the world has divided itself into two broad camps, pro- and anti-American, and the continued friction between them is bound to exacerbate tensions in the future.

Various countries are neither enemy of one another, nor are they friends; they are "frenemies," competitors for the world's scarce resources. These countries assure their people that they can shape the coming global order and provide for their future welfare, but their respective visions of the future can differ greatly. A potential "clash of futures" looms on the horizon of the multipolar world.

The model of the sovereign state that has been regarded as the foundation of the international legal order ever since the Peace of Westphalia (1648) will be critically assessed with regards to actual developments in international relations. The question will be asked whether this model is still sufficient in an age of new threats and globalization, or that it stands in need of revision. At the same time, the question whether liberal democracy can be exported by military means, or only can come from within nations themselves, will be asked. These questions will all be addressed with regards to theoretical and philosophical conceptions that lie at their roots.

At present, while the developed nations occupy 86% of the gross world product and 82% of the export market, the developing countries, with an overwhelming majority of the world population, hold a mere 14% and an 18% respectively. The world is witnessing ever increasing wealth enjoyed by the developed nations in contrast to the ever worsening poverty on the part of the developing countries. There are still 1.3 billion people in the world living under the abject poverty line with an overwhelming majority of whom living in the developing countries. Absent a fundamental change of

such a situation, not only will the developing countries be unable to keep up with the development of the world economy, but the developed nations will also fail to insulate themselves from adverse effect, resulting inevitably in a turbulent world community which will find it increasingly difficult to promote the common development of all countries and realize worldwide prosperity.<sup>18</sup>

However, two vital and controversial issues are only rarely discussed by harmonizers. Is harmonization desirable? Is harmonization achievable? The subject of 'legal transplants' (in inverted commas because the very name of the subject is controversial) has generated much debate, largely as a result of the huge modernization and harmonization drives of recent years. Will imported laws/legal concepts work? Will they work as planned? Will they work in the same way as they do in their home jurisdiction? These are all questions to which there are no easy answers.

'The processes of globalization stir up old nationalisms, exacerbate cultural conflict, and encourage post-modern scepticisms about the universality of value or ideas.'<sup>19</sup> It is one thing to receive law from somewhere else, but quite another to ensure that it is as effective in the host jurisdiction as in the place where it was conceived and developed. It is all very well to harmonize, but the need for it, the possibility of achieving it, and the difficulties of maintaining it, are far more controversial and difficult issues than they first appear.<sup>20</sup> On the international practice front, the basic documentation may be the same worldwide, but local conditions are still important, perhaps because the question of enforcement of contractual obligations is always a local one, or because security, a locally based concept, has to be taken, or for some other reason.

More than ever before, then, 'any conception of law that is limited to the municipal law of nation states and, perhaps grudgingly, public international law, is extremely narrow and probably dangerously misleading'.<sup>21</sup> However, comparative law is still far from the mainstream. Despite the increase in activity, legal academia as a whole has not caught up with developments since the 1980s. Indeed, the difference between the still parochial attitude of many academics and the cosmopolitan view of international practitioners is striking, a difference constantly borne out by the author's own experience. One need only compare the attendance at the comparative law section of an academic conference (ten or so colleagues) with the attendance at a presentation on Islamic law to a City of London firm (a packed meeting room). Further confirmation, if any is needed, comes from numerous conversations in which practitioners express their astonishment at how far academia lags behind practice, and the fact that in some areas practitioners who might well otherwise have relied on the academic world to produce scholarly work have been obliged to fill the gaps themselves. More problems are to be found in the state of academic comparative law itself. William Twining describes it as 'subjected to mounting internal and external criticism' and refers to 'Febrile introspection about the purposes, nature, and methods of comparative law'.<sup>22</sup> Nora Demleitner writes that 'comparative law is in a state of disorientation'.<sup>23</sup> In its 'classic' form, it is restricted in scope and insufficient for the needs of the present situation, consisting mainly of an introduction to legal systems focusing on the common law/civil law divide, and the domestic systems of a few Western jurisdictions, such as France and Germany, together with comparisons between certain areas of private law (particularly obligations) in those systems.

The International Court does not enjoy a full separation of powers, with permanent members of the Security Council being able to veto enforcement of even cases to which they consented in advance to be bound. Other existing international thematic courts, such as the ICC, are not under the umbrella of the International Court. "Compulsory" jurisdiction is limited to cases where both parties have agreed to submit to its decision, and, as such, instances of aggression tend to be automatically escalated to and adjudicated by the Security Council. Organizations, private enterprises, and individuals cannot have their cases taken to the International Court, such as to appeal a national supreme court's ruling. U.N. agencies likewise cannot bring up a case except in advisory opinions (a process initiated by the court and non-binding). The rules under which different domestic legal systems operate usually vary. Such lack of uniformity causes legal uncertainty and can also create friction between nations.

**Probable recommendations:** There is an increasing realization that all legal systems are to some extent mixed, not just those such as Scotland and South Africa, which are traditionally so regarded, and that mixing will be a key component of law in the future.<sup>24</sup> In Dean Koh's words, Louis "led an intellectual revolution to break down the historic distinctions between public and private law, domestic and international law, and municipal and global governance."<sup>25</sup> Slaughter et al. perceptively point to the need to rethink the relationship between international relations and law on the grounds that:It is time to move beyond the canonical narratives of how the disciplines evolved, both separately and in conjunction with each other. These narratives are valuable both as intellectual history, providing necessary context for current debates, and as bulwarks against the ad hoc, borrowing of terms and concepts. But it is time to move on.<sup>26</sup>

To reverse such an imbalance of the world economic development, the world community must make joint efforts in transforming the existing world economic order so as to make it conducive to the maintenance of the interests of all countries of the world, including that of the developing countries. This situation has produced a need for comparative legal knowledge unparalleled in history. It has become an 'essential instrument for legal understanding'.<sup>27</sup> There should be political compromises on judges' backgrounds; geography and experience matter as Politics determines whether or not the courts receive resources. There has been healthy progress over the past century in fashioning global laws against the most serious of international crimes. With sufficient support, the ICC could be a powerful mechanism, and it could be an especially credible one by virtue of its transparency and commitment to the legal ideals respected by most domestic legal systems. Coalitions of different international players can create a tribunal by treaty as an alternative to national courts.<sup>28</sup> The parties to such a treaty may be a country and the United Nations, as is the case with the Independent Special Court for Sierra Leone. They may also be various states, as was the case with the Nuremberg and Tokyo tribunals. The Nuremberg trials, for instance, were held in accordance with the London Agreement pursuant to which the four victorious allies of the World War II agreed to prosecute major Nazi leaders.<sup>29</sup>

There is hardly any alternatives of enunciating and application of hybrid legal system<sup>30</sup> by using the maneuvers of comparison as prevailing in comparative law to have resolutions pertaining to various conflicts of this new world order whereof the necessary and proper parties hailed from different

parts of the world as the hybrid legal system (or jurisprudence of hybridity) is hyper active to give resolution in arising legal problem as firstly, it acknowledges the reality that people hold multiple community affiliations, rather than dissolving that multiplicity into either universality or separatism. Second, developing procedural mechanisms, institutions, or discursive practices that acknowledge hybridity helps to ensure that multiple communities are at least taken seriously and given a voice. Third, providing space for multiple communities may result in better substantive decisions because there is more space for variations and experimentation.<sup>31</sup>

**Conclusion:** In the postmodern era of human civilization with new international legal order in the new world order, comparative law with its magnitude of horizontal and vertical functional reality is quite potential to have solutions of multifaceted legal problems. Peaceful and sustainable global reality in the new world order with new international legal order depends in many parts on adaptable legal resolution for the neo-disputes and challenges as arisen amongst global actors and dealings. The pivotal realities like -- global good governance and implementation of human rights with legal and equitable right on the resources of the world, addressing the problems of climate change, conflict of global leadership along with controversial war on terror and doctrine of pre-emptive attack and the notion of neo-colonialism within new world order should be properly addressed in new international legal order by the international communities through the maneuver of comparative law. International organizations, international civil society and other global stake holders should come forward to address the multidimensional challenges of new international legal order in the new world order via the materialization of comparative laws' efficacy whereof special action oriented focus should be invested without further delay.

#### **References:**

- Delbrück J.(1993), Globalization of law, politics, and markets, Indian Journal of Global Legal Studies ; I: 9-36.
- 2. Kenneth W. Abbott, (1989) Modern International Relations Theory: A Prospectus for International Lawyers, 14YALE J. INT'L L. 335.
- 3. Global reality of economics, politics and leadership with the motive of neo-colonialism headed by USA after 2<sup>nd</sup> world war.
- 4. Globalization without border whereof individuals and private sectors take part important role of human relations and disputes all over the world.
- 5. Abbott;supra note 8.
- 6. Krasner; supra note 13, at 2.
- 7. Beeson Mark & Jayasuriya Kanishka, (1994), An Essay in International Relations Theory, 56 REV. POL. 441.
- 8. Stone; supra note 15, at 470.
- 9. Foster, NHD (2002) 'Transmigration and Transferability of Commercial Law in a GlobalizedWorld' 21st Century Kluwer.

- 10. In inverted commas because the word as used herein covers a whole range of processes in which varying degrees of homogeneity are sought.
- 11. Reparation for Injuries Suffered in the Service of the United Nations (Advisory Opinion) [1949] ICJ Reports 174 at 178.
- 12. European Court Reports 1963, 1; Common Market Law Reports 1963, 105.
- 13. Schulze R,(1995) "Le droitprivéEuropean", Revue international de droit compare7, at 18.
- 14. 46 international and Comparative Law Quarterly 745, at 748, (1996),"Comparative law and the courts".
- 15. Watson Alan, one of the world's renowned legal scholars specializing in comparative law.
- 16. Thompson, Mark (2008-12-26). "The \$1 Trillion Bill for Bush's War on Terror". TIME. http://www.time.com/time/nation/article/0,8599,1868367,00.html.
- 17. Beres, Louis Rene (1991-1992), On Assassination as Anticipatory Self-Defense: The Case of Israel, 20,HofstraL.Rev.,pp. 321.
- 18. http://www.china-un.org/eng/chinaandun/legalaffairs/sixthcommittee/t28560.htm.
- 19. Twining, W (2000) 'Comparative Law and Legal Theory: The Country and Western Tradition' in Edge, SOAS Law Department Transnational Publishers 21 at 65.
- 20. Legrand's Pierre criticism of the European Civil Code project in 'Antivonbar' in*The Journal of Comparative Law*:A New Scholarly Resource issue-1, at 13
- 21. Twining, W 'Comparative Law and Legal Theory' supra note 7 at 25.
- 22. Twining, W (2005) 'Glenn on Tradition: An Overview' in this issue at 108.
- 23. Demleitner, N (1999) 'Combating Legal Ethnocentrism: Comparative Law Sets Boundaries' (31) ArizonaState Law Journal 737 at 737.
- 24. Örücü, E, Attwool, E, and Coyle, S (1996) Studies in Legal Systems: Mixed and Mixing Kluwer chapter 20.
- 25. KohHaroldHongju, (2007) Louis B. Sohn: Present at the Creation, 48 Harv. Int'l L.J. 14–15.
- 26. Slaughter et al., supra note 8, at 368.
- 27. Örücü, E (2002) 'Unde Venit, Quo Tendit Comparative Law' in Örücü, *Comparative Law in the 21st Century* Kluwer 1 especially at 15-16.
- 28. http://www.africa-union.org/en/commarchive.asp?Page=2&ID=141.
- 29. London Agreement, Aug. 8, 1945, Nuremberg Trial Proceedings, vol. 1,
- 30. AttwoolllElspeth,(1996),Sean Coyle "Studies in legal systems: mixed and mixing"February.
- M.Cover Robert, (1981), The Uses of Jurisdictional Redundancy: Interest, Ideology, and Innovation, 22 WM. & MARY
   L. REV. 639.

# Legal Aid- Assisting People To Enforce Their Rights: Bangladesh perspective

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# Abstract:

In a democratic country it is a prerequisite that all citizen get economic and social justice. It can be achieved through Legal aid service. Legal aid is the provision of assistance to people otherwise unable to afford legal representation and access to the court system. Legal aid is regarded as central in providing access to justice by ensuring *equality before the law, the* right and the *right to a fair trial*. In other word means free lawyers services or legal advice or representation that is provided by an organization at law or no cost to people who cannot afford to pay for legal service. Legal professionals use the phrase 'legal aid' to mean any or more of the following three issues-(a) providing monetary aid, or (b) counseling on any legal issues, or (c) defending a person in a court of law. This study emphasizes on the meaning of legal aid, problems of Legal Aid Act in Bangladesh and how these problems can be solved. Legal Aid is one of the most important ways to ensure justice and establishing rule of law in the society.

### Key words:

Legal Aid, Rules, Criminal, Civil, helpless, instrument, charity, indigent, constitution, legal assistance.

### Introduction:

Chief Justice Mathew remarks that "Justice is open to all like the Ritz Hotel." Behind this remark lies an age-long complaint that the cost of law prevents the poor from getting justice. The Ritz or Sheraton hotels are open for public but can the poor people dare to enter their let alone stay there? International commitment to the principle of equality of justice as enshrined in Article 7 of the Universal Declaration of Human Rights, it has been pledged in the preamble of our Constitution that one of the fundamental aims of the state is to realize a society in which equality would be secured for all citizens.<sup>1</sup>Article 27 of the Bangladesh Constitution, 1972 provides that all citizens are equal before law and are entitled to have equal protection of law.

In the case of *Dr.Neelima Ibrahim v* Bangladesh, it was held that the principle of *Audi alterem partem* unless expressly excluded by law or by the nature of the objects of any particular law is to be implied to have been proved in every statute. But the fact is that due to financial constraints and social inequality not all are equally privileged to get the benefits of law. Thus, jurisprudential concepts of 'equality before law', 'equal protection of law', 'rule of law' have provided in the past, the rationale for legal aid movement.<sup>2</sup>

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 Objective:

The Legal Aid Services Act, 2000 aims at serving legal aid to those who are unable to access justice owing to economically disadvantaged, destitute and incapable of socio-economic consideration. The main object, therefore, of providing legal aid is to make the law and the legal services accessible to all in commitment to the internationally recognized principle of equality of justice. So we can said that it is an Act to provide legal aid to the litigants who are unable to get justice because of financially poor, indigent and others eco-social reason.

# Methodology:

This study is based on secondary data collected from law reports, text-books, and decision of the apex courts, journals, newspapers, websites, and training workshops on Legal Aid etc.

# **Definition of Legal Aid:**

It is more democratic thought that it is all equality before the law and all have rights to get fair justice. But if anybodyfaces economic incapacity to get fair justice in such case cannot come into bloom. To serve the legal assistance to all those people who are poor and unable to take action for their economic weakness is called legal aid.

The New Encyclopedia Britannica says, "Legal aid is professional legal assistance given, either free or for a nominal sum to indigent persons in need of such help".<sup>3</sup>

Legal aid service is a service which is provided to those who cannot afford it.<sup>4</sup>

The International Commission of Jurists includes the provisions of legal advice and representation in the Court to all those threatened as to their life, liberty, property or reputation, who are unable to pay for it.

Section 2(a) of the Legal Aid Act, 2000 specifies that the term 'Legal aid' means to provide legal aid to people who are unable to get the justice due to financial position or due to different socio economic conditions such as the payment of lawyer's fees, etc. Thus, broadly defines 'Legal Aid' so as to include counseling, payment of lawyers' fees and other incidental cost for expenses of litigation.<sup>5</sup>

# **Classification of Legal Aid:**

Legal Aid offers different kinds of help, depending on the problem. These are discussed below-

## For Criminal Charges:

An offence which likely results in jail (e.g. assault, impaired driving causing bodily harm, robbery, welfare fraud, breaks and enter).

## **In Family Matters:**

To get custody of children or to change custody

To set up, increase or decrease child or spousal support payments

To help one if his partner denies his access to his children

To get access to see children or to make a major change to access arrangements that has already been made.

To stop partner from selling or destroying other property

To negotiate ownership of things like RRSPs or pensions that could provide once with some income.

To get access for grandparents or other relatives to see a child.

Sec.5 of the Family Court Ordinance1985, Legal Aid can be provided in case of Dissolution (divorce) of Marriage, Dower, Maintenance, Restitution of conjugal, Guardianship etc. In above mentioned cases a poor women or children can get Legal Aid.<sup>6</sup>

# For Some Civil Cases and Final Appeals:

Worker's compensation appeal tribunal cases

Social benefits Tribunal matters

**Employment Insurance appeals** 

Mental Health hearings and appeals.

# Legal Aid Does Not Cover The Following Kinds Of Causes:

Wrongful dismissal, change of name, personal bankruptcy, power of attorney, money you lent to others or money you owe to others sponsorship of relatives, commercial litigation, libel, defamation and slander, real estate matters etc.

### **Criteria for Granting Civil Legal Aid:**

Before any legal aid certificate can be issued, there are two aspects that the legal aid office must consider. These are:

1. Whether the proceedings have legal merit. (This point will be dealt with between the Advocate and the Legal Aid Certifying Offer).

2. Whether the applicant is financially eligible for Legal Aid- i.e. whether the applicant's finances are considered to be within the required limits for Legal Aid under the Legal Aid (Financial Resources) Regulations 1997.

To determine whether an applicant is financially eligible for the Legal Aid office will undertake a means step.<sup>7</sup>

### **Concept of Legal Aid:**

It is very tough to trace out the true history of legal aid. If we reflect on the definition of 'legal aid' then it can be inferred that the history of legal aid is as old as the practice of law because throughout the history, lawyers have advised and represented poor people without charge, the year 813 A.D. In 1179 A.D. the third Lateran Council, which issued a more specific prohibition to the same effect, made an exception on behalf of poor persons who could not manage their own causes. In the reign of Henry I the rules relating to security were relaxed for poor plaintiffs so that those who had not sufficient present security should pledge their faith to the utmost satisfaction to their power. In the reign of Edward I and Henry III, the principle was accepted that the poor should have their rights for nothing. In Magna Carta, it was declared that to no one will we sell; to no one will we deny or delay right or justice.<sup>8</sup>

The first traces of the entitlement to be represented by a counsel can be traced to the Prisoner Counsel Act, 1836. Before this legislation, a person charged with felony in Britain did not have an entitlement to be represented by a counsel but, by this Act, a person charged with felony got a right to be defended by a counselor solicitor. The earliest legal aid movement appears to be of the year 1851 when some enactment was introduced. In France for providing legal services to the poor and needy dates back to 1944. when Lord Chancellor, Viscount Simon appointed Rusheliffe Committee to enquire about the facilities existing in England and Wales

for giving legal advice to the poor and to make recommendations as to be desirable for ensuring that persons in deed of legal advice are provided the same by the State. The Committee reported in 1945 and described the existing falsities for gratuitous legal aid and advice as "a service which was at best somewhat patchy and which has become totally inadequate".<sup>9</sup>

### Legal Aid in Other Countries:

There are many countries has incorporated the theory of Legal aid in their legal system. Among these some are described below-

### Legal Aid Service in United Kingdom:

Legal Aid in UK has been governed in the past by a series of statutory enactments. In criminal cases, the bar operated system of 'duck briefs' where any lawyer present in Court would represent an unrepresented prisoner facing indictment on a token fee of a guinea. Cappelletti's comparative work in 1975 point out that the Christian nation of 'charity' informed legal aid as well. For instance, St. Yves of Brittana (the patron saint for lawyers) was canonized for his legal aid as well. There were apparently two organized forms. One was the official created by canon law, employed by the church and paid to a represent the poor in ecclesiastical court (advocates pauperismdeputatusetstipendiatus). The second was the command given to forgive courts fee of poor litigants and assign private lawyers to help them gratuitously. The Poor Prisoner's Defense Act 1903, offered legal aid from public funds in criminal cases heard by judge and curry by 1930, this was extended to certain cases before the magistrate as well. The Genesis of the Legal Aid and Advice Act 1949 was the report of Rushcliffe Committee published in May 1945 which recommended that legal aid should be available in all courts and should be given free of cost to those unable to afford counsel. The Rushcliffe committee recommended thatLegal Aid should available in all courts and in such manners as would unable persons in need to have access to the professional help they required.<sup>10</sup>

#### Legal Aid service in USA:

The standing committee on legal aid indigent defendants was gratified that, without dissent, the American Bar Association House of Delegates, at the 1986 annual meeting received standers for provides of civil Legal service to the poor. These standers are fourth set of association standers on this topic. They represent the result of almost three years of consideration by the standing committee. We believe that the standers will be assistance to organizations service the legal needs of low income persons as they struggle to provide high quality legal representation within available limited resources at a time of great unmet need. In society based on law, justice is available only to those who can make the legal system work for them. A right is not a right unless it can be enforce; a remedy is not remedy, if it is available only in the theory. For the poor who lack the economic resources to hear a lawyer, justice historical has often been difficult or impossible to achieve. Lack of economic resources as well as dependence on public institution and programs create magnitude legal problems for the poor that have been difficult to resolve.

The American Bar Association first adopted Standers for the operation of civil legal Aid programs in1961. Those standers were reviewed and revised in 1966, and the standers currently in effect were approved in 1970. The Standers of Civil Legal Aid have not been addressed by American Bar Association since that date.

The past sixteen years have significantly increased the understanding of how to meet the legal need of the poor most effectively, and the emergence of a variety of delivery moods, involving both staff and private lawyers.<sup>11</sup>

#### Legal Aid in Canada:

The constitution and legal service in Canada, the concept of social justice have never remained constant for any appreciable period of time and historically, as our attitudes have changed so too have our views as to legal assistance to the poor. In Ontario, Prior to 1951, most legal aid was performed on an ad hoc by members of bar who always recognized it as part of their professional responsibility. In civil matters, no payment was received for such service and lawyer not only absorbed their loss of fees but also paid the required disbursements out of their pockets. In criminal matters, while the Attorney –General's Department paid a nominal per diem fee to council in capital case no payment of any kind was received by member who acted the defense of an indigent person.<sup>12</sup>

In 1951 Legal Aid in Ontario Crystallized into a voluntary plan with the passing of regulations of the Law society of Canada. The period that followed had the following characteristics:

- 1. The service entirely voluntary in nature.
- 2. No lawyer was entitled to service any remuneration for service rendered unless the client could afford part payment.
- 3. Eligible was based on schedule of entitlement relating to annual income and number of dependent but a discretionary "needs" test was also built in.
- 4. The plan covered most civil cases but only indictable criminal matters.
- 5. The plan was administered locally by the Country and District Law Association, and
- 6. The provincial fund was available to pay for most disbursements.

The Legal Aid Act of 1966, the structure of which was developed in the Common Report, was in fact the result of the work and dedication of countless lawyer and layman alike going back over the many years that legal aid had been available in one form or another in this province. Now that it has been in operation in its present form for some years the changing times have again required a review. We dedicate this report to those who preceded us.<sup>13</sup>

#### Legal Aid services in India:

India was that it is necessary to establish a legal aid schemes that was held on 18-19<sup>th</sup> September 1957 at law Ministers Conference. Thereafter the law Commission of India in its Judicial Administration in its 4th report on "Reform of Judicial Administration " published in 1958 devoted a full chapter on legal aid and recommended to initiate action on that behalf. Thereafter in 1974, the above committee submitted its report known as "Processual Justice to the people" and in it discussed in detail the need for legal aid and advice to the poor, to the dales, Tribes and back word classes etc. It also recommended in 1976 and Article-39A was added to chapter-4(Directive principle of state police). It argues " The state to promote the operation of legal system on the basis of equal opportunity and in particulars, shall provide free legal aid by suitable legislation, or in other way, to ensure that opportunities for securing justice or justice is not denied to any citizen by reason for economic or other liabilities.

Another committee under the Chairmanship of Justice P.N Bhagwti on 26<sup>th</sup> September 1980. It was known as the "Committee for Implementing Legal Aid Services" (CILAS). This committee mentioned the legal aid scheme and transformed it into National Legal Services Authority (NALSA) through enacting LegalService Authority Act 1987. This law comes into effect on 9<sup>th</sup> November 1995. It gives statutory recognition to the legal aid scheme.<sup>14</sup>

# Legal Aid in Bangladesh:

In 1967 the Government of Pakistan set up a committee consisting of ten members and headed by eminent justice Humidur Rahman to recommend ways and means by which competent legal aid may be brought within the means of poor mitigations. The Committee submitted a fairly comprehensive report on February'15, 1970. Due to the liberation War in 1971, the recommendations were stalled. The Government took formal and specific initiative for enacting legal aid laws only in 1994 a resolution in 1994, the Government established a National Legal Aid committee chaired by the Minister, Ministry of Law, Justice and Affairs and District Committees chaired by the District judged to provide to legal aid to poor litigants and an amount of money was allocated to cover the costs of such representation under the authority of the District Judge. Funding is made available from government, resources, donation from national and international organizations and other sources.Subsequently by another notification dated 19<sup>th</sup> March 1997 government formed a National Legal Aid Committee, and also reconstituted district legal aid committees. Under this notification the National Committee was entrusted with coordinating and supervising the functions of the district committees.<sup>15</sup>

In 37 year time of its independent constitutional history legal aid movement in Bangladesh has not gained any momentum at the governmental level until 2000.It was in 2000 when the Government in assurance of financial cooperation by the Canadian International Development Agency (CIDA) made an initiative to provide legal aid to indigent litigants and in view of that plan the Legal Aid Act 2000 was passed providing for legal mechanism and access to legal aid throughout the country.<sup>16</sup>

No amount of constitutional protection of high ideal of rule of law, independence of judiciary for the administration of justice, can help a poor citizen of a country like ours to protect his rights and liberties unless there is someone to stand by his side.

# **Provision of Legal Aid in International Instruments:**

There exists a range of international norms and standards that relevant to the question of a state's responsibility to provide legal aid, which began to be articulated by the international community after 1945 with the establishment of the United Nations and the development of international human rights law. These standards are contained in treaties, such as covenants and conventions, which are binding amongst the states that ratify them, as well as other instruments designed to provide guidance, such as declarations, principles, rules, recommendations and guidelines. The latter instruments, while not legally binding upon states, have been accepted by a large number of states and considered to have moral force.

It has been a matter of fact that provision of legal aid in criminal matters is recognized all over the world. Legal aid as a human right is implicit in Articles 7, 8 and 10 of the Universal Declaration of Human Rights 1948 and more it flows clearly and inevitably from clause 3(d) of Article 14 of the International Covenant on Civil and Political Rights, 1966. Article 7 of the Universal Declaration of Human Rights, 1948 provides that all are equal before the law and are entitled without any discrimination to equal protection of the Law. All are entitled to equal protection against any discrimination in violation of this Declaration and against any incitement to such discrimination. The European Convention for the Protection of Human Rights and Fundamental Freedoms, 1950, in Article 6(3) (C) deals with legal aid in criminal cases whereby the right to free legal aid to a person charged in a criminal case was guaranteed. Besides, the United Nations Conference on Human Rights, 1968 (the Tehran Conference) recognized provision of legal aid in criminal matters attaching due importance. Some other international instruments contain provisions of legal aid in criminal matters. For example, the International Covenanton Civil and Political Rights. 1966 provides for legal aid in criminal matters under Article 14 (3) (d). Article 6(1) and Article 20(1) of the Commonwealth of Independent States Convention on Human Rights and Fundamental Freedoms. 1995 contain similar provisions as article 7 of the Universal Declaration of Human Rights. Article 24 of the American Convention on Human Rights, 1978 provides that all persons are equal before the law and consequently, they are entitled, without discrimination, to equal protection of the Law.<sup>17</sup>

# Legal Aid and NGO :

The legal Aid support of the NGOs is worth mentioning. Some are mentioned below-

a) The Bangladesh Legal Aid Service Trust (BLAST) has national networks of lawyers and currently provides legal aid and mediation services in eighteen districts and five legal aid clinic.

b) Madaripur Legal Aid Association (MLAA) encompasses the districts of Madaripur, Firojpur, and Shariatpur. Bangladesh MahilaPrishad (BMP) is 34 year old membership based, non-profit movement oriented voluntary organization, with approximately 134,00 general members working for woman's rights.

c) A number of other NGOs, like ASK, BNWLA BSWHR also provides legal services. While the general focus is on providing legal support in civil cases, relating mainly to matrimonial or land disputes, criminal work is also undertaken. Nature of disputes centered generally around matrimonial issueslike, divorce, non-maintenance, non-payment of dower, child marriage, dowry, and polygamy. There were also cases over inheritance, land and property matters. The role some renowned NGO are mention here.

d) BLAST achieved some milestones despite the otherwise gloomy scenario. On the side of the programmed, the number of cases settled through mediation increased substantially. The trend still showed a high number of women beneficiaries and family related disputes. The beneficiaries were given wider opportunities to be heard and their voice participation become an important feature in the strategy of planning and delivery of service. The rural leaders like UP chairman, women members and other important personalities like teacher, imams and community leaders were involved in BLAST's awareness and advocacy programmed, initiating the process of reaching the grass roots and eliciting their views.BLAST's has remained successfully engaged in legislative advocacy and public interest litigation with a focus on poverty related issued. BLAST has carried out 63 PILs between November 1999 to June 2007.<sup>18</sup>

e) MadaripurLegal Aid Association (MLAA), established: March 1978. The mission of the MLAA is established a society where people, particularly poor and destitute women and their children can live in justice and peace.<sup>19</sup>

f) Bangladesh National Women Lawyers Association (BNWLA) is one of the pioneer organizations working for the establishment of human rights in Bangladesh. The Association was formed in 1979 at the initiative of some prominent women lawyers of Bangladesh, and subsequently registered as a legal aid body in 1981. The Association works for the uplift of women by providing legal aid , conducting training on rights of women, lobbing for necessary reforms of the existing laws, lobbing the authorities on women's rights, issues and laws , investigating reports on violence against women and carrying out different activities for the rehabilitation of the survivors of different types of violence.

g) Ain o Salish Kendro (ASK) is a legal aid and human rights resource centre. It provides free legal to the poor-women, workers and child workers. It has a special consultative status with UNECOSOC. ASK is a membership organization, started by nine founding members (4 women and 5 men). Providing free legal aid, ASK seeks to create awareness of legal and human rights so as to empower citizens to negotiate their rights. It is committed to campaigning for reform of discriminatory and repressive laws to eliminate systemic social, legal and political discrimination.<sup>20</sup>

# Legal Aid Provisions in existing Bangladeshi Law:

It is stated earlier that the Constitution of the People's Republic of Bangladesh, 1972 recognizes the concept 'equality before law', 'equal protection of law', 'rule of law' etc. In these concepts, the issue 'legal aid' is underpowered. We get the flavor of legal aid in specific provisions in very limited scale in Bangladeshi Laws both in civil and criminal matters. To Legal Aid Act, 2000 has passed. Code of Civil Procedure, 1908 includes Legal Aid in Order 33 and Code of Criminal Procedure, 1898 includes Legal Aid in Section 342. Also in case of the rights codified in section 5 of the Family Court Ordinance, 1985legal aid can be applied.<sup>21</sup>

# Who Can Apply:

Any Freedom fighter rule-2 of the Legal Aid Rules 2001, the following persons will be entitled to receive legal aid:

- i. incapable of earning or partially incapable or jobless or whose yearly is not more than taka 6,000.00,
- ii. Any person income who is receiving old age benefit,
- iii. Any helpless mother with V.G.D card,
- iv. Any Women or children who are victims of illegal trafficking,
- v. Any Women or children who are victims of acid throwing,
- vi. Any person who has been allocated a house or plot to any ideal village,
- vii. Poor widow, any poor women deserted by her husband,
- viii. Any handicapped person with earning incapability,
- ix. Any person who is financially incapable to protect or defend his rights in the court,
- x. Any person who is arrested under preventive detention law and is financially incapable to defend his rights,
- xi. Any person who has been considered by the court financially incapable or poor,
- xii. Any person who has been considered or recommended by the Jail Authority financially incapable or poor,

xiii. Any person considered by the Organization from time to time financially incapable or poor for the purpose of the Legal Aid Act.

# How to Apply For Legal Aid:

All applications for getting legal aid must be submitted to the National Board of LegalAid or in appropriate cases to the District Legal Aid Committee. If an application is rejected by the District Committee and the personfeels aggrieved by that decision, then the applicant may prefer an appeal to the National Legal Aid Board within 60 days of the pronouncement of the decision of the District Committee:

1. The candidate shall apply, along with his full name & address and the underlying causes for his application, in a white paper.

2. If the application is made for legal aid for any matter in the Supreme Court, it is to be submitted to the Chairman of the organization, on the other hand, if it is for legal aid in any contract, it is to be made to the Chairman of the District Committee.

3. The application accepted by the committee is considered in its next meeting.

4. If it is not possible for the committee to take decision based on the submitted information then the committee may require for further information.

5. Once any application considered to have been accepted, the applicant litigant shall be informed in the prescribed manner.

### **District Committee:**

Section -9 provides that the formation of the District Committee will be as follows:

- a. District and Session Judge, who will be the Chairman of the committee,
- b. District Magistrate or any Additional District Magistrate,
- c. District Police Super or any Additional Police Super appointed by him,
- d. District Jail Super,
- e. District Social Welfare Officer, if any,
- f. District women and Children Officer, if any,
- g. Chairman of the District Committee of National Women's Federation,
- h. President of the District Lawyers Bar Association,
- i. Government Pleader,
- j. Public Prosecutor in the District,

- k. Non-Government Inspector of jail in the District, if any,
- I.A representative from any charitable society in the District nominated by the Chairman of the District Committee,
- m. Elected General Secretary of the District Lawyers Association,
- n. Chief Metropolitan Magistrate and Metropolitan Police Commissioner if the District is in any metropolitan city,
- o. The Judge and the Police Prosecutor of the Woman and Child Repression Tribunal of the District, if any.

### Functions of District committee :

According to the section 10, the main function of District committee is to provide legal aid to the poor litigants according to the Rules and Regulation fixed by the National Legal Aid Organization. And to adopt the implement project and plan relating to legal Aid in District

### Upazilla Committee:

The Upazilla Committee and Union Committee will consist of one Chairman and 14 members. All issues relating to the Upazilla Committee and Union Committee will be set up by subsequent rules. The Upazilla committee consists of the following members-

- (a) Upazilla Chairman, who will also be the chairman of the committee,
- (b) Upazilla vice- chairman(woman),
- (c) Upazilla agriculture officer,
- (d) Upazilla education officer,
- (e) Upazilla Health officer
- (f) Upazilla Social welfare officer
- (g) Officer in charge of Thana
- (h) Upazilla woman officer
- (i) Upazilla Anser and VDP officer
- (j) Chairman of the Upazilla committee of the National Woman Organization.
- (k) One member selected by the chairman of upazilla committee among the chairman's of Union Perished
- (I) One member selected by the chairman of upazilla committee among the members holding reserve seat
- (m) One woman teacher selected by the Chairman of upazilla committee from the Government approved Educational institute of that Upazilla
- (n) If there any NGO, then the any one member of that organization selected by the chairman of Upazilla Committee
- (o) UNO who will also be the member secretary of the Organization.<sup>22</sup>

#### **Union Committee:**

The union committee consists of the following members

(a) Union Parishad Chairman, Who will be the chairman of the Union Committee.

(b) Three woman members holding reserve seat.

(c) Three members of Union Parishad selected by the chairman of the Union Parishad.

(d) One woman teacher selected by the Union parishad from the Government approved educational Institute of that Union Parishad.

(e) One woman member of Anser and VDP selected by the chairman of the Union Parishad.

(f) President of the market committee or a businessman selected by the chairman of Union Parishad.

(g) If there any NGO, then any one member of that Organization selected by the Chairman of Union Parishad

- (h) One agent appointed by the chairman of zilla committee of National Woman Organization.
- (i) Deputy Assistant Agricultureofficer
- (j) Family welfare Officer

(k) Secretary of Union Parishad, who will be also the member secretary of that committee.<sup>23</sup>

# Functions of Upazilla and Union Committee:

The main function of Upazilla and Union committee is to send the application of the helpless people to the Zilla committee and to arrange adequate awareness program about Govt. Legal Aid.<sup>24</sup>

# Advantages of Legal Aid:

Firstly, The main advantange of legal aid is that the helplesspeople can establish their right through this system. The riches are always depriving the poor people. For this the poor or helpless people cannot establish their right under the shelter of court. If legal aid is adequate, the helpless people can try to establish their rights.

Secondly, Legal aid system minimizes the crime.

Thirdly, Legal aid can take important part in the establishment of Rule of Law. The main characteristics of democracy is Rule of Law. If anyone cannot file suit for being-poor, he cannot be treated as equal in the eye of law.

Fourthly, the broadness of the mind of lawyer increases through legal aid.

Fifthly, the students of law can acquire experience through working for the establishment of legal aid.

Overall, legal aid programmed can play vital role for the establishment of democracy & Rule of Law.<sup>25</sup>

# **Disadvantages of Legal Aid:**

Legal Aid programmed has started in 1997. 10years had passed after passing the Legal Aid Rules. But there is no reasonable outcome. More persons are including in the zilla committee but there always exist quorum problem, for this meeting cannot be held.

Moreover, there are following problems-

- 1. In this rule there is no provision relating to the person who identified the pauper.
- 2. The scope of the committee is vast. It is unnecessary.
- 3. General Secretary of Bar Council elected for one year. He is also signed the chequeof Zilla Committee fund. According to the sec-9, the person who has signed the cheque, his term will be valid for 2 years. But it must be considered that how can the secretary general who has elected for 1 year be signed in the chequeof Zilla committee fund.
- 4. Under this Rule the average income of pauper is 3000(three thousand), which is not reasonable.
- Under this Rule, the pauper cannot be given court fee. For this he cannot file suit. As a result, the object of this Rule cannot be fulfilled.<sup>26</sup>

### **Conclusion:**

The reality is that law in our country is in the hand of rich people and has gone beyond the reach of poor. It has become discriminatory against them. They have failed badly to enjoy the fruits of law may be because they are poor, illiterate or ignorant about the law. The Constitution of Bangladesh provides different rights of the people and empowers the High court Division for the enforcement of fundamental rights. If we mean actual and real protection of rights we need to consider provision of legal aid.

# References

- 1. Ali, Anser, Our Society and the Necessity of Legal Aid, 13 BLD.
- 2.32 DLR (1980) 201.
- 3. The New Encyclopedia Britannica, Vol. VI, P.122.
- 4. Aiyar P Ramanath 2008, Concise Law Dictionary, Third edition.
- 5. The Legal Aid Act, 2000-S (2) (a).
- 6. The Family Court Ordinance, 1985, Sec-5
- 7. Halim Abdul & SiddikiN.E, 2010, The Legal system in Bangladesh.
- 8. Magna Carta, 1215, Art-40.

9. Ibid.

- 10. <u>www.legal</u> services.gov.uk and <u>www.nilsc.org.uk</u>.
- 11. Wikipedia.org/wiki legal aid in the United States.
- 12. Mossman, Jane Mary, Legal Aid," The Canadian Encyclopedia"
- 13. http:Wikipedia.org/wiki/Canada.
- 14. The Constitution of India (Amended), 1976, ART-39A.
- 15. Http://www.banglapedia.org/httpdocs/HT/L. 0088.HTM (01.05.2012).
- 16. Aingata Sohayata Prodhan Ain, 2000, (Bangla version).
- 17. Universal Declaration of Human Rights, 1948, Art-7.
- 18. PIL and Advocacy cell, Bangladesh Legal Aid and Services Trust (141/1), Segunbagicha, Dhaka-1000.
- 19. Madaripur Legal Aid Association, Hamid Akanda Road, New Town, Post box no-09,Mararipur-7900,Bangladesh.
- 20. http://svr87.ednsl.com/starnet/2007/04/24d.htm.
- 21. Akhtraruzzaman, Md.2011, Concept and Laws on Alternative Dispute Resolution and Legal Aid, (Bangla version), PP.249.
- 22. www.nlaso.gov.bd.
- 23. Ibid.
- 24. Ibid.
- 25. Ali, Anser& Halim, Abdul, Alternative Dispute Resolution and the Legal System in Bangladesh, 2011.
- 26. Akhtaruzzaman, Md., Concept and Laws on Alternative Dispute Resolution and Legal Aid, 2011, PP.291.

# **Constitutionality of Mobile Court in Bangladesh**

## Md. Raisul Islam Sourav<sup>1</sup>

**Abstract:** The 9<sup>th</sup> parliament legislated the Mobile Court Act in 2009 which introduces a new dimension in the history of Bangladesh to try instantly at the place of occurrence upon the confession of the wrongdoer. Mass people of this soil welcomed the piece of legislation preliminarily. Because they witnessed speedy trial in case of eve teasing, food adulteration etc. while they accustomed to get justice after countless patient. However, the law had also enforced to oppress the innocent citizens in the name of maintaining peace and order (i.e. during *hartal* (strike) period) by cutting down their constitutionally guaranteed fundamental rights and fundamental principles of natural justice. In addition, the enactment does not fulfill the requirement to be an actual enactment in the eye of jurisprudence. This manuscript is aimed to examine the constitutionality of the mentioned statute from human rights perspective.

**Key Words:** Mobile Court, Human Rights, Bangladesh, Executive Magistrate, Natural Justice, Fair Trial, Constitutionality, *Hartal*/Strike.

#### Introduction

Enforcement of mobile courts during *hartal* (strike) was one of the most controversial issues in the country since 2011. Current *Awami League* (AL) led 14 parties great alliance government dramatically applied mobile court to prevent anarchy for the first time in the history of independent Bangladesh under the Mobile Court Act, 2009. On 11 June 2011 mobile courts were first introduced to arrest and summarily try picketers when main opposition party Bangladesh Nationalist Party (BNP) was called *hartal* for a couple of days on 12 & 13 June 2011. During strike period, mobile courts were took cognizance and punished instantly all over the country and over more than hundred of peoples.

Again, mobile courts were brought into force during consecutive 48 hours uninterrupted *hartal* on 6 & 7 July 2011 called by BNP and their ally and next following strikes. The then Home Minister and concern authorities were constantly said that they are obligated to keep peace and security. Moreover, all most every politicians of AL were echoed that ensuring public security and safety at any cost is their prime concern and by giving this mandate to voters, they constitute this government. Hence, they affirmed to protest any type of subversive activity in the name of *hartal* by any means. More than one responsible persons of the government assure that use of mobile court during *hartal* is lawful because the representatives of the citizens passed the Mobile Court Act through legislature. The truth ness of this avowal will justify at the latter portion of this initiative.

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## Methodology

The research paper is designed to be analytical nature. The major sources of this study are secondary, namely different articles, texts, newspapers, national research papers, web sites and so on. The collected data have been analyzed and interpreted by the author.

## Objectives

To scrutinize the constitutionality of the Mobile Court Act, 2009; To examine the standard of this statute in the eye of jurisprudence; To evaluate process of protecting human rights by this legislation.

## Analysis of the Mobile Court Act, 2009

The Mobile Court Act, 2009 was brought into force from 24 February 2009. The Act has 17 sections, which empower Executive Magistrates  $(EM)^1$  to take cognizance and try some offences specified in the schedule instantaneously on the spot to prevent crime efficiently as it describe in the preamble and Sec. 4 of the Mobile Court Act, 2009.

This same Mobile Court Act was highly appreciated by the natives of this soil when it was implemented to thwart eve teasing and adulteration of foods. Nevertheless, now this unchanged law is remarkably criticized by the rights activist, lawyers and politicians as well because of violation of general principles of rule of law and repressing politicians even in some cases innocent citizens. In other words, it established the instance of "State sponsored" human rights violation.

According to S. 6(1) of the said Act, Magistrate can only try any matter if that culpability falls under the offences specified in the schedule of this Act and if Magistrate can catch him red handed and also if he confesses his crime. S. 6(3), (4), & (5) have a provision that if the offence is not describe in the schedule or if it is more grievous in nature then the matter would refer to the formal court and mobile court has no authority to try the matter under the ambit of this law.

In accordance with S.  $7(1)^2$  after taking cognizance, concern Magistrate will frame written charge against the offender and ask whether he confesses his crime or not. If he does not confess, then the EM directs him to explain the reason. Magistrate can only punish by either imprisonment or fine or by both if the wrongdoer confesses his guilt. Otherwise, he cannot punish any individual.

Section 8(1) of the said Act inflicts a limitation on mobile court that it cannot impose more than two years imprisonment. However, an aggrieved person may be able to file an appeal before District Magistrate (DM) against the decision of the concern Executive Magistrate. The Mobile Court Act, 2009 has a schedule at the end of its text, which contains almost a list of 85 separate laws under which the offences will try. However, Sec. 16 of this Act gives authority to compose rule, but the Govt. is yet to formulate any such rule.

#### Legitimacy of Hartal in Bangladesh

The legality of *hartal* is determined by the Supreme Court (SC) firstly, in the *Abdul Mannan Bhuiyan v State*<sup>1</sup> (2008) case. On perusal of the pro-*hartal* destructions stated in the *Daily Ittefaq* newspaper the HCD on 15 February 1999 issued *suo moto* rule under S. 561A of the Code of Criminal Procedure, 1898 calling upon the General Secretary of the BNP and others to show cause as to why activities of pro-*hartal* and anti-*hartal* should not be declared as cognizable offence and the criminal court and the police should not be directed to take action accordingly<sup>2</sup>. The Secretary General of BNP appearing before the Court submitted that *hartal* was a historically recognized democratic right of the people to express their disapproval of governmental activities.

The High Court Division made its rule absolute by declaring violence and coercion for or against *hartal* a criminal offence. Interestingly, nowhere in the judgment, calling for a *hartal* was declared unconstitutional. The stare *decisis* of the judgment was that all activities in favor or against the *hartal* were cognizable criminal offence and accordingly the law enforcement agencies and courts are bound to take legal action against those who would force anybody in favor or against *hartal*. After the completion of hearing of the learned counsels, the High Court Division (HCD) promulgated its judgment and order sum up Chapter VIII of the Penal Code, 1860 and construed S. 141 of the Code by observing that:

according to the 5th clause of S. 141, a procession or other activities of five or more persons in support of or to force *hartal* shall be an unlawful assembly punishable under S. 143 of the said Code;

every assembly of five persons or more to protest or to oppose *hartal* shall be an unlawful assembly;

activities of the members of these assemblies shall be cognizable offence according to their behavior under the relevant sections of chapter viii of the Penal Code and the criminal courts and police are directed to act accordingly.

Challenging the said HCD verdict and order *Abdul Mannan Bhuiyan, and Amanullah Kabir*, who were interveners in the HCD preferred two criminal appeals<sup>3</sup>, which were heard by the Appellate Division (AD) jointly. The Appellate Division found that the HCD Bench disposing the *suo moto* rule was lacking in jurisdiction. As per Section 561A of the Code of Criminal Procedure, to take *suo moto* cognizance of a matter, the concerned HCD Bench must have a related issue pending before it. Since there was no such related issue pending before the concerned Bench, the AD found the Court lacking in jurisdiction. In the AD, the power of the HCD to legislate and create any cognizable offence was addressed by Md. Abdul Matin J in following words:

"Ours is a Constitution based on the spirit of separation of powers. ......it is true that there is no such thing as absolute or unqualified separation of power in the sense conceived by Montesquieu but there is however, a well marked and clear-cut functional division in the business of the

Government and our judiciary is to oversee and protect the overstepping not only of other organs of the Government but also of itself. <u>Offence can be created only by a law, by an act of the parliament and not by any legal pronouncement by any court.</u> The HCD acted beyond its authority in entering into the field of making law and to declare the pro-*hartal* and anti-*hartal* activities as cognizable offence. The HCD had no constitutional or judicial power to legislate or create, of its own, a cognizable offence."

Accordingly, so far the position is that the AD recognized *hartal* as a long practiced political right and overruled the HCD's attempt to criminalize pro-*hartal* and anti-*hartal* activities. The Appellate Division confirmed an earlier decision of the HCD in *Khandker Mudarresh Elahi v. Government of Bangladesh*<sup>4</sup>. *Hartal* or strike *per se* enforced through persuasion unaccompanied by threat, intimidation, force or violence is a democratically recognized right of the citizens<sup>5</sup> guaranteed under the Constitution.

## In quest of Constitutionality of the Mobile Court Act, 2009

At first instance, we can say deployment of mobile court during *hartal* is *ultra vires* to the Constitution and beyond any legitimacy. If we justify the point of Constitutionality of this Mobile Court law then we can see that our Constitution guaranteed freedom of assembly and association<sup>6</sup> in Art 37 & 38. In a democratic society *hartal* is legal unless & until it is declared illegal by an enactment or by the intervention of court. If any party or body wishes to observe strike peacefully then the govt. could not prevent them. Government could only prevent when it creates any anarchy; otherwise not<sup>7</sup>.

A good number of laws still exist to try these offences. Section 186 of the Penal Code, 1860 can be used against the pro-*hartal* activists. In addition, Sections 186 and 353 of the Penal Code provide for action against obstruction in government  $duty^8$ .

Further, Art. 31 of the Constitution of the People's Republic of Bangladesh endow with equal right to get protection of law. Moreover, Art. 32 has a provision regarding personal liberty. Govt. cannot curtail citizens' right to liberty without any lawful explanation<sup>9</sup>; even it has no authority to confine any person without any valid reason even for a nanosecond. Yet, this black law convicts people. For this reason, the law is unconstitutional.

In addition, Art. 33 of the Supreme Charter of the country provides safeguards as to arrest and detention. Bail is a mandatory provision even sometime in case of a grievous offence to ensure standard of neural justice<sup>10</sup>. But if any body convicted on the spot instantly without maintaining any definite rule of investigation, witness, examination, crossexamination and evidence as well; in that case right to get bail is the name of an abstract dream. He can claim bail only at the stage of appeal.

There is no scope for the release of the sentenced activists in the Act unless they file pleas to this effect before district court concerned. It was done only to ensure long detention of the opposition activists. Moreover, Art. 35(3) & (4) of the Constitution provides that every person shall have the right to obtain fair and open trial by a competent forum and no person shall be compelled to give evidence against him<sup>11</sup>. To constitute a fair and neutral trial these Articles require<sup>12</sup>:

Right to know the grounds of arrest;

Right to consult and be defended by legal counselor;

No unlawful detention;

No expost facto operation of criminal law;

Protection against double jeopardy;

Right to a speedy and open public trial by an independent and impartial court or tribunal established by law;

No self-incrimination;

No subjection to torture or to cruel, inhuman, or degrading punishment or treatment<sup>13</sup>.

On the reverse side, the sole apparatus to punish accused under this law is receiving selfwitness against him! It is needless to say, the provision is extra constitutional<sup>14</sup>.

Another established principle of natural justice is, every person shall have the right to self-defense before punishment and can appoint lawyer to defend him. However, in this case the law has no provision of self-defense, which is a grave violation of human right as well as rule of law. Non-existence of any such provision is beyond constitutional.

A further ridiculous stipulation of this Act is that, the Magistrate who will take cognizance and frame charge, himself summarily trying the matter. That means the same person plays two roles at a time. That is, the Magistrate brought allegation and tries simultaneously. There is no such precedent all over the world.

#### **Executive versus Judiciary**

It is true that we cannot support these countless damage of public and private property by the name of *hartal*. However, that does not mean, we prevent it by following an illegal method. Mobile Court is not a proper forum to try this matter. Because, Government applies it's executive power to try this, which contravenes with the principle of separation of power and independence of judiciary. There is a scope of abuse of judicial power by the executive. Furthermore, there is a possibility to use this instrument revengefully and already we have found in some other cases executive Magistrate used this power vengeance fully.

## Some instances of abuse of the Mobile Court by the EMs

i) On 09 March 2010, The *Daily Kaler Kantho* reported that, a Mobile Court was protested by local businessmen. They said, the Mobile Court performed their duty <u>without giving any notice</u>, so that they were angry and for this reason, they protest their proceedings when the Mobile Court tried to evict them and tried to seize their product. At that moment, RAB and other members of law enforcing agencies fired to control the situation.

Most of the time the Mobile Court operates its function without giving any sort of notice.

ii) On 30 April 2011, The *Daily Prothom Alo* reported that, a Mobile Court of Jamalganj of Sunamganj imposed 4 months imprisonment to a local journalist. The court was functioning by UNO & Executive Magistrate Abul Hasem. Local Journalists and Chairman alleged that, the convicted reporter reported against the corruption of the UNO and that is why he arranges this trial by using his <u>unauthorized power in the name of Mobile Court</u>. However, the UNO refused all allegations brought against him.

iii) On 05 November 2010, The *Daily Kaler Kantho* reported that, traders of old Dhaka alleged that the Mobile Court fined them whimsically and for silly reason. Even though they didn't find any explosive or any other dangerous chemical at their shop but they fined for existing hole on the roof of their shop. Federation of Bangladesh Chamber of Commerce & Industries (FBCCI), highest organization of businessmen in Bangladesh strongly opposes this type of activities done by the Mobile Courts. They stated that if it continues they will close their trade. FBCCI propose that a representative of FBCCI will be a member of Mobile Court.

Chief of Fire Service & Civil Defense also agree to stop such activity of Mobile Court without their own manpower. Moreover, concern Minister was also directed to stop Mobile Court activity.

iv) On 24 November 2010, The *Daily Kaler Kantho* reported that, Law ministry directed the District Judge not to take any direct appeal against the decision of Mobile Courts. Sec. 13 of the Mobile Court Act, 2009 provides that any appeal against the decision of Mobile Court shall lie before District Magistrate Court not to District Judge Court. However, many convicted people wrongfully filed these appeal before District Judge Court.

#### Some specific allegations against Mobile Court on this event

Many of picketers were tried at *thana* (Police Station) by Mobile Court which is reported by all most every leading national dailies of the territory with photo. It is a complete infringement of S. 4(3), 6(1), 7(1), (2), (3), (4), & 11 the Mobile Court Act, 2009. Because according to these provisions Executive Magistrates and District Magistrates have the only authority to run the Mobile Court. They can punish only at the time of occurrence of the offence and offences which is performed at there presence. However, at the time of *hartal* they try persons at Police Station, which is beyond their authority<sup>15</sup>.

Then they try instantly without taking any statement from the convict person. But the law has a clear provision that Mobile Court can only punish if the alleged person confesses the allegation.

In addition, such type of power goes against the spirit of *Masder Hossain*<sup>16</sup> case. Executive body cannot regulate a judicial body. It is a complete contravention of supremacy of judiciary as well as it undermines the judiciary and it is beyond authority. It is not only a mere interference rather a plan to destroy the whole judiciary. It is nothing but a political game which current govt. plays to suppress the opponent. Between these two parties game we the mass people of this unfortunate country are squeezed.

Government argued that though the House of Nation enacts the law ergo doubtlessly it is valid & legal. But they may forget a law passed by the parliament is not forever beyond question rather if it inconsistent with the spirit of Constitution then it shall be void to that extent of inconsistency. In our previous discussion, we proved that the Mobile Court Act, 2009 is inconsistent with the Constitution as well as rule of law<sup>17</sup>. Hence, it is not a law at all. Ergo, Government's this type of squabble is totally a vogues one and they intentionally comment this type of nonsense avowal to make people stupid.

Besides being the manifestation of the government's apparent intolerance with the political opposition and disregard for the rule of law, the deployment of mobile courts provides yet another instance of blatant abuse of the subordinate judiciary to partisan end, which would further erode the credibility of the magistrates in the eye of the public. It will also make a mockery of the government's repeated assertions of its commitment to the independence of the judiciary. By this Mobile Court Act, govt. just imposes sentence by merely an executive order. In this Act, there is no judicial or quasi-judicial ingredient.

#### Loopholes in the Mobile Court Act, 2009

There are numbers of loopholes in the mentioned Act. In this paper, we tried to find out them as follows:

I. S. 6 of this Act has a provision that if anybody confesses any allegation brought against him the Mobile Court can try and punish him;

II. No scope of self defense;

III. No scope of appointment of lawyer;

IV. No opportunity of cross examination of witness;

V. The theme is against the rule of law, because Executive Magistrate does this arbitrary function by their executive power which is inconsistent with the spirit of Independent judiciary & *Masder Hossain* case promulgated by the apex court of this country; VI. Executive interferes in the work of Judiciary;

VII. S. 8 of this Act stipulated that under this Act Magistrate could punish up to two years imprisonment. However, schedule of this Act contains a list of almost 85 different

laws. They try mainly by following the provision of these laws. Among these laws, many have provision of more then two years imprisonment; which is self-contradictory. Like: S. 148, 152, 225 of the Penal Code, 1860 has the provision of 3 years jail/imprisonment; VIII. Abuse of executive power; even can be used revengefully as we seen in second (ii) instance in illustration portion of this paper. Some other instances of abuse of the Mobile Court by the EMs have also shown in preceding portion of this article;

IX. No scope of giving prior notice;

X. No scope of bail, because in this case Magistrate can finish the trial instantly.

Hence, the rule of framing charge, plea of guilty at court, taking evidence etc. are neglected in these trial proceedings which are basic requirement to do a fair and neutral trial. That means there is neither pre-trial stage nor post-trial stage so that, therefore, convicted person is completely deprived from getting bail or similar types of remedy.

#### Conclusion

Mobile court's involvement in political programs like *hartal* will only victimize general people in the name of punishing offenders. In many cases as we have seen many innocent persons were convicted by mobile court. In Bangladesh, inhabitants are naturally harassed by law enforcing agencies whereas this law opens the door of great harassment by a so-called legal way.

#### References

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- 1. 60 DLR (AD) 49
- 2. Das, Tapos Kumar; "*Hartal* vs. Mobile Court: Examining the constitutionality of the Mobile Court Act, 2009", *The Daily Star, Law & Our Rights* page, 16.07.2011
- 3. Criminal Appeal Nos. 24 and 25 of 1999
- 4. 54 DLR 47
- Chowdhury, M. Jashim Ali; "Pre-emptive(!) *hartal*: Ill-legal if not illegal", *The Daily Star, Law & Our Rights* page, 29.03.2010. Available at: http://www.thedailystar.net/law/2010/05/05/judgement.htm (Last accessed on 7 Nov. 2012)
- 6. The International Covenant on Civil & Political Rights (ICCPR), 1966
- 7. Huq, Zahirul; "Law & Practice of Criminal Procedure (11th ed.)", 2011, Publisher: Bangladesh Law Book Company, Dhaka
- Huq, Alhaj Zahirul; "Penal Code (5th ed.)", 2010, Publisher: Anupam Gyan Bhander, Dhaka
   9 Islam, Mahmudul; "Constitutional law of Bangladesh (2nd ed.)", 2010, Publisher: Mullick Brothers, Dhaka
- 10. Ibid
- 11. Rahman, Justice Latifur; "The Constitution of the People's Republic of Bangladesh with Comments & Case Laws (3rd ed.)", 2011, Publisher: Mullick Brothers, Dhaka
- 12. Art. 33 & 35 of the Constitution; The Code of Criminal Procedure, 1898
- 13. The Convention Against Torture (CAT), 1984
- 14. Chowdhury, M. Jashim Ali; "An Introduction to the Constitutional Law of Bangladesh (1st ed.)", 2010, Publisher: Northern University Bangladesh, Dhaka
- 15. The Daily Kaler Kantho on 14.06.2011
- 16. 52 DLR 82
- 17. Art. 7(2) of the Constitution of the People's Republic of Bangladesh

# TV Advertisements and Gender Disparity among Middle Class Youths in Dhaka City

## Masum Billah

**Abstract:** This piece of research is about the role of TV advertisements in reflecting gender disparity among middle class youths in Dhaka city. The qualitative method has been applied in this research work to get an indepth analysis of the issues of gender disparity in relation with TV advertisings among middle class youth viewers. Findings of the study show up that there is a coherent relationship between the nature of gender disparity and its association with the content of TV advertisements in the context of cultural practices in urban setting.

Key Words: Advertisement, Mass Media, Gender, Socialization, Paradox, Stereotypes, Hegemony, Disparity

#### Introduction

Mass media is a significant force in modern culture, particularly in developed countries. Sociologists refer to this as a mediated culture where media reflects and creates the culture as well as finally dominate the elements of socialization procedure. Communities and individuals are bombarded constantly with messages from a multitude of sources including TV, billboards, and magazines. These messages promote not only products, but also moods, attitudes, and a sense of what is and is not important. The tide of mass media particularly electronic media has tremendously touched the developing countries like Bangladesh at the first phase of twenty first century commemorating satellite and consumer culture in the global arena. Socialization is a prolonged process and massively concerned with different images of change and expansion. TV advertisements have an intimate and coherent relation in the process of gendered socialization in Bangladesh. The ideologies and opinion of middle class youth viewers are tremendously shaped by the content of different advertisements intensifying the question of gender disparity. This is usually believed that manufacturers of the product and makers of advertisements play a pivotal role in designing the nature and content of different advertisements. Besides, it is very natural to give emphasis their own choices and interests in shaping the subject matter of advertisements.

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Since most of the middle class families have accessibility to TV set, viewers have enough options to be equally influenced with these discriminatory advertisements. By making people aware of the products, services and ideas, advertising promotes sales and thereby business as well. Most television advertisements are consumer advertisements sponsored by the manufacturer of the product or the dealer who sells the product. Though advertising is one of the most signatory marketing tools, it has a great role on gendered socialization procedure. The research shows how men and women from Bangladesh get themselves connected with TV, the meaning they derive from the various advertisements they watch and the adoption of certain elements into their lifestyles from the outset of life.

## **Objective of the Study**

The study addresses the role of TV advertisements in reflecting gender disparity among middle class youth viewers in Dhaka city. It also focuses on socio-economic indicators and demographic characters to find out the middle class youth viewers. The researcher attempts to determine the relationship between TV advertisements and socialization procedure. The area of study covers to scrutinize the perception level of urban youth viewers about gender discrepancy.

## Methodology

In order to comprehend the role of TV advertisements and its association with the middle class youth viewers regarding the portrayal of men and women, the qualitative approach is needed. The in-depth individual interview was applied to conduct the study. To carry out this piece of research, the researcher decided to include at least twenty middle class youth TV viewers in his sample group. In order to organize the work in a representative manner, his attempt was to choose the three blocks out of six blocks of Lalmatia Area by following random sampling. By applying the random sampling method the researcher succeeded in finding out three blocks: (1) Block-B, (2) Block-C and (3) Block-F. Then, the researcher had to choose seven household units from each block in order to get middle class youth TV viewers.

#### Gender Stereotypical Images and Behavior in Advertisement

Studies in the 1980s showed that men were typically portrayed as dominant, successful professionals in business settings or engaged in fun activities in settings away from home<sup>1</sup>. This is asserted that advertising presents women almost exclusively in one of the two roles: housewife or sex object<sup>2</sup>. Although more ads now show women in business settings, the use

of women as decorative objects- physically attractive but having nothing to do with the product being advertised- is on the rise as well<sup>3</sup>. Images in advertisements often depict social expectations for gendered behavior, reinforcing stereotypical masculine and feminine behaviors. This study examined the effectiveness of using gender role stereotypical images in advertisements by matching two products with a male and female, based on the match-up hypothesis. Two gender congruent and two gender incongruent advertisements were created to test the effectiveness of gender congruency on perceived message clarity, advertisement believability, perceived argument quality, attitude toward the advertisement, attitude toward the brand, and purchase intention, based on the information-processing model. Though gender congruent advertisements, perceived message clarity was the only variable significantly influenced by gender congruency as messages in gender congruent advertisements. Therefore, this study serves to encourage advertisers to re-evaluate current advertising techniques, as they are currently reinforcing gender stereotypical behaviors for little benefit<sup>4</sup>.

#### **Traditional Gender Roles: Child Consumers and Television Advertisings**

Research continues to explore the impact of ads that accompany children's television programming, in terms of the numbers of male characters and the roles they enact, the lack of positive female portrayals, and the predominant use of male voice-overs in television commercials. As cultivation theory suggests, these factors have the potential to reinforce for children conventional gender-role definitions, meaning that children may come to believe that life is supposed to be it is portrayed in commercials. This is sought to assess<sup>5</sup> the possible effects of television advertising on children's buying response from early childhood to early adolescence and the role of parent- children interaction in this process. The study has revealed that the parents give due recognition to the increasing role of children above the age of eight years in the family's purchase decision. Both the parents and the children felt the impact of TV advertisements on children's purchase request. The results further implied that parent-child interaction plays an important role in the children's learning positive consumer values and in parents perceiving the influence as positive on their children's buying response. The study has mentioned that children's consumer values are mainly determined by TV advertisements and response to their parents. My research will uplift whether the growing

children are affected or not by the values, norms and ideologies presented by models in TV advertisements.

Television Advertising Leads to Unhealthy Habits in Children<sup>6</sup> shows that children under the age of eight are unable to critically comprehend televised advertising messages and are prone to accept advertiser messages as truthful, accurate and unbiased. The Task Force, appointed by the APA in 2000, conducted an extensive review of the research literature in the area of advertising media, and its effects on children. Additionally, the average child watches more than 40,000 television commercials per year. The six-member team of psychologists with expertise in child development, cognitive psychology and social psychology found that children under the age of eight lack the cognitive development to understand the persuasive intent of television advertising and are uniquely susceptible to advertising's influence.

The study shows that children are not able to understand televised advertising messages because of the lack of rational thinking. They accept advertising messages as truthful, accurate and unbiased. My research topic will find out the process through which children imitate all types of ideas and messages. TV Commercial Targeting Children<sup>7</sup> study has shown that the average Chinese child begins to display a desire to control his or her own life around age three. They manifest this by refusing to accept items from their parents. After age ten, children also want a say not only in their own everyday affairs but on the household as well. Children are becoming the most favored demographic for television producers and advertisers. Turning on TV, the audience can find an innocent face selling products ranging from toothpaste and milk to computers and digital cameras.

# Gender, TV Advertisements, and Discriminatory Socialization Procedure in the Context of Bangladesh

Since gender is a socially constructed concept and subject to change, this is massively influenced the existing social and cultural system. Being an important arm of exposing cultural issues, TV plays a vital role in constructing gender based socialization procedure among its viewers. Gender concerns the psychological, Social and cultural difference and between males and females. Gender is linked to socially constructed nations of masculinity and femininity; it is not necessarily a direct product of an individual's biological sex<sup>8</sup>. Gender is about being a man or women. Being men and women has two aspects: first, physiological and secondly, social. The physiological aspects of being a man or a woman are rather clear, because these ideas basically generate from the biological sense. On the contrary, the social

aspects of being man or women are more complex. These social aspects (Socially determined) roles and responsibilities of men and women and also relationship between men and women) of being men and women are called gender. This is attempted to pick up how images of women are presented in TV advertisements. After analyzing 131 advertisements from three TV channels Sikder<sup>9</sup> has found that 4 of them are gender sensitive and the percentage is 3.05 and 92 of them are insensitive or stereotypical (70.23%) and 35 of them are neutral (26.72%). His analysis also shows that gender neutral ads are ignored according to average of total broadcast and average of how many times they are being broadcast. There is priority of advertisements with gender discriminations and without any gender awareness. The research work has also exploded that women are represented explicitly in a negative way in most of the TV advertisements. Since 73% people watch TV ads, they are much more affected by the so called stereotypical advertisements.

There is a preponderance of advertisements with gender discriminations. Their analysis depicts the truth that images of women are presented in a positive sense. My research will find out the issue whether people support or not such commercial and discriminatory advertisements in their practical life. It will also clarify the phenomenon that whether they follow the roles of models in accomplishing their own roles.

More precisely this research<sup>10</sup> project has explained women's image in TV ads in a different way. She has reviewed 587 advertisements broadcast in the prime time of BTV in a new dimension. She showed that women are used as a main character in approximately 47.19% and their presence is 53% in all type of advertisements. A woman washes her moon like face, cleans her dishes. She attempted to eliminate spot through music as well as dry clothes through dancing. She finds the meaning of love in coconut oil, she cooks delicious items for her family or pray for others protection. The author has also shown that though both men and women are in there in advertisements, those with female models in negative roles are more common on television channels (85.68%). In spite of having feminine role of women, She basically showed that how women are used as a commodity in the process of market economy and capitalist society.

In the 1970s, for the sake of development project, most of the tools of birth control<sup>11</sup> were women's body centered unlike two methods for men. In this propaganda, women are mostly encouraged. Some reporting has recently shown that these women's body centered birth control methods have a negative reaction on women's body. In some cosmetic product ads, it becomes so difficult to find out whether it is an advertisement of commodity or woman. The

messages we get from ads are \_ be confident in terms of beauty, development in career, getting love of men and creating attraction for men etc. this type of ads focuses that the measurement of counting women's competency is the color of body unlike her intellectuality and other skills. A negative attitude is created among women with the help of these discriminatory advertisements. The essay emphasizes that women are in vulnerable position in terms of adopting birth control methods than male. Women are also considered as the quintessence of love and beauty, the write-up depicts. My research will do for as the role of advertisements in creating discriminatory ideas and perceptions among middle class youths.

In his book Mostaq Ahmed<sup>12</sup> wrote an article on "Women Modification in Advertisement". This article named as a "Women Modification of Prime Time Advertisement in BTV" discussed some priority based topics such as (a) women representation (b) conservative position of male (c) social view about women (d) how capitalist society views women representation in advertisements etc. The writer found 43.98% women presence, 4.40% male and rest was women and male child. On the other hand, voice was 60.19% male and only 12.04% female. He comments that women are seen only at home. They have no position in commerce and industry, office or administration. Advertisement shows them in more negative and lower position than they have in society. Different researchers and writers working on TV ads in relation gendered socialization, both nationally and internationally give emphasis that men and women are not equally portrayed in electronic media. Women are always represented in a negative way whereas men are watched to be leaders, high officials and chair of executive committee in TV ads in Bangladesh. The images and ideas of both male and female are reflected in most TV advertisings in a different way, though culturally defined and accepted. Stereotypical portrayals of the sexes, including a few exceptions play a vital role in the creation of gender disparity among consumer groups. Gender is seen as culturally and historically relative, i.e. the meaning, interpretation and expression of gender varies both within and between cultures, and is subject to historical modification.

#### Media Hegemony and Capitalistic Domination: A Theoretical Framework

The mass media are, in classical Marxist terms, a 'means of production' which in capitalist society are in the ownership of ruling class. According to the classical Marxist position, the mass media simply disseminate ideas and world views of the ruling class, and deny or defuse alternative ideas. Being an important and pertinent agent of socialization procedure, mass media helps in diffusing its roles, wishes and statuses among viewers. As TV is an integral part of mass media, its advertising and relevant context is dominated by the ruling class in

male-dominated patriarchal society. In the view of Gramsci, there are on the one hand the dominant classes who seek to contain and incorporate their thoughts and behavior within the terms and limits they set in accordance with their interests. On the other hand there are the dominated or subordinate classes who attempt to maintain the further validity and effectiveness of their own definitions of reality. Cultural domination arises from a complex play of negotiations, alignments and realignments within society... the fact of hegemony presupposes that account be taken of the interests and the tendencies of the groups over which hegemony is to be exercised.<sup>13</sup> Gramsci's theory of hegemony highlights the importance of ideological manipulation by the ruling class over the working class. Hegemony is a type of communicative power that refers to an ideological justification for the inequities of capitalism. The hegemony operates through such institutions as the mass media, church and political parties. However, the capitalist hegemony is never complete, thereby allowing for the construction of an alternative hegemony.

Gerbner regards television as the dominant force in shaping modern society. Today, the TV set is a member of the household, with virtually unlimited access to every person in the family. Television dominates the environment of symbols, telling most of the stories most of the time<sup>14</sup>. In Gerbner's view, television is the mainstream. TV produces seek to attract the largest possible audience by celebrating the moderation of the mainstream. Indeed, Gerbner thinks that through constant exposure to the same images and levels, television types develop a commonality of outlook. TV glorifies the middle class, and those with heavy viewing habits assume that label no matter what their income<sup>15</sup>. In most of the advertisements, this ideological hegemony is highly noticeable. The roles and ideologies presented by models often reflect the hegemonic nature of a particular class. Since the ideological issues are mainly manipulated by the ruling class, they exercise their own wishes and expectations in designing ads.

#### Household Chores: An Invisible Labor for Women

Traditionally women are assigned to cook. They are mainly fixed for cleaning clothes and household materials. Women are interested to satisfy their family members. Men do not cook after coming back from offices. This is the watch able scenario in TV advertisements.

"In different ads of spices, women are watched to be assigned for cooking. The major task of a woman is to satisfy all the members of family by cooking well and delicious food items. She attempts to try best so that no one can find fault with him in household tasks"<sup>16</sup> Though cooking and cleaning at household levels are mainly conventional functions for women, individuals become accustomed to follow then they watch TV ads.

*"For doing well in cook, I watch TV ads of different spices and sometimes enjoy cooking related programs. This is indispensable to think about husband coming from offices whether he becomes satisfied or not. It seems to me as a traditional female oriented duty"*<sup>17</sup>

Some ads are not congruent with practical life. Those seem to be ludicrous and irrational due to the nature and subject matter. Since glamour girl models are watched more frequently than product, they turn ultimately into products. Majority of TV ads are basically made in order to capture the consumer group. Models only perform; they have no particular role in designing ads. Few respondents believe that directors and models can be equally claimed for enriching and making TV ads. A large number of respondents acknowledge that decisions and ideologies adopted by company are mainly focused. Following the dazzling content of different ads, the growing children and youth class become exposed to it which helps to flourish and portray gender insensitive characters.

## Images of Women are in Commercial TV Advertisings

Though both boys and girls perform in modeling and commercial advertisings, very often priority goes on girls. In most ads, girls are treated as glamour and attractive in order to achieve the business interest of target groups. "*The beauty of the girl is mainly glamorized rather than the advertising of Meryl Beauty Soap. Women should be very beautiful and attractive too, I think so*"<sup>18</sup>

"We should break the stereotypes that are portrayed in the media: married women are always shown busy with making a home and tending to children; the good wife is shown as someone looking after her in-laws and tolerating all manner of injustice, dark women are constantly shown trying to be pretty, all this should change and new images and stories of women need to be depicted"<sup>19</sup>.

Bengali girls are likely to practice the glamourness of body. Boys want girls to be lucrative and beautiful. Sex is an integral part of life. Most of the people either in educational institutions or work places continue having affairs; many of them have physical relation with their counterparts. There is no longer era where women remain virgins until marriage<sup>20</sup>. It is warned that children and adults acquire attitudes, emotional responses and new styles of conduct through filmed and television modeling. It is apparent that women are entirely satisfied about carrying out their conventional duties whatever they watch in advertisings<sup>21</sup>. A woman is not portrayed as decision maker in the family. In order to satisfy husband and other

family members, they are spontaneously prepared to be good cook, careerist, bearer and rearer of child. Consequently, they realize that house hold chores are assigned for them. There are a few respondents though educationally qualified believe that working at households should be shared by both men and women.

#### **Television: False Images and Distortion of Reality in Advertisements**

The fact that women may be workers, organizers or leaders, which also exist in reality, is never portrayed properly besides their traditional role of daughter, wife or mother. This tendency of depicting women is a special dimension in advertisements of 'RC Lemon' or 'Jhotpot Cha'. In some advertisements, dialogue for children, youth or main actor carry words which reflect existing gender discrimination. Some illogical and false conceptions come automatically. The advertisements of Fair & Lovely remain clear example of it. The objectionable fact of this type of advertisement expresses if woman is not pretty and appealing, she would not ever get any scope of job even though she possesses enough qualities to get herself avail of the opportunity of having job but still being fair and smart is mandatory which is very offensive. "Lengthening and glamorizing the size of hair using oil". "This is more interesting to eat the cooked food processed by my wife's own hand". These messages create sometimes confusion and ultimately humiliate women's status role in mainstream level intensifying the very structural aspects of socialization procedure. The fundamental reason goes for patriarchal attitudes and traditional ideas centering the portrayal of sex.

#### Patriarchal Ideologies and Conventional Paradoxes: TV Advertisements

Superiority of girls is mainly seen in TV advertisements due to their attractive body image and sexual appeal remembering the greater acceptance to its viewers. Approximately, all respondents support that women are skilled in presentation and suitable for modeling. Two respondents take the issue in saying that male and female are equally presented in TV advertisements. A large section of respondents was male and they willingly expressed their views. It shows that female should be the quintessence of love and beauty. On the contrary male needs to focus to be the makers of money and decision in family and all outdoor activities often the general scenario in TV advertisements. There are a few respondents who believe women are traditionally assigned to cook. They are interested to satisfy their family members by cooking delicious food items. In official jobs whereas men belong to chief levels such as manager, director, and principal; women are watched in receptionist, assistant and sales girls in various ads. Only male respondents support the issue and one of them assert that no change should come in this case. But all female respondents claim they are to perform two tasks at the same time as service holders and cook consequently. This is a double burden work for women. Every male speaks on behalf of patriarchy, but women raise their voice considering their performance in working and household levels as a double task.

#### Planning and Making Advertisements: Roles Promoted by Males

Majority of middle class youths watch TV ads on a regular basis to know and buy products. Few respondents demanded that they watch TV ads soon after changing channels. Since Gerbner regards television as the dominant force in shaping modern society, almost every middle class youth in Dhaka city has accessibility to it. Advertising is an integral part of product campaign; TV plays a vital role and manages its relative association with middle class youths. After the analysis of data, it can easily be clarified that in modern society middle class youths have a close proximity with advertisings in electronic media.

#### Portrayals of the Sexes, Objectionable Appeals and Gender Disparity

The perceived differences between the sexes become ranked and evaluated in a systematic way. The analysis of gender as an inevitable part of disparity in which feminized persons are ranked and rewarded below masculinized, has been stressed by middle class youth viewers. All of respondents speak on behalf of the issue that male and female are not equally portrayed in advertisings in TV channels. Their roles and images are not presented in an equitable sense. Form the point of respondent's view; women are presented as the holder of lower status in terms of domestic labor, domestic status, social and practical life comparing with male counterparts. In most of the advertisements, women are watched the role of carrying out domestic works and rearing children, at the same time involving in outdoor services. This is evident that portrayals of male and female are not equally done in TV advertisings. That's why discriminatory socialization process becomes notable in most of the TV ads.

#### Conclusion

Advertisements are not just marketing of products. In many cases, advertisements represent the norms, values and ideologies of the existing social system that incorporate and mould the status of socialization. Male and female are not equally portrayed in electronic media. The messages of different TV ads sound discriminatory presentation of models without considering the gender sensitive issues. The roles and responsibilities of men and women apparent in different TV ads often reflect the discriminatory portrayals of the sexes and ultimately assist in gendered socialization. This is hereby to recollect that surfing between reality and fantasy still remains in a host of advertisements influenced by a particular dominant class in Bangladesh.

#### References

- Courtney, A.E, & Whipple, T. W (1974). Women in TV Commercials. Journal of Communication, 24, 110-118.
- Kilbourne, J. (1998) Beauty and the beast of advertising . In L.J. Peach (Ed.), Women in culture: A women's studies anthology (pp. 127-131). Malden, M.A: Blackwell.
- Lanis, K., & Covell, K. (1995). Images of women in advertisements: Effects on attitudes related to sexual aggression. Sex Roles, 32, 639-649.
- Picklesimer, Sara (2010). Gender role stereotypes in advertising: A test of the matchup hypothesis on advertising effectiveness: An MSS thesis submitted to University of Louisville.GRIN Verlag GmbH.
- Verma, D.P.S & Kapoor, Neeru (2004). Influence of TV Advertisements on Children's Buying Response: Role of Parent – Child Interaction as cited in Global Business Review, Vol-5, No-1, 51-71 (2004).
- Washington (2008). Television Advertising Leads to Unhealthy Habits in Children. American Sociological Association, 2002, 4242.
- 7. China Daily May 14, 2004
- 8. Giddens, (2006). Sociology, Macmillan Press Inc., London UK
- 9. Sikder, Shourov (2007) 'Images of women in television commercials' which was published by (Oxfam GB, Bangladesh).
- Nasrin, Geeti Ara (2002). Political Economy of Advertisements in BTV; A Gender Analysis (Gender, Media and Tourism; December, 2002).
- Janakantha, April 2, 2006. An essay on 'Skin Beautifying Cosmetic; Propaganda and Impact'
- 12. Ahmed, Mustaque (2000). "Gonomaddhom O Gonosomaj", edited by Geeti Ara Nasrin, Mofijur Rahman & Sitara Parvin was published in March 2002.

- 13. Gramsci, 1971; Storey 1994
- 14. Griffin, Em. (1991). A First Look at Communication Theory. Mc Graw-Hill, Inc.
- 15. Griffin, Em. (1991). A First Look at Communication Theory. Mc Graw-Hill, Inc.
- 16. Interview, 17 August 2008. Conducted with Tahmina, an ideal housewife and educated women
- 17. Interview, 25 August 2008. Shared with a university BBA student
- 18. Interview, 12 August 2008. Approached with a university student Riyad
- 19. The Star, 30 December, 2010
- 20. The Star, 30 December, 2010
- 21. Bandura, A. (1997). Self-efficacy: The Exercise of Control. Freeman, New York.

# Tuberculosis Awareness Program in Rural Bangladesh: A Sociological Analysis

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**Abstract:** Current study highlights the level of knowledge of rural people regarding tuberculosis in Bangladesh. The findings of the study show that the level of knowledge about TB is tremendously affected by their socioeconomic and socio-cultural variables in rural Bangladesh. TB control and awareness program directed by different sources of media is proved to be successful to some extent in amplifying awareness and educating rural community in farthest corners of the country. The study is completely dominated by some noticeable barriers to TB treatment and care.

**Key Words:** Tuberculosis, Knowledge, Perception, Stigma, Mass Media, Epidemiology, Susceptibility, KAP, HBM

#### Introduction

Tuberculosis (TB) is one of the major prototypes to the global burden of disease and has received timely attention, particularly in low- and middle-income countries where it is closely associated with HIV/AIDS. Poor adherence to treatment is common despite various interventions aimed at improving treatment completion. Lack of a comprehensive and holistic understanding of barriers and facilitators, treatment adherence is currently a major obstacle to finding effective solutions. Fueled by poverty, poor public health systems, and increasing HIV/AIDS prevalence, TB continues to be a persistent challenge for global health and development. TB control programs currently emphasize the Direct Observed Therapy Short-Course (DOTS) strategy, promoted by the World Health Organization and the International UNION against Tuberculosis and Lung Disease. The current goals are to achieve 85% treatment success and 70% case detection. Among others, TB global control currently confronts two challenges to meet those goals: diagnosis delay and non-completion of treatment.

Bangladesh ranked 5th among the top 22 high TB burdened countries of the world, where 300,000 new tuberculosis cases occur every year, half of them are infectious, resulting in a high incidence (105/100,000 population) of infectious TB cases<sup>1</sup>.

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Tuberculosis is associated with a stigma, together with poor facilities and unfriendly health care providers; this discourages female patients from seeking health care, leading to a huge reservoir of infectious TB cases in the rural community<sup>2</sup>. TB patients often get themselves enmeshed with socio-cultural and economic sufferings resulting in a vehement negation of fundamental rights. The stigma attached to TB adds to the burden of disease for both men and women, and even more so if they are of marriageable age. While men have to deal with the stigma at their work place and at the community level, women are faced with ostracism within the household and in the immediate neighborhood. They are also inhibited in discussing their illness and participating in social functions due to fear of becoming an outcast.

Studies reveal that social beliefs are more severe for women and have an impact on female treatment seeking behavior. Similar findings from a study in South Africa showed that 40% of TB patients had attended healers at some time prior to diagnosis in Malawi. More women (35%) visited traditional healers before diagnosis than men; fewer females submitted sputum samples, and had been diagnosed with smear positive TB, compared with males in health centers<sup>3</sup>. A study in the Philippines found that only 29% of TB patients first visited a health center after the onset of TB related symptoms, and more than half (53%) had initially consulted a traditional practitioners. A striking finding was the greater use of alternative medicines and avoidance of public health services by women, due to long waiting times, poor quality of care, inadequate staff, lack of female providers and the unfriendly attitude of health practitioners<sup>4</sup>.

#### **Objective of the Study**

This article attempts to assess the level of knowledge of rural people of Bangladesh about tuberculosis. It focuses on the nexus between cultural variables and health seeking behavior approached by people. This piece of research measures the impact of TB awareness program conducted in rural Bangladesh. It is inevitable to find out the barriers affecting their knowledge about the disease. Media exposure was taken into consideration in order to explore awareness level of the respondents.

#### Methodology

This paper is about to explore the level of knowledge of rural people about tuberculosis in Bangladesh. The study employed both quantitative and qualitative methods of data collection. Samples are selected purposively using the random sampling procedure for the survey. A total of 150 people are interviewed. In the study, a structured interview schedule is used for conducting and administering the survey. For the qualitative part of the study, five case studies are conducted.

#### uberculosis: A Possible Threat to Health Workers and Family Members

TB epidemics are initiated and potentially accelerated by factors other than the immune response of the general population. Although tuberculosis may have been present among the different ethnic groups such as European Caucasians or Status Indians in Saskatchewan prior to the onset of the epidemic, something would have been required to initiate the TB epidemic in populations where scattered cases of TB were presumably already occurring. Urbanization, as occurred during the Industrial Revolution in Europe or the loss of traditional lifestyle and movement onto reserves by the First Nations population, may have been a key factor<sup>5</sup>. According to Grigg, urbanization, leading to overcrowding, resulted in more individuals being exposed to each case of infectious TB and "more people participated in the beginning of the TB phenomenon. The speed with which the TB epidemic wave progresses depends on urbanization of the affected population. In an immune naive or susceptible population, more individuals are at risk of progressing to TB disease once infected. Mortality and morbidity peak quickly.

Social factors have been attributed to the epidemiology of TB; however, risk factors for acquisition of infection differ than risk factors for progression to disease. TB is described as a disease of poverty. Grigg maintained that social factors were included in the 'generic term' of urbanization. Overcrowding was the social factor of urbanization that resulted in an increased risk of exposure. The role of overcrowding in the epidemiology of TB has been demonstrated by previous studies that looked at individual social factors. Studies using composite indices or definitions of poverty demonstrated an association with TB because overcrowding was one of the composite measures. Cantwell et al identified that the quartile with the most overcrowding had the strongest association with the development of TB<sup>6</sup>.

#### **Knowledge and Perceptions about TB**

When the early symptoms of cough start, they perceive them as minor ailments and do not find it necessary to seek care at a hospital. When the cough lasts for weeks or months or they have hemoptysis, they perceive their illness as being serious. Most groups stated that in general, people did not like a TB patient to visit their home, to contact their children, or to share a meal. They also reported that parents would not let their son or daughter marry a TB patient, not even an ex-TB patient. The patient participants said that discrimination by neighbors and relatives, particularly by teachers and educated people, did not influence their care seeking for TB, because without getting treatment, they could not get rid of the disease, and the discrimination as well.

Some of them asked the doctors to conceal their TB. All of them agreed that for young, unmarried people it could be necessary to keep the disease a secret. The underlying reasons for not marrying a TB patient were that they could not produce a healthy baby in the future; TB patients were unclean, and incurable TB would impoverish the family.

#### **TB** Control and Awareness Program

TB control program is a felt-need oriented program as more than 80% people with chest symptoms have been reported to seek relief of symptoms on their own<sup>7</sup>. Poor awareness on all aspects of TB, including symptoms suggestive of TB, availability of free diagnosis and treatment facilities in the community might adversely affect the program performance. Earlier studies have shown that TB awareness was not up to the expectations due to poor literacy rate or lack of availability of effective communication channels resulting in improper health seeking behavior and treatment compliance. In a study conducted in our center, it was observed that 29% of patients had delayed seeking care for more than one month and 40% of them attributed the delay to their lack of awareness about TB<sup>8</sup>. Even in the Joint TB program review conducted in the year 2000, it was observed that paucity of knowledge on TB and TB control program prevailed even among the grass-root level health workers, despite the presence of posters and pamphlets in abundance to promote Revised National Tuberculosis Control Program (RNTCP)<sup>9</sup>. All these findings suggest that there is a need to improve awareness of chest symptoms suggestive of TB including availability of free diagnostic and treatment services in the community, especially in rural areas to achieve effective TB control.

#### Health Belief Model (HBM)

As a psychological theory, the stages of the Health Belief Model (HBM) massively attract the individual without assessing the role that structural and environmental issues may have on a person's ability to enact behavior change. The Health Belief Model (HBM) is one of the most widely used conceptual frameworks for understanding health behavior. In the 1950s the U.S. public health service flourished the model in order to explain people's participation in health screenings<sup>10</sup>. The HBM aims to predict whether individuals choose to engage in a healthy action in order to prevent the chances of diseases or the health threats posed by inappropriate

or unhealthy practices. According to HBM, there are two main types of beliefs that influence people to take appropriate preventive action. These include beliefs related to readiness to take action and beliefs related to modifying factors that facilitate or inhibit action. The variables that are used to measure readiness to take action are perceived susceptibility to the illness or any health threats and the perceived severity of the illness. Perceived benefits (i, e. the perceived advantages of taking action) and Perceived barriers (i.e. the perceived costs or constraints of the specific action) are the main modifying variables<sup>11</sup>. According to the HBM when individuals are faced with a potential threat to their health they consider their susceptibility to, and the severity of the health threat.

According to HBM once an individual perceives a threat to his/her health and is simultaneously cues to action, and his/her perceived benefits outweigh his/her perceived threats then the individual is most likely to undertake the recommended preventive health action. For instances when applied to parents' immunization behavior, the HBM suggests that simply having knowledge and awareness about infectious diseases will not necessarily result in increased visits to a hospital for vaccinations. Instead, the model specifies four related elements that must be present for knowledge about disease to be translated into preventive action.

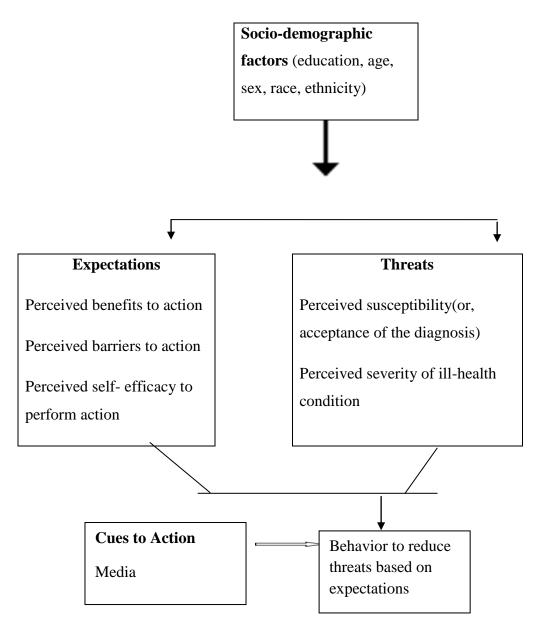
This is a more psychological model applied to explore and examine a variety of health behaviors in diverse populations. With the advent of TB, this model has been used to gain a better understanding of sexual risk behaviors.

The HBM (Fig. 1) is based on the understanding that a person will take a health-related action (i.e., use condoms) if that person:

1. feels that a negative health condition (i.e., HIV) can be avoided,

2. has a positive expectation that by taking a recommended action, he/she will avoid a negative health condition (i.e., using condoms will be effective at preventing HIV), and

3. believes that he/she can successfully take a recommended health action (i.e., he/she can use condoms comfortably and with confidence).





The Health Belief Model is a framework for motivating people to take positive health actions that uses the desire to avoid a negative health consequence as the prime motivation. For example, TB is a negative health consequence, and the desire to avoid TB can be used to motivate people into practicing a sound life. Similarly, the perceived threat of a heart attack can be used to motivate a person with high blood pressure into exercising more often.

A great limitation following with the HBM is lack of consistency in applying and testing of the model. For example, identifying and measuring the concept of cues to action has been problematic. Cues can be diverse in nature, may occur in a transient manner, and an individual may or may not consciously remember events that action. In retro specific studies, the nature and importance of cues is more difficult to evaluate because research participants are questioned about behaviors performed in the past.

The socio-structural variables attached and crucial in shaping and influencing personal behavior like sexual risk practice, excessive alcoholism, immunization behavior, dieting<sup>12</sup>are massively overlooked in formulating this model. This is supposed to negate all socio-cultural factors like race, ethnicity, myths and after all discriminatory attitude and brand itself as a unilinear model.

#### Knowledge, Attitude, Practice (KAP) Model

The knowledge, Attitude and Practice (KAP) Model was popular in developing countries to study human behavior during 1950s to 1960s. To protect human risk behavior, psychologists used this first. The UCSF AIDS Health Project 1998 stated that, in HIV/STD prevention as in other areas of health and behavior, the knowledge, the attitude-behavior (KAP) or knowledge attitude-practice continues is often referred to. In other words, the main argument of KAP model is that human behavior is influenced by ascribed knowledge which can change the attitude. As a result the practice may be changed. This can be shown in the following way:

	Knowledge		Attitude		Practice
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Where,

Knowledge= the capacity to acquire and use information, a mixture of comprehension, experience, discernment and skill.

Attitude= the inclinations to reject in a certain pre-dispositions or to organize opinions into coherent and interrelated structures.

Practice= the application of rule and knowledge that leads to action. According to the sociologists, it is not easy to change sexual behavior.

They stated that the particular behavior of clients promote the sex workers to risk behavior. The sociologists argued that the Commercial Sex Workers (CSW) cannot practice on ascribed knowledge. Though they have positive attitude towards knowledge they cannot practice to survive. The sociologists identified these factors for these risk practice. These are survival, male domination, economic stability, cultural variation, religion, education, environment and remoteness of diseases. The sociologists believe that KAP model can be effective in developing countries if it is reshaped by the cultural construction. They argued that practice is

originated through culture and it is related to individual's own belief, socialization process, rituals, religion etc.

#### Labeling Theory: Social Organization and the Individual

Labeling Theory refers to the idea that individuals become deviant when two things occur: (a) a deviant label is applied to them (e.g., loner, punk) and (b) they adopt the label by exhibiting the behaviors, actions, and attitudes associated with it. This approach to deviance recognizes its cultural relativity and is aware that deviance can result from power imbalances. But it takes the idea of deviance further by illustrating how a deviant identity develops through the application and adoption of labels. Labeling theory argues that people become deviant as a result of people forcing that identity upon them and then adopting the identity. Labels are understood to be the names associated with identities or role-sets in society. Examples of more innocuous labels might include father or lover. Deviant labels refer to identities that are known for falling outside of cultural norms, like loner or punk<sup>13</sup>.

There are two additional ideas related to the labeling theory approach to understanding deviance. First, once a deviant identity is adopted, it is often the case that the past behaviors of the now deviant individual are re-interpreted in light of the new identity. The process of recasting one's past actions in light of a current identity is referred to as retrospective labeling.

Another important element of labeling theory involves the idea of stigma. Stigma is a quality, behavior, or reputation applied to discredit someone and at the same time makes the individual psychologically stratified from others in an unexpected way. Stigma is conceptualized as the phenomenon whereby an individual with an attribute is deeply discredited by his/her society and rejected as a result of the attribute. This is a process by which the reaction of others spoils normal identity of a person. Goffman emphasizes the fact that the stigma relationship is one between an individual and a social setting with a given set of expectations; thus, everyone at different times will play both roles of stigmatized and stigmatizer (or, as he puts it, "normal"). He addressed the three different types of potential social stigma. These are physical deformities, perceived abnormalities or blemishes of character (such as addiction, mental disorder, or imprisonment) and tribally allocated stigmas related to another's race, nation or religion<sup>14</sup>.

#### **Socio-Demographic Profile of the People**

In the study (Table 1)150 people ranging from age 17 to 58 were interviewed. Of them 42.67 percent was male and 57.33 percent was female. The number of female respondents seems to be higher because of their direct participation in survey as the study was conducted at household level. A large number of the people (56.57 percent) remains married in the study which is another important socio-demographic factor. The outstanding character of marital status was single (34.00 percent) of the respondents, the concern goes 6.00 percent of the respondents lead separated life.

An astounding majority of the people (75.33 percent) was Muslim and rest of them was Hindu. This figure is also congruent with the national statistics of Bangladesh. The majority of the population of Bangladesh (about 88 percent) is Muslim<sup>15</sup>.

Characteristics	<b>Male (%)</b>	Female (%)	Total (%)
Age in Years			
< 25	7	22	19.33
25 to 30	16	17	22.00
30 to 35	19	16	23.33
35 to 40	11	11	14.67
40 to 45	9	15	16.00
45+	2	5	4.67
Marital Status			
Single	35	16	34.00
Married	29	56	56.67
Separated	0	9	6.00
Widowed	0	5	3.33
Deserted	0	0	0.0
Religion			
Muslim	53	60	75.33
Hindu	11	26	24.67
N= 150	64	86	100.00

Table 1: Distribution of the People by Socio-Demographic Profile

(Source: Field Work, 2012)

#### **Socio-Economic Status of the People**

The study (Table 2) found that a majority of the respondents (42.00 percent) got themselves engaged in household chores who are simply women. A considerable number of people (32.00 percent) were identified as unemployed whereas 20 percent of the respondents found themselves in agriculture. Of the people 2.00 percent and 10.67 percent were counted as migrant workers and service holders respectively in the study. A large number of people (34.67 percent) show themselves that their monthly income is 5000-10000 (BDT). The

average income of 25.33 respondents was less than 5000 (BDT). Education a dominant character of the lifestyles and status, affects many aspects of life including demographic and health behavior. Many studies show that people with formal education have strong influences on health behavior, attitudes and practices. School attendance among people was moderately high with more than 70 percent. A certain number of respondents (34.67 percent) had only primary level schooling. With a view to getting higher education, 26.00 percent of the respondents had participated in secondary school level and only 13.33 percent of the whole respondents completed tertiary level education.

Characteristics	Male	Female	Total (%)
Employment Status			
Service holder	9	7	10.67
Migrant worker	3	0	2.00
Farmer	18	0	12.00
Retired	2	0	1.33
Housewife	0	63	42.00
Unemployed	32	16	32.00
Income (BDT)			
<5000	13	25	25.33
5000-10000	18	34	34.67
10000-15000	12	12	16.00
15000-20000	11	7	12.00
20000-25000	7	5	8.00
25000+	3	3	4.00
Education (Level)			
Illiterate	14	25	26.00
Primary	23	29	34.67
Secondary	15	24	26.00
Tertiary	12	8	13.33
N= 150	<u>64</u>	<u>86</u>	100.00

 Table 2: Distribution of the People by Socio-Economic Characteristics

(Source: Field Work, 2012)

#### Perceived Susceptibility and Perceived Severity of Tuberculosis

More than 60 percent of the respondents believe (Table 3) that they can avoid contracting TB with the help of preventive action. Men were more likely to avoid contracting TB than women. Women are not highly exposed to different sources of mass media. Around 80 percent of the male respondents states that they watch television at different times in a day. But 58 percent of the female said that they watched television on a regular basis. Every now

and then women are kept in the dark in this male dominated patriarchal society due to many socio-cultural impediments.

Characteristics	Male (%)	Female (%)	Total (%)
Avoid contracting Tuberculosis	67.19	59.30	62.67
Diagnosis for TB treatment	59.36	52.32	55.33
Total	N=64	N= 86	100.00

Table 3: Perceived Susceptibility of Tuberculosis by Sex

(Source: Field Work, 2012)

The study (Table 4) reports that about 55 percent of the respondents wished that they need proper diagnosis for treating TB. Men were more likely to receive knowledge and information than women. Since the income generating activity is dominated by male, female does not show any more interest in treatment seeking practices. Perceived susceptibility of male as to TB is higher than female in Bangladesh. A variety of socio-structural and socio-cultural factors are claimed the dropping of women's response in measuring perceived susceptibility.

 Table 4: Perceived Severity to TB Treatment by Sex

Characteristics	Male (%)	Female (%)	Total (%)
<1 month	17.19	31.40	25.33
2-6 months	31.25	38.37	35.33
6-12 months	20.31	13.95	16.17
1-2 years	13.44	11.63	16.17
2 year+	7.81	4.65	6.00
Total	N=64	N=86	100.00

<sup>(</sup>Source: Field Work, 2012)

Perceived severity to TB treatment was measured by counting how days TB patients can pass without treatment soon after being informed of the concerned fact. The figure focuses that 35 percent of the respondents reported that they will take treatment within two to six months soon after getting infected with TB. Female are more likely to receive treatment than male at the beginning period of conforming to TB.

#### **Tuberculosis: Noticeable Barriers to Treatment and Care**

Health facilities in the most remote corner of the country are not available for general people due to lack of qualified healers, time and space gap, unavailability of roads and transports, financial complexity as well. Poor people do not get equal accessibility to the sources of treatment and counseling. Majority of the respondents gave opinion that TB treatment is a prolonged process and costly, let alone the availability of services of expert healers in local area. A woman claimed that we have no enough facilities for getting first aid whereas the treatment and care of TB is really a challenge in this rustic area. There are a lot of obstacles to treatment and support regarding TB such as financial crisis, deep sadness, embarrassing situations, negative image of others and callousness of healers. Rural people never think of judging a TB bearing person in a positive sense (Interview, 2012). He/ she is to lead a critical and isolated life debarring from other nearest and dearest ones which is really shocking for the maintenance of mainstream treatment and care about TB in Bangladesh.

#### Exposure to Mass Media and TB Awareness Program in Bangladesh

Accessibility to knowledge and information as to TB epidemiology is often channeled to increase people's awareness of the health related risk behavior, which may affect their perceptions and behavior. Awareness and counseling program can make them sure of the severity of the disease and the proper channels of receiving treatment. This is obligatory to pick up that exposure to mass media is very important for TB because of their vulnerability and susceptibility to risk practices.

The study shows (Table 5) that more than 90 percent of the respondents proclaimed that they had ever hard/watched campaign on tuberculosis from the reliable sources of both electronic and print media. Women are more likely to expose to media than men. More than 60 percent of the female respondents received information on TB from satellite channels but 60 percent of the respondents supported banners for getting information. Around 64 percent of the respondents got the message on TB from Bangladesh Betar, only 62 percent and 48 percent of the people heard the message from festoons and daily newspaper respectively. Women were almost likely to response than men in this media based multiple responses questions.

(%) 108.14	(%)
108.14	
	116.67
72.09	74.00
16.28	32.00
0.0	1.33
3.49	5.33
44.19	42.67
29.07	41.43
33.72	60.40
86	100.00
	33.72

Table 5: Response to TB Control Program\*

\*Multiple Responses (Source: Field Work, 2010)

Though people have an astounding entrance to satellite channels, daily newspapers and other sources of media in rural area in Bangladesh, TB awareness program should be got more emphasis keeping in view the timing and space. Without considering the contextual relevance, it will be like casting pearls before swine to formulate any health related campaign. Local media can play a significant role in disseminating health related information and raising awareness program centering TB in Bangladesh.

#### Social Stigma and Misconceptions about TB in Rural Bangladesh

TB stigma has drawn a global attention in recent years. Stigma is perpetrated and reinforced by health staff, family members, neighbors, and other groups. Patients postpone seeking care due to fears of finding out their HIV status, and suffering stigmatization and social rejection as a consequence of their HIV and TB status becoming known. In some cases, even attending DOTS clinics to get diagnosed is stigmatized. If uncertainty about HIV status deters people from seeking diagnosis, knowledge of HIV status seems to be negatively associated with delay. A study in Thailand found that patients who are HIV positive have the shortest delay for TB diagnosis. The authors speculated that patients are more willing to seek care after they know their HIV status.

TB patients experience psychological and social sufferings and their basic rights may be unacknowledged. Amongst problems met by TB patients, social stigma has been increasingly recognized. Social stigma is "an undesirable or discrediting attribute that an individual possesses, thus reducing that individual's status in the eyes of society. To conclude, the study has demonstrated that despite the excellent performance of Revised National TB Control Programme for over more than a decade in Delhi and the excellent results of success rates over 82% and case detection of over 70%, the stigma in TB still remains a problem and we need to supplement our efforts in Advocacy, Communication and Social Mobilization for reducing the stigma problem among TB patients which will pay dividends towards effective TB control and to achieve millennium development.

#### Conclusion

The findings in this study illuminate some important aspects of Tuberculosis awareness program in rural Bangladesh. A variety of factors have been identified as the leading causes of low level of knowledge about TB in rural area including poor socio-economic status, low literacy level, lack of physical accessibility, financial crisis, cultural beliefs and perceptions and large family size. Although majority of the people are exposed to different sources of media, TB awareness and treatment program is still dominated by the socio-cultural beliefs and demographic status in Bangladesh.

## References

- World Health Organization. Global tuberculosis control, WHO Report 2001. WHO/CDS/TB/2000. 287, 2001
- Fair E, Islam Amid, Chowdhury SA. Tuberculosis and gender: treatment seeking behaviour and social beliefs of women with tuberculosis in rural Bangladesh 1997. Dhaka: BRAC Working Paper1997; No. 1.
- Boeree MJ, Harries AD, Godschalk P, et al. Gender differences in relation to sputum submission and smear-positive pulmonary tuberculosis in Malawi. Int J Tuberc Lung Dis 2000; 4: 882-4.
- Rangan S, Uplekar M. Gender perspectives of access to health and tuberculosis care. In: Diwan VK, Thorson A, Winkvist A, eds. Gender and tuberculosis: an international research workshop. Goteborg, Sweden: The Nordic School of Public Health, May 24-26, 1998.

- 5. Grigg E R. The arcana of tuberculosis with a brief epidemiologic history of the disease in the U.S.A. Am Rev Tuberc 1958; 78(2):151-172.
- Cantwell MF, McKenna MT, McCray E, Onorato IM. Tuberculosis and race/ethnicity in the United States: impact of socioeconomic status. Am J RespirCrit Care Med 1998; 157(4 Pt 1):1016-1020.
- 7. World Health Organization. The global plan to stop tuberculosis. World Health Organization, Geneva. CDS/STB/2001.16
- Rajeswari, R., V. Chandrasekaran, Suhadev M,Sivasubramaniam S, Sudha G, Renu
   G. Factors associated with patient and health system delays in the diagnosis of tuberculosis in South India. Int J Tub erc Lung Dis 2002,6(9): 789-795.
- RNTCP status report 2005, Central TB Division, Director General of Health Service, Ministry of Health & Family Welfare, New Delhi.
- Rosenstock I.M. (1974). "Historical Origins of the Health Belief Model." Health Education. Monograph 2:328-335
- Rosenstock I.M. (1990). "The Health Belief Model: Explaining Health Behavior through Expectancies." In glanz et.al. (Eds.) Health Behavior and Health Education: Theory, Research and Practice Jossey-Bass Publisher, San Francisco. Pp. 39-62.
- Amanullah, ASM., Islam, S. and Khan, M.I. (2008b). 'Exposure to Media and HIV/AIDS-Related Risk Practices among Adolescents and Youths in Bangladesh: A Sociological Study'. Journal of Business and Technology (Dhaka), Vol.1, Issue: 3, ISSN-1992-271x.
- Goffman, E. (1963). Stigma: Notes on the Management of Spoiled Identity. Englewood Cliffs: Prentice Hall.
- 14. Cockerham, W.C. (2000). Medical Sociology. New Jersey: Prentice Hall.
- 15. Bureau of Bangladesh Statistics, 2007

# Higher Education in Private Universities of Bangladesh: A Sociological Study

## Md. Nasimuzzaman Khan<sup>\*</sup>

Abstract: This article is an attempt to reveal the quality of higher education in the private universities of Bangladesh. With this end some indicators of quality education like academic atmosphere, quality of faculty members, regular class. Examination and result, library and research facilities and so on have been discussed. Evaluated and examined. In Bangladesh, higher education is of great importance in bringing expected social changes, economic development and modernization. Along with the public universities of Bangladesh, private universities can play a significant role in ensuring skilled administration, judicial system, leadership, teaching and research. As a new and fast growing sector of higher education, the private universities have some limitations but that can be solved and overcome through taking the realistic and effective ways by the concerned authorities.

Key Words: Higher education, research, economic development, judicial system, leadership, realistic.

#### Introduction

Education acts as key agent in the social, economic and political life of an individual, a community and a nation. Without education, a nation cannot achieve its expected social changes and development. This view is agreed and accepted by education sociologists and relevant experts not only in Bangladesh but also in other parts of the world. There is no alternative to education and more particularly, higher education in both public and private sector of administration, leadership of the community and nation, teaching from primary to tertiary level and to ensure a good judicial system. Like many other courtiers of the world, Bangladesh has been working to ensure higher education among the citizens of the country. To this end, a number of public universities have been established in the land from 1921. Both types of universities are trying to create skilled, alert and patriotic citizens for the country. Higher education is the key to unlock the main gate to civilization and modernization, because it is one of the universal ingredients in the development of mankind and it is indispensable for economic growth and prosperity. Although the world is changing more rapidly than its educational systems, yet education continues to protect Society, to promote knowledge and preserve stability by passing on the culture from one generation to another; at the same time it plays a pioneering role in innovation<sup>1</sup>.

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#### The Journey of Private Universities in Bangladesh

At the time of Independence in 1971, there were only five public universities in Bangladesh but due to the socio-political conditions of the country, the quality of higher education in the universities started to deteriorate. At the same time, a recent addition to the higher education system in Bangladesh is the emergence of the private universities. Although private universities have existed in other countries for long, the first private university in Bangladesh did not make its appearance till 1992. A law titled 'Private University Act of Bangladesh' was passed in the National Parliament in 1992 and the first private university of the country, the North South University, started functioning in the same year. Today the country has 62 such private universities where approximately 20 lakhs students pursue their studies in subjects ranging from business to fashion design and media studies.

The promoters of private universities in Bangladesh can be classified into six broad categories:

- (a) Retired bureaucrats;
- (b) Successful businessmen;
- (c) Senior academicians;
- (d) Active/retired politicians;
- (e) NGOs'
- (f) Combination of some of the above.

There are private educational institutions of another category operating in Bangladesh: they are the Bangladesh campuses of some low profile overseas private universities and colleges.

There is a great demand of higher education in the country. Hence there is a rush of Students admission into the universities but the public universities cannot accommodate them. So, the government has in consultation with the UGC, accorded permission to a number of entrepreneurs to start universities in the private sector. This has been done in keeping with Private University Act, 1992, which got amended in 1998. There are now 62 private universities in Bangladesh and some are also waiting for the approval of the government. Meanwhile, Government of Bangladesh has approved Private University Act-2010 in the parliament on 17 July 2010.

#### Methodology

From both primary and secondary sources information have been collected and used in the present study. Primary data are those which are collected directly from field level. To collect primary data, survey method, has been applied .In this case, twenty students from each university of the proposed sample has been interviewed to know their socio-economic background and views on the education system of private Universities in Bangladesh. Secondary sources comprise different relevant books, articles and research reports including those published by the University Grants Commission.

## Socio-Economic Background of the Students

At the time of approval of private universities, it was criticized that it would be the institutions only for upper class and urban people. In order to know the socio-economic background of the students, the researcher has interviewed twenty Students of each University and found that half of the students (50%) studied in rural area at primary level of education. On the other hand.30% of them Studied in semi-urban area and only 20% in urban areas, Similar at high school level of education, half of the total students studied in rural area and remaining 50% studied in semi-urban and urban area. However, at higher secondary level of education, 55% students of the University studied in urban area.30% in semi-urban area and only a small portion (15%) in rural areas where H.S.C. level education is available. This shown the table-1.

Level of education	Urban area	Semi-urban	Rural area	Total
		area		
Primary	20%	30%	50%	100%
High School	30%	20%	50%	100%
College	55%	30%	15%	100%

Table-1: Previous learning institutions of the students

Source: Fieldwork, 2012

# **Goals and objectives of Higher Education**

A suitable system of higher education not only meets the present requirements of society, but also provides a direction for national progress and necessary inspiration to achieve it. Higher education helps extend the limits of knowledge for examining and explaining the different aspects of human life and of nature. Higher education also helps in setting the goals for formulating national planning though practical application of knowledge for solving the every day problems of life.

According to the Bangladesh National Educational Commission of 1988, the goals and objectives of higher education in Bangladesh are:

1. The full development of the individual so as to enable him to contribute to the overall development of the society and the country. Higher education is the main vehicle to achieve the higher goals of the nation.

2. Higher education aims not only to fill a person with knowledge or sharpen his quest for knowledge. It also aims to make a person bold and fearless. Higher education gives a person the strength to express with confidence the perceptions he / she gains through his facts and reasoning.

3. Higher education gives conscious and careful attention to the development of cultured and respectable personalities in the true sense.

4. One of the preconditions for the advancement of civilization is the unraveling of the mysteries of nature though experimentation and anlysis and the interpretation of the forces of nature 4. Only highly educated persons can meet this precondition.

# **Occupation of the Guardians**

It is generally believed that the guardians of the students belong to upper class but in recent time it is found that there is a good number of guardians who are only engaged in agricultural activities as their means of subsistence. In the present study it is found that 40% fathers of the students are occupied in agriculture related profession, 30% are engaged in business while other 30% are in the government and private jobs. This shown the table-2.

Occupations of the Guardians	Number of students	Percentage
Government Job	3	15%
Private Job	3	15%
Business	6	30%
Agriculture	8	40%
Total	20	100%

Table-2: Occupation of Fathers

Source: Fieldwork 2012

# Status of the Parents in the Society

The status of the parents of the students varies largely as they come from various socioeconomic backgrounds and places. It is found that most of the parents of the students of the private universities belong to middle class (40%) and 20% belong to upper class who enjoys high status in the society. 30% belong to upper-middle class and only 10% is from lowermiddle class. However, there has not made any access of lower class in private universities yet. This indicates that the parents of the students of the private universities belong to different classes and enjoy their status according to the position or class in the society. This shown the table-3.

Table-3: Status of the parents of the students

Classes	Number of parents	Percentage

Upper class	4	20%
Upper-middle class	6	30%
Middle class	8	40%
Lower-middle class	2	10%
Lower class	-	-
Total	20	100%

Source: Fieldwork 2012

## **Role of Private Universities**

The Private University Act was passed in 1992 to supplement the public universities in promoting higher education and easing the pressure on the public universities. It was realized that every year a large number of students aspiring for admission in the public universities are deprived of higher education due to limitations of available seats as per their choice in the public universities of the country. About 12-15 percent of the applicants are found to get enrolled and the rest either enter into the job market or get admitted in the colleges where facilities for higher education fall far short to the desired minimum. It was expected that the private sector being guided by the demand and supply conditions of the market economy may take into cognizance the exact market phenomena and accordingly embark upon the management of higher education in the private sector. Thirdly, it was presumed that access to higher education may by substantially broadened without imposing too much financial burden on the government budget if the private sector is allowed to operate in the management of higher education.

The annual report in the private universities constitutes only a small proportion of the total in all the universities of the country.

The situation in respect of Students is, thus, disappointing in the perspective of the need of the country. Recently the Ministry of Education, Govt. of Bangladesh has already passed 'Private University Act 2010' in the national parliament. This shown the table-4.

## **Table-4 Last Five Years Students Ratio of Private Universities**

Year	No. of	Total students	Increase/decrease	% of increase
	universities		with comparison of	& decrease
			the last year	

2005	54	88,669	+25813	+41
2006	51	1,24,267	+35598	+40
2007	51	1,70,505	+46238	+37
2008	51	1,82,641	+12136	+07
2009	51	2,00,939	+18298	+10
2010	51	2,20,752	+19913	+11

Source: UGC Annual Report 2010

Year	No. of	Total	Increase/decrease with	% of increase
	universities	students	comparison of the last	& decrease
			year	
2006	23	1,53,249	+36452	+31.66
2007	27	13,99,843	+9755	+3.36
2008	29	11,76,969	-222874	-15.92
2009	31	13,82,216	+205247	+17.44
2010	32	18,20,487	+438271	+24.07

# Source: UGC Annual Report 2010

Shown Table-4 & Table-5 depict that enrolment of students in the public and private university is increasing gradually. In 2010, 11% and 24% enrollment increased in the public and private university respectively.

# **Higher Education Policy 2010**

The goals, priorities and strategies in higher education and strategies for achieving the defined outcomes in the context of the 21<sup>st</sup> century global market, the knowledge economy and national aspirations and values must be articulated and delineated clearly. This is not a one-shot affair and requires a mechanism involving major stakeholders to continue focus on policies, priorities and their implementation.

The structure and content of higher educating curricula and teaching-learning practices the balance between specialized and general liberal arts education, the complementarities of public and private providers of higher education, and the links between primary, secondary and tertiary stages of education should be important elements of policy consideration.

The directives as noted in the Constitution of the People's Republic of National Education Policy 2009. the UN Child Rights convention that emphasizes the ensuring of rights of children in every member state has been a further area of consideration. The primary objectives of this policy are directed toward the cultivation of human values. It seeks to prescribe ways through which citizens can be groomed to become leaders in pro-people development programs and progress of the society. They will become rational and intellectually accomplished human beings with ethical perceptions, who have respect for their own religion as well as of others faiths. Education will help them to grow up as noncommunal, patriotic and efficient persons free from superstitions. And simultaneously, it is only education that can equip the nation to acquire the qualities and skills that will strengthen Bangladesh to work with equal capacity and pace of the global community. This education policy will work as a basis for an education system suitable for the delivery of education which will be pro-people, easily available, uniform, universal, well planned, science oriented and of high standard according to the constitutional directives and it will also work as a strategy to counter all problems. With this idea in view, the aims, objectives, goals and principles of the Higher Education Policy will be as follows.

#### **Aims and Objectives**

The purpose of higher education is to generate and innovate knowledge, at the same time to build up a skilled manpower. Autonomy is a must for the centers of higher studies including the universities. But it will be implemented under some set rules. A government monitoring system will be in place to monitor whether the allocated fund is being utilized in a proper way. At present, many specialists of specific areas devote their knowledge and research intensively to their specialized areas. That creates division in the area of knowledge. On the other hand, a counteraction also takes place leading to increasing interdependency of different branches of knowledge. As a result, science and technology, Sociology, literature, arts, economics and other subjects are becoming interdependent. This is added by inventions of new technologies. Especially, with the unprecedented development of information technology and newer scientific inventions, the perception about the world is getting renewed. In this context, on one can deny the importance of the co-ordination of knowledge that counteracts the division in the area. The traditional higher education system is not enough the fulfill present day the needs of an independent country like Bangladesh. In this respect, re-structuring of the whole system is an imperative need. The non-government higher education institutions must run according to set rules so that they can deliver quality education, in particular, in the areas of science, technology and business studies.

#### **Strategies**

- 1. After successful completion of secondary education from different streams, students will be allowed to take up higher study according to their merit, interests and aptitudes.
- 2. Measures will be taken to provide residential facilities, special help and scholarship for the children of freedom fighters, of small ethnic communities and socially backward groups for sundry reasons.

- 3. Academic institutions, which can ensure quality educating will provide higher education. Minimum qualification will not be relaxed for quota system or any other reasons.
- 4. All necessary steps and care will be taken to improve the standard of higher education.
- 5. 4-year Honours degree will be considered as the terminal degree and acceptable required qualification for jobs in all sectors excepting teaching positions at higher education institutions.
- 6. 4-year Honours course will be introduced in the colleges gradually in stead of the existing 3-year degree courses.

7. Teachers and students together have to take part in research work. At the universities, special emphasis will be given on original research. Sufficient and attractive funds will be made available to the brilliant students to carry on innovative research. There will be larger number of fellowships beside the recently introduced Bangabandhu fellowship. At the same time, steps will be taken to create necessary facilities of research in the degree colleges.

## **Higher Education Today**

At present there are 34 public universities in the country, with a new university having been declared by the present government to be set up at Gopalganj, is also been approved, thus raising the number of public universities to 34. There are currently as many as 62 (including 8, recently approved by the govt.) private universities in the country, most of these being very hurriedly and carelessly approved and established during the last regime. Some of these universities have already achieved fairly large student population; a few of the older ones, can claim quality.

Among the functioning 31 public universities, 29 are campus based, while the National University (NU) is an affiliated university, with over 2350 colleges located allover the country, and the Bangladesh Open University (BOU), based on the Distance Learning mode also has a country-wide coverage through its Regional Resource Centers and Branches.

The 29 campus-based public universities together had 1,79,128 students in 2010, while the NU had 12,70,843 and the BOU had 1,22.503 students. The 52 Private universities had 2,00,939 students at that time. The following table expounds the total scenario of higher education. This shown the table-6.

#### **Table-6 Students in Higher Education in 2010**

Public University (32)	1,79,128	11.22	6523
National University (I)	12,70,843	62.68	71
Bangladesh Open University (I)	1,22,503	17.01	91
Private Universities (52)	2,00,939	09.09	6690 (3666F.T*)
Total	17,73,413	100.00	

Source: UGC 36 Annual Report 2010 \*Full-Time (12)

#### **Academic Atmosphere**

Proper academic atmosphere is essential to invent, explore and disseminate new knowledge and ideas in a university. So, a university should be committed to providing an appropriate and idle academic atmosphere for its teachers and students, which is a great barrier in higher education in Bangladesh. The basic and common feature of private universities in Bangladesh is that all campuses are free of student politics. Student politics is formally declared as prohibited in the campuses. Certainly, this creates a congenial atmosphere for students to seek and achieve knowledge in different academic .It has provide students with wellfurnished and air-conditioned classrooms for better environment .The bearing and setting capacity is sufficient for the students in a certain classroom. The students have good relationship with the teachers. The computer lab is technologically advanced with Internet facilities the students. But a major portion of the campuses of the universities is located in the commercial areas of Dhaka city. The free space needed for acquiring and practicing knowledge is not available in the campuses. The students are confined inside the classrooms or building during class hours and they have no free space for relaxation. In recent time, due to the pressure of government as well as to ensure proper education in the institutions, some private universities have established separate and independent campuses. Besides, a good number of private universities have started to shift and establish separate campus according to the act of Private University. This is definitely a positive aspect for the sector of higher. education in the country.

#### Accommodation, Scholarship and Financial Assistance

To ensure proper education, a university should provide different types of facilities for the students. It includes accommodation, canteen, transports, recreation, and medical services. Physical training centre, financial and scholarship facilities. But most of these facilities are not available for the students of private universities<sup>1</sup>. In private universities, accommodation and canteen facilities are not enough as much as needed. Besides, the private universities do not assist any student directly with money as scholarship. However, in recent time many private universities have started to offer financial aid as scholarship for brilliant and relatively poor students.

#### **Scholarship Provided by UGC**

In order to promote and encourage the level of knowledge or Standard of the ongoing students of country, UGC (University Grants Commission) supports the following opportunities. This shown the table-7.

Table-7 Number of Scholarship

Year	Number of Scholarship
1984	18
1992	34
1999	49

Source: 37<sup>th</sup> Annual Report of (UGC) 2010. Page-18

The students of all the above-mentioned scholarships were provide to public universities .No scholarship was at all allocated for the students of private universities (3).

## **Quality of study Facilities**

Most of the teachers in the private universities are qualified in terms of higher degrees and academic achievements but the numbers are not sufficient in compare to teacher-student ratio. However, a number of faculty members of different public universities take classes as guest teacher,' this creates a good academic interaction among the faculty members. Though it is now manipulated by politics in public universities, the private universities try to appoint the best students as a teacher on the basis of merit and academic performance.

universities	Teacher -students	Library & Laboratory cost (Laces)	Study cost per student
NSU	1:41	31.25	74590.00
BRAC	1:12	13532	156813.00
AIUB	1:29	32.87	137144.87
PUB	1:18	9.355	19693.00
DIU	1:24	119.15	17627.00
BU	1:28	10.92	14598.00

Table-8Overview of Different Facilities:

Class, Examinations and Results (37<sup>th</sup> Annual report of UGC)-2010

A major problem facing university education in Bangladesh is what has come to be known is the session-jam. As a result of this phenomenon, a three-year course is prolonged to five years or more and a one-year course is to two or three years<sup>4</sup>. The major causes are political conflict, terrorism and quarrel within the campus, a legacy of previous session jams, delayed

admission tests and late beginning of classes, unscheduled closure of university, shifting of examination dates due to pressure from students and other reasons, irregularity of some teachers is taking classes and courses not completed on time. As a result of session-jam, many students of the public universities lose several years of life.

However, the problem of session jam and other mentioned problems are almost absent in the private universities. There is no political

Conflict and quarrel within the campuses. Class and, exam held regularly and publish the results in right time according to the academic calendar. Therefore, students can complete their courses on time and safe their valuable time of life.

#### **Issue of Student Politics and Campus violence**

"Campus violence' is a much discussed and widely denounced phenomena, one that traumatizes campus life and impacts adversely on teaching, learning and other activities in the campus 5. There is a common perception that the campuses of public universities are not very safe places to go to. But the students of the universities in the past contributed immense!} for the national politics, social activities, and national crisis and in different movements. In the language movement of 1952 and the liberation war 1971. The students played an important role for the country. Many national leaders have come out from this place <sup>6</sup>. But from 1991, the student politics in the country lost its pride and now it is engulfed by corruption, immorality and violence. The student politics is now affiliated to the national level and the political parties tend to exploit the students as means of achieving their political goals. The students are now more concerned with their political parties rather than their various aspects of education in the universities. They follow the party lines often violently, in the pursuit of their programs and activities in the campus<sup>7</sup>. At the same time, many students have been allowing themselves to be used by 'godfathers' of violence, who are often political leaders belonging to different parties.

#### **Library Facilities**

Library is the major source of acquiring knowledge. It works as an important media for preserving different ideas, theories, and views of the scholars and to disseminate knowledge among the students 8. Therefore, a library is regarded as one of the important aspects of higher education of a university. A number of public universities of the country possess big library for the students and teachers at central, department and hall level but the relatively new sector of higher education, private universities are not yet fully self-sufficient with their library facilities. In spiel of having their limitations, the private universities try to enrich their libraries by providing at least course related books and journals. This shown the table-9.

Time	Total cost	Average cost (Laces)
	(Laces)	
2009	3913.11	78.26
2008	5921.89	116.12
Audio- visual	23.351	735.09

 Table No-9 Library Cost in Private Universities

Source: 37th Annual Report of (UGC) 2010 page-169.

Table No-10 Library Cost in Major Private Universities in 2009.

Institutions	Amount (Lac)
AIUB	11310.33
NSU	9676.03
U1U	8278.62

Source: 37<sup>th</sup> Annual Report of (UGC) 2010 (13)

# **Research Works and Publication**

Research is a systematic search for reality and truth. It fertilizes teachers, students or any other related person. It gives an insight and increases sensitivity and perception. According to Hommadi<sup>9</sup>, the purpose of research in universities is to solve problems and help the country's economy make progress. This cannot be done unless the results of research find a way to the people who can use the results. In part this is the function of an education program. For indepth research and presentation of its results, publishing periodical and journals, arranging seminar on various issues; the private universities still need to go a long way. However man) private universities now publish academic journals regularly about the socio-economic and political aspects of the country. Though it is not sufficient in numbers it has created a great potentiality to publish the opinions of the concerned faculty-members, (as in indicated Tablel-2)

Category	Number
Books	10,61,304
Journal	67,317
Audio-visual	23,351

Table No-11 (8 Number of Study Materials Provided in 2009.)

Source: 37<sup>th</sup> Annual Report of (UGC) 2010 (13)

The average number of books in every university was almost 20.810. Every student holds six books which is not the sufficient for maintaining equality education in private University in Bangladesh.

## **Extra Curriculum Activities of the Students**

Extra curriculum activities include songs, dances, recitation, and drama and so on. The students of the universities should have the opportunity to take part in different extracurriculum activities in different cultural programs and competitions, participation in sports and voluntary organizations, organizing debate programs, exercising different language courses and so on. Many students of the universities have achieved reputation in different competitions at national and international level. But, due to the lacking of separate campus and enough opportunity, the students of the private universities mainly take part in sports and debate program. The picture of extra-curriculum activities of the students is shown in the following table and it revealed that half (50%) of the students usually participate in any sort of sports. This shown the table-12.

Extra-curriculum activities	Participation		
	Number of students	Percentage	
Cultural activities	5	25%	
Sports	10	50%	
Student politics	-	-	
Debate club	-		
Voluntary activities	2	10%	
No participation at all	3	15%	
Total	20	' 100%	

Table No-12 Participation in extra-curriculum activities of the students

Source: Fieldwork at 2012

#### Conclusions

Education system of a country reflects the cultural aspects of a nation. It reveals a nation's tradition, beliefs, language and literature. Through education one can learn different aspects of one's culture". A university is the highest place for acquiring knowledge, practicing cultural activities, exploring new dimensions, and above all, generating newer and ever changing way of thought. From this perspective, the private universities have a great prospect for the students in higher education in Bangladesh. As a new sector and self financed organizations, private universities lacings in full fledged separate campus, enough teachers, library and laboratory facilities but they are almost free from student politics and campus violence. A good guidance and sufficient support from the concerned authority are essential for the progress of the universities. So the government should take realistic steps and supports through UGC for the betterment of the private universities in Bangladesh.

#### References

- Hommadi, AH (1991), Higher Education in Third World, Indian Bibliographies Bureau, Fountain, Delhi.
- 2. SHAH. MF (2008), Higher Education in Bangladesh: An Assessment of Public and Private University. Dharoni Sahitty Prakash, Dhaka, Bangladesh.
- S.Alam. M: Haque. MS and Siddique. SF (2005), Private Higher Education in Bangladesh (ed.by N.V. Varghese). HEP-UNESCO. Paris.
- 4. Ahmad, Q.K. (2000), Quality of Education and Campus Violence: Case Studies of Dhaka and Rajshahi Universities, the University Press Limited, Dhaka-1000.
- 5. SHAH, M.F. (2008), Ibid
- 6. Ahmad, Q.K. (2000), Ibid
- 7. SHAH, M.F. (2008), Ibid
- 8. Ahmad, Q.K. (2000), Ibid
- 9. Hommadi, A.H. (1991), Ibid
- 10. SHAH, M.F. (2008), Ibid
- Kneller, GF (1995), Educational Anthropology: An Introduction, Publishers-John Wiley and Sons, INC, New York /London / Sydney.
- 12. 36<sup>th</sup> Annual Report 2009 Published by University Grant Commission (UGC)
- 13. 37<sup>th</sup> Annual Report 2010 Published by University Grant Commission (UGC)

# Nature and Extent of Domestic Violence in Bangladesh : an empirical observation.

## Jahan Ara Begum<sup>\*</sup>.

Abstract: The term violence against women encompasses a multitude of abuses directed at women and girls over their life span. Although it is difficult to delimit the types and extent of violence, but broadly it can be defined as any act of gender-based violence that results in, or is likely to result in physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life. UNFPA, quoting some local dailies, reported that Bangladesh ranks fourth among the world's nations with respect to violence against women. Violence against women is one of the most serious threats to overall development and progress of Bangladesh. Violence against women is prevalent in all parts/segments of our country, be it rural or urban, rich or poor, educated or illiterate. This study has been done in a very posh area of Dhaka city where highly educated people live in (the name of the area has been kept secret considering the high social status of the respondents). In this study the highly educated wives and also the maid servants of their houses have been included as the respondents. In the survey area, the findings were perplexing and of no different from other areas of Bangladesh. The findings in that posh area surprisingly show the prevalence of same nature and extent of violence done against the women of low status.

**Key words :** Domestic violence, self- directed violence, interpersonal violence, collective violence, sexual violence, emotional violence, wife battering.

#### Introduction

Violence against women is probably the most common phenomenon in most of the societies. This problem is more acute in backward conservative societies like Bangladesh, India, Pakistan and many other south Asian countries.

The Millennium Development Goals of 191 member states of the United Nations pledges to sustainable, human development and recognize that equal rights and opportunities for women and men which are critical for social and economic progress<sup>1</sup>. Concurrently, it must include addressing violence against women—a concrete manifestation of inequality between the sexes.

Policies to prevent this violence should be implemented as part of the agendas for equality, development, public health, and human rights<sup>2</sup>. Although statements and international declarations have called for the eradication of violence against women many agencies, governments, and policy-makers view it as a relatively minor social problem <sup>3</sup>.

There is a growing body of evidence from research that suggests that violence against women is highly prevalent, with an estimated one in three women globally experiencing some form of victimization in childhood, adolescence, or adulthood  $^4$ .

Intimate partner violence is also an important cause of death, accounting for 40 to 60% of female homicides in many countries, and an important portion of maternal mortality in India, Bangladesh, and the United States <sup>5</sup>.

This violence has a direct economic impact along with the human and emotional costs. A study in the USA estimated the costs of intimate partner rape, physical assault and stalking as exceeding \$5.8 billion each year, nearly \$4.1 billion of which is for direct medical and mental health care services  $^{6}$ .

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The results from the WHO Study on Women's Health and Domestic Violence against Women releasedgreatly extend the geographic range and scope of available data <sup>7</sup>. The results in the report are based on over 24,000 interviews with 15- to 49-year-old women from 15 sites in 10 countries: Bangladesh, Brazil, Ethiopia, Japan, Peru, Namibia, Samoa, Serbia and Montenegro, Thailand, and the United Republic of Tanzania. In 13 of the 15 sites studied, between one-third and three-quarters (35 to 76%) of women had been physically or sexually assaulted by someone since the age of 15.

## A framework for understanding violence against women

The term violence against women encompasses a multitude of abuses directed at women and girls over the life span. The UN Declaration on the Elimination of Violence against Women (defines violence against women as: "....any act of gender-based violence that results in, or is likely to result in physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life"<sup>8</sup>.

This statement defines violence as acts that cause, or have the potential to cause harm, and by introducing the term "gender based" emphasises that it is rooted in inequality between women and men. The term gender based violence has been defined as "acts or threats of acts intended to hurt or make women suffer physically, sexually or psychologically, and which affect women because they are women or affect women disproportionally" <sup>9</sup>. Thus, gender based violence is often used interchangeably with violence against women.

A typology of violence presented in the WHO report on violence and health, divides violence into three broad categories : self directed violence, interpersonal violence, and collective violence <sup>10</sup> as shown in Figure 1. It further captures the nature of the violent acts that can be physical, sexual, or psychological, including deprivation and neglect. This typology gives a comprehensive overview of the violence present in society and is relevant for both women and men and for different age groups. Women experience all forms of violence, however, interpersonal violence—that is, violence inflicted by another person or by a small group of people on the woman is the most universal form of violence against women, as it takes place in all societies. It is in turn divided into two subcategories: family/intimate partner violence and community violence. Family/partner violence describes violence between family members (often taking place in the home), while community violence describes violence between people who are unrelated and who may or may not know each other, and it generally takes place outside the home.

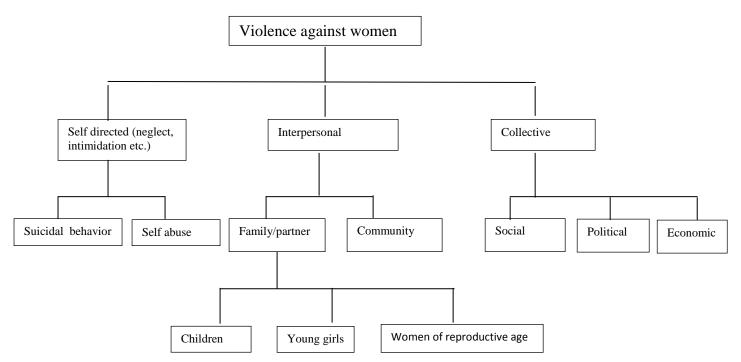


Figure 1 : A Typology of violence against women (modified). Source : WHO, 2002

## Violence against women in Bangladesh : review of literature

Bangladesh is no different from other developing nations in terms of violence against women. In many instances, extent this societal disease is more widespread in our country because of "patriarchal values entrenched in the society which keep women subjugated, assigns them a subordinate and dependent role, and, prevents from accessing power and resources"<sup>11</sup>.

According to Janet E. Jackson, the former deputy representative of the United nations Population Fund (UNFPA) Bangladesh ranks fourth among the world's nations with respect to violence against women <sup>12</sup>.

Jackson observed that sixty five percent of Bangladeshi males think it was justifiable to beat up their wives, 38 percent had no clear idea what actually constituted physical violence, and 40 percent had the mentality to keep women socially dormant.

Another source says "Bangladesh stands second in the world in terms of violence against women in different forms like women battering, domestic and dowry related violence, acid throwing, rape, physical and verbal harassment, fatwa, sexual harassment in workplace, trafficking and prostitution, polygamy and child abuse <sup>13</sup>.

News regarding murder, bodily torture, sexual assault, psychological injury and mental humiliation of women (of all categories) within homes by the husbands, or any other members of the family get profusely published in our national dailies.

## Laws to protect women

The government of Bangladesh has enacted several laws to protect women from different types of violence. In its 5<sup>th</sup>periodic report to the United Nations' Committee on the elimination of Discrimination Against Women, the government of Bangladesh reported enactment of the Prevention of Women and Child Repression Act (enacted in 2000). The law makes provision for Capital punishment of sexual abuse and sexual harassment. This law also has put some restrictions on the media so that the victim's privacy is protected. Introduction of the safe custody for the victim is one of the most important features of the law. The important features of the Act are :

- (a) Speedy investigation and trial of cases will be held in tribunals, and all crimes under the law are non-bailable (with few exceptions).
- (b) A summary tribunal titled Women and Children Repression Tribunal would be formed in each district town to dispose of the cases quickly.
- (c) A tribunal will complete the trial process within 180 days.
- (d) The investigation should be completed within 60 days.
- (e) Under a provision of the law, a rapist will have to pay for the upkeep of a child born as consequence of rape.

## Law enforcement and implementation

Despite the legal measures to stop violence against women, several sources, including the Bangladesh government in its report to CEDAW (United Nations Convention on Elimination of All Forms of Discrimination Against Women), maintain that there is a need for improved law enforcement and implementation <sup>14</sup>.

*Country Reports on Human Rights Practices for 2002* mentions that "enforcement of these laws was weak especially in rural areas, and the Government of Bangladesh seldom prosecuted those cases that were filed"<sup>15</sup>.

The reality is that, despite presence of several laws to protect women in Bangladesh, unfortunately violence against the women is on rise. The following table show the upward trend of reported violence :

Table 1 . Reported cases : Rape and Tele informing					
Year $\longrightarrow$	2000	2001	2002	2003	2004
Rape cases	564	605	1434	1550	1043
Cases of	172	250	366	335	266
Acid					

Table 1 : Reported cases : Rape and Acid throwing

Source : Resource Centre, BNWLA and Study on Violence against Women, 2004

However, another source (Table 2) reveals the extent of violence (2004) which may be compared with the data given in the table above :

Table 2 : Outbreak of violence against women, Jan Dee, 2004									
Tortur	Acid	Abductio	Rap	Murder/inju	Murd	Hur	Other	Total	Total
e for	throwin	n	e	ry after rape	er	t	violenc	violenc	accuse
dowry	g						e	e	d
3081	198	1608	308	17	62	134	4563	12746	34061
			3						

Table 2 : Outbreak of violence against women, Jan –Dec, 2004

Source :Collected by Sharmeen from Monitoring Cell on violence against women in Police Department.

From the above tables, it can be seen that there is a great difference in the number of violence incidents in the year 2004.

Many experts are of the opinion that there are several reasons for this situation. However three are more important : helplessness of the women due to social system, negligence of the law enforcing agencies to enforce and implement the laws, and dearth of statistics regarding the violence cases for which the interactive agencies cannot come forward in helping the victims.

Statistics on violence is difficult to collect as many of the incidents are never been reported or revealed by the victims. In presence of the family members, it is hard for a woman to speak out. Because of economic dependency, the wives, in many instances, do not make public the torture they had to suffer.

## **Objectives** of the study

Of late, there has been manifestation of domestic violence as a serious social problem around the world inclusive of Bangladesh. Domestic violence is primarily concerned with married couples in the domestic sphere, which may further be extended to the type of violence that occurs with the female domestic servants working in the households.

This study mainly deals with the domestic violence against the women in Dhaka city and concentrates in learning the nature and extent of violence against wives and the female domestic servants.

## Methodology of the survey

A very posh area (identity not disclosed) of Dhaka city has been selected by the researcher to study the nature and extent of violence against the women, mainly two types of women : wives of elite society and the maid servants working in that survey area. As the issue of violence by very near and dear ones is a very sensitive issue, so it was decided that a Depth interview technique would be followed to collect the data and information. Accordingly, a sample of 20 housewives and 30 maid servants were selected on the basis of purposive sampling technique. In selecting the sample, the researcher had to give much weightage on close relation with the respondents. Many times the researcher had to have a long informal discussion with individual respondent to create a situation where the respondent, without any fear or hesitation, shared her experiences of violences. a structured questionnaire was developed and used at the time of interaction with the respondents in order to ensure the discussion remained on track althrough. The researcher had to explore huge secondary data to

weave the first part of the survey where the global scenario along with Bangladesh's situation has been discussed vividly. Therefore in this survey, both secondary and primary sources of data and information have been utilized.

# **Findings of the survey**

The findings of the survey are first presented in tabular form in Table 3 and then the discussions follow.

Age group	Wives	Maid	Total
(years)		servants	
Upto 20	-	10	10 (20%)
20 - 30	4	9	13 (26%)
30 - 40	7	9	16 (32%)
40 - 50	7	2	9 (18%)
50 and above	2	-	2 (4%)
Total	20	30	50 (100%)

Table 3 : Distribution of age of the respondents .

Of all the samples, 78 percent belonged to up to 40 years of age. However, concentration of the respondents seemed to be more in age bracket of 30 - 40 years, followed by 20 - 30 years.

Table 4 :	Education	of the	respondents.
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Education	Wives	Maid servants	Total
Less than SSC	-	26	26 (52%)
SSC to Graduation	5	4	9 (18%)
Post Graduate	14	-	14 (28%)
Others	1	-	1 (2%)
Total	20	30	50 (100%)

From Table 4, it is seen that almost 87 percent of the maid servants belonged to 'less than SSC' level of education; whereas 70 percent of the interviewed wives are having post-graduate degrees.

## Discussions

As has been mentioned in the methodology part, the researcher had to discuss the issues of violence with the interviewed wives much cautiously and confidentially, so the researcher, in many instances, had to draw conclusion about the nature of violence. For example, wife battering is easy to understand, but many psychological, mental, or emotional violence was difficult to identify by many respondents, especially the half-educated maid servants. The followings are the perplexing findings on the nature and extent of violence on our wives of highly educated families in one hand, and on the other hand, on the no- or half-educated poor maid servants working in their houses. These two categories of respondents differed in their social status, but were experiencing same type of violences from their near and dear ones.

Of the total respondents in the 'wives' category, 90 percent told that they were somehow exposed to violence. 93 percent of the interviewed maid servants told they were 'tortured' in different ways either by their master/mistress, or by their male members in their own houses. The following is the discussion on the basis of nature of violence :

## Wife battering (physical violence)

## Maid servants

84 percent of the maid servants were married; and out of them hundred percent reported that they were severely beaten by their husbands. The reasons mainly included :

- 1. Dowry
- 2. Demand for money for drugs and alcoholic drinks
- 3. Demand for money for having no/less income.
- 4. Because of extra marital relations (of the husband)
- 5. Perceived negligence by the wife in household activities.
- 6. Lack of trust on working wife (for being late in coming home)
- 7. (Sometime) without any reason

## Wives

Out of the wives, 55 percent reported they were beaten/slapped by their husbands mainly because of the following reasons :

- 1. Husband being drunk
- 2. Dowry
- 3. Extra marital relation of either the wife or the husband
- 4. Lack of trust on working wife (e.g. suspicion for being late in coming home)

Physical violence is exercised through physically aggressive acts such as kicking, biting, slapping, beating, or even strangling. Intentionally inflicted injuries are often disguised as accidents.

## **Risk of pregnancy**

Majority of women in our country are not aware of their sexual and reproductive rights. They are having limited control over their own bodies. A woman's freedom of choice regarding sexual intercourse, birth control, pregnancy, abortion is restricted by her husband and other members of the husband's family <sup>16</sup>. A man has absolute authority to determine the time of intercourse with his wife. In this society, the male members normally act as the aggressors. Consequently, a wife's personal urges and wishes are irrelevant in decision making. This fact has been revealed by the present survey as almost 35 percent of the wives and almost 70 percent of the maid servants reported that they had to destroy fetus forcibly because of unwilling pregnancy. It may be mentioned here that in Bangladesh, three women die every hour because of maternal related complexities and nine million women continue to suffer from other long term diseases because of unwanted pregnancy/ forced abortion <sup>17</sup>.

## **Rape (Sexual violence)**

Sexual violence includes forced sex through the use of physical force, threats, and intimidation, forced participation in degrading sexual acts as well as acts such as the denial of the right to use contraceptives or to adopt measures to protect against sexually transmitted diseases.

Although much sexual violence occurs in the context of intimate partner violence it can also take place in many other settings. Sexual violence can be exercised by another family member, a dating partner, acquaintance or stranger, striking young girls and adolescents as well as grown up women.

In this survey it was found that almost 65 percent of the maid servants experienced sexual violence including rapes by others. Surprisingly, 24 percent of the raped maid servants revealed they were raped by their masters or their sons of that posh area.

It is surprising that at least 30 percent of the wives admitted they were raped (forced sex) by their husbands. None of them(wives) reported any sexual violence by another family member or by any acquaintance.

## Psychological, mental, or emotional violence

This type of violence describes acts such as preventing a woman from seeing family and friends, ongoing belittlement or humiliation, economic restrictions, violence or threats against cherished objects and other forms of controlling behaviours. This form of violence is more difficult to define across cultures and countries as it can take different forms. In a study from Vietnam, emotional violence included acts such as a husband forcing his wife to have sex the day before she prepares to go to pray in the pagoda, thus forcing her to break the taboo of being clean and content <sup>18</sup>.

In our case almost 100 percent of the maid servants reported to be exposed to this sort of violence. Many of the husbands do not have trust on their wives who work as maid servants in different houses. They try to establish that their wives are having illicit relations with somebody at the work place. This is somewhat a mental torture for many of the maid servants. At the end of the month when the maid servants get salary from their masters, the husbands forcibly snatch the money from them.

Psychological, mental, or emotional violence is more prevalent among the wife category respondents. About 80 percent of them reported to suffer from some sort of psychological, mental, or emotional violence. Some working wives told the same as the maid servants told. Mistrust of the husband, forceful sharing of wife's earning, preventing from seeing family and friends, intentional praising of other woman, blaming the wife for any mishap etc. are the major reasons for psychological, mental, or emotional violence.

## **Dowry related violence**

Dowry is the payment to be made to the groom's family to marry away a daughter, and it takes different forms in different cultures. However, the size of the dowry is a common reason for disputes between the families, with the groom's family demanding more than the bride's family can offer, resulting in harassment of brides and also dowry related deaths, particularly in certain parts of India and other southern Asian countries including Bangladesh.

Almost 78 percent of the interviewed maid servants reported of dowry related violence. For which they are regularly being tortured by their husbands.

This type of violence is not rampant among the wives category. However, 25 percent of the wives complained against their husbands' attitude over dowry.

## **Recommendations and Conclusion**

#### Recommendations

The study reveals that the women in our country are exposed to different types of violence. However the nature of violence is almost same for women in general, but extent may vary on the basis of social status of the women. This is quite easy to get the data and information for the violence done on the women of lower echelon, but very difficult to get data and information on the violence done on women of higher echelon.

Bangladesh has formulated several laws relating to protection of the women and children, but the implementation of these laws is not satisfactory. In many instances, the violence is not reported by the women in fear of so-called social status and also in apprehension of more violence. The law enforcing agencies also many times do not take into account the incident that has occurred in their area. Why they behave in that way is a matter of further research. A country-wide research on the attitude of the members' of law enforcing agencies towards 'violence on women' should be conducted by some competent authority to know the reasons of reluctance in accepting the cases . Beside, anti-violence programs (drama) in television, creating innovative advertisements depicting negative side of violence, making people aware about the legal implications for violence etc. should be launched by the government and other competent authority/organizations.

Computerized database should be maintained by Police, Local government, and the NGOs in order to monitor the number and extent of violence done to the women. The organizations working in this area can share the information to help the government mechanism in formulating policy to combat violence against women.

If possible, a routine community-based study/monitoring system on violence incidents could be introduced in different areas.

As this is social problem, so the stakeholders have to identify the ways on how this menace could be minimized, if not completely overcome. The international agencies, government ministries and agencies, non-government organizations, religious institutions can work in harmony to eradicate this problem.

'Respect for the women' should be instilled in the minds of our children by inclusion of poetries and writings in the school curricula. Developing curricula for children and young people to learn emotional and social skills, including nonviolent methods of conflict resolution, could be an important contribution to violence prevention.

#### Conclusion

Since time immemorial, violence on women is prevalent in societies. This problem is more grievous in countries like Bangladesh. The nature of violence is same for all categories of women - rural or urban, rich or poor, educated or illiterate. Husband's education level, high status in the society along with high income apparently do not contribute much in creating positive attitude toward not committing violence to the wife. However, now we have become more concerned about this social curse and as a result the government has taken series of

measures to combat violence against women. Many of the non-government agencies have also come forward to help curbing this social problem.

Violence against women is a complex social problem, and our knowledge on how to address it is evolving. Tackling the problem requires coordinated action that engages communities and many different sectors—including health, education, and justice—to challenge the inequities and social norms that give rise to violence and to provide emotional and physical support for victims.

Furthermore, violence against women is a serious violation of women's human rights and of direct concern to the public health sector because of the significant contributions that public health workers could do if properly trained, as they are placed close to the victims, and possibly well acquainted with the community and its inhabitants. Thus, local health services and communities could play a central part in raising awareness among the public to prevent this violence. To openly debate this subject is a way to reduce society's age-old tolerance towards violence against women.

## References

- United Nations. Resolution A/55/2, The United Nations Millennium Declaration [United Nations (UN), New York, 8 September 2000]; (www.un.org/millennium/declaration/ares5552e.htm).
- 2. WHO. "Addressing violence against women and achieving the Millennium Development Goals" [World Health Organization (WHO), Geneva, 2005].
- 3. UNGA. "Declaration on the elimination of violence against women" (UN General Assembly resolution, document A/RES/48/104, UN, New York, 1993). And The Fourth World Conference on Women, Beijing, China, 4 to 15 September 1995 (document A/CONF.177/20, UN, New York, 1995).
- 4. L. Heise, M. Ellsberg, M. Gottemoeller, Ending Violence Against Women (Johns Hopkins Univ. Press, Baltimore, MD, 1999).
- 5. L.Heise,C.Garcia-Moreno, in World Report on Violence and Health, E.G. Krug et al., Eds. (WHO,Geneva, 2002).
- 6. National Center for Injury Prevention and Control "Costs of intimate partner violence against women in the United States" (Centers for Disease Control and Prevention, Atlanta, GA, 2003).
- 7. C. Garcia-Moreno, H. A. F. M. Jansen, M. Ellsberg, L. Heise, C.Watts, "WHO multicountry study on women's health and domestic violence against women: Initial results on prevalence, health outcomes, and women's responses" (WHO, Geneva, 2005).
- 8. WHO. Addressing violence against women and achieving the Millennium Development Goals" [World Health Organization (WHO), Geneva, 2005].
- 9. *op.cit*.
- 10. WHO report on violence and health, Geneva, World Health Organization, 2002

- 11. Farouk Sharmeen A. Violence against women : A statistical overview, challenges and gaps in datacollection and methodology and approaches for overcoming them. Bangladesh National Women Lawyers Association (BNWLA),Organized by UN Division for the Advancement of Women in collaboration with ECE and the WHO, Geneva, Switzerland, April,2005
- 12. Immigration and Refugee Board of Canada, Report on "Bangladesh : Violence against Women, speciallydomestic violence; state protection and resources available to survivors of abuse". Bangladesh, published on 12 January, 2004
- 13. Ibid
- 14. Immigration and Refugee Board of Canada. op.cit
- 15. US Department of sState. Country Reports on Human Rights Practices for 2002. "Bangladesh". United States Department of State. Washington DC. 31 March, 2003.
- 16. Farouk Sharmeen A. op.cit.
- 17. Farouk Sharmeen A. op.cit.
- 18. P. Tjaden, N. Thoennes, "Extent, nature and consequences of intimate partner violence: Findings from the National Violence Against Women Survey" (National Institute of Justice, Washington, DC; Centers for Disease Control and Prevention, Atlanta, GA, 2000).