

East West Journal of Business and Social Studies

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of Bangladesh**

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Editorial

I feel honored and indebted to CRT for having the trust in me to lead this accomplished journal. It is a huge responsibility on my part as my predecessor, Professor Nazrul Islam and his editorial team has established a bench mark and created a journal of quality during their time of office. With this statement as a prelude, I am determined to pursue this standard of excellence, while at the same time continue to source articles that bring intellectual discussion and rigor to this forum in our continued journey of exploring the facets of business and social sciences.

In this issue we have compiled an array of eight interesting and educational articles ranging from Marketing, International Business, Consumer Behavior, and Human Rights for your reading.

We do hope that you would not only have an enjoyable time reading the articles but would also find them useful.

Md. Humayun Kabir Chowdhury, Ph. D.

Editor

East West Journal of Business and Social Studies (EWJBSS)

Prospect of Implementing Total Quality Management Approach in Commercial Banks of Bangladesh

Bikash Barua*

ABSTRACT

Total Quality Management (TQM) drives an organization towards better performance through developing a concrete organizational system. In this paper, the objective is to identify the prospect of TQM implementation in the commercial banks of Bangladesh. The implementation of Total Quality Management in banking services all over the world is surveyed through literature review, both from theoretical and practical perspectives. The concepts of quality through the terms of the Malcolm Baldrige National Quality Award (MBNQA) are determined. Then the implementation of Total Quality Management in the banking sector is investigated. While investigating the implementation, several criteria were established according to MBNQA standard under different categories such as leadership, strategic planning, customer focus, information and analysis, human resources focus, and process management. Primary data on performance and TQM implementation categories were collected through questionnaire survey among the managers and upper level personnel in different commercial banks. Data collected from survey is processed through regression analysis where a relationship is attempted to establish between performance of bank, namely Return on Equity (ROE), with the implementation categories. From the results, it is found that banks although have not adopted the TQM system formally but are carrying out some of the necessary activities that are required for implementing the program. Banks have established a very good information system and a very good personnel practice system. Moreover, leadership of management, customer focus, and strategic planning are also at a good level. However, the banks are at moderate level with respect to process management. So, there is a very good prospect for commercial banks of Bangladesh to implement TQM program.

Keywords: Total Quality Management, TQM implementation, Prospects of TQM in commercial banks of Bangladesh, TQM and performance level, Malcolm Baldrige National Quality Award (MBNQA).

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Introduction

Total Quality Management is a structured system for satisfying internal and external customers and suppliers by integrating the business environment, continuous improvement, and breakthroughs with development, improvement, and maintenance cycles while changing the whole organizational culture (Cole & Mogab, 1999). This is the comprehensive approach towards quality management covering all areas of business. Total Quality Management (TQM), a modern concept and a phrase that is most commonly used by strategists, is based on the assumption that quality is manageable. This fashionable approach focuses on customer satisfaction, accurate measurement of all significant factors of business, continuous improvement, employee empowerment and development and their relationships based on mutual trust and teamwork. (Pearce and Robinson, 2005).

Like other industries, quality improvement is taking place at a revolutionary pace in banking sectors too (Rana, 2005). So, banks are not left behind in quality race. In today's highly competitive environment, success of banking is based upon the satisfaction of both internal and external customers. The philosophy of Total Quality Management leads towards this direction i.e. satisfaction of both internal and external customers. Banks play their own important role, being the backbone of an economic system and as financial intermediaries involved in channeling funds from those having surplus to those having shortage (Luckett, 1994).

Keeping in view the competitive environment in banking sector of Bangladesh where bank management is trying their best to offer high quality services to their customers there is a need to formalize the quality management concept for commercial banking operations. In this regard, a study conducted by Barua and Islam (2009) reveals that QMS operates in more than half of the banks in Bangladesh. Moreover, the authors have found that higher customer satisfaction, better service quality, better financial situation, and higher staff motivation are found to be mostly perceived benefits of QMS. Implementation of quality management system is an essential initiative to step forward towards implementing the TQM program (Besterfield et al. 2003). In light of that, further initiatives for adopting more sophisticated quality management program like TQM will provide the banks with higher competitive advantage through satisfying its internal and external customers (Naeem and Saif, 2008). Melidonioti and

Gotzamani (2007) conducted a study on the quality and standardization of Greek banks based on the European Foundation of Quality Management (EFQM). This paper aims to perform similar study based on Malcolm Baldrige National Quality Award (MBNQA). Thus, the objective of this paper is to identify what other initiatives the commercial banks in Bangladesh have undertaken apart from implementing QMS. Based on the initiatives, it will be possible to consider the possibility or prospect of implementing TQM system in the commercial banks of Bangladesh.

Literature Review

Total Quality Management (TQM) has been popular and well adopted over the years in the manufacturing industry. The manufacturing organizations are practicing this concept quite successfully. But, it is limited to practice in service organizations and a few of the financial institutions have adopted this culture. Banks are one of those. Although TQM is not adopted formally in the banking sector, many of the leaders in this sector apply TQM principles in all of their business processes (Melidonioti and Gotzamani, 2007).

Application of SERVIQUAL model in different banks led to the improvement in service quality. Newman and Cowling (1996) conducted an empirical study as major quality improvement initiatives undertaken by two British banks using this model. In their study, the researchers measured the gap between customer expectations and experience.

Implementing TQM requires change in organizational processes, cultures and outlook. Implementation of this principle results in resistance and needs to be addressed by the change agents. Thus, it is necessary to have strong leadership and top management commitment to implement this system (Frick, 1997). Moreover, leadership style and culture must be congruent with the TQM (Burton and Philip, 1999).

Saffran and Vogt (1999) studied the implementation of quality management system based on ISO 9000 at Deutsche Bank AG. To establish the quality system, a structural plan was divided into four steps: determination of tasks and responsibilities; studies; implementation; and certification. A major component of the second step was the quality manual, the creation of which followed three guidelines: simple language, understandable illustrations, and focusing on the

essentials. Guidelines for this documentation included: outcome-based planning; uniform methods of describing procedures; readability; and employee focus.

Edwards and Smith (1999) conducted a research on TQM in Banking focusing on quality performance standard setting, measuring and monitoring. The study concluded that customer care programs, action teams and improved communications were the first step; the next step in maintaining the competitive edge was the establishment of quality performance standards, and devising systems for measuring and monitoring their effectiveness. The best way to institute quality into an organization, particularly a bank, was to train employees to do their job better through a top down training structure.

Brah, Wong and Rao (2000) conducted a research on TQM and business performance in service sector in Singapore. A clear evidence was found that TQM implementation improved business performance in the service sector of Singapore. The study found that while accrued benefits could be attributed to some of the tools of TQM, such as, customer focus and quality improvement rewards, the key to the success of TQM lay in its intangible and behavioral features such as top management support, employee empowerment and employee involvement.

A TQM study by Tsang and Antony (2001) analyzed TQM practices in the UK. The results focused on 11 critical factors of quality management such as continuous improvement, teamwork and involvement, customer focus, top management commitment and recognition, training and development, quality systems and policies, supervisory leadership, communication within the company, supplier partnership or supplier management, measurement and feedback and cultural change. It was found that customer focus was the most successfully driven factor for TQM programs in UK service organizations.

Gupta et al. (2005) conducted a study on Quality management in service firms: sustaining structures of total quality service. The research proposed a conceptual model may be developed that may be used in understanding the relationships between sustaining structures that support the total quality service (TQS) philosophy and customer satisfaction.

Samat (2006) conducted a study on TQM practices, service quality, and market orientation. The main purpose of this study was to explore the relationship between total quality management (TQM) practices and service quality as well as the relationship between TQM practices and market orientation. The results showed that employee empowerment, information and communication, customer focus, and continuous improvement had a significant effect on service quality whereas only employee empowerment and customer focus had a significant effect on market orientation.

Rahman and Siddiqui (2006) conducted a survey among insurance, banking, software, manufacturers etc of 300 Indian companies to know about the use of TQM in these departments. The most important outcome of the study revealed top management support as the perceived benefit for implementing TQM. Another study by the same authors (Siddiqui and Rahman, 2007) on managers of banks state that TQM philosophy is based on top management commitment, benchmarking for problem solving etc. TQM and Information System can be fruitful in improving the quality of products and services offered to the end customers.

A study conducted on 204 bank customers regarding the relationship between relational benefits and customer satisfaction, (Molina, Consuegra and Esteban, 2007) found that confidence benefits had positive impact on customer satisfaction with their banks from the set of social benefits, special treatment benefits and confidence benefits,

Data collected from 250 banks in UAE to examine the critical success factor of TQM implementation in UAE banking sector (Khalid Al-Marri, Abdel Moneim and Mohamed Zairi, 2007) identified 16 critical factors for successful TQM implementation. Some are top management support, strategy, recognition and reward etc.

Research Methodology

Primary data for research purpose was collected through questionnaire survey. The questionnaire incorporated questions regarding practicing different dimensions of TQM. The survey considered only the Private Commercial Banks (PCBs) and Nationalized Commercial Banks (NCBs). It ignored Foreign Commercial Banks (FCBs) as it may dilute the actual result. A total of 170 questionnaires were distributed to the managers or upper level people of the 34

(Thirty Four) commercial banks of Bangladesh. Out of which 102 questionnaires were filled in and returned with a response rate of Sixty percent.

The questionnaire was designed following the Malcolm Baldrige National Quality Award (MBNQA) standards and prior researches on TQM implementation in different banks (Frick, 97; Melidonioti and Gotzamani, 2007; Naeem and Saif, 2007; Naeem, Saif and Qasim, 2008; Naeem and Saif, 2008). The questionnaire items fell under the following six categories of TQM performance excellence: 1) leadership, 2) customer focus, 3) information and analysis, 4) strategic planning, 5) human resources, and 6) process management. The respondents were asked to rank their frequency of performing the provided statements on a seven-point scale with 1=never, 2=seldom, 3=fairly frequently, 4=relatively frequently, 5=frequently, 6=very frequently, 7=always.

Performance measure indicator that is used in the analysis is Return on Equity (ROE). This indicator is used because it is the measure bank owners are concerned more about (www.fdic.gov/banks/statistical/statistics/0106/cbr) and it is used as a measure of performance according to both CAMEL rating and Balanced Score Card Method (Purohit and Mazumder, 2006). Moreover, TQM has been reported to be positively correlated with profits, with better stock performance and with, up to 84%, rise in ROE (PIMS, 1986). Moreover, a worldwide survey by the American Institute of Quality Inc., has shown that service providing companies that have applied TQM systems, have decreased their operating costs, have improved their financial features, and now have more satisfied customers (Harrington, 1996).

The statistical data was analyzed by Multiple Linear Regression (MLR) method using Minitab statistical package (version14). For analysis purpose, different criteria were developed under each category of six MBNQA framework. The regression method established the relationship between performance criteria (ROE) as dependent variable and different criteria of each of the six MBNQA categories as independent variables. Coefficient of regression for different independent variables and corresponding p values significant at different levels (***) $p < 0.01$; ** $p < 0.05$; * $p < 0.10$) were considered for analysis purpose (Montes, Fuentes and Fernandez, 2003).

Seventeen per cent of the banks fell under small category with the number of employees less than 500, Thirty Four percent was categorized as medium-sized

with employees between 500 and 100, and Forty Nine percent were large-sized with employees more than 1000. Based on the number of years spent working for a bank, respondents were distributed as follows: 50% worked for up to 5 to 7 years; 40% 7 to 10 years; and 10% over 10 years.

Results and Discussions

The regression analysis results of the TQM implementation prospects using ROE as dependent variable and each of the factors for six performance measure categories as independent variable are presented below:

Leadership

Table- 1 presents the results for Leadership category. In this category, significant relationship is found between ROE and independent variables. The independent variables were expressed in terms of standardized factor scores (beta coefficients). The significant factors that remained in the regression were shown in order of importance based on beta coefficients. The regression equation for ROE and with respect to independent variables for leadership category is presented below,

$$Y_R = \beta_0 + B_1L_1 + B_2L_2 + B_3L_3 + B_4L_4 + B_5L_5 + B_6L_6$$

Where,

$$Y_R = \text{ROE}$$

$L_1, L_2, L_3, L_4, L_5, L_6$ = independent variables under leadership category presented in Table- 1.

$B_1, B_2, B_3, B_4, B_5, B_6$ = regression coefficients of independent variables.

From Table- 1, it is found that the association between ROE and the independent variables is positive and high with correlation coefficient value $R = 0.86$. Moreover, the R^2 value of 0.732 reveals that 73% of the variation of ROE is explained by the six factors in the leadership category.

Lastly, the beta coefficients from regression analysis in Table- 1 can be used to explain the relative importance of the six independent variables in contributing to the variance in ROE. As far as the relative importance of the six factors under leadership is concerned, establishment of a strategic quality planning group in the

organization by top management, L_4 (0.37); demonstration by top management through their words, actions that quality is the top priority of the organization, L_3 (0.23); and active and personal involvement of top management in communicating the goals and standards to the employee, L_2 (0.19) are significantly related to the performance of the organization. This means that one unit increase in L_4 will increase ROE by 0.37 unit, one unit increase in L_3 will increase ROE by 0.23 unit, and one unit increase in L_2 will increase ROE by 0.19 unit.

Table- 1: Regression Analysis Result along Leadership Dimension

Dimension	Coefficient	t	p-value	
Constant	-3.1120	-4.00	0.001	F=10.94 R = 0.855 R ² = 0.732
L_1 . Active and personal involvement of top management in developing the quality goals and standards for the organization	0.08016	0.90	0.378	
L_2 . Active and personal involvement of top management in communicating the goals and standards to the employee	0.19150	2.14	0.043**	
L_3 . Top management demonstrate through words, actions that quality is the top priority of the organization	0.23435	2.44	0.022**	
L_4 . Top management establishes a strategic quality planning group in the organization	0.37227	4.90	0.000***	
L_5 . Top management has the willingness to create a cooperative environment inside the organization	-0.07365	-0.79	0.438	
L_6 . Evaluates its management effectiveness	0.06063	0.76	0.453	

Note: Significant at *** $p < 0.01$; ** $p < 0.05$; * $p < 0.10$.

Strategic Planning

Table- 2 presents the result for strategic planning category. In this category, significant relationship is found between performance and independent variables. The independent variables were expressed in terms of standardized factor scores (beta coefficients). The significant factors that remained in the regression were shown in order of importance based on beta coefficients. The regression equation

for ROE and with respect to independent variables for strategic planning category is presented below,

$$Y_R = \beta_0 + B_1S_1 + B_2S_2 + B_3S_3 + B_4S_4 + B_5S_5 + B_6S_6$$

Where,

$$Y_R = \text{ROE}$$

$S_1, S_2, S_3, S_4, S_5, S_6$ = independent variables under strategic planning category presented in Table- 2.

$B_1, B_2, B_3, B_4, B_5, B_6$ = regression coefficients of independent variables.

From Table- 1, it is found that the association between ROE and the independent variables is positive and high with correlation coefficient value $R = 0.86$. Moreover, the R^2 value of 0.74 reveals that 74% of the variation of ROE is explained by the six factors in the strategic planning category.

Lastly, the beta coefficients from regression analysis in Table- 2 can be used to explain the relative importance of the six independent variables in contributing to the variance in ROE. As far as the relative importance of the six factors under strategic planning is concerned, existence of a structured strategic quality plan, S_1 (0.215); adequate dissemination of the information of quality plan within the organization, S_4 (0.169); and evaluation and improvement of the planning process by top management, S_6 (0.167) are significantly related to the performance of the organization. This means that one unit increase in S_1 will increase ROE by 0.215 unit, one unit increase in S_4 will increase ROE by 0.169 unit, and one unit increase in S_6 will increase ROE by 0.167 unit.

Table- 2: Regression Analysis Results along Strategic Planning Dimension

Dimension	Coefficient	t	p-value	
Constant	-3.2699	-5.09	0.000	
S ₁ . The organization has a structured strategic quality plan	0.21498	2.24	0.035**	
S ₂ .The quality plan reflects the mission, vision and value of the organization	0.1438	1.19	0.246	
S ₃ .The plan considers input from people beyond who have actually developed it	0.03508	0.48	0.635	F=11.76 R = 0.863
S ₄ . The information of quality plan is adequately disseminated within the organization	0.16984	2.44	0.023**	R ² = 0.746
S ₅ .Constantly determine the future requirement of the customer	0.1471	1.16	0.256	
S ₆ . Top management evaluates and improves the planning process	0.16770	1.68	0.100*	

Note: Significant at *** p<0.01; ** p<0.05; * p<0.10.

Customer Focus

Table- 3 presents the results for customer focus category. In this category, significant relationship is found between performance and independent variables. The independent variables were expressed in terms of standardized factor scores (beta coefficients). The significant factors that remained in the regression were shown in order of importance based on beta coefficients. The regression equation for ROE and with respect to independent variables for customer focus category is presented below,

$$Y_R = \beta_0 + B_1 C_1 + B_2 C_2 + B_3 C_3 + B_4 C_4 + B_5 C_5 + B_6 C_6$$

Where,

$$Y_R = \text{ROE}$$

C₁, C₂, C₃, C₄, C₅, C₆ = independent variables under customer focus category presented in Table- 3.

B₁, B₂, B₃, B₄, B₅, B₆ = regression coefficients of independent variables.

From table 3, it is found that the association between ROE and the independent variables is positive and high with correlation coefficient value $R = 0.81$. Moreover, the R^2 value of 0.66 reveals that 66% of the variation of ROE is explained by the six factors in the customer focus category .

Lastly, the beta coefficients from regression analysis in Table- 3 can be used to explain the relative importance of the six independent variables in contributing to the variance in ROE. As far as the relative importance of the six factors under customer focus is concerned, having effective means to determine customer expectations, C_2 (0.38); responsiveness to customer need, C_4 (0.18); and adequate training to the employee regarding customer contact, C_6 (0.07) are significantly related to the performance of the organization. This means that one unit increase in C_2 will increase ROE by 0.38 unit, one unit increase in C_4 will increase ROE by 0.18 unit, and one unit increase in C_6 will increase ROE by 0.07 unit.

Table- 3: Regression Analysis Results along Customer Focus Dimension

Dimension	Coefficient	t	p-value	
Constant	-3.2774	-4.17	0.000	
C_1 . Develop strategies to maintain and build customer relationship	-0.10506	-1.41	0.172	
C_2 . Has effective means to determine customer expectations	0.3845	2.61	0.015***	
C_3 . Establish standards to meet customer expectations	0.2308	1.41	0.171	F=7.81
C_4 . Responsive to customer needs	0.1816	1.81	0.033**	R = 0.813
C_5 . Responsive to customer complaints	0.0607	0.54	0.592	$R^2 = 0.661$
C_6 . Employees have adequate training regarding customer contact (listening, behavior, complaint resolution etc.)	0.06639	1.96	0.014***	

Note: Significant at *** $p < 0.01$; ** $p < 0.05$; * $p < 0.10$.

Information and Analysis

Table- 4 presents the result for information and analysis category. In this category, significant relationship is found between performance and independent variables. The independent variables were expressed in terms of standardized factor scores (beta coefficients). The significant factors that remained in the regression were

shown in order of importance based on beta coefficients. The regression equation for ROE and with respect to independent variables for information and analysis category is presented below,

$$Y_R = \beta_0 + B_1 I_1 + B_2 I_2 + B_3 I_3 + B_4 I_4 + B_5 I_5 + B_6 I_6$$

Where,

$$Y_R = \text{ROE}$$

$I_1, I_2, I_3, I_4, I_5, I_6$ = independent variables under information and analysis presented in Table- 4.

$B_1, B_2, B_3, B_4, B_5, B_6$ = regression coefficients of independent variables.

From Table- 4, it is found that the association between ROE and the independent variables is positive and high with correlation coefficient value $R = 0.86$. Moreover, the R^2 value of 0.75 reveals that 75% of the variation of ROE is explained by the six factors in the information and analysis category.

Lastly, the beta coefficients from regression analysis in Table- 4 can be used to explain the relative importance of the six independent variables in contributing to the variance in ROE. As far as the relative importance of the six factors under information and analysis is concerned, practicing benchmarking and using the findings to improve upon, I_3 (0.56); Pertinence of information collected through benchmarking to the improvement effort, I_4 (0.44); decisions taken based on the findings of the performance analysis, I_6 (0.35); and existence of a database designed to meet the needs of those who will use it, I_2 (0.29) are significantly related to the performance of the organization. This means that one unit increase in I_3 will increase ROE by 0.56 unit, one unit increase in I_4 will increase ROE by 0.44 unit, one unit increase in I_6 will increase ROE by 0.35 unit, and one unit increase in I_2 will increase ROE by 0.29 unit.

Table- 4: Regression Analysis Results along Information and Analysis Dimension

Dimension	Coefficient	t	p-value	
Constant	-1.5952	-3.44	0.002	F=12.19 R = 0.867 R ² = 0.753
I ₁ . Have accurate and timely database that provides information on customers, internal operations, organizational performance, and costs and finances	-0.05225	-0.58	0.567	
I ₂ . Database is designed to meet the needs of those who will use it	0.28785	3.82	0.001***	
I ₃ . Practice benchmarking and use the findings to improve upon	0.5694	4.42	0.000***	
I ₄ . Information collected through benchmarking is pertinent to the improvement effort	0.4476	4.46	0.000***	
I ₅ . Performance evaluation criteria are well understood by all levels of employee	-0.12360	-1.35	0.188	
I ₆ . All organizational decisions are based on the findings of the performance analysis	0.35198	3.99	0.001***	

Note: Significant at *** p<0.01; ** p<0.05; * p<0.10.

Human Resources

Table- 5 presents the result for human resources category. In this category, significant relationship is found between performance and independent variables. The independent variables were expressed in terms of standardized factor scores (beta coefficients). The significant factors that remained in the regression were shown in order of importance based on beta coefficients. The regression equation for ROE and with respect to independent variables for human resources category is presented below,

$$Y_R = \beta_0 + B_1H_1 + B_2H_2 + B_3H_3 + B_4H_4 + B_5H_5 + B_6H_6$$

Where,

$$Y_R = \text{ROE}$$

H₁, H₂, H₃, H₄, H₅, H₆ = independent variables under human resources category presented in Table- 5.

$B_1, B_2, B_3, B_4, B_5, B_6$ = regression coefficients of independent variables.

From Table- 5, it is found that the association between ROE and the independent variables is positive and high with correlation coefficient value $R = 0.875$. Moreover, the R^2 value of 0.76 reveals that 76% of the variation of ROE is explained by the six factors in the human resources category.

Lastly, the beta coefficients from regression analysis in Table- 5 can be used to explain the relative importance of the six independent variables in contributing to the variance in ROE. As far as the relative importance of the six factors under human resources is concerned, positive work environment, H_3 (0.28); evaluation of personnel practices, H_4 (0.27); delegating responsibility to the employee to take decisions regarding their activities, H_6 (0.18); and continual persuasion of employees to make suggestions for improvement, H_2 (0.15) are significantly related to the performance of the organization. This means that one unit increase in H_3 will increase ROE by 0.28 unit, one unit increase in H_4 will increase ROE by 0.27 unit, one unit increase in H_6 will increase ROE by 0.18 unit, and one unit increase in H_2 will increase ROE by 0.15 unit.

Table- 5: Regression Analysis Results along Human Resource Focus Dimension

Dimension	Coefficient	t	p-value	
Constant	-2.2718	-4.29	0.000	F=13.10 R = 0.875 R ² = 0.766
H ₁ . Has Training program for all levels of employees	-0.05430	-0.87	0.395	
H ₂ . Employees are encouraged to make suggestions for improvement	0.14988	1.84	0.078*	
H ₃ . A positive work environment is maintained	0.2843	2.77	0.011***	
H ₄ . Personnel practices are evaluated to find their effectiveness	0.26778	2.84	0.009***	
H ₅ . Worker satisfaction of all levels is measured	-0.1232	-1.09	0.285	
H ₆ . Employees are given responsibility to take decisions regarding their activities	0.18108	2.31	0.029**	

Note: Significant at *** $p < 0.01$; ** $p < 0.05$; * $p < 0.10$.

Process Management

Table- 6 presents the results for process management category. In this category, significant relationship is found between performance and independent variables. The independent variables were expressed in terms of standardized factor scores (beta coefficients). The significant factors that remained in the regression were shown in order of importance based on beta coefficients. The regression equation for ROE and with respect to independent variables for process management category is presented below,

$$Y_R = \beta_0 + B_1P_1 + B_2P_2 + B_3P_3 + B_4P_4 + B_5P_5$$

Where,

$$Y_R = \text{ROE}$$

P_1, P_2, P_3, P_4, P_5 = independent variables under process management category presented in Table- 6.

B_1, B_2, B_3, B_4, B_5 = regression coefficients of independent variables.

From Table- 6, it is found that the association between ROE and the independent variables is positive and high with correlation coefficient value $R = 0.824$. Moreover, the R^2 value of 0.68 reveals that 68% of the variation of ROE is explained by the six factors in the process management category.

Lastly, the beta coefficients from regression analysis in Table- 5 can be used to explain the relative importance of the six independent variables in contributing to the variance in ROE. As far as the relative importance of the six factors under process management is concerned, having an effective system for improving those processes that require improvement, P_5 (0.27); and identification of all processes performed by the organization and establishment of ownership of each process, P_1 (0.26) are significantly related to the performance of the organization. This means that one unit increase in P_5 will increase ROE by 0.27 unit, and one unit increase in P_1 will increase ROE by 0.26 unit.

Table- 6: Regression Analysis Result along Process Management Dimension

Dimension	Coefficient	t	p-value	
Constant	1.6709	-2.95	0.007	F=8.5 R = 0.824 R ² = 0.680
P ₁ . All processes performed by the organization have been identified, and the ownership of each process has been established	0.2593	1.76	0.092*	
P ₂ . Performance standards for processes have been established	0.0745	0.49	0.632	
P ₃ . A system to measure process performance against the standards has been developed	-0.0385	-0.35	0.732	
P ₄ . Employees have understanding about continuous improvement	-0.0341	-0.25	0.803	
P ₅ . Has an effective system for improving those processes that require improvement	0.2718	2.14	0.043**	

Note: Significant at *** p<0.01; ** p<0.05; * p<0.10.

Conclusions

The aim of the research was to analyze to what level some of the essential initiatives of TQM according to Malcolm Baldrige National Quality Award (MBNQA) standards the commercial banks in Bangladesh are performing. The commercial banks in Bangladesh can use the outcome of the research to focus their mindset on implementing the TQM program.

The study reveals that top management of the banks has potentiality to demonstrate leadership in terms of active involvement in communicating quality goals to employees, and establishing strategic quality planning group in the organization. The strategic planning of the management is also good as this plan is formulated using relevant information regarding customer needs and expectations, personnel practices, benchmarking, and improvement efforts required. Not only that but also management disseminates this plan all through the organization. Apart from this, the plan is continually evaluated and improved to find its effectiveness. Banks are found to be a little bit weaker in process management. Although top management identifies all processes in the organization, establishes process ownership, and develops effective system for improving processes, yet

banks are lacking in formulating some more important aspects of the process management.

From the research, it is found that even though banks in Bangladesh have not implemented TQM approach systematically in their operations, yet banks are practicing some of the norms of such kind of program. It can be concluded that there is a very good prospect for commercial banks in Bangladesh to move towards formal implementation of TQM program if following imperatives are fulfilled and practiced:

- Top management needs to be actively involved in developing the quality goals and standards for the organization as well as creating cooperative environment to inculcate these goals. Moreover, top management should evaluate its management effectiveness regularly.
- The quality plan should reflect the mission, vision and value of the organization. In this regard, the plan should incorporate inputs from employee.
- The banks should constantly determine the future requirement of the customer. They need to develop strategies to maintain and build customer relationship. Banks should also establish standards to meet customer expectations and needs to be more responsive to customer complaints.
- Banks should have accurate and timely database that provides information on customers, internal operations, organizational performance, and costs and finances.
- Personnel practices should address issues such as employee performance evaluation criteria, arranging training program for employees, and worker satisfaction.
- Banks should set performance standards for processes and process performance should be measured against the standards.
- Employees should have understanding about continuous improvement and dedicate their effort to achieving it.

Future Research Scope

Like other researches, this research is also not without limitations. It will be possible to overcome these limitations through conducting future researches. This

research did not consider the implementation of different aspects of TQM with respect to public and private banks. Moreover, differences in size, length of operations, and types of services provided are not included in the research. Thus, future research should address these issues to fill the gap.

TQM categories mentioned in this research integrally affect the program. Therefore, it is necessary to conduct future research to find the integrated effect of the categories on the implementation of the TQM to find the effectiveness of the program.

This research considered the implementation of the TQM initiatives at a single time. However, TQM is a process of continuous improvement. Therefore, a longitudinal study needs to be conducted in future to find whether the TQM initiatives are ongoing effort or not.

Lastly, future research needs to perform with some other measurement system of TQM to find the exact fit of the system with respect to operations of commercial banks of Bangladesh.

References

- Barua, B., & Islam, M. M. O. (2009). Implementation of Quality Management System in the Banking Sector of Bangladesh. *Independent Business Review*, 2(2), 54- 64.
- Besterfield, D., Besterfield, C. M., Besterfield, G., & Besterfield, M. S. (2003). *Total Quality Management*, 3/e, Pearson Education Inc.
- Brah, A. S., Wong, L. J., & Rao, B. M. (2000). TQM and Business Performance in Service Sector. *International Journal of Operations and Production Management*, 20(11), 1293- 1312.
- Burton, G. et al. (1999). *TQM and Organizational Change and Development*, Albany, New York: Rockfield College Press.
- Cole, W. E., & Mogab, J. W. (1999). *TQM in Action*, New Delhi: Beacon Books.
- Edwards, S., & Smith, S. (1999). *TQM in Banking*, The TQM Magazine, 2.
- Frick, R. A., (1997). The Application of Total Quality Management on Service Quality in Banking. *The Journal of Bank Cost & Management Accounting*.

- Gupta, A. et al. (2005). Quality Management in Service Firms: Sustaining Structures of Total Quality Service. *Managing Service Quality*, 15 (4), 389-402.
- Harrington J.H. (1996), *National traits in TQM principles and practices*, The TQM Magazine, 8(4).
- Khalid A., Moneim, A., Ahmed, M. B., & Zairi, M. (2007). Excellence in Service: An Empirical Study of the UAE Banking Sector. *International Journal of Quality & Reliability Management*, 24(2), 164-176.
- Luckett, D. G. (1994). *Money & Banking*, McGraw Hill Inc. New York.
- Melidonioti, M., & Gotzamani, K. (2007). *Standardization and Quality in Greek Banking Services*, MIBES Transactions on Line, 1(1), 60-73.
- Molina, A., Consuegra, D. M., & Esteban, Á. (2007). Relational Benefits and Customer Satisfaction in Retail Banking. *International Journal of Bank Marketing*, 25(4), 253-271.
- Montes, J. L., Fuentes, M. D. M., & Fernandez, L. M. M. (2003). Quality Management in Banking Services: An Approach to Employee and Customer Perceptions. *Total Quality Management*, 14 (3), 305– 323.
- Naeem, H., & Saif, M. I. (2007). *Excellence of Banking Services - A Multidimensional Approach*. The 4th International Postgraduate Research Colloquium IPRC Proceedings, Bangkok, Thailand.
- Naeem, H., & Saif, M. I. (2008). Recommending A Conceptual Model for Total Quality Management in Commercial Branch Banking Operations. *Gomal University Journal of Research*, 24, 190- 197.
- Naeem, H., Saif, M. I., & Qasim, S. (2008). .Total Quality Management–A Recommended Strategy for The Pakistani Banking Sector. *International Business & Economics Research Journal*, 7(11), 49- 54.
- Newman, K., & Cowling, A. (1996). Service Quality in Retail Banking. *International Journal of Bank Marketing*, 14 (6), 3- 11.
- Pearce, J.A. & Richard, B.R. (2005). *Strategic Management*. McGraw Hill, New York.

- Pearce, J. A., & Robinsons, R. B. (2005). *Strategic management*. New York: McGraw Hill.
- PIMS Letter on Business Strategy, The. No. 4, Cambridge, MA: Strategic Planning Institute, 1986.
- Purohit, K. K., & Mazumder, B. C. (2006). Performance Measurement of Banks: An Application of Balanced Scorecard. *The Cost and Management*, 34(6), 21- 30.
- Rahman, Z., & Siddiqui, J. (2006). Exploring Total Quality Management for Information Systems in Indian Firms: Application and Benefits. *Business Process Management Journal*, 12(5), 622- 631.
- Rana, I. A. (2005). TQM Paradigm in Banking. Retrieved April 4, 2007, from www.dawn.com.
- Saffran, N., & Vogt, U. (1999). *Case study; ISO 9000; Implementation; Quality System; Total Quality Management at Deutsche Bank AG*. Management Systems, Inc., Wilmette, IL. Annual Quality Congress, 53(0). Retrieved October 1, 2007, from <http://qic.asq.org/perl/search.pl? item=10793>.
- Samat, N. et al. (2006). TQM practices, Service Quality, and Market Orientation: Some Empirical Evidence from a Developing Country. *Journal Management Research News*, 29 (11), 713- 728.
- Siddiqui, J., & Rahman, Z. (2007). *TQM Principles' Application on Information Systems for Empirical Goals: A Study of Indian Organizations*. The TQM Magazine, 19(1), 76-87.
- Tsang, H. Y. J., & Antony, J. (2001). TQM in UK Service Organizations: Some Key Findings from a Survey. *Managing Service Quality*, 11 (2), 132- 141.
- www.fdic.gov/banks/statistical/statistics/0106/cbr.

An Assessment of the Impact of Green Messages on the Audience of Dhaka City

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ABSTRACT

Previous research has shown the impact of various message formats on consumer behavior. Much work has been done to ascertain the impact of the various types of appeals (rational, fear, and guilt), and degree of customer involvement on consumer responses to various messages. This research represents a robust study conducted on the impact of messages pertaining to a greener environment on the population of Dhaka City. A structured questionnaire was sent out to 400 respondents within the periphery of Dhaka City. It has been observed that the dependent variable, consumer attitude towards green messages, is related to the different appeals of the messages that they are exposed to. In addition, it has also been found that consumers attitude towards green messages is influenced by their degree of involvement pertaining to various environmental issues.

Introduction

During the late 1980s the term 'green marketing' became one of the great business buzzwords, often spoken but rarely understood. Obviously it is not difficult to see that green marketing has to be the marketing of the future. The activities of the industries are not currently sustainable. The environment cannot supply the resources they consume or deal with the pollution they create indefinitely. Gradually businesses, both private and public sector, will be pushed towards better environmental performance by the rising costs of resource inputs and by legislation to control pollution outputs. What is perhaps less obvious is that the green marketing should be the marketing of the present. (Peattie, 1992).

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The signs of environmental degradation and the depletion of the natural resource base in the whole of South Asia are very clear. They were brought to the notice of the world during the successive major floods that hit most of Bangladesh in 1987 and again in 1988. Bangladesh, a small country of 147,570 square kilometers and over 120 million people, suffers not only from floods but also from droughts, soil degradation, deforestation, unplanned urbanization and industrialization, depletion of water resources and forest cover and even from signs of increasing aridity which could lead to desertification (Statistical Division and Ministry of Finance & Planning, 2004).

Desertification is evident in the northwest while fierce typhoons and tidal waves frequently batter open coastal lands and settlements because they are without protective tree cover. Cowdung and other valuable biomass, which could be used as fertilizer is burned as fuel because firewood is no longer available. People are facing a multitude of difficulties caused directly or indirectly by nationwide deforestation, but the worst consequences of forest destruction are still to be experienced. (Anwar & Sidduque, 1997).

In light of what has been mentioned earlier, it is imperative that businesses and consumers alike need to evolve in terms of their practice of various green marketing activities. This paper explores green marketing as the messages transmitted to the audience (via TV, radio, billboard, etc.), which highlights the importance of a greener environment. Thus, emphasis has been placed on messages that focus on forestation and the importance of planting trees in the city.

The remainder of the paper has been organized into six sections. Firstly, objectives have been delineated. Then the following sections review the literature that has been consulted, followed by the research framework, hypotheses, research methodology, data analysis, and finally a section on the conclusion and implications of this study.

Objectives of the Study

The researchers have delved into trying to ascertain as to how the different message formats depicting the various appeals (emotional, rational) have constructed or reshaped the existing attitudes of the audience towards messages that promote the notion of a greener environment. In addition to this objective, the researchers have also investigated whether the degree of involvement of audience affects their attitude towards the green message.

Literature Review

Green marketing is used to describe any marketing activity of a firm that is intended to create a positive impact or to lessen the negative of a product on the environment and as a result capitalize on consumers' concerns about environmental issues (Etzel, Walker & Stanton, 1997).

Green marketing involves developing products and packages that are less harmful to the environment. Green marketing includes many areas ranging from conservation to control of pollution (Skinner, 1994).

Green advertising is defined as any ad that meets one or more of the following criteria:

1. Explicitly or implicitly addresses the relationship between a product/service and the biophysical environment.
2. Promotes a green lifestyle with or without highlighting a product/service.
3. Presents corporate image of environmental responsibility.

Five types of emotional appeals are identified: fear, guilt, humor, self-esteem, and warmth. Rational appeals and appeals that emphasized the financial aspects of environmentalism are coded as a third category (Benerjee, Gulas, & Iyer, 1995).

Exposure to an advertisement can create awareness about the brand or services, leading to a feeling of familiarity with it. Second, information about the brand's benefits and the attributes on which the benefits are based can register with the consumer and can also result from exposure to the ad. Third, advertisements can also generate feelings in an audience that they begin to associate with the brand or its consumption. (Batra, Myers & Aaker, 1996)

Petty and Cacioppo have proposed the framework, which predicts when the audience member will cognitively elaborate and follow the central route. Two factors identified in the ELM (Elaboration Likelihood Model) as significant are an audience member's motivation to process information and ability to process information. Consumers are most likely to process centrally when both motivation and ability are high; when either low, peripheral processing is more likely.

Motivation to process information: Central processing requires first the motivation to process information, because information processing requires effort. Unless there is some reason to expend the energy or pay the price, the 'hard' information in the ad will not be processed. Such effort will not be expended unless the consumer is involved with the product or associated with purchase decision and unless the information in the advertisement is both relevant and important. (Batra, Myers & Aaker, 1996).

Rational appeal is the persuasive communication aimed at the buyer which is based upon the economic and technical advantages of the product or service to the buyer, rather than emotive appeals which are based upon essentially behavioral factors (Baker, 1998). It is an appeal to the consumer's practical, functional need for the product or service (Bovee & Arens, 1992). If the term 'rational' is defined as an individual's attempt to maximize his satisfactions (whether they be economic or other psychological satisfactions) or to minimize his dissatisfactions, then all behavior must be viewed as being rational (Britt, 1979). The rational appeal is an important approach to consider because prospects have a tendency to envision themselves as being intelligent individuals, and they desire to rationalize their decisions (Dirksen, Kroeger & Nicosia, 1983). These aim at the customer's self-interest by stressing the value or performance of the product. For a green advertising theme a rational appeal might stress the cost savings of green products which use less resource than conventional products. (Peattie, 1992).

Emotional appeal relates to the consumer's psychological, social, or symbolic needs (Bovee & Arens, 1992). If the term 'emotional' is used to denote behavior that is any way connected with feelings, attitudes or emotions, then all behavior must be viewed as being emotional (Britt, 1979). Emotional content in advertisements enhances their attention attraction and maintenance capabilities. Advertising messages that trigger emotional reactions of joy, warmth, or even disgust are more likely to be attended to than are more neutral ads. Emotions are characterized by a state of heightened physiological arousal, emotional messages may be processed more thoroughly than neutral messages. Emotional advertisements that trigger a positively evaluated emotion enhance liking of the ad itself (Hawkings, Coney & Best, 1992).

Fear appeal involves organization of message content so as to arouse the anxieties and fears of the consumer (Block & Roering, 1976). Fear appeals make use of the threat of negative (unpleasant) consequences if attitudes or behaviors are not

altered. Where fear appeals have been studied primarily in terms of physical fear (physical harm from smoking, unsafe driving and so forth), social fears (disapproval of one's peers for incorrect clothing, bad breath, or inadequate coffee) are also frequently used in advertising. For fear appeal to be successful, the level of fear induced must not be so high as to cause the consumer to distort or reject the message. In addition, it is critical that the source of the fear-arousing message be viewed as highly credible (Hawkings, Coney & Best, 1992).

Consumers feel especially guilty about environmental ills they can do something about, but do not. They readily acknowledge the role of their own consumption in despoiling the environment. They see themselves as being able to do little to fix serious problems like global climate change or ozone layer depletion. However, they do feel a responsibility to cut down on excess packaging and take steps like recycling and conserving water (Ottman, 1998).

It refers to the intensity of the consumer's interest in a product, medium, or message. High-involvement means that a product - or information about it - is important and personally relevant. Low-involvement means that the product or information is perceived as unimportant. Advertising for this type of product often focuses simply on key points, emotions, lifestyles, or images (Wells, Burnett & Moriarty, 1992).

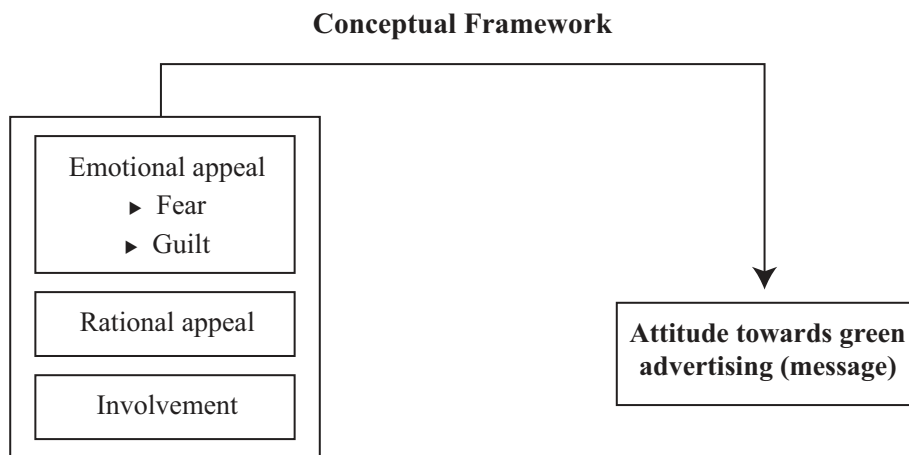
Involvement is the perceived importance or personal relevance of an object or event. It is about the degree to which the consumer feels attached to the product or brand, and the loyalty felt towards it. Involvement has both cognitive and affective elements: it plays both the brain and the emotions. High product involvement will come about if the consumer feels that product attributes are strongly-linked to end goals or values; lower levels of involvement occur if the attributes are only linked to function and low levels occur if attributes are irrelevant to consequences (Blythe, 1997).

Involvement is a motivational state influenced by the perceived personal importance and/or interest evoked by a stimulus. Level of involvement not only influences the amount of information processing, it also has important implications for decision-making process, attitude formation and change, and word-of-mouth communication (Mowen, 1993).

Involvement refers to consumers' subjective perception of the personal relevance of an object, activity, or situation. It is important to recognize that people may be

involved with many concepts besides products and brands such as advertisements. Consumers who perceive that some attributes of a product are associated with important values will experience higher levels of product involvement than consumers who perceive that product with attributes lead only to functional consequences. Of course, consumers who perceive that product attributes have no important consequences at all (basically, they have no means-end chains) will feel little or no involvement with the product (Peter & Olson, 1990).

Figure- 1: Conceptual Framework of the Research Study



After the audiences are exposed to a message, they form an attitude towards it. The affective and the cognitive dimension of the attitude described in literature review reflect that the audiences tend to be attracted by the green messages and thus form an attitude. This attitude is formed through various effects which lead to a favorable or unfavorable liking toward the brand.

According to advertising exposure model, it is obvious that exposure of message can create an attitude towards it by processing the elements of the ad such as emotional factors. (Batra, Myers & Aaker, 1996)

Any message has a definite communication effects. One of the major communication effects is the formation of the brand attitude that is preceded attitude toward that message. Brand attitude eventually forms a position in the audience's mind that lead the audience to the later stage of purchase intention.

The research framework also delineates that messages provide information and facts about the product or service being promoted, in this case the concept of green marketing that is planting more trees to save the environment, and thus the audience form attitude towards it. The “ELM” model in the literature review depicts that message can lead the attitude of the audiences to change. Depending on the level of involvement, the audiences form an attitude towards the message.

According to the definition of green marketing in the literature review section, it is apparent that a green message has used both emotional and rational appeal with involvement to promote a green lifestyle with or without highlighting a product or service. Thus in this framework emotional (fear and guilt), rational appeal and involvement have been included as the independent variables that affect the message issue which influences audience behavior in changing attitude.

Thus by reviewing all theories and models from the previous section and the findings from previous research that have been discussed later, the researcher has considered emotional appeal (fear, guilt), rational appeal and involvement as the means to influence the attitude toward green messages.

Hypotheses

The research framework presented in the previous section leads to the following hypotheses for this research study. The hypotheses are based on the assumption that all the audiences have the same degree of exposure to the green advertisements.

H1a: There is a relationship between fear and the attitude toward the green advertising.

H2a: There is a relationship between guilt and the attitude toward the green advertising.

H3a: There is a relationship between rational appeal and the attitude toward the green advertising.

H4a: There is a relationship between involvement and the attitude toward the green advertising.

Singh and Cole (1993) conducted a research on television commercial effectiveness where they used attitude towards the advertisement message, and rational appeal as one of the dependent and independent variables respectively.

Emotional appeal was measured on a 3-item scale that included statements such as "The commercial is trying to appeal to my sentiments (emotions)." Reported scores are the average score on the 3-item scale. Rational appeal measured on a 4-item scale includes statements such as "The commercial makes arguments for buying the brand." Reported scores are the average score on the 4-item scale. Attitude toward advertisement was measured on a 13-item, 7-point semantic differential scale. The adjectives used were pleasant/unpleasant, refined/vulgar, likeable/unlikable, interesting/boring, tasteful/tasteless entertaining/ unentertaining, artful/artless, familiar/novel, good/bad, insulting/ uninsulting, believable/ unbelievable, convincing/unconvincing and informative/ uninformative.

- The following statement has measured attitude toward the green advertising:
"Green advertising creates consciousness about environment."
7-item, 7-point Semantic differential scale has been used where +3 indicates good, likable, pleasant, favorable, interesting, convincing and believable, -3 indicates bad, unlikable, unpleasant, unfavorable, boring, unconvincing and unbelievable and 0 indicates neutral condition.
- The following statement has measured fear:
"Let the trees live, if you want to live."
3-item, 7-point Semantic differential scale has been used where +3 indicates fearful, afraid and anxious, -3 indicates not fearful, not afraid and not anxious and 0 indicates neutral condition.
- The following statement has measured guilt:
"Cutting a tree requires planting two trees."
3-item, 7-point Semantic differential scale has been used where +3 indicates guilty, regretful and remorseful, -3 indicates not guilty, not regretful and not remorseful and 0 indicates neutral condition.
- The following statement has measured rational appeal:
"Each tree is a piece of investment."
3-item, 7-point Semantic differential scale has been used where +3 indicates important, beneficial and favorable, -3 indicates not important, not beneficial and unfavorable and 0 indicates neutral condition.
- The following statement has measured involvement:

"The condition of the environment affects the quality of my life."

3-item, 7-point Semantic differential scale has been used where +3 indicates important, interested and means a lot, -3 indicates not important, not interested, and not means a lot and 0 indicates neutral condition.

The Research Methodology

The purpose of this research study is hypotheses testing which is to explain the nature of certain relationship of two or more factors in a situation. The apposite type of research design for this study is Ex Post Facto design where the subtype used is survey to accomplish the research objectives. Survey has been used as the researcher does not intervene in an attempt to control the independent variable(s) and information is gathered from a sample of people by use of questionnaires. The central objective of survey design is to search for relationships between variables. It usually depends upon the use of a well-constructed questionnaire, which is used to collect data from the relevant unit of analysis under study, usually, an individual (Davis & Cosenza, 1993). Thus this research can depict the relationship(s) of certain variables of green advertisements (messages) from the context of the audiences of Dhaka Metropolitan City, the capital city of Bangladesh.

The convenience sampling is one of the non-probability sampling designs that is being used in this research. As its name implies, convenience sampling involves collecting information from members of the population who are conveniently available to provide this information (Sekaran, 1992).

The sampling units are both male and female audiences of Dhaka city. These individuals are aware of the green messages that the dwellers of Dhaka city are exposed to. The social classes that these individuals belong to are mostly middle class to upper class who have access to different media and who have some knowledge about the impact of environment on society.

Primary data have been collected from 400 samples by the use of questionnaire. According to Cochran, reported by Burtlett, Kotrlik & Higgins (2001), the method for calculating sample size has been used to determine the sample size for this research.

Data collection has proceeded with coding of 400 questionnaires into a symbolic form in SPSS software. The data was summarized in the form of simple frequency and descriptive statistics. The following is a brief of tests that have been utilized.

As hypotheses have been tested to identify the relationship of certain variables that are based on the scale of ordinal data in the questionnaire, Bivariate analysis (Spearman's Rank Correlation test) has been used.

A reliability test for each hypothesis, which entails the relationship of a construct and a dependent variable, has been conducted. The researcher has used semantic differential scale to measure each of the independent and dependent variable. As this scale is based on seven points and is split into two halves, it is considered appropriate to test the reliability of this scale. The value of the Chronbach's alpha has been estimated to test whether the scales are reliable or not. A Chronbach's alpha value of at least 0.6 is considered reliable for this research study. For lucidity, examining each hypothesis is encompassed into three steps: Reliability analysis of the dependent variable, Reliability analysis of the independent variable and Testing of hypothesis in statistical form.

Data Analysis

The first analysis has been undertaken to test the reliability of the scale that measures the first dependent variable, attitude towards green advertising (message) that has been mentioned in the framework. The reliability analysis of this dependent variable indicates an alpha value of 0.8831 that is above 0.6. Therefore, it can be inferred that the seven sub-variables (Good-bad, Likable-unlikable, Pleasant-unpleasant, Favorable-unfavorable, Interesting-boring, Convincing-unconvincing, Believable-unbelievable) that have been aggregated to measure the first dependent variable, attitude towards green advertising, are reliable.

The Cronbach alpha values of reliability analysis for all the independent variables have been shown in Table- 1.

Table- 1: Independent variables and their corresponding Cronbach alpha values

Independent variables	Cronbach alpha
Fear	0.8747
Guilt	0.8680
Rational appeal	0.8538
Involvement	0.6671

The table above indicates that the Cronbach alpha values of the independent variables are higher than 0.6. Therefore, it can be deduced that the four independent variables are reliable.

The "bivariate" correlation test with the value of Spearman's rho, assists the researcher to make inference regarding the relationship of the following variables (attitude towards green messages as the dependent variable, and fear, guilt, rational appeal, and involvement as the independent variables).

It is imperative to set the cutting point of which to select between the null and alternative hypotheses. Thus, the statistical notion implies the two conditions for accepting the alternative hypotheses, if $\rho \neq 0$ and, if $\alpha < 0.05$.

It can be inferred from the following table that the α value (two-tail significance level test) for each of the four hypotheses tested is found substantiated at the significant level lower than 0.05 (the actual α is 0.01). The p value for each of the hypotheses was found not to be not equal to zero (refer to Table 2). Thus, all four null hypotheses have been rejected.

Table- 2: Significance value (α) and Correlation coefficient (ρ) of four hypotheses

Hypotheses	Significance value (α)	Correlation coefficient (ρ)
1	0.0000	0.232
2	0.0000	0.288
3	0.0000	0.510
4	0.0000	0.510

Hypothesis 1

H1a: There is a relationship between fear and the attitude towards the green advertising (message).

The reasonable explanation behind this finding is that environmental consciousness is gaining popularity in Dhaka city. People are becoming more conscious when the green advertisements (message) are shown in different media. Different media messages demonstrate the devastating outcomes resulting from

cutting down trees unnecessarily and excessively. A sense of fear has aroused among the audience of Dhaka Metropolitan City when these audiences are exposed to the green advertisements (message), which focus their messages on fear appeals.

In Bangladesh 25% land should be covered with trees, but only 6% land is covered. Dhaka Metropolitan City is the most densely populated city in Bangladesh. It has its unique problems including tremendous high degree of pollution, soil erosion, accommodation problem, population problem etc. Beside these, rapid urbanization and growing population enhance the activities of cutting trees causing the severity of the above mentioned problems. The green advertisements (message) uphold the picture of these environmental degradations succinctly. As a consequence, these green advertisements generate fear among the audiences of Dhaka Metropolitan City to an alarming level. When the audiences are exposed to the fear appeals of the green advertisements (message), they tend to believe the message and form some sort of attitude. Likewise, it can be reconfirmed that there is a positive relationship between fear and attitude of the audiences of Dhaka Metropolitan City towards green advertisement (message).

Hypothesis 2

H2a: There is a relationship between guilt and the attitude towards the green advertising.

Results from the second hypothesis state that there is a positive relationship between guilt and the attitude towards the green advertising (message). The thoughtful elucidation behind this finding is that environmental consciousness is gaining popularity in Dhaka city. The consequences of destroying trees unnecessarily, which are demonstrated on the green advertisement (message), generate consciousness among the audiences. A sense of guilt has arisen among the audiences of Dhaka Metropolitan City when these audiences are exposed to the green advertisements, which focus their messages on emotional appeal such as guilt. There is an obvious illustration of cutting trees excessively in Bangladesh without reconciliation of ecological imbalance through plantation of enough number of trees. By claiming these facts these green advertisements generate tremendous guilt among the audiences of Dhaka Metropolitan City. The green advertisements have heightened psychological arousal among the audiences by emphasizing the feeling of guilt.

Feelings engendered by an ad can create or influence an attitude toward the ad directly as well as indirectly, through assessments of the quality of the ad's execution characteristics. In fact, some researchers believe that attitude towards the ad has two different components: an affective one, reflecting the direct effect of the feelings evoked by the ad, and a second, more cognitive one, reflecting how well made and useful the ad (and the information in it) is considered to be. In this case, the affective component of the green advertisements is the feelings of guilt that create or influence the attitude of the audiences of Dhaka Metropolitan City. Thus it is re-corroborated that there is a positive relationship between guilt and the attitude the audiences towards the green advertising.

Hypothesis 3

H3a: There is a relationship between rational appeal and the attitude towards the green advertising.

The findings from the third hypothesis reveal that there is a positive relationship between rational appeal and attitude toward green advertising. The apposite explanation behind this research finding is that Bangladesh is a poor country where a majority of the labor force is unemployed. The climate of Bangladesh is extremely in favor of growing trees which generate income. Given that profit potential in this green campaign (planting trees) is very high, a huge part of the manpower in Bangladesh engages in planting trees. Thus, when this kind of rational appeal is demonstrated in the green advertisements, the audiences become attracted to the ad and form a favorable attitude towards the green advertisements.

It is imperative to reiterate that the attitude towards the ad be higher if the ad contains useful information. According to elaboration likelihood model (ELM), developed by psychologists Richard E. Petty and John T. Cacioppo, the consumer can consciously and diligently consider the information provided in the ad in forming attitude. Here, attitudes are changed or formed by careful consideration, thinking, and integration of information relevant to the product or the object of the advertising. The consumers here are highly involved in processing the information. This type of persuasion process is termed the central route to attitude change. Thus, the attitude of the audiences of Dhaka Metropolitan City has changed centrally due to the rational appeals conveyed in the green advertisements. By showing the financial gain from planting trees, the green

advertisements help form a favorable attitude among the audiences of Dhaka Metropolitan City. Likewise, it is reassured that there is a positive relationship between rational appeal and the attitudes of the audiences towards green advertisements.

Hypothesis 4

H4a: There is a relationship between involvement and the attitude towards the green advertising.

The findings from the fourth hypothesis unveil that there is a positive relationship between involvement and attitude toward green advertising. The appropriate explanation behind this research finding is that Bangladesh is a country where natural disaster is part and parcel of the lives of the people. Devastating flood, deadly cyclone, tremendous pollution etc. are obviously making the lives more hazardous. Especially, in Dhaka Metropolitan City, which is recognized as one of the top ten polluted cities in the world where the degree of air pollution is extremely high in which, millions of city dwellers are continuously facing serious health-threat. As a result, the people of Dhaka have no other way than to be concerned about environmental consciousness. This involuntary involvement of environmental consciousness leads the people to give utmost importance and focus on the green advertisements shown. Thus, the audiences of Dhaka Metropolitan City form a favorable attitude towards the green advertisements, which focus on planting trees to save the environment.

It is important to restate that according to elaboration likelihood model (ELM) developed by Petty and Cacioppo (1986), it is possible that the audience members cognitively elaborate information and follow the central route to attitude change. Two factors, an audience member's motivation to process information and ability to process information are identified which must be present in order to alter the attitude of the audiences. Unless there is some reason to expend the energy or pay the price, the 'hard' information in the ad will not be processed. Such effort will not be expended unless the consumer is involved with the product or associated purchase decision and unless the information in the advertisement is both relevant and important. Thus, it can be stated that the audiences of Dhaka Metropolitan City are involved with the concept of green marketing and are educated enough to process information. As the target audiences have the ability to process information conveyed by green advertisements their involvement with the

environmental consciousness has changed centrally. Therefore, it is reassured that there is a positive relationship between involvement and the attitude of the audiences towards green advertising.

Conclusion and Implications

This particular research study has been proposed to make meaningful what might otherwise be just a cacophony of words regarding the importance of saving the environment from intense deterioration. The framework of this study will help the academicians to build concrete understanding of how do certain factors in green advertisements cause an impact on the audiences. Not only building solid understanding, but also practical implementation of the theories in the context of a unique geographical location is unveiled. The academicians are provided with the notion of how do certain theories regarding green marketing concept and its means to convey messages to the audiences work in the real situation. And how certain theories do not work in the practical situation due to the difference in cultural perception of the audiences is also upheld here. The findings of this research authenticate the use of some existing theories that have been depicted in the previous sections to furnish the literature review. Moreover, the conceptual framework of this research study will lead the academicians to base their future research on this conceptual construct.

Most researches that have been conducted regarding green advertising are based on the settings of developed countries. Limited research has been conducted in the context of developing country regarding green advertising. This research which is conducted in the context of developing country helps the academicians to explore certain factors of the green advertising that have an impact on the audiences. Thus, this study proves that certain factors of green advertising that have been used in the previous studies in developed countries can also be applicable for a developing country like Bangladesh. The research also tries to offer the academicians a good consideration of the need to conduct future research in different settings.

In order to find to what extent the impact of advertisements on other media is measurable, the future researchers may find this study very much conducive to conduct their respective researches. The academicians acknowledge the assertion of theory that rational and emotional appeal on advertisement and the involvement of the audiences with the product or concept influence the attitude of the audiences towards the advertisements. Specifically, the academicians will come to know that

rational appeal and emotional appeal of green advertisements and the involvement of the audiences with the environment influence the audiences to form an attitude towards green advertising. It is noteworthy that no matter what type of media being used, this research study provides the academia with greater confidence to apply the findings.

In the ramification, this research study offers the academicians to conduct further research regardless of the type of media being used or type of product being considered. Though this study is based on green advertising that conveys green marketing concept, the findings and the extensive literature review along with the theoretical framework furnish the academicians with crucial viewpoints to conduct future researches.

This research study has tried to make a contribution to the business sectors that are continuously tussling in a tremendous competitive ambience. It is time for the business to take a proactive approach to environmental issues rather than waiting for regulations, or accidents, to force the business into action. And this study also tried to provide the business sectors with a perfect way to visualize their future in terms of green movements and knowledge of realizing the need for environmental decisions.

The research reveals how certain factors of advertisement may alter the customer's attitudes towards their purchasing decision. This finding might help the business to formulate their marketing plan regarding promotion particularly advertising. Business sectors may find themselves in a better position to survive in the hostile business environment as they are informed by this research study that consumer's attitude towards advertising can affect their purchasing decision. Specifically for the environmental marketers, an effective way to persuade the consumers to purchase green products is unveiled here.

References

- Anwar, K., & Siddique, H. A. (1997). *Adhunik Tathay Kosh*. Dhaka: Independent Press and Publication.
- Baker, M. J. (Ed.). (1998). *Macmillan Dictionary of Marketing and Advertising*. 3rd edition Macmillan Business.
- Bartlett II, J.Z., Kotrlík, J.W., & Higgins, C.C. (2001). Organizational Research: Determining Appropriate sample Size in Survey Research. *Information technology, Learning, and Performance Journal*, 19(1), 47.
- Batra. R., Myer, J.G., & Aker, D.A.(Eds.). (1996). *Advertising Management*. Prentice Hall International, Inc: New Jersey 07458. 48
- Batra. R., Myer, J.G., & Aker, D.A.(Eds.).(1996). The ELM Model of Attitude Change: *Advertising Management*. Prentice Hall International, Inc.
- Benerjee, S., Gulas, C.S., & Iyer, E. (1995). Shades of Green: A Multidimensional Analysis of Environmental Advertising. *Journal of Advertising*, XXIV(2)(summer).
- Block, C.E., & Roering, K. J. (1976). *Essentials of Consumer Behavior*. The Dryden Press: Hinsdale, Illinois.
- Blythe, J. (1997). *The Essence of Consumer Behavior*, Prentice-Hall, London, NY, Sydney, Tokyo, Singapore, Madrid, Paris.
- Bovee, C.L., & Arens, W.F. (Eds.). (1992). *Contemporary Advertising*, Irwin, Homewood, IL 60430.
- Britt, S.H. (1979). *Consumer Behavior and the Behavioral Sciences: Theories and Applications*, NY, Huntington: Robert E. Krieger Publishing Company.
- Davis, D., & Cosenza, R.M. (Eds.).(1993). *Business Research for Decision Making*, Belmont, California: Wadsworth Publishing Company.
- Dirksen, C.J., Kroeger, A., & Nicosia, F.M. (Eds.).(1983). *Advertising: Principles and Management Cases*. Richard D. Irwin NHC. Illinois, 60430.
- Etzel, M.J., Walker, B.J., & Stanton, W.J. (Eds.). (1997). *Marketing*. Boston, San Francisco, California: Irwin McGraw-Hill.

- Hawkings, D.I., Coney, K.A., & Best, R.J. (Eds.). (1992). *Consumer Behavior: Implications for Marketing Strategy*, Irwin, Illinois, Massachusetts, Australia.
- Mowen, J.C. (Eds.). (1993). *Consumer Behavior*. NY: Macmillan Publishing Company.
- Ottman, A.J. (Eds.). (1998). *Green Marketing: Opportunity For Innovation*: NTC Business Books.
- Peattie, K. (1992). *Green Marketing*, 128 Long Acre, London WC 2E 9AN: Pitman Publishing.
- Peter, J. P., & Olson, J.C. (Eds.).(1990). *Consumer Behavior and Marketing Strategy*, Irwin, Homewood, IL 60430
- Petty, R., & Cacioppo, J.T. (1986). The Elaboration Likelihood Model of Persuasion: in *Advances in Experimental Social Psychology*, 19, L. Berkowitz, New York: Academic Press, Inc., 123- 305.
- Sekaran, U. (Eds.). (1992). *Research Methods for Business*, John Wiley & Sons, Inc. New York, Chichester, Brisbane, Toronto and Singapore.
- Singh, S.N., & Cole A. C. (1993). The Effects of Length, Content, and Repetition on Television Commercial Effectiveness: *Journal of Marketing Research*, 30, 91- 104.
- Skinner, J. S. (1994). *Marketing*, Boston, Toronto: Houghton Mifflin Company.
- Statistical Division and Ministry of Finance- The People's Republic of Bangladesh, (2004). *Dhaka District Statistics*: Bangladesh Bureau of Statistics.
- Wells, W., Burnett, J., & Moriarty, S. (1992). *Advertising Principle & Practice*. 2nd edition, Prentice Hall, New Jersey 07632.

Role of Women in Processing and Marketing of Dry Fish from Coastal Bangladesh – An Exploratory Study

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Sanoara Yasmin**

ABSTRACT

Women fisher folk play a significant role in creating income generating activities (IGA) in different levels of dry fish marketing structure in coastal Bangladesh. This paper focuses mainly on the role of fisherwomen in processing and marketing of dry fish from coastal areas. The study covers seven different villages of Cox's bazaar districts. A total of 280 women fishers among - 140 fisherwomen and 140 women workers, were selected for the study. The paper points out that the sample women are involved in different income generating activities like drying, sorting and grading, cleaning and salting. The paper highlights that the income generating activities and monthly income derived from those activities vary in peak and lean seasons. The paper also identifies that most of the female fishers are semiskilled or unskilled and only 12.14% of them got training from NGOs. The article shows that their attitude towards NGOs is positive as they attain bundle of benefits from the NGOs among which are getting loans, marketing assistance, creating social awareness, enjoying sanitary latrine and the likes. Finally the paper puts forward some policy recommendations to overcome the problems of the women fishers, avail opportunities of the dry fish sector and thus lead a sustainable livelihood.

Key Words: Women, Dry Fish, Marketing, Processing, Income generating activity, NGO

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Background

Women are important productive workers in the economy making up about one-third of the labor force. Women in fishing communities also play an important role in fish production and processing across the world. Their role encompasses social and economic responsibilities, both within and outside the family. There are essential differences between the economic, social and political roles of men and women in most rural communities especially in fishing communities. It was found that women's participation in aquaculture was recognized by many researchers and practitioners (e.g. Nwabueze, 2010). Shalesha and Stanley (2000) reported that women perform important functions in the fisheries of most Asian and African countries. However, rural fishing women live in poverty with no purchasing power, and suffer from malnutrition due to low protein intake (Nwabueze, 2010).

Fishing communities of Bangladesh provide around 60%-80% of its animal based protein and livelihood for over 10.8 million households in 1400 coastal villages along the 710 k.m. coast line (GOB, 1997). About 8% of the total population in Bangladesh depends on fisheries for their livelihood (Alam, 1996, BBS 1998, FAO/BFDC 1972, Hossain, 1991). But about 73% of the fishers' households are involved in subsistence fisheries in the flood lands (GOB, 1997). Some of the poorest people of the country live in coastal fishing communities, who are culturally and economically marginalized and have often little or no voice in local government bodies such as thanas. Besides, coastal fishing in Bangladesh is highly seasonal; the monsoon is considered as the peak season for fishing hilsha and other different categories of fish. This season takes place between June and September of the year and is considered harvesting period for the fishers (Blowfield and Haque, 1996). However, income levels are only at a fraction during the remainder of the year, thereby increasing the population's vulnerability (Kleih, 2001).

Again, dry fish is an important source of protein in Bangladesh. Many people across the country especially the coastal, central and north-eastern districts of the country are fond of dry fish (Nowsad, 2007). However, sun drying of fishes is the oldest known and widely used method of fish preservation in Bangladesh, which is although the least expensive (Balachandran, 2001) yet often rudimentary and good hygiene is rarely practiced (Azam, 2002). Besides, superfluous middlemen in the marketing channels reduce the profit of fresh/dry fish producers/processors

(Flowra, Sen, Galib, Kamal and Islam, 2010) and thus the socio-economic conditions of fishers in general and fisherwomen of Bangladesh in particular remain unchanged. In order to improve the existing condition of women fishers, it is necessary to understand present status of women involved in fishing and fish marketing. Although few researches have already been conducted on fish drying (e.g. Nowsad, 2002, 2003 and 2005; Reza et al., 2005) however, these research focuses on drying and processing techniques. To the best of the knowledge of the researchers, no research has been done so far on fisher women's contribution in processing and marketing dry fish in Bangladesh. In this backdrop, this study aims at highlighting women's contribution in processing and marketing dry fish from coastal Bangladesh.

Purpose

The key purpose of this research is to explore and understand the activities involved in dry fish processing and pinpoint the role of women in these activities. In the light of the main purpose, the specific purposes of the study are as follows:

- To identify the role of women fishers in processing and marketing dry fish.
- To study the income generating activities of the sample respondents.
- To examine the parties involved in the marketing of dry fish.
- To study the patterns of employment such as work environment , working hours, wages and other financial benefits;
- To know the attitude of the sample respondents towards NGO activities in study areas.

Materials & Methods

The study is the product of the combination of two methods, i.e. empirical survey and desk study. Both qualitative and quantitative methods were used to collect data for the exploratory study.

Study Areas & Sample Size

The study was confined to seven coastal fishermen villages of greater Chittagong, Bangladesh. The reason for selecting these villages is based on the consideration that it will fully represent the picture of coastal fishing community of Chittagong, Bangladesh. They are homogeneous in terms of social, economical, political and

other external environment. The villages belong to three thanas of southern Chittagong which are – Gotivanga, Ghorakghata, and Thakurtala under Maheskhali, West Kutubdiapara and Chafuldandi under Cox's Bazar and Sairakhali under Chakaria.

The sample respondents are 280 among which 140 are women workers whereas 140 are fisher women. 20 women workers and 20 fisherwomen are interviewed separately from each of the above mentioned seven villages.

Primary Data

Primary data have been collected through both quantitative and qualitative methods. Under quantitative research methods, Direct Interview through structured questionnaire, check list and interview schedule were used to collect primary data. Observation, Depth Interview, and PRA (Participatory Rural Appraisal) technique were used to collect the qualitative information. The questionnaire is finalized after necessary correction based on a pilot survey conducted on a limited basis. The questionnaire was designed with two main characteristics viz., open ended and close ended according to the nature of information. For instance, questions regarding procedures and method of different aspects of credit issues were close ended based on literature survey and pilot survey. This was done to facilitate data analysis work. Some other questions were kept open ended where opinion was sought and the respondents had something to tell from her experience. This was done to give scope to the respondents to express themselves freely.

Findings of the Study

Socio-Economic Profile of the Respondents

Socio-economic characteristics help shape preferences, determine attitudes and mold values (Rabey, 1984). Such characteristics are often observed to be an inheritance process where some benefits, resources and privileges are passed on from the father and other family members to the next generations. Further, socio-economic environment is of major interest to marketers because it involves people and people make up markets (Kotler, 1992). In such a context, socio economic characteristics, i.e. age, education, gender combination, marital status, monthly income, assets, land, have been considered more relevant for the purpose of sample respondents of present study. The socio-economic profile of the sample respondents is shown in Table- 1.

Table- 1: Socio-Economic Profile of the Sample Respondents

Variables	Items	Frequency %	Average
Age group	< 10	15.00%	36 years
	10 – 20	11.07%	
	20 – 30	16.07%	
	30 – 40	37.14%	
	40 – 50	13.93%	
	50 +	6.78%	
Education	Illiterate	46.07%	
	Can write only	37.86%	
	Up to Primary	12.86%	
	Up to Secondary	2.50%	
	Above Secondary	0.71%	
Family Size	<=4	17.14%	6.47
	5 – 6	32.86%	
	7 – 8	31.79%	
	9 +	18.21%	
Marital Status	Married	38.57%	
	Widow	26.43%	
	Divorced	13.57%	
	Unmarried	12.86%	
	Old	8.57%	

Source: Field Survey

It is evident from Table- 1 that the average age of the women respondents is 36 years. Most of them (37%) fall in the age group of 30-40 years followed by 20-30 years (16%), less than 10 years (15%), 40-50 years (14%) and 10-20 years (11%). It shows that this is the age when one can exert his skill, talent, on one hand, and seems to be motivated to face any challenges in building her career, on the other. Again, the survey data reveals that significant numbers of women respondents (11+15 = 26%) are children and they are involved in fishing or fishing related activities instead of spending time in school which shows a key socio-economic perspective of the fishing community. It appears that there is potentiality of development of family based enterprises which will open up job opportunities for all family members.

The table portrays that most of the respondents are illiterate and the percentage is 46%. The education level of the women fishers ranges from 38% in the “can write name only” section which is followed by 13% - up to class V, 2.50% - up to SSC and only 0.71% - above SSC. The survey data reveals that 280 total respondents have 1811 total family members with average family size of 6.47, which is higher than national Average – 5.26. This shows that the respondents have fairly large families which also prove that family planning campaign of the government is not that successful in the study areas. Again, such large family size, in turn, causes lower rate of earning, low rate of saving and ultimately they lead a poor livelihood.

As far as the marital status of the respondents goes, Table- 1 shows that 38.57% of the respondents are married, 26.43% of them are widow, 13.57% are divorced, 12.86% are unmarried and 8.57% are old. Reportedly, married women live a more secured life than widows and divorced women of the coastal fishing communities. Thus, social network through marital linkages may help one to choose alternative income generating activities from their socio-economic environment.

Occupations of the Women Respondents

Occupation is a key element of demography, which has significant impact on the socio-economic condition of the individual. Optimum occupation can lead to different income generating activities and thus facilitate better livelihood. In this background, the data collected regarding the occupation of the sample respondents is shown in Table- 2.

Table- 2: Distribution of the Respondents by Occupation

Occupation	Frequency	Frequency in %
Fish Processing	218	77.86%
Weaving	152	54.29%
Poultry farming	136	48.57%
Yard Farming	104	37.14%
Dairy	69	24.64%
Bamboo works	120	42.86%
Daily Labor	64	22.86%
Housewife	34	12.14%

Source: Field Survey

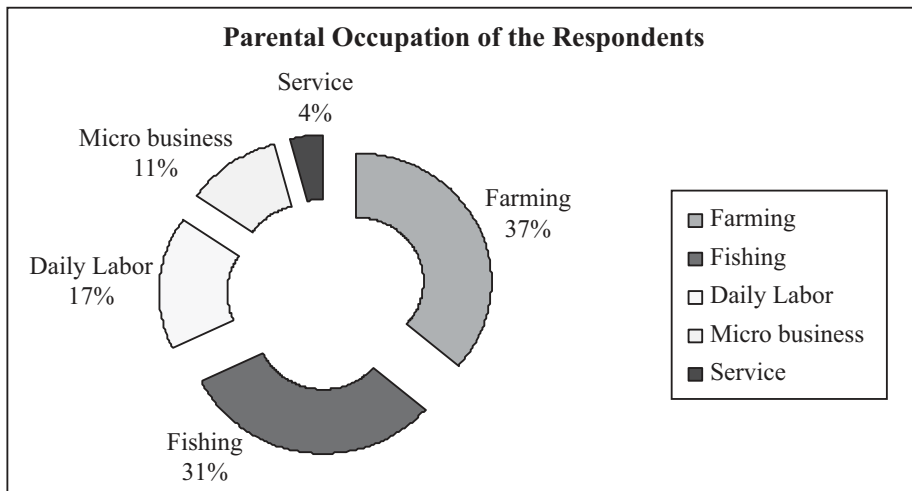
N.B. Respondents answered more than one option

Table- 2 states that 78% of the respondents are involved in fish processing followed by weaving – 54%, poultry - 49%, farming - 37%, Dairy - 25%, Bamboo Works - 43%, Daily Labor – 23%, Housewife – 12%. Therefore, it is evident that the women are highly involved with different types of activities instead of being housewives only.

Parental Occupations

Demography seldom stresses importance of occupational status of the parents of the respondents in endeavors to verify the nature of the choice of occupation by the respondents. But on many occasions, the pursuit of occupations by individuals is determined in the line of the professional background that their parents used to hold. In this regard, we were interested to know about the parental occupation of the sample respondents and data collected is shown in Figure- 1.

Figure-1: Parental Occupations of the Respondents



Source: Field Survey

From Figure- 1, we find that the main parental occupation was farming (36.43%) whereas other significant parental occupations were fishing (31.43%), daily labor (16.79%), and micro business (11.43%). Thus it proves that professional migration has been prevailing in the study areas. It is reported that the main reasons for such professional migration from farming to fishing is due to land erosion (due to tide) in the coastal areas, due to seasonal effect on crops i.e. mainly paddy and also due to the lack of availability of fertilizer at affordable prices.

Role of Women in Drying Fish

Millions of women, in rural Bangladesh, are suffering from poverty, illiteracy, unemployment and malnutrition. They play a significant role in the dry fish industry of the coastal areas of Bangladesh though they suffer from malnutrition due to lack of protein. In this connection, we were interested to know about all possible activities done by the women workers in producing dry fish. It has been reported that huge numbers of women workers are engaged in different types of activities in producing dry fish. These activities are as follows –

Drying: Drying is the key activity in the dry fish industry which is usually done either by the female fishers or by the wives and children of the male fishers. It has been observed that the sample respondents dry the fishes caught by their male counterparts on the roof (mostly made by hay; few of them are made by tin) and / or in the yard of their houses. They spread the caught fishes on a mat and then dry them. The respondents opined that they do not follow any modern mechanism for drying the fishes. They usually dry their produces manually and even they seldom use cover to protect the fishes from dust and other dirt. This definitely has negative impact on the quality of the dry fish.

Sorting and Grading: Sorting is another mentionable activity done by the women fishers in the study areas. The sorting of fishery products into standardized grades is a facilitating marketing functions. Grades and Standards constitute an agreed-upon market language that can greatly simplify marketing processes and reduce marketing costs. Graded goods conform to the different quantities expected by different consumers according to their paying capacity or satisfaction expected. It also helps in streamlining handling and transporting fish produces otherwise different grades of different quantities brought from different fishermen have to be transported separately (Amarchand and Varadharazon, 1979). It has been observed that the two basic bases of grading fishes are size and freshness. It has also been reported by the respondents that sometimes the fishes which are about to be rotten are separated and dried and then sold as dry fish. But it has been observed that the fishers suffer from a lack of scientific techniques in sorting and grading which hinders the efficiency of the dry fish marketing system.

Packaging: Packaging is the task of wrapping and folding materials to protect the same from the surroundings. Packaging is needed to accumulate and transport fish from catching point to processing yard to different markets. The functions of packaging are firstly to contain adequately a convenient quantity of the product to

protect it in transit and to aid in its safe delivering to the customers (Francise, 1980). It has been reported that the sample respondents generally use bamboo-made baskets, plastic bags and jute bags for packaging fishes to transport them to the processing or drying yard. Once the fishes are dried then they are packaged in different plastic and jute bags to be transported to the market.

Transportation: The movement of farm products from where they are produced to consumption centers creates place utility (Kohis and Uhi, 2002). In case of dry fish industry, the fish catching places are away from the drying places. Again the primary markets where the dried fishes are sold first are also away from the drying places. Thus transportation plays a significant role in the producing and marketing of dry fish. It has been reported by the sample respondents that the women fishers and other family members walk a long way and bring the caught fishes to their home yards by themselves. The dried fishes are transported to the primary market to sell to the local middlemen like Faria, Mohajon, etc. But unfortunately, a lack of adequate and good means of transportation between the areas of fish catching and the centers of their marketing hinders the movement of fish produce and makes primary marketing costly (Rahman, 1973). It has been reported that the various modes of transport are used in this regard among which van, rickshaw, boats, etc. are worth mentioning,.

Storing: Storage refers to the holding of procedures under proper conditions between the time of their production and their final sale (Fredrick 1940). Storage marketing function is associated with the creation of time utility (Kohis and Uhi, 2002). Storing is another indispensable function of the fish marketers and the fishers as well. It has been reported that the sample respondents store the dried fishes in pots of different sizes and also in wooden boxes and plastic bags before they are transported and sold to the market or before the middlemen buy them from the fishers. Sometimes they tend to dry fish when they catch a huge amount of fishes and all of the fishes can not be sold within a day. Some of the excess fishes are also stored with ice by the fishers and then sold or dried later on.

Cleaning: When the fishers catch fish then lots of dirt, clay and things are mixed with the fishes which are cleaned by the women workers and female family members of the male fishers. They clean the fishes before sorting, drying and selling them to market.

Salting: Salting is an indispensable function of fish drying. Once the fishes are cleaned, sorted and graded then they are mixed with salt before drying. The

women fishers and other family members usually conduct this function. They buy generic salt from the local market and mix with fishes so that the fishes do not get rotten overnight because it takes a few days to dry the fishes properly.

De-Germinating: The caught fishes are usually sorted and graded and cleaned in the yards of fishers in a manual and non-scientific way. Again the fishers also dry the fishes in a traditional manner. As a result the fishes need to be de-germinated to be dry fish of improved quality. The women fishers usually de-germinate the fishes with some specific chemicals.

Among all these activities, the researchers were interested to know about which activities were mostly done by the women fishers. The survey data were processed in this regard to find out the rank average of different roles played by the women fishers in drying fish, which is shown in Table- 3.

Table- 3: Role of women in Dry Fish Industry

Activities/Role	Respondents' Ranking or Factors			Weighted Score	Rating Percent	Rank
	No.1	No.2	No.3			
Sorting & Grading	177	141	33	846	18.87	2
Drying	178	144	35	857	19.11	1
Cleaning	162	109	87	791	17.64	3
Packaging	22	98	188	450	10.04	5
Transportation	18	41	140	276	6.16	7
Storing	20	76	176	388	8.65	6
De-germinating	14	36	77	191	4.26	8
Cutting	15	33	61	172	3.84	9
Salting	41	96	198	513	11.44	4
Total				4484	100.00	

Source: Field Survey

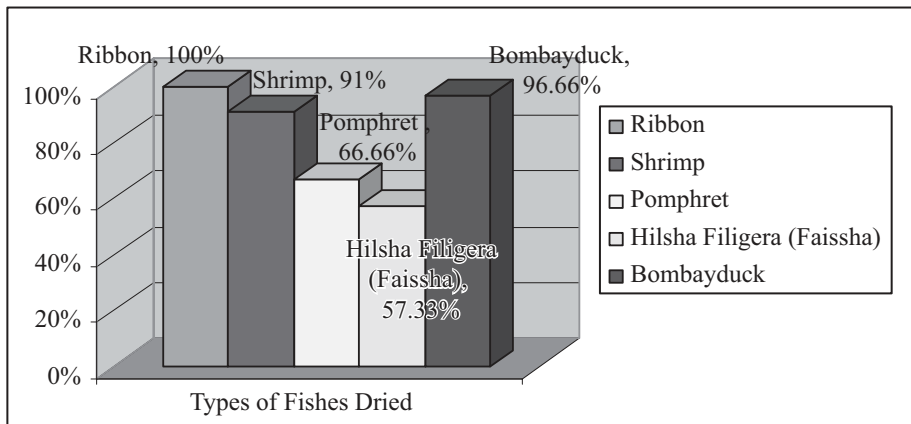
N.B. The respondents mentioned more than one activity as the key role of women in drying fish and in some cases they didn't mark all the three role according to preference. The ranking factors indicate 3,2, and 1 respectively. The overall ranking has been made on the basis of the percentage of the weighted scores for each activity.

Table- 3 shows that women workers are engaged with nine different types of activities in drying fish. Based on the rank average of these eleven activities, the sequence is - Drying (rank 1), Sorting and Grading (rank 2), Cleaning (rank 3), Salting (rank 4), Packaging (rank 5), Storing (rank 6), Transportation (rank 7), De-germinating (rank 8), and Cutting (rank 9). Therefore, most of the women workers in the study areas are involved in drying fish followed by sorting and grading, cleaning, salting, and the likes. It is reported that some times all the family members are doing these activities together i.e. husband catch the fish and wife sort, clean, salt and dry the fish along with their children. Often the marginal women workers, widows and old workers depend on their children or engage themselves with their neighbors and do the same.

Types of Fishes Dried by the Respondents

A number of fishes are usually dried by the dry fish women workers during the peak season. Ribbon, Bombay duck, Shrimp, Pomphret, Hilsha Filigera (local name is Faisha) are worth mentioning among those. Figure-2 shows the types of fishes dried by the sample respondents.

Figure 2: Types of Fishes Dried



Source: Field Survey

Figure- 2 shows that the main fish dried is Ribbon (100%) followed by Bombay Duck – 97%, Shrimp – 91%, Pomphret – 67%, and Hilsha Filigera (Faisha) – 57%.

Who do the Respondents Sell Dry Fish to?

Selling is a monetary transaction that involves at least two parties. It is one of the oldest professions (Kotler, 1999). Though modern selling is a complex process and involves a number steps, but selling function of the dry fish processors in coastal areas is much easier as it does not include all the steps of modern selling like prospecting & qualifying, pre-approach, approach, etc. Rather in case of dry fish selling by the women dry fish workers in the coastal areas, usually different parties come and visit the yards of the respondents and buy dry fish. In this backdrop, we were interested to know about the parties to whom the respondents sell their produces. Table- 4 shows the information regarding the parties to whom the respondents sell fish.

Table- 4: Table showing the parties to whom the respondents sell fish.

Category	Frequency	Frequency in %
Aratder	251	89.64%
Wholesaler	205	73.21%
Processor	230	82.14%
Dadondar	246	87.86%
Consumer market	90	32.14%

Source: Field Survey

N.B. Total frequency in percentage is more than 100 as the respondents answered more than one option.

The Table- 4 shows that the major parties to whom the respondents sell the dried fish are aratders, wholesalers, processors, dadondars and directly in the consumer market. It also shows that 90% of the respondents sell their dried fish to aratders, followed by 88% to dadondars, 82% to processors, 73% to wholesalers, 32% to consumer market. It is reported that often the aratders, dadondars and processors are the same persons and control the whole marketing channel of dry fish. Thus it is evident that dadondars or aratders are the key interest group and principal beneficiary of the dry fish marketing chain.

IGA of the Respondents and Income Derived from the Activities

Income generating activities are the prime determinants of level of income. Income is the important ingredient of purchasing ability and thereby fundamentally affects livelihood of the target people. It is generally observed that increase in income is followed by subsequent rise in demand and search for quality, which pave the way towards better livelihood. Again, the income generating activities vary based on gender and season. In this connection, we were interested to know about different IGA in peak season and lean season for male and female fisher and also income derived from such IGAs, which is shown below–

Peak Season: Peak season in fishing industry basically refers to the dry season which lasts from October to March. During peak season the fishers are able to dry fish at their highest level. During this season male principal activity is *Fish catching* and their average income is 2985.72 tk. On the other hand, female principal activity is *Fish processing & drying* and their average income is 1611.90 tk.

Lean Season: Lean season refers to the rainy season when the fishers really struggle to dry fish due to heavy rainfall. It lasts from April to September and this period of the year is also prone to natural calamity like cyclones, floods, etc. During lean season usually the income is low compared to peak season and both male and female fishers pursue different activities for their livelihood. Information in this regard is shown in Table- 5.

Table- 5: Activities of women respondents during lean season

Activities	Frequency in %
Poultry	52.38
Weaving	38.09
Bamboo works & Handicrafts	33.33
Gardening & Plantation	28.57
Dairy	23.67
Fish Culture	8.52

Source: Field Survey

N.B. Respondents answered more than one option

From Table- 5, it is evident that the principal income generating activities of the female fisher in lean season is poultry (52%) followed by weaving 38% and Bamboo works 33%, etc. The average male income during lean season is 1645.23 tk. whereas average female income is 1061.90 tk.

Working Hours & Wage Structure of Women in Fish Processing

Wage is the monetary value of labor. In the coastal fishing community, wage is calculated based on both per day and overtime hours. Table 6 shows the working hours and wage rate for the sample women dry fish workers.

Table- 6: Working hours and wage rate of the respondents

Time	Total Hours	Total Wage
1. 7 am – 6 pm	12 hrs	50 tk.
2. 6 pm – 12 midnight	6 hrs.	50 tk.
3. 12 midnight – 3 am	3 hrs.	50 tk.

Source: Field Survey

From Table- 6, it is confirmed that the regular wage of the women dry fish workers is tk. 50 per day only, which is very poor and frustrating as well. The overtime rate is also very poor for the first 6 hours, it is tk 50 only and even during the midnight, the rate is also only tk 50. The usual trend of working hours of the respondents is shown in Table- 7.

Table- 7: Distribution of the Respondents by working hours

Category	Frequency	Frequency in %
7 am - 6 pm	220	78.49%
6 pm - 12 midnight	105	37.53%
12 midnight - 3 am	68	24.18%

Source: Field Survey

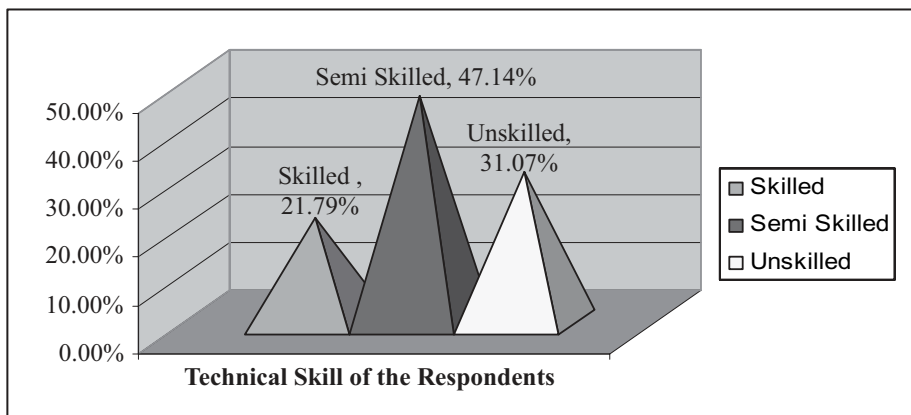
N.B. Total frequency in percentage is more than 100 as the respondents answered more than one option.

Table- 7 proves that 78.49% of the respondents work in the usually working hours i.e. from 7am to 6 pm. 38% of them work from 6 pm to 12 midnight whereas 24% work after midnight from 12 am to 3 am.

Technical Skill of the respondents in drying fish

Skill is one's capability of carrying out a specific task. Skills are learned and developed with experience, training, and practice. Technical skills are those involved in making a product or providing a service (Skinner and Ivancevich, 1992). Likewise, in fish drying, skill of the workers is an important determinant of the quality of the dried fish. Data collected in this regard is shown in Figure- 3.

Figure 3: Technical Skill of the Respondents



Source: Field Survey

From Figure- 3, it is evident that most of the respondents (47%) are semiskilled. 31% of them are unskilled whereas only 22% are skilled in drying fish.

Training of the Workers

Training is a continual process of helping workers perform at a high level (Skinner and Ivancevich, 1992). It used to be thought that 'training was like measles' – a dose in one's youth was sufficient for life (Jewel, 1998). It may occur in workplace or at special training facilities. It may be conducted on the job or off the job. In this connection, we were interested to know whether sample respondents got any on off the job training from any institutions. Data in this regard is shown in Table- 8.

Table- 8: Distribution of the sample respondents based on formal training attained

Training	Training	
	Frequency	Frequency in %
Yes	34	12.14%
No	246	87.86%

Source: Field Survey

From Table- 8, we see that only 12.14% of the respondents got training on their profession i.e. in drying fish. It is reported that basically the NGOs arrange different types of off the job training program for the fisher folk in general and dry fish workers in particular.

As the NGOs offer off the job training, we were interested to know about the nature of off the job training they offer from the 34 respondents who got the off the job training of the NGOs. The results have been shown in the following Table- 8 (a).

Table- 8 (a): Distribution of sample respondents based on nature of training attained from NGOs

Off the Job Training	Frequency (out of 34)	Frequency in %
Lecture Session	22	64%
Group Discussion	14	41%
Counseling	17	50%
Simulation Technique	8	23%

Source: Field Survey

N.B. Respondents answered more than one option.

Table- 8 (a) shows that among the 34 respondents who got off the job training from the NGOs, 64% of them attended the lecture session, followed by counseling 50%, group discussion 41% and simulation technique 23%. Reportedly, the dry fish workers also attained some on the job training by their predecessors or supervisors and these were obviously informal. In this connection, we were interested to know

about the nature of training attained by the respondents, which is shown in Table-9.

Table- 9: Distribution of respondents by the nature of informal on the job training attained

On the Job Training	Frequency	Frequency in %
Apprenticeship Training	129	46%
Assistantship	98	35%
Job Rotation	64	22%
Part Time Assistance	106	37%

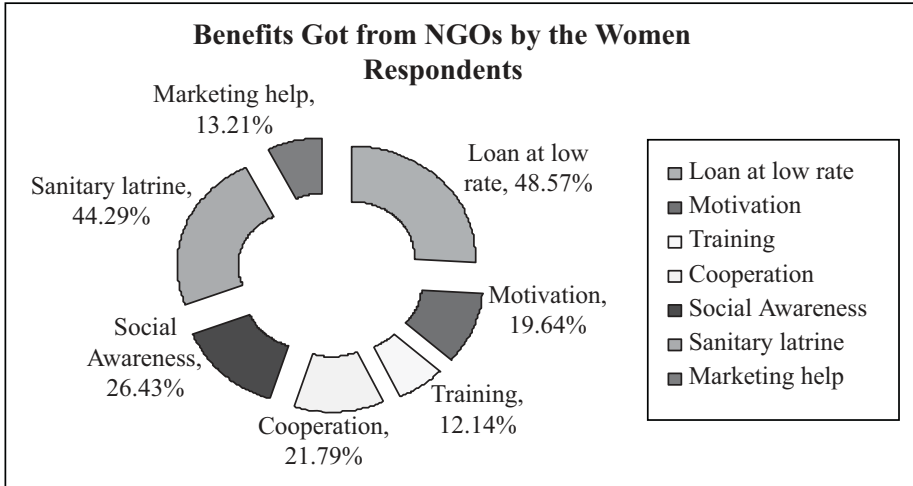
Source: Field Survey

N.B. Respondents answered more than one option

Table- 9 evidences that the women dry fish workers often attain informal on the job training among which the most popular method is apprenticeship training given to 46% followed by part time assistance 37%, assistantship 35% and job rotation 22%.

Attitudes towards NGO

NGOs help in various ways for the better livelihoods of the fishing communities. A number of NGOs operate in the study areas among which COAST, CODEC, BRAC are worth mentioning. Besides, Grameen Bank's operation is also significant in the study areas. Attitudes towards NGO is positive, because NGOs render the following benefits. They provide collateral- free micro credits, undertake social awareness program, provide technical assistance, conduct training programs, provide sanitary latrine facility, infrastructural help, marketing help, etc. In this regard we were interested to know about the nature of benefits that respondents got from the NGOs, which is shown in Figure- 4.

Figure 4: Benefits got from NGOs

Source: Field Survey

From Figure- 4, we see that the main benefit that the respondents attained from NGO is 'loan at low rate' weighted to 48.57% followed by sanitary latrine 44.29%, social awareness program 26.43%, cooperation 22%, motivation 19.64%, training 12.14%. It is reported that from NGOs they often get collateral- free loan at low rates but still the rate is higher than that of formal sources like formal commercial bank. Good to note that the rate is lower than that of the rate of Dadondars. This is a key benefit for the women dry fish workers as they don't have any access to the formal institutional sources. Besides, they got cooperation from NGOs during the natural disaster and also during their family problems. Moreover, NGOs undertake different motivational and social awareness programs for the respondents in the study areas.

Problems of Women Fishers

The UNDP Report (UNDP Report, 1994) stated that having independent income is the most important source of empowerment for rural women. This is quite true for coastal fisher women as they are also poor and distressed. They are facing a number of problems related with social, economic, political, technological matters. Again efficient marketing is essential for the growth and development of agriculture and industry. Data collected in this regard is shown in Table- 10.

Table- 10: Table showing the Problems of the Women involved in Drying Fish

Problems	Frequency in %
Social Problems:	
a) Lack of Social Security	98.88%
b) Lack of Sanitation	66.67%
c) Lack of Education	88.66%
d) Early marriage	72.95%
e) Gender Discrimination	50.55%
Economic Problems	
a) Lack alternative IGA	62.55%
b) Lack of Capital	87.86%
c) High Interest Rate	82.62%
Infrastructural Problems	
a) Lack of transport facilities	68.88%
b) Lack communication facilities	56.60%
c) Lack of power supply	68.90%
d) Lack enough school	55.67%
Marketing Problems	
a) Poor Bargaining Capacity	92.86%
b) Absence of adequate marketing information.	84.68%
c) Lack of adequate fishing equipment.	71.20%
d) Absence of logistic support for efficient storage & distribution	65.00%
e) Lack of modern communication facilities	78.52%
f) Lack of easy access to credit	100.00%

Source: Field Survey

N.B. Respondents answered more than one option

Table- 10 shows that the sample respondents are facing social, economic, infrastructural, and marketing problems. Among the problems, lack of easy access to credit (100%), lack of social security (98.88%), poor bargaining capacity (92.86%), lack of education (88.66%) are the most acute problems. The next serious problems of the women workers are lack of capital (87.86%), Absence of adequate marketing information (84.68%) and high interest rate (82.62%) are worth mentioning. Due to such acute problems, the sample respondents are deprived of their basic rights and timely information and suffer from a poor livelihood.

Policy Implications

The fisheries are predominantly perceived as the activity of men. Despite the fact that there are difficulties for women to be involved in fisheries, there is a vast potential for women to contribute meaningfully in the fisheries sector. The following are the few strategy recommendations to ensure the participation of women in the production, processing and marketing of dry fish in a more befitting manner with a view to making certain the livelihood security of the women fisher folk in general and sample women fishers in particular.

Access to Credit

The women fishers are marginalized and do not have access to traditional bank credit. Adequate financial support needs to be ensured to them so that they do not fall prey to marketing intermediaries. Moreover complexity of processing bank loan needs to be simplified so that concerned fisherman can get benefit of institutional financial market.

Development of Communication and Transport Facilities

The women fishers in the coastal Bangladesh have neither access to modern communication system nor do they enjoy smooth transportation facilities. Even the private communication enabling companies like telecommunication do not have infrastructure in coastal areas. As a result, they do not have up to date information regarding natural disasters like cyclones, tidal bores etc. which creates lots of suffering in their life. Therefore, the fishers at coastal areas should have access to modern communication system.

Access to Improved Technology

Coastal communities depend on indigenous technologies in catching, cutting, sorting and processing dry fishes. The unprivileged fishermen may be given preferential access to improved technology through training and skill development.

Basic Infrastructural Development

The Government should take proper steps for the development of basic infrastructures for the coastal inhabitants so that they can enjoy education, safety, health and hygiene factors.

Ensuring Fair Price for the Harvesters

Often the fish harvesters are exploited by the money lenders (dadondars) as the dadondars capitalize on the marginalized nature of the fishing community and force them to sell their produces at low prices as they lend them money. To get rid of such kind of vicious empire of the dadondars in the coastal areas, the Government should take proper steps through legal protection and/or through ensuring credit facility to the fishers without any collateral.

Collaboration among Government Organizations, and NGOs

Different Government organizations like the Ministry of Fisheries, Local Govt. Institutions, etc. along with different local and international NGOs should initiate a collaborative approach to creating social awareness in coastal areas regarding the contribution and significance of the fishing community. The NGOs should organize training for the harvesters to improve their skills as to scientific harvesting, processing and marketing through spread of knowledge, skills, technical know-how.

Involvement of women in all development endeavors including agricultural is seen as a priority in development paradigm. Again marine dry fishes are important source of protein. Its edible parts provide protein 70-80%, fat 2.5%, minerals 10% (Calcium, phosphorus, iodine etc.). It is tasty, cheaper, and available and is a favorite food item of middle class families. Moreover, special emphasis should be given to ensure participation of women in fishery development activities so as to raise the family income leading to the better standard of living. In fact suitable profession for the women in fishery sector will be fish cleaning, cutting, drying, salting, grading, packing and the likes.

Limitations and Future Research Directions

The study has a number of limitations. It unearths women's contribution in dry fish processing and marketing from coastal Bangladesh. Future research may focus on how women's involvement in dry fish processing and marketing can aid their poverty alleviation. Secondly, sample study areas are concentrated in coastal areas of Bangladesh and the findings of the study may differ from the situation of inland fishing communities. Therefore, future research may be pursued to explore whether women's status and contribution in dry fish processing and marketing is different for inland fishing context from that of coastal context. Last but not least,

this study is just an exploratory research; hence it does not show any causal relationship between different social phenomena of coastal fishing communities. Future research may be pursued in this direction focusing on cause and effect relationship between different social phenomena involved in this sector. For example, it may be worthwhile to conduct a study focusing on causes of marginalization of women fishers and consequences of different Government and NGO initiatives in eradicating their poverty.

References

- Alam, K. (1996). Two Fishing Villages of Bangladesh: A community Study, PhD Dissertation, Department of Development and Planning, Aalborg University, Denmark. (Bangla translation of this Ph D thesis has been published by the PRIP Trust, Dhaka in September 1998).
- Amarchand, D., & Varadharazon, B. (1979). *An Introduction to Marketing*, New Delhi: Vikas Publishing House Private Ltd.
- Azam, K. (2002). Fishermen Community of Kuakata, Bangladesh: Fisheries Activities and Quality of Dried Fish, SUFER Project (DFID-UGC), Khulna University, 2.
- Balachandran, K. K. (2001). *Post-harvest Technology of Fish and Fish Products*, Daya Publishing House, Delhi-110035, 77.
- BBS, September. 1998. Statistical Year Book of Bangladesh, Bangladesh Bureau of Statistics Division, Ministry of Planning, Government of the People Republic of Bangladesh, Dhaka, Bangladesh.
- Blowfield, M. E., & Haque, N. (1996). Ties Between Marketing and Credit in Coastal Bangladesh __ Safety Net or Debt Trap, PHF News, Issue No. 6, Chennai, India.
- FAO/ BFDC. 1972. Report on Marine Fishing Village Identification Survey in Bangladesh; 1967-1968, prepared by the Statistical Cell of the Bangladesh Fisheries Development Corporation, Bangladesh.
- Flowra, F.A., Sen, S. C., Galib, S. M., Kamal, M. M., & Islam, S. N. (2010). Dry Fish Marketing in Rajshahi And Thakurgaon, Bangladesh, *Int. J. Bio Res*, 1 (5), 13-16.

- Francis, G. K. (1980). *Modern Management*, New Delhi, Sultan Chand Company Ltd.
- Frederick, J. H. (1940). *Public Warehousing*, New York: The Ronald Press Company Quoted in M. A. Mannan, *Principles of Marketing*, Dhaka, Royal Library.
- Government of Bangladesh. (1997). Ministry of Fishery and Livestock, GOB.
- Hossain, M. (1991). *Agriculture in Bangladesh: Performance Problems and Prospects*. The University Press Limited, Dhaka, Bangladesh.
- Jewell, B. R. (1998). *An Integrated Approach to Business Studies*. Third Edition, Longman.
- Kotler, P., & Gary, A. (1999). *Principles of Marketing*. Eighth Edition, Prentice Hall India.
- Kotler, P. (1992). *Principles of Marketing*. New Delhi, Prentice Hall of India, 62.
- Kleih, U. (2001). *Poverty Alleviation and Livelihood Security Among the Coastal Fishing Communities-Market and Credit Access Issues*, Workshop presentation, 27-28, Chittagong, Bangladesh.
- Kohis, R. L., & Joseph, N. U. (2002). *Marketing of Agricultural Products*, Ninth Edition, Prentice Hall India, 318.
- Nowsad, A. K. M. A. (2002). *Review of solar drying techniques used in the fish drying*. GOB / UNDP / FAO Project, BGD/97/017.
- Nowsad, A. K. M. A. (2003). *A new method of fish drying in a solar dryer* (in Bengali). Food and Agricultural Organization of the United Nations. BGD/97/017.
- Nowsad, A. K. M. A. (2005). *Low Cost Processing of Fish in Coastal Bangladesh. Empowerment of Coastal Fishing Communities for Livelihoods Security*. GOB/UNDP/FAO Project: BGD/97/017:5/2005, 73.
- Nowsad, A. K. M. A. (2007). *Participatory Training of Trainers: A New Approach Applied in Fish Processing*, Bengal Com-print, 68/5, Green Road, Dhaka, Bangladesh, 328.
- Nwabueze, A. A. (2010). The Role of Women in Sustainable Aquacultural Development In Delta State. *Journal of Sustainable Development in Africa*, 12, 5, 284-293.

- Rabey, B. (1984). The year 2000: A Demographic Profile of Consumer Market, *Marketing News*, May, 25, 8.
- Rahman, K. M. (1973). *Development of Agricultural Marketing in Bangladesh*, Comilla: Bangladesh Academy for Rural Development, 64-65.
- Reza, S. M., Kamal, M., Akteruzzaman, M. & Islam, M. N. (2005). Presentation of drying activities of marine fishes in the coastal region of Bangladesh. *Bangladesh J. Fish.* 27- 46.
- Shalesha, A., & Stanley, V.A. (2000). Involvement of rural women in Agriculture: An innovation approach Naga. *The ICLARM Quarterly*, 23(3), 13 – 17.
- Skinner, S., & Ivancevich, J. M. (1992). *Business for the 21st Century*, Irwin. UNDP Report. 1994, 19.

The Mediating Role of Organizational Environment in Faculty Talent Retention: A Case Study in Bangladesh

Mohammad A. Ashraf*

ABSTRACT

The objective of this paper is to analyze the mediatory role of organizational factors linking the human resource management practices and talented employee retention. To attain this objective, the paper employs the analytical technique provided by Barn and Kenny (1986). Human resource matrix is taken as a function of four variables such as compensation package, person organization-fit, challenging opportunity and training and development. Organizational factors also involve four variables such as working environment, organizational culture and policy, leadership behavior and teamwork relationship. The experiment has been accomplished in a private higher academic environment in Bangladesh collecting data from 54 talented faculty members. The results show that organizational environment plays an important mediatory role in linking human resource management and talent faculty retention. Thus, the findings of the study imply that organizational variables are at least equally important as important as the human resource variables in order to retain the talent retention in an organization. It is also important that this finding will not only contribute to formulate the retention strategy for an academic institution, but also for any non-academic organizations as well.

Keywords: Human Resource Management, Organizational Culture, Faculty Talent Retention, Mediating Effect

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Introduction

The wants and needs of a good job candidate would seem to follow logic. It is what just about every worker craves: competitive pay, solid benefits, a healthy work environment and a chance for raises and promotions (Cassano, 2009). Yet, the best job candidates look for something else and it is the first thing that ought to be offered to them. The best candidates want assignments and responsibilities that match their talent and experience ((Martin and Schmidt, 2010; Grebb, 2008; Goretsky and Pettry, 2007). In attracting and retaining talent today providing competitive compensation package is necessary but not sufficient (Harvey, 2009). Assuming organizations provide good wages and other benefits, proper training and development along with worthy leadership they will either win or lose the war for talent on behavioral culture and policy nurtured in an organization. Practically speaking, a positive and engaging organizational behavior must be viewed and marketed as an integral part of the talent retention (Benest, 2008).

Despite the current economic downturn globally, “talent crunch” continues (Yamamura, Birk and Cossitt, 2010). Manpower Inc.’s 2009 Talent Shortage Survey reported that 30 percent of employers worldwide had difficulty finding qualified candidates for open positions, citing “a lack of suitable talent”. Although more candidates might have applied for positions than in prior years, most did not have the particular skills needed for the job. Manpower predicted that the talent shortage would become “more acute and more widespread” over the next ten years (Yamamura et al., 2010).

In this increasingly global competitive market environment, no function is under greater scrutiny than the human resource function in which organizational behavior posits to be an important mediating component of Human Resource Management (HRM). Among the HRM dynamics, compensation is an important issue that has been proliferating since the early 1900s by the Scientific Management theorists. Taylor, for example, examined the issue of compensation and performance-based pay as one of the primary management tools in controlling employees behavior as means of increasing organization’s productivity and reducing employees turnover (Hausknecht, Rodda, Howard, 2009). Other factors of HRM such as training and development and leadership behavior are equally vital for talented employee retention.

Employee talent retention, particularly in the private higher education sector in Bangladesh bears paramount importance because of immense surplus in demand

and huge shortage in supply of talented faculty ((Mannan, 2009; Heinen and O'Neill, 2004). This predicament becomes worse when private universities witness dramatically increasing growth in Bangladesh over the last two decades. Besides, due to a short life span of these universities, there has been a serious lack in the nurturing and development of healthy university culture and policy as well. For these reasons, the attrition rate of faculty members in private universities is much higher compared to public universities of Bangladesh and faculty retention is, thus, regarded as a core challenge faced by private higher education sector of this country (Ashraf, 2009). Realistically, recruitment, development and retention of faculty members are so one of the most studied research topics in organizational psychology (Stewart and Brown, 2009) as well as in today's competitive knowledge-base environment, where human capital is considered to be a key resource for the overall success of the business (Ashraf and Joarder, 2009; Trotman, 2004).

Objectives of the Study

The overall objective of this study is, therefore, to ultimately gain an understanding of factors that might impact on the faculty talent retention practices in a private university environment. To achieve this objective, a specific theoretical framework has been formulated for this study. The framework uses a set of variables, referred to as dependent variable, independent variable and a mediating variable. However, the specific objectives are as follows:

1. To investigate the direct influence of HRM practices on the faculty talent retention in a private university.
2. To examine the mediating role of organizational culture between HRM and faculty talent retention in a private university.
3. To make some recommendations for improving the faculty talent retention in a private academic environment

Context and Conceptual Basis

During the last two decades of the twentieth century human resource practices witnessed myriads of contemporary trends starting successively right from competitive advantage to training and development, cross training and job rotation, job enrichment and empowerment, teambuilding and leadership

development, flexible work schedules, alternative workplaces and telecommuting, temporary and part-time employees, employee compensation, challenging task analysis, work-environment analysis and ergonomics. By and large, the hub of this rapid transition is consolidated with key employee attracting and retaining to attain the company goal of ultimate success in the competitive global environment (Hausknecht et al., 2009). By the term of key employee, it means the talent pool which makes differences in business competition focusing on a new way to calculate economic profit ((Barber and Strack, 2005), such as:

$$\text{ECONOMIC PROFIT} = \left[\frac{\text{ROI}}{\% \text{ of Return on Investment}} - \frac{\text{COC}}{\text{Cost of Capital}} \right] \cdot \frac{\text{IC}}{\text{Invested Capital}}$$

Replace "return on investment" with its equivalent, "earnings divided by invested capital":

$$= \left[\frac{\text{E/IC}}{\text{Earnings/Invested Capital}} - \frac{\text{COC}}{\text{Cost of Capital}} \right] \cdot \text{IC}$$

Use algebra to arrive at:

$$= \frac{\text{E}}{\text{Earnings}} - [\text{COC} \times \text{IC}]$$

Replace "earnings" with its equivalent, "revenue minus personnel costs minus supplier costs minus depreciation";

$$= \frac{\text{R}}{\text{Revenue}} - \frac{\text{PC}}{\text{Personnel Costs}} - \frac{\text{SC}}{\text{Supplier Costs}} - \frac{\text{D}}{\text{Depreciation}} - [\text{COC} \times \text{IC}]$$

Use algebra to factor in a key people-oriented element, the number of people employed and introduce two metrics, namely, employee productivity and average personnel cost per person employed:

$$= \left[\frac{\text{R-SC-D-[COC} \times \text{IC]}}{\text{P}} - \frac{\text{PC}}{\text{P}} \right] \cdot \text{P}$$

Employee Productivity Avg. Cost/ Person People Employed

The result is a calculation of economic profit that is meaningful to people-intensive businesses:

$$\text{ECONOMIC PROFIT} = [\text{EPR} - \text{ACP}] \cdot \text{P}$$

Employee Productivity Avg, Cost/Person People Employed

This new people-oriented equation replaces the capital-oriented one. Employee productivity corresponds to capital productivity and the average personnel cost per person employed corresponds to the cost of capital. The number of people employed corresponds to the amount of invested capital (Barber and Strack, 2005).

This new algebra of economic profit highlights human resources at the center stage which can be influenced by four variables namely compensation package, person-organization-fit, challenging opportunity and training and development (Ready, Hill and Conger, 2008; Frank, Finnegan and Taylor, 2004). Similarly, organizational factors, which can have mediated to influence the talent retention practices, are categorized as working environment, company culture and policy, leadership behavior and teamwork relationship (Kontoghiorghes and Frangou, 2009; Chew, 2005). Altogether four HR and four organizational factors have been identified which affect the employee talent retention.

Compensation Package

Compensation is the combination of all cash incentives and the fringe benefits mix that an employee receives from a company, which constitutes an individual's total compensation ((Chiu, Luk and Tang, 2001; Shaw, Gupta and Delery, 2002). A total compensation package promotes high levels of individual performance as well as commitment to a company's overall success ((Huselid, 1995; Younger and Smallwood, 2008). In addition to highly competitive package, benefits that start on the first day of employment and other perks such as tuition reimbursement, a retirement savings plan, casual dress code and state-of-the-art fitness and recreation programs now are huge motivating factors for talented employees (Barber and Bretz, 2000; Chiu, 2002). Today's incentives even subsume a host of on-site other conveniences which include cafeterias, post offices, day care centers, company stores, free covered parking and welfare programs of free annual health

risk assessments and clinics, flu shots, preventive care benefits and many more. “Is non-salary compensation is a motivator for every employee? For many employees, it is.” (Harvey, 2009, p. 20). Yet, the extent to which each module of a company's total rewards package motivates employees is unique to each employee talent. A talented graduate fresh out of college will certainly be motivated differently than an individual with a family who is saving for children's college educations and retirement. One should strive to provide a comprehensive total rewards package that can motivate all employees (Harvey, 2009). Although most of the previous studies focused on the level and determinants of compensation, including the relationship between compensation and performance, there is an increasing awareness that the compensation package may have a strong bearing on reducing agency cost associated with managing corporations (McDonough, 2002).

Person-Organization-Fit

One of the most influential concepts in Nobel Prize winner economist Gary Baker's work is the distinction between firm-specific human talent and general human talent based on which Groysberg, McLean and Nohria (2006) examine whether the executive's talent is a good fit with the company. Their conclusions are that companies need to look beyond corporate pedigree when choosing a new leader and that the types of an executive's skills are better indicators of a good match. Deployment of the idea of person-organization-fit matches the correct candidate to an important job or project. A good balance between providing opportunities for employees to find the right fit for their skills and respecting their personal priorities is not always possible. But as the organization hones its talent deployment strategy and approach, it becomes an easier task to provide the right job for the right employee (Sowers and Woody, 2006). Many utilities are exploring nontraditional approaches to ensure that the companies retain and capture knowledge and identify and support critical talent. Knowledge transfer programs not only connect young and experienced talent, but also offer new recruits an insight into a company's operations and help them find a place in the organization that matches their aspirations. Thus, selection of a person whose values, norms and ethics are congruent with those of an organization is necessary to retain (Netemeyer, Boles, McKee and McMurrian, 1997).

Challenging Opportunity

It's very easy to retain employees by giving them more challenging responsibilities and upgrading their designations. The biggest driver of satisfaction is not free bagels or lunches and not even your compensation, but providing more opportunities for people to do what they do best. Rebecca Ryan of Next Generation Consulting says her firm's research has found that for 20- to 40-years old, "pay may be a maintainer but it's not a retainer." (Siegfried, 2008, p.55). The new talent structure will offer the most desirable incentive of challenging opportunities that stretch people's skills and help them build up their personal market value. Skilled staffers remain hard to find and even harder to keep, but one can win them over with reconfigured jobs with challenging tasks, flexible schedules, and unusual perks (Stuart, 2009).

For all that happens under their jurisdiction, one of the biggest challenges for executives is their tough responsibility. It has to be kept in mind that emerging leaders yearn to be challenged and be given assignments that utilize their talent. This is how they learn. In a similar vein, one should take a chance let go and show trust, then there is more likely a possibility that the horizon would be surrounded with a higher performing team-stars (Takash, 2009).

Training and Development

Employees see a lack of growth opportunities in their organizations which do not provide training. Particularly, cross-training and development help retain great employees. Workers covet for opportunities to learn, grow and perform at the highest level. And they think they have a part to play in helping their employer succeed (Goretsky and Pettry, 2009). Nowadays employees see a lack of growth opportunities in their organizations—whether that is in training, promotional opportunities, pay or career advancement. So this is the time for employers to carefully examine any weaknesses in these areas that could be encouraging employee turnover (Mazur, 2009). Companies also can consider providing on-site training programs utilizing leaders from within various departments. These programs can offer insight to workers in departments across the company who may be interested in expanding their skill base. Besides, subsidized attendance at local seminars or online development programs can be arranged.

Everybody is on a different career path at various points during their life and career, but what they come for, what they need and want to have, is a

developmental model. If staffers simply talk about it and don't deliver, the employee will leave. The bottom line is that when employers identify, engage and retain people who enjoy what they do, employees will work with integrity and passion (Siegfried, 2008).

Some companies emphasize career and developmental opportunity. The best are able to turn their commitment to development into a source of advantage in recruiting, engaging, and retaining employees. We call these companies branded talent developers. The exceptional quality of our workforce is a valuable competitive edge. To build on this advantage we will strive to hire and retain the most qualified people available and maximize their opportunities for success through training and development (Younger and Smallwood, 2007).

Organizational Environment

Work Environment

Creating the right work environment is one of the best ways to attract and retain the talent (Siegfried, 2008). As the 21st Century unfolds, major changes are beginning to occur in today's workplace. A growing awareness of unavoidable demographics is creating a greater urgency for HR professionals everywhere to focus more attention and energy on retaining talented employees and keeping them actively engaged in their work (Frank et al. 2004). The flexible environment, the exciting challenges, the great brand, the fun and stimulating work environment can attract a lot of people who have exceptionally great background (Laff, 2005).

University Culture and Policy

Although much can be written about the company, the culture on which it prides itself is very much in evidence to take into consideration. Experts explain that the company culture and policy is always going to be attractive to people (Laff, 2005). Besides, employees – especially young ones – are more likely to stay at a company whose culture and values they enjoy. So, one should conduct regular “culture audits” to measure employees’ connection to the company’s work environment (Lawler, 2008).

Leadership Behavior

Great communication is vital to any organization and often communication is unclear or insufficient. This is always frustrating, but in difficult economies,

mixed signals or misread messages can lead to bigger problems. Take extra steps to make sure your communication is always consistent, crystal-clear and positive. Provide open access to senior leadership and find ways to foster two-way communication (Mazur, 2009).

Teamwork Relationship

Teams have emerged as a critical organizing structure to integrate disparate expertise and to coordinate their talent in today's high speed changing environment (Yun, Faraz and Sims, 2005). Many recent studies have highlighted the value of teamwork (see e.g. Jacobides, 2010; Ashraf and Noor, 2010) which influences organizational culture and policy (Ashraf and Joarder, 2009). Teamwork has also been proven to be a powerful tool for reducing discrimination and team members learn together and are encouraged to help each other (Parker, 2003).

Faculty Talent Retention

Retention is crucial. Successful firms have creative means for inspiring employee loyalty, such as keeping staff challenged and emotionally invested in the company's success. A recent PwC publication noted: "Rather than focusing on incentives and perks to entice and retain employees, organizations operating on this new model will hold on to the most talented workers in their permanent corps by offering them a range of professional experiences, broad functional and geographic exposure within the organization and more targeted leadership opportunities. In essence, this new talent structure will offer the most desirable incentive of all; challenging opportunities that stretch people's skills and help them build up their personal market value." (Siegfried, 2008, p.55). Many companies offer leadership training programs coupled with manager mentoring to prepare junior employees for leadership roles. It is also important to protect employees from being poached by competitors.

Research Methods

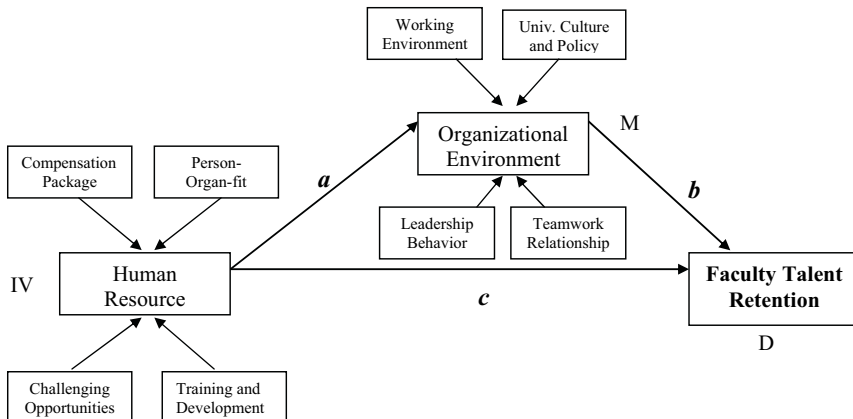
Development of Hypotheses

Although the systematic search for moderator variables is relatively recent, researchers have long recognized the importance of mediating variables (Baron and Kenny, 1986). For instance, Woodworth's (1928) study, which recognizes that an active organism intervenes between stimulus and response, is perhaps the most generic formulation of a mediation hypothesis. In general, a given variable may be

said to function as a mediator to the extent that it accounts for the relation between the predictor and the criterion. Mediators explain how external physical events take on internal psychological significance. This study uses the methodology of Baron and Kenny (1986) in detecting the mediator's role which specifies some conditions for holding the mediation-role.

In the Figure- 1, human resource compact, organization quantum and faculty talent retention are, respectively, taken as independent variable (IV), mediating variable (MV) and dependent variable (DV). According to Baron and Kenny (1986), a variable functions as a mediator when it meets the following conditions: (i) variations in levels of the independent variable significantly account for variations in the presumed mediator (i.e., Path a), (ii) variations in the mediator significantly account for variations in the dependent variable (i.e., Path b), and (iii) when Paths a and b are controlled, a previously significant relation between the independent and dependent variables is no longer significant, with the strongest demonstration of mediation occurring when Path c is zero. When the relation between independent and dependent variables is reduced to zero, it holds strong evidence for a single, dominant mediator. If the Path c is not zero, this indicates the operation of multiple mediating factors. Because most areas of psychology, including social phenomena that have multiple causes, a more realistic goal may be to seek mediators that significantly decrease the condition described in Path c rather than eliminating the relation between the independent and dependent variables altogether. From a theoretical perspective, a significant reduction demonstrates that a given mediator is indeed potent, albeit not both a necessary and a sufficient condition for an effect to occur.

Figure- 1: Research Framework of the Study



An appropriate practices of human resource management, which includes compensation package, person organization-fit, training and development and challenging work opportunities, was said to have a significant impact on organizational culture (Joo and Shim, 2010), and in turn can influence the employee retention. The ability of organization to nurture the healthy cultural structure based on proper compacts such as working environment, leadership behavior, teamwork relationship and its culture and policy, has an important effect on talent retention (May et al., 2002). However, based on this argument and the conceptual framework, the following hypotheses are developed in order to examine the mediating role of organizational culture in the faculty retention policy of the university:

H1: Human resource management is significant to influence organizational cultural structure.

Besides, Steers (1977) contended that those individuals, who are satisfied with an organizational culture, are more likely to reciprocate by developing more commitment to that organization. The research of Deshpande (1996) indicates that when employees show enhanced satisfaction with the organization and culture and policy, their commitment to stay is also enhanced. Thus, the following hypothesis is drawn:

H2: Organization cultural structure is significant to influence faculty talent retention.

However, study on employee reaction and an attitude toward organizational commitment to stay is based on the expectation that work-related outcomes were mediated by attitudes toward organizational culture and policy (Williams, McDaniel, & Nguyen, 2006). Yet, talent retention is the function of maintaining proper human resource management and healthy organizational culture (Ashraf and Joarder, 2009). Thus, a hypothesis can be drawn as follows:

H3: Human resource management practices in the presence of organizational cultural structure significantly influence faculty talent retention.

Data Collection and Sampling

This objective is achieved through primary data collected from the high caliber faculty of one of the top most private universities in Bangladesh. In the data collection process, a structured questionnaire was used in the survey. The

respondents (faculty members) were asked to what degree the faculty retention policies practiced by the university corresponded to their expectations on the 24 items of the HR factors and 24 items of the organizational variables related talented employee retention model. Here in the study, organizational behavior has been taken into consideration as the mediating variable between HR factors and talent faculty retention. The questionnaire was sent to the population size of 60 full time faculty members of a private university located in Dhaka city, of which 54 faculty members responded resulting in 90% participation rate. The convenience sampling procedure was followed for this data collection. The study used seven point Likert Scale with closed ended questions ranging from “strongly agree” to “strongly disagree”. The researcher assigned numeric values to those options ranging from 7 to 1. A total of forty eight questions were asked for this survey.

Analysis of Data

The statistical package for social science (SPSS, Version 16) was used to analyze the quantitative data. For testing the mediation effect, the study uses the methods of Baron and Kenny (1986) which manifest to fulfill three conditions: first, the independent variable must affect the mediator in the first equation; second, the independent variable must be shown to affect the dependent variable in the second equation; and third, the mediator must affect the dependent variable in the third equation. If these conditions all hold in the predicted direction, then the effect of the independent variable on the dependent variable must be less in the third equation than in the second. Perfect mediation holds if the independent variable has no effect when the mediator is controlled.

The reliability test has also been conducted to verify the internal consistency of the variables obtained in the sample. The Cronbach’s alpha value is found 0.8982, which is much higher than the minimum acceptable level suggested by Nunnally (1978). Several statistical analytical techniques such as Hierarchical Regression Analysis, ANOVA and correlation analyses have been used to measure the level of incentives of the talent faculty rendered by the concerned university.

Results and Discussion

Reliability Analysis and Correlations

The means, standard deviations, Cronbach’s alpha and zero order correlation of all studied variables are presented in Table 1. The means for all the variables studied

are reported to be in the range of 4.3 to 6.1 in which leadership behavior scores the highest level ($\mu = 6.1$) and training and development is in the low rating ($\mu = 4.3$). These imply leadership behavior or mentorship is in considerably good condition, but the training and development opportunities are poor which needs to be improved. The standard deviations are ranged from .74 to 1.6. The results of reliability analysis are shown in italic and bold on the diagonal. The result shows that all variables are in the range between .64 and .89 which are in the acceptable standard of reliability analysis (Nunally, 1978). The reliability coefficient of human resource management practices is .89 which is the highest one. Organizational culture and faculty retention show the reliability coefficients of .64 and .86. Overall, the reliability coefficient for the model is .88 which is considerably high in comparison to Nunally (1978).

Table- 1: Mean, Standard Deviation, Cronbach's Alpha and Correlations Analysis

	1	2	3	4	5	6	7	8	9	10	11
HR (1)	.89										
CP (2)	.76**	.80									
LB (3)	.22	.31*	.86								
UCP (4)	.69**	.47**	.27	.85							
TD (5)	.75**	.45**	.21	.48**	.80						
ORG (6)	.58**	.56**	.57**	.64**	.29*	.64					
WE (7)	.26	.40**	.15	.16	-.01	.73**	.75				
POF (8)	.87**	.51**	.15	.62**	.51**	.47**	.14	.67			
TR (9)	.45**	.27	.25	.39*	.23	.68**	.33*	.42**	.78		
CO (10)	.82**	.47**	.03	.65**	.42*	.56**	.31*	.75**	.54**	.77	
FTR (11)	.61**	.45**	.22	.69**	.36**	.68**	.42*	.52**	.49**	.63**	.86
Means	4.6	4.8	6.1	5.2	4.3	5.7	5.7	4.8	5.6	4.9	5.6
SD	.86	1.1	.86	1.1	1.1	.74	1.6	1.0	.85	1.1	1.0
Items	23	7	4	8	4	19	7	3	5	4	6

**p<.01, *p<.05; Cronbach alpha coefficient shown in italics and bold at diagonal; n = 54

The results of correlation analysis show that human resource management practice is significantly correlated with compensation package ($r = .76$), university culture and policy ($r = .69$) and training and development ($r = .75$) at .01 level. The correlation coefficient between human resource practices and leadership behavior is ($r = .22$). Organizational culture is significantly correlated with all its factors of working environment ($r = .73$), person organization-fit ($r = .47$), team relation ($r = .68$) and challenging opportunities ($r = .56$) at the level of .01. Human resource management practice and organizational culture are significantly correlated ($r = .58$) at .01 level. The correlation between organizational culture and faculty talent retention is $r = .68$ which is significant at .01 level. Human resource management and faculty talent retention are also highly significantly correlated ($r = .61$).

Tests for a Mediator Effect

A mediator effect can be tested with hierarchical regression analysis (Judd and Kenny, 1981). However, mediator effects should only be tested if there is a significant direct association between an independent variable and an outcome variable, otherwise there is no relationship to mediate. An important assumption of this method is that the outcome variable does not predict the mediator variable. Based on the Figure 1, first, the single order relationships among the variables are confirmed by statistically significant Pearson correlations in the expected direction. As predicted, human resource management practices and organizational culture are correlated ($r = 0.55, p < .001$), organizational culture and talent faculty retention are correlated ($r = 0.68, p < .001$) and human resource management practices and talent faculty retention are correlated ($r = 0.62, p < .001$)

Next, three regression analyses are performed, following the method specified by Baron and Kenny (1986) based on hierarchical regression analysis. The first equation regresses organizational culture on human resource management practices ($F(1,52) = 26.96, p < .001$ & $t = 5.192, p < .001$). Human resource management practices explained 34% of the variance in organizational culture. Thus, $H1$ is accepted.

The second equation regresses talent faculty retention policy on human resource management practices ($F(1,52) = 31.09, p < .001$ & $t = 5.576, p < .001$). Human resource management practices explained 37% of the variance in talent faculty retention. Thus, $H2$ is accepted.

The third equation regresses faculty talent retention on organizational culture ($F(1, 52) = 44.76, p < .001$ & $t = 6.690, p < .001$). Then, another equation regresses talent faculty retention on both human resource management practices and organizational culture. This final equation met the two requirements for a mediator effect: (a) The hypothesized mediator, organizational culture, was a significant predictor ($t = 4.152, p < .001$) and explained 24% of the variance in faculty retention and (b) the variance in faculty retention explained by human resource management practices was reduced from 37% in the second equation to 10% in the third equation. Thus, the reduced direct association between human resource management practices and talented faculty retention, when hopefulness was in the model, supported H3 that organizational culture was at least one of the mediators in the relationship between human resource management practices and talented faculty retention.

The results revealed some significant findings of the relationship between human resource practices which align with the earlier findings that appropriate allocation of compensation structure and other variables have a significant effect on organizational culture and environment (Bloom, 1999; May et al., 2002). The results also show that human resource factors have a significant effect on talent faculty retention with organizational factor to mediate. From the result, it shows that the inclusion of organizational variables has contributed to the significance of talent retention. The results support the earlier findings that organizational milieu which is influenced by the organizational culture and environment tends to influence the talents to be committed and loyal to the organization (Silverthorne, 2004).

Conclusion

The main objective of this study is to explore the mediatory role of organizational cultural environment linking the human resource management and talent faculty retention. Keeping this aim at the center, the study also endeavors to provide some insights into how human resource and organizational culture would be considered in designing them to support an organization in order to achieve its goals. It is suggested for the organization to consider four variables such as compensation package, person organization-fit, challenging opportunity and training and development in managing human resources as the results of this study shows all these variables have influences on the organization and talented employee retention. In addition, organizational factors are shown to play a significant role in mediating human resource management in the talent retention as well. The effect

of the presence of organizational factors has increased the performance of the relationship between human resource management and human capital retention process. Employees who are satisfied will be more committed to the organization they are working with. Hence, it suggests that organization focuses more on to what employees aspire from their job, instead of what is already being practiced in the organization.

References

- Ashraf, M. (2009). Faculty Shifting at Private Universities in Bangladesh: Blessing or Bane. *The Independent*, 25, 8.
- Ashraf, M. A., & Joarder, M. H. R. (2009). Talent Management and Retention Practices from the Faculty's Point of View: A Case Study. *Journal of Human Capital*, 1(2), 151– 163.
- Ashraf, M. A., & Noor, M. S. I. (2010). Team-Player Styles and Teamwork: A Role Composition Model Analysis in the Case of Grameenphone in Bangladesh. *Journal of Human Capital*, 2(3), 199– 211.
- Barber, F., & Strack, R. (2005). The Surprising Economics of a 'People Business'. *Harvard Business Review*, 83(6), 80– 90.
- Benest, F. (2008). The Role of Benefits in Winning the War for Talent. *Benefits & Compensation Digest*, 42– 45.
- Bloom, M. (1999). The Performance Effects of Pay Dispersion on Individuals & Organizations. *Academy of Management Journal*, 42(1), 25– 40.
- Cassano, E. (2009). Accounting for Talent. *Smart Business Houston*, 12– 16.
- Chew, Y. T. (2005). Achieving Organizational Prosperity through Employee Motivation and Retention: A Comparative Study of Strategic HRM Practices in Malaysia Institutions. *Research and Practices of Human Resource Management*, 13(2), 87– 104.
- Chiu, R. K., Luk, V. W. M., & Tang, T. L. P. (2001). Hong Kong and China: The Cash Mentality Revisited. *Compensation and Benefits Review*, 66– 72.
- Chiu, W. C. K. (2002). Do Types of Economic Ownership Matter in Getting Employees to Commit? An Exploratory Study in the People's Republic of China. *International Journal of Human Resource Management*, 13(6), 865– 882.

- Deshpande, S.P. (1996). The Impact of Ethical Climate Types on Facets of Job Satisfaction: An Empirical Investigation. *Journal of Business Ethics*, 15(6), 655–660.
- Frank, F. D., Finnegan, R. P., & Taylor, C. R. (2004). The Race of Talent: Retaining and Engaging Workers in the 21st Century. *Human Resource Planning*, 27(3), 12–25.
- Goretsky, B., & Pettry, D. B. (2007). Building a Talent. *T+D*, 61(6), 56–60.
- Groysberg, B., McLean, A. N., & Nohria, N. (2006). Are Leaders Portable. *Harvard Business Review*, 92 -100.
- Hausknecht, J. P., Rodda, J., & Howard, M. J. (2009). Targeted Employee Retention: Performance-Based and Job-Related Differences in Reported Reasons for Staying. *Human Resource Management*, 48(2), 269–288.
- Harvey, P. R. (2009). Talent Magnets. *Smart Business Tampa Bay*, 4(6), 20–21.
- 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.
- Jacobides, M. G. (2010). Strategy Tools for a Shifting Landscape. *Harvard Business Review*, 88(1), 77–85.
- Joo, B., & Shim, J. H. (2010). Psychological Empowerment and Organizational Commitment: the Moderating Effect of Organizational Learning Culture. *Human Resource Development International*, 13(4), 425–441.
- Kontoghiorghes, C., & Frangou, K. (2009). The Association between Talent Retention, Antecedent Factors and Consequent Organizational Performance. *SAM Advanced Management Journal*, 74(1), 29–58.
- Mannan, A. (2009). Higher Education in the 21st. Century Bangladesh. Paris: UNESCO.
- Martin, J., & Schmidt, C. (2010). How to Keep Your Top Talent. *Harvard Business Review*, 54–61.

- May, T. Y., Korczynsky, M., & Frenkel, S. J. (2002). Organization and Occupational Commitment: Knowledge Workers in Large Corporations. *Journal of Management Studies*, 39(6), 775– 801.
- Mazur, S. (2009). Retain Talent Today for Success, Stability Tomorrow. *Franchising World*, October, 20- 22.
- Netemeyer, R. G., Boles, J. S., McKee, D. O., & McMurrian, R. (1997). An investigation into the Antecedents of Organizational Citizenship Behaviors in a Personal Selling Context. *Journal of Marketing*, 61 (1), 85– 98.
- Parker, G. M. (2003). *Cross-Functional Teams: Working with Allies, Enemies and Other Strangers*. New Jersey: John Wiley and Sons Inc.
- Ready, D. A., Hill, L. A., & Conger, J. A. (2008). Winning the Race for Talent in Emerging Markets, *Harvard Business Review*, 86(11), 62– 70.
- Russell, R. S., & Taylor, B. W. (2007). *Operations Management: Quality and Competitiveness in a Global Environment*. Fifth Edition. New York: John Wiley and Sons, Inc.
- Siegfried, R. L. (2008). Mapping a Career Path for Attracting and Retaining Talent. *Financial Executive* November, 52– 55.
- Silverthorne, C. (2004). The Impact of Organizational Culture and Person-Organization Fit on Organizational Commitment and Job Satisfaction in Taiwan. *Leadership and Organization Development Journal*, 25(7), 592– 599.
- Sowers, J., & Woody, S. (2006). A Game Plan for Retaining Talent. *Electric Perspectives January/February*, 46– 52.
- Steers, R. M. (1977). Antecedents and Outcomes of Organizational Commitment. *Administrative Science Quarterly*, 22, 46– 56.
- Stevenson, W. J. (2009). *Operations Management*. Ninth Edition, New York: McGraw Hill.
- Stewart, G. L., & Brown, K. G. (2009). *Human Resource Management: Linking Strategy to Practice*. Hoboken, NJ: John Wiley & Sons, Inc.
- Stuart, A. (2009). The War for Talent is Still On. *CFO.Com November*, 23– 24.

- Trottman, M. (2004). Southwest Air Profit Rises 12% as Cost-Cutting Shows Results. *Wall Street Journal*, October 15, B6.
- Williams, M. L., McDaniel, M. A., & Nguyen, N. T. (2006). A Meta- Analysis of the Antecedents and Consequences of Pay Level Satisfaction. *Journal Applied Psychology*, 91(2).
- Yamamura, J. H., Birk, C. A., & Cossitt, B. J. (2010). Attracting and Retaining Talent: The Importance of First Impression. *The CPA Journal*, April, 58– 60.
- Younger, J., & Smallwood, N. (2008). Developing Your Organization's Brand as a Talent Developer. *Human Resource Planning*, 30(2), 21– 29.
- Yun, S., Faraj, S., & Sims, H. P. (2005). Contingent Leadership and Effectiveness of Trauma Resuscitation Teams. *Journal of Applied Psychology*, 90(6), 1288– 1296.

Estimation of Export Supply Model of Bangladesh: Cointegration and Vector Autoregressive Approaches

Md. Moniruzzaman*

ABSTRACT

The broad objective of this study is to empirically estimate the export supply model of Bangladesh. The techniques of Cointegration, Engle-Granger causality, Vector Error Correction and Vector Auto-regression are applied to estimate the models of this study. Structural breakpoint or stability of the variables and impulse responses are also conducted in this study. The econometric analysis is done by using the time series data of the variable of interest which is collected from the secondary sources. The study has empirically tested the hypothesis and long run relationship and casualty between variables of the models. The study findings reveal that the trend growth rate of aggregate export is higher in post-liberalization period as compared to the pre-liberalization period. The Cointegration analysis shows that all the variables of the study are cointegrated at their first differences meaning that there exists long run relationship among the variables.

Key words: Engine of Growth, Cointegration, Granger Causality, VECM, VAR.

Prelude

Trade is considered as the 'Engine of Growth' because of its role that facilitates a country to specialize in the production of goods and services following the theory of comparative advantage or revealed comparative advantage. Foreign trade plays a very important and crucial role in economic development of a country. Economic theories suggest that it reduces the dependency on foreign aid, augments the base of industrialization, increases foreign exchange earnings, creates employment opportunities, helps in transformation of the economic structure etc. Empirical evidence supports that there exist positive correlation and strong causality between foreign trade and economic growth and development of

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many countries.¹ Since independence Bangladesh has been facing chronic deficit in the balance of trade. The main reasons have been identified as increasingly large dependence on import of capital goods and machineries, industrial raw materials, fuel, food grain and a wide variety of consumer items on import side and low volume of few traditional export items, low valued products, high concentration on traditional markets, and low level of product diversification on the export front.

Though Bangladesh has been suffering chronic trade deficit since independence but there are a number of remarkable achievements in improving trade-GDP ratio, export-GDP ratio, import-GDP ratio, export diversification in terms of items and markets, increased imports of intermediate goods and industrial raw materials and capital goods. The significant increase in trade-GDP ratio of Bangladesh reflects greater degree of openness of the economy to the external world. The structure of export has changed significantly, shifting from primary goods to manufacturing goods and from traditional to non-traditional items. The structure of imports also changed significantly in terms of commodity and sources. The government initiated extensive trade reform programs to increase export of newly developed non-traditional and higher value added products. The major elements of the policy reforms included liberalization of imports and simplification of import procedures, rationalization of tariff structure, reduction in tariff rates and quantitative restrictions, pursuit of a flexible exchange rate policy, allowing IMF-consistent counter trade, and provision of specific and transparent export promotion measures. The Five Year Export Policy and the Five Year Import Policy Orders were adopted by the government during the Fifth Five-Year Plan period (1997-2002) to improve the foreign trade sector of Bangladesh with emphasis on product diversification and quality improvements, backward linkages, foreign investment etc on export side and import of raw materials, capital machinery on the import side. The foreign trade of Bangladesh had been protected by high tariff and non-tariff barriers in the mid-80s to support the domestic manufacturing industries.² The economy has been more open and liberal in the recent years as compared to the situation during 1970s and 1980s. The study is intended to examine the export demand and export supply models of Bangladesh using modern time series econometric modelling.

¹ B. Balassa, "Exports and Economic Growth: Further Evidence", *Journal of Development Economics*, vol. 5 (1978) and P.C.Y. Chow, "Causality Between Export and Industrial Performance: Evidence from NICs", *Journal of Development Economics*, vol. 18 (1987).

² A.R. Bhuyan and M.A. Rashid, *Trade Regimes and Industrial Growth: A Case Study of Bangladesh*, (Dhaka: Bureau of Economic Research, University of Dhaka, 1993).

It is observed that Bangladesh has been experiencing chronic trade deficit in spite of reforms. Exports grew at an annual rate of 14.7 per cent in the 1990s which was 9.1 per cent in the 1980s. The lower growth rate of export (11.8 per cent) achieved during FY 2001-2009 as compared to the same in the 1990s (14.7 per cent) can be satisfactorily explained in the context of global economic slowdown and recession in 2002 and 2007-2008. Despite a number of challenges the double digit growth rate of export in the consecutive years signifies the resilience of export sector. The GDP growth rate still remains a single digit level at around 5%-6%. The economy is characterized by low income, low export-gdp ratio, low import-gdp ratio, low foreign exchange reserve, persistent balance of trade deficit, and deficit in current account of balance of payment. The trade deficit can be reduced to a tolerable level or eliminated through substantial increase in exports and reduction of unnecessary and luxurious goods particularly consumption goods. Exports can be boosted by mainly devaluation of domestic currency, increase of productive capacity, diversification of both products and markets.³ There are also opposing views of trade liberalization that reduction of import duty, removal of tariff and non tariff barriers encourage excessive imports over exports.⁴ Both the exports and imports of Bangladesh are on an increasing trend. Generally it is said that trade reforms or trade liberalization augments the increasing growth of exports and imports. Exports have increased at double-digit rates, and imports have increased in parallel, leaving the trade balance largely unchanged in dollar terms. These exports have been heavily concentrated in the garment industry, which is an industry well-suited to Bangladesh's comparative advantage in view of its heavy use of abundant unskilled labour. GDP growth has accelerated.

Export Scenario of Bangladesh

After independence Bangladesh continued the ISS policy. As a war devastated newly born country Bangladesh experienced very low exports for the first couple of years of its independence. The annual export growth rates were volatile with negative rate in some year upto 1986-87. Since then Bangladesh has continued to achieve substantially high and positive growth rates in exports with few exceptions. The export earnings, growth rates and its share in GDP have been shown in Table- 1:

³ Robert J. Gordon, *Macroeconomics* (8th ed.; USA: Wesley Longman Inc., 2000).

⁴ Richard T. Froyen, *Macroeconomics: Theories and Policies* (5th ed.; USA: Prentice Hall, 1996).

Table- 1: Exports of Bangladesh during 1972-73 to 2008-2009

Year	Exports (in Million US\$)	Growth Rate (%)	Exports as % of GDP
1972-1973	369.7	-	4.0
1977-1978	489.8	21.0	5.0
1982-1983	686.0	9.58	5.6
1987-1988	1231.0	14.6	6.4
1992-1993	2383.0	19.5	9.9
1997-1998	5172.0	16.8	15.2
2002-2003	6548.44	9.38	17.5
2006-2007	12177.86	15.6	22.8
2008-2009	15565.19	10.31	18.5

Source: Export From Bangladesh 1972-73 to 1999-2000 and Export Statistics, various issues, Export Promotion Bureau.

It is evident from the above table that exports of Bangladesh increased manifold over the years. The annual growth rates of exports were 21% in 1977-1978, 9.58% in 1982-1983, 14.6% in 1987-1988, 19.5% in 1992-1993, 16.8% in 1997-1998, 9.38% in 2002-2003, 15.6% in 2006-2007 and 10.31% in 2008-2009. The share of exports in GDP has also increased substantially. The shares of exports in GDP recorded a 5% increase in 1977-1978, 5.6% in 1982-1983, 6.4% in 1987-1988, 9.9% in 1992-1993, 15.2% in 1997-1998, 17.5% in 2002-2003, 22.8% in 2006-2007 and 18.5% in 2008-2009.

Structural Changes of Exports

Structural changes took place in the exports of Bangladesh during 1972-1973 to 2007-2008. The changes were characterized mainly by the changes in commodity compositions and direction of export destinations.

Table- 2: Percentage Shares of Exports of Major Items

Year	Jute and Jute Goods	Tea	Leather and Leather Goods	Frozen food	RMG
1972-1973	90.7	2.7	4.6	1.3	-
1981-1982	66.2	6.3	10.6	8.8	1.2
1991-1992	21.6	1.8	8.3	7.3	59.3
1999-2000	6.3	0.3	3.7	6.4	81.5
2005-2006	4.8	0.11	2.4	4.4	75.1
2007-2008	3.6	0.13	2.1	4.0	75.6

Source: Export From Bangladesh 1972-73 to 1999-2000, Export Statistics, various issues, Export Promotion Bureau.

It is observed from the table that Jute and Jute goods was the major export item of Bangladesh. It constituted 90.7% of total exports in 1972-1973, 66.2% in 1981-1982. Since 1991-1992 RMG took the position of Jute and Jute goods. The shares of Tea, Leather and Leather goods and Frozen foods have declined in subsequent years. If we classify the export items as primary commodities and manufactured commodities, we observe that the share of primary commodities gradually decreased and the same for manufactured commodities increased over the years. The share of primary commodities was recorded as 41.41% in 1973-1974 which decreased in the subsequent years as 34.45% in 1977-1978, 30.75% in 1979-1980, 33.88% in 1984-1985, 21.20% in 1989-1990, 13.02% in 1994-1995, 7.95% in 1998-1999, 8.16% in 1999-2000, 7.34% in 2005-2006 and 7.51% in 2007-2008. On the other hand the share of manufactured items of total exports was recorded as 58.54% in 1973-1974 which was subsequently recorded as 65.55% in 1977-1978, 69.25% in 1979-1980, 66.12% in 1984-1985, 87.80% in 1989-1990, 86.98% in 1994-1995, 92.05% in 1998-1999, 91.84% in 1999-2000, 92.66% in 2005-2006 and 92.49% in 2007-2008. The structural change in the composition of exports is a major breakthrough in our export sector over the period 1981-2000. The share of RMG and Knitwear in total exports increased from less than 1% in 1981 to about 40% in 1990 and 76% in 2000. The share of traditional export declined from 74% in 1981 to 33% in 1990 and only 6% in 2000. The share of manufacturing exports in total exports increased from 57% in 1972-1973 to 66% in 1977-1978, 77% in 1987-1988, 88% in 1995-1996 and 90% in 1997-1998.

Methodology and Data of the Study

Annual Time Series Data for the period from 1972-1973 to 2008-2009 for the relevant variables are collected from the various publications of the government of Bangladesh, World Tables of World Bank, International Financial Statistics of IMF etc. The study applies time series econometric techniques such as Cointegration, Vector Error Correction and Vector Autoregressive (VAR) modeling strategy. These techniques are chosen because they provide a formal framework for investigating the existence of both long-run and short-run relationship among variables, each of which may individually be non-stationary. The economic interpretation is that even though the variables contain stochastic trend meaning non-stationary they are linked to form long run equilibrium. This framework helps identify the long-run relationship as well as the short-run dynamics between external sector variables and other macroeconomic variables for trade policy modeling. Time series properties of all concerned variables in the models used in this study have been identified by Augmented Dickey- Fuller (ADF 1981)⁵ and Philips-Perron (PP 1988)⁶ tests respectively. In unit root test if the variables are found to be on-stationary at their respective levels then we proceed to Cointegration tests⁷ developed by Engle and Granger (1987). The Co-integration test is performed by either Johansen⁸ (1988) or Johansen and Juselius⁹ (1990) multivariate Cointegration approach. For the time series data the following steps are generally chosen.

Stationarity Analysis

A set of time series data is stationary when its mean, variance and auto-covariances (at different lags) are fixed. Regression estimation using non-stationary time series data leads to spurious or nonsense results. As a result, classical t test and F test are not valid (Fuller 1985). So regression estimation is to be done using stationary data so that classical t test and F test will provide valid results. A time series data has a unit root meaning that the data is non stationary or

⁵D. A. Dickey and W. A. Fuller, "Likelihood Ratio Statistics for Autoregressive Time Series with a Unit Root", *Econometrica*, (1981), vol. 49, pp.1075-72.

⁶P.C.B. Philips and P. Perron, "Testing for a Unit Root in Time Series Regressions", *Biometrika*, (1988), vol. 32, pp. 301-18.

⁷R.F. Engle and C.W.J. Granger, "Co-integration and Error Correction: Representation, Estimation and Testing", *Econometrica*, (1987), vol. 55(2), pp. 251-76.

⁸S. Johansen, "Statistical Analysis of Co-integration Vectors", *Journal of Economic Dynamics and Control*, (1988), vol. 12, pp. 231-54.

⁹S. Johansen and K. Juselius, "Maximum Likelihood Estimation and Inference on Co-integration with Application to Demand for Money", *Oxford Bulletin of Economics and Statistics*, (1990), vol. 12, pp. 231-54.

the data has random walk. So the first attempt would be to check whether a particular time series data has a unit root or not. This study uses annual time series data. To avoid “spurious regression”, we check a unit root process by integrating procedure. A linear combination of individual non-stationary variables may be stationary when they are co-integrated.

There are generally three tools to track the presence of unit root. They are:

- 1) Testing the order of integration of the series of the selected variables. If a variable is found $I(0)$ at its level form then the variable is considered as stationary.
- 2) If a variable is not found $I(0)$ at its level form then the variable is considered as non-stationary. But if the first difference of the non-stationary variable is found $I(0)$ then it is of $I(1)$ and it becomes stationary.
- 3) The Stationarity of the series of a variable can be examined by the Dicky Fuller (DF) unit root test, Augmented Dicky Fuller (ADF) unit root test or by Philips-Perron (PP) unit root test.

Unit Root Testing:

So it is important to check stationarity of data before proceeding with estimates¹⁰ (Gujrati, D. N., 1995). Hence a stationary variable is integrated of order ($I(0)$), a variable which must be differentiated once to become stationary is to be $I(1)$ co-integrated of order one. In applied work co-integration possess a formal framework for activating long run equilibrium relationships. When a set of $I(1)$ variables are co-integrated then regressing one on the others should produce residuals that are $I(0)$.

The Augmented-Dickey Fuller test (ADF) is superior to Dickey Fuller (DF) test as it can remove the serial autocorrelation successfully. So, in this study Augmented Dickey Fuller (ADF) statistics will be used to trace out whether the time series has a unit root or not. Philips-Perron Unit root test (PP test) is another technique to identify whether there is a unit or not. To test for stationarity, both ADF and PP test can be conducted. If there arises any contradiction, ADF results are preferred over Phillips-Perron test (Campbell and Perron 1991)

¹⁰ Damodar N Gujarati, Basic Econometrics, (McGraw Hill: New York: 2003), 4th ed. pp.792-815.

Co-integration Analysis

The concept of co-integration was developed by Engle and Granger in 1987. As we have mentioned earlier, stationarity in time series data is necessary to have a valid t statistics and F statistics. But it has been identified that two or more time series data can be cointegrated although each of which is individually non-stationary or random walk. Cointegration tells us about the presence of long run relation among two or more variables. When we go for running cointegration analysis, we assume that all variables are non-stationary. Secondly they are all integrated in the same order. Even, if the variables are not integrated in the same order, we still can continue with cointegration analysis. We call this situation 'Multicointegration' There are indeed two tools to identify whether there exists a long run relation among variables. They are:

1. Engel-Granger's Residual based test
2. Johansen-Juselius (JJ) test.

Since Engel-Granger's Test suffers from some shortcomings, Johansen-Juselius (JJ) test is preferred for cointegration analysis. While doing Johansen-Juselius Test, if there comes up a different result between trace statistic and maximum eigenvalue test, maximum eigenvalue result is preferred (Banerjee et al 1993).

Pairwise Granger Causality Tests

Pairwise Granger causality tests are conducted to examine whether an endogenous variable can be treated as exogenous. For each equation in the VAR, the output displays (Wald) statistics for the joint significance of each of the other lagged endogenous variables in that equation. The statistic in the last row is the statistic for joint significance of all other lagged endogenous variables in the equation¹¹. When we estimate a VEC, the lagged variables that are tested for exclusion are only those that are first differenced. The lagged level terms in the cointegrating equations (the error correction terms) are not tested.

VAR and VECM Techniques

Generally the structural approach to time series modeling uses economic theory to examine the relationship among the variables of the model because economic theory can not sufficiently provide a dynamic specification that identifies all of these relationships. Moreover, estimation and inference are complicated by the

¹¹ EViews User Guide, Chapter 20. Vector Autoregression and Error Correction Models , p.523

fact that endogenous variables may appear on both the left and right sides of equations. These problems lead to alternative, non-structural approaches to modeling the relationship among several variables such as the estimation and analysis of vector autoregression (VAR) and the vector error correction (VEC) models. These models are used for testing the presence of cointegrating relationships among several non-stationary variables. The vector autoregression (VAR) is commonly used for forecasting systems of interrelated time series and for analyzing the dynamic impact of random disturbances on the system of variables.

The VAR approach sidesteps the need for structural modeling by treating every endogenous variable in the system as a function of the lagged values of all of the endogenous variables in the system. The mathematical representation of a VAR is as follows:

$$y_t = A_1 y_{t-1} + \dots + A_p y_{t-p} + Bx_t + e_t$$

where y_t is a k vector of endogenous variables, x_t is a d vector of exogenous variables, and A_1, \dots, A_p and B are matrices of coefficients to be estimated, and e_t is a vector of innovations that may be contemporaneously correlated but are uncorrelated with their own lagged values and uncorrelated with all of the right-hand side variables. Since only lagged values of the endogenous variables appear on the right-hand side of the equations, simultaneity is not an issue and OLS yields consistent estimates. Moreover, even though the innovations may be contemporaneously correlated, OLS is efficient and equivalent to GLS since all equations have identical regressors. Using the tools and procedures in EViews and other Softwares we can define the structure of VAR.

A Vector Autoregression (VAR) system of n^{th} order formed by N -dimensional vector of a non-stationary variable, as for example, Y_t can be represented as follows:

$$Y_t = \Pi_1 Y_{t-1} + \Pi_2 Y_{t-2} + \dots + \Pi_n Y_{t-n} + \eta + e_t; (t= 1,2,\dots,T) \dots (1)$$

Here, e_t is N -dimensional vector of innovations which are independently and identically distributed with mean zero and constant variance. The vector η represents a vector of constant terms consisting of two parts such as 'intercept' in the co-integrating equation and the 'trend term'.

The above VAR system can be transformed into VECM by using first difference operator Δ as follows:

$$\Delta Y_t = \Pi_1 Y_{t-1} + \sum \Gamma Y_t + \eta + e_t \dots \dots \dots (2)$$

Here, Π represents the parameter Matrix and the rank of the matrix $r(\Pi)$ shows the number of co-integrating vectors that exists in the n^{th} order VAR system. If $0 < r < N$, parameter matrix Π can be expressed as $\Pi = \alpha\beta'$ where α is the speed of adjustment vector and β' is the co-integrating vector. If r equals to N the vector Y_t is stationary i.e. $I(0)$. If r equals to 0, the parameter matrix Π is null and the vector is non-stationary i.e. $I(1)$. It is important to note here that the estimated coefficients of α determines the short run dynamics of n^{th} order VAR system, i.e. stability, direction and the speed of adjustment towards long run equilibrium. If the coefficient is less than unity ($\alpha < 1$) then the short run behavior is stable and any deviation from short run from its long run will be corrected within a reasonable span of time and it will lead to the long run equilibrium again. The number of Cointegrated vector(s), if any, can be identified by two test statistics namely Trace Statistic (λ_{Trace}) and the Maximum Eigenvalue Statistic (λ_{Max}).

Variables for Aggregate Export Supply Model

- Nominal Value of Merchandise Exports in log form (LRX)
- Relative Price of Exports (LRPX)
- Real Gross Domestic Product in log form (LRGDP)
- Real Gross Capital Formation in log form (LRGCF)
- Liberalization Dummy Variable for Regime Change (LIBD)

Justification for choosing explanatory variables

Relative Price of Exports (LRPX): The relative price of exports is a major determinant of any demand and supply model. It indicates the relative competitiveness of exports and imports of any country. The general demand law states that other things remaining the same when price goes up quantity demanded goes down and vice versa. The law of supply states that other things remaining the same when price goes up quantity supplied goes up and vice versa.

Real Gross Domestic Product in log form (LRGDP): Production capacity is an important variable to determine the responsiveness of export of a country. It shows how a country is able to produce exportables. To measure the production capacity, real GDP of Bangladesh has been taken into account as a proxy variable of production capacity in absence of data of production index of exportables.

Real Gross Capital Formation in log form (LRGCF): Gross Capital Formation indicates the level of productive investment in the production of goods and services.

Dummy Variable for Regime Change (LIBD): A liberalization dummy variable 'LIBD' is taken as an explanatory variable to capture the distinction (if any) between pre and post liberalization periods with respect to trade performance. The dummy variable shows the effect of regime change. It takes value '0' for pre-liberalized period and '1' for post-liberalized period.

Specification of Model

The Export Supply Model of Bangladesh: $LRX_t = \alpha_1 + \alpha_2 LRPX_t + \alpha_3 LRGDP_t + \alpha_4 LRGCF_t + \alpha_5 LIBD_t + \varepsilon_t$; ($\varepsilon_t \sim N(0, \sigma^2)$) [LRX_t = Real Exports in log form, $LRPX_t$ = Relative Price of Exports in log form, $LRGDP_t$ = Real GDP in log form, $LRGCF_t$ = Real Gross Capital Formation in log form, $LIBD_t$ = Liberalization Shift Dummy, ε_t = Error Term, α = Coefficients] All the dependent and independent variables are taken in log form except dummy variable in both models. So the estimated coefficients of all independent variables represent respective elasticities.

Findings of the Study

Growth Trend of Exports

The compound growth rate and compound annual growth rate of exports are estimated separately for the pre-liberalized and post-liberalized regimes as well for the entire study period from 1972-1973 to 2009-2010. The estimates are presented in Appendix Table A.1. It is observed that the compound growth rate of exports in the pre-liberalization regime i.e. 1972-1973 to 1989-1990 is 8.81 per cent while the same is 11.90 per cent in the post-liberalization period i.e. 1990-1991 to 2009-2010. The CGR for the whole study period i.e. 1972-1973 to 2009-2010 is estimated at 11.56 per cent. It indicates that the growth rates of exports are higher in the post-liberalization period.

On the other hand it is observed that the compound annual growth rate of exports in the pre-liberalization regime i.e. 1972-1973 to 1989-1990 is 8.54 while the same is 11.88% in the post-liberalization period i.e. 1990-1991 to 2009-2010. The CAGR for the whole study period i.e. 1972-1973 to 2009-2010 is estimated at 10.63%. It can be concluded that trade reforms or trade liberalization in Bangladesh has positive impact on exports in Bangladesh.

Test of Hypothesis: Using t-test the following hypothesis is tested to find out whether trade liberalization has positive impact on export growth in Bangladesh.

H₀ : There is no change in export growth between pre and post trade liberalization regime.

H₁ : There is significant positive change in export growth between pre and post trade liberalization regime.

The t-test is performed on the basis of trend regression of the pre-liberalization and post-liberalization periods.

$$t_{37df} = (b_1 - b_2) / \sqrt{(seb_1)^2 + (seb_2)^2}$$

Here, b₁ = slope coefficient of time variable in the pre-liberalization period, b₂ = slope coefficient of time variable in the post-liberalization period, se = standard error of slope coefficient. Now by putting the values in the formula t-statistic is computed as:

$$\begin{aligned} t_{37df} &= (0.037 - 0.049) / \sqrt{(0.002)^2 + (0.002)^2} \\ &= -4.26 \end{aligned}$$

Decision: The table value of t-statistic at 37 degree of freedom is 1.65 and the absolute value of calculated t-statistic is 4.26. Since the calculated value is higher than the critical t-value so the null hypothesis H₀ is rejected and the alternative hypothesis H₁ is accepted at 5 per cent significance level implying that the export has significantly increased in the post-liberalization regime.

Chow Breakpoint Test: The structural change in export of Bangladesh to the liberalization of trade is tested by Chow Test using the F-test which can be formulated as:

$$F = \frac{(RSS - (RSS1 + RSS2)/k)}{(RSS1 + RSS2) / (n1 - n2 - 2k)}$$

Chow Breakpoint test is conducted based on 1989-90 and it is found that F-statistic is greater than F critical value at 2, 34 degree of freedom and the p-value 0.00 indicates that the null hypothesis H_0 of structural stability is rejected.

Test of Stationarity of the Variables of Aggregate Export Supply Model

To check the Stationarity of the variables, the liberalization dummy, standard Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests have been conducted both at levels and at the first difference of each variable of the Aggregate Export Supply Model of Bangladesh. The test results are summarized in Table- 3.

Table- 3: ADF Unit Root Test Results
Null Hypothesis: H_0 ; The concerned variable has a unit root

Variables	Level / First Difference	Intercept	Intercept and Trend	Conclusion
LRX	Level	-0.729 (0.825)	-5.934 (0.000)	I(1) and I(0) Inconclusive
	First Difference	-5.972 (0.000)	-5.919 (0.000)	I(0) and I(0) Stationary
LRPX	Level	-2.944 (0.050)	-5.348 (0.005)	I(0) and I(0) Stationary
	First Difference	-9.849 (0.000)	-9.741 (0.000)	I(0) and I(0) Stationary
LRGDP	Level	-0.652 (0.845)	-2.079 (0.539)	I(1) and I(1) Non-stationary
	First Difference	-6.555 (0.000)	-6.471 (0.000)	I(0) and I(0) Stationary
LRGCF	Level	-2.310 (0.174)	-7.420 (0.176)	I(1) and I(0) Inconclusive
	First Difference	-5.637 (0.000)	-5.785 (0.000)	I(0) and I(0) Stationary

- Note:
1. ADF test Critical Values for model with intercept: -3.62 for 1% level of significance, -2.94 for 5% level of significance and -2.61 for 10% level of significance.
 2. ADF test Critical Values for model with intercept and trend: -4.23 for 1% level of significance, -3.54 for 5% level of significance and -3.20 for 10% level of significance.
 3. Unit Root Tests are performed by Econometric Software E-Views 5.0.

It is observed from the above ADF test that most of the variables are non-stationary at the level for model with intercept and intercept and trend. But it is interesting to note that all the variables are $I(0)$ i.e. stationary at the first difference for model with intercept and intercept and trend. Similar test result is found in case of Phillips-Perron test.

Correlation Analysis of the Variables: It is wise to check the correlation among variables before proceeding to the cointegration analysis. The correlation coefficients are shown in the Table- 4.

Table- 4: Correlation Matrix of Aggregate Export Supply Model

	LOG(RX)	LOG(RPX)	LOG(RGDP)	LOG(RGCF)
LOG(RX)	1.00	0.86	0.95	0.96
LOG(RPX)	0.86	1.00	0.77	0.89
LOG(RGDP)	0.95	0.77	1.00	0.90
LOG(RGCF)	0.96	0.89	0.90	1.00

The correlation coefficients in Table- 4 reveal that real export is positively correlated with relative price (0.86), real GDP (0.95) and real foreign exchange reserve (0.96). Relative price is highly correlated with real GDP (0.77) and real foreign exchange reserve (0.89). Real GDP is positively correlated with real foreign exchange reserve (0.90).

Co-integration Analysis

The Co-integration test is conducted to examine whether there are any long run relationship among the variables of Aggregate Export Supply Model. Johansen and Juselius co-integration test is applied here. Two tests i.e. the trace test and the maximum eigenvalue test are used to determine the number of cointegrating vectors. The cointegration test results are shown in the Table- 5 and Table -6.

Table- 5: Johansen Co- integration Test Based on Maximum Eigenvalue

Hypothesis		Eigenvalue	Max-Eigen Statistics	5% Critical Value	p-value**
Null	Alternative				
$r^* = 0$	$r = 1$	0.634	35.23	27.58	0.004
$r \leq 1$	$r = 2$	0.390	17.31	21.13	0.157
$r \leq 2$	$r = 3$	0.234	9.340	14.26	0.258
$r \leq 3$	$r = 4$	0.011	0.411	3.841	0.521

Note: Trend assumption: Linear deterministic trend, Unrestricted Cointegration Rank Test (Maximum Eigenvalue), Max-eigenvalue test indicates 1 cointegrating eqn(s) at the 0.05 level.

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Johansen Cointegration test based on maximum eigenvalue confirms that there is one cointegrating vector meaning the cointegration relationship between the dependent variable and the independent variables of the model. The null hypothesis, $r = 0$, against the alternative hypothesis, $r = 1$, is rejected at the 5% level of significance.

Table- 6: Johansen Co- integration Test Based on Trace Test

Hypothesis		Eigenvalue	Trace Statistics	5% Critical Value	p-value**
Null	Alternative				
$r^* = 0$	$r = 1$	0.634555	62.30271	47.85613	0.0013
$r \leq 1$	$r = 2$	0.390302	27.07037	29.79707	0.0999
$r \leq 2$	$r = 3$	0.234234	9.752651	15.49471	0.3003
$r \leq 3$	$r = 4$	0.011699	0.411881	3.841466	0.5210

Note: Trend Assumption: Linear Deterministic Trend, Unrestricted Cointegration Rank Test (Trace), Trace test indicates 1 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Johansen Cointegration test based on trace test confirms that there is one cointegrating vector meaning the Cointegration relationship between the dependent variable and the independent variables of the model. The null hypothesis, $r = 0$, against the alternative hypothesis, $r = 1$, is rejected at the 5% level of significance.

Long Run Cointegrating Relationship: Based on the cointegration test the long run estimates of the cointegrating vectors are presented in the Table- 7.

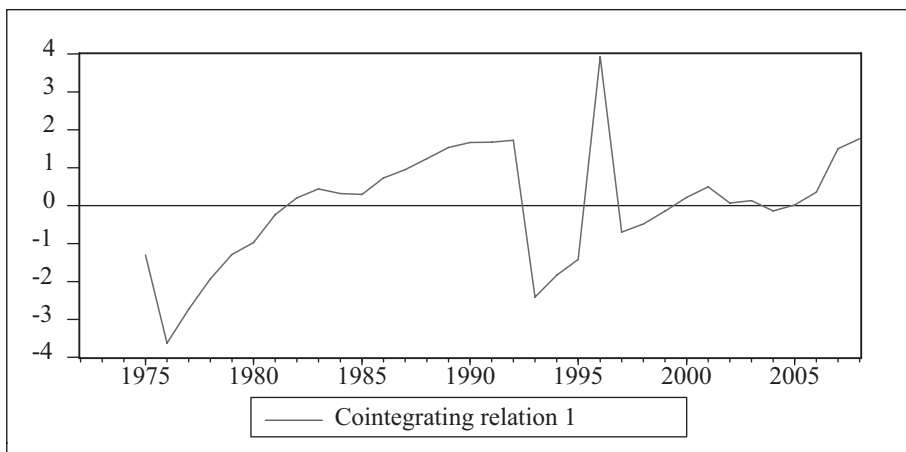
Table- 7: Long Run Relationship of Variables of Export Supply Model

LOG(RX)	LOG(RPX)	LOG(RGDP)	LOG(RGCF)
1.00	0.204	0.318	1.37
Standard Errors	(0.427)	(0.168)	(0.243)
T-statistics	0.477	1.89	5.63
Significance Level	Not Significant	Significant at 5%	Significant at 1%

Note: Log Likelihood 101.2528

The long run estimates show that elasticity of real export supply (RX) are 0.20 with respect to relative price of export (RPX), 0.318 with respect to real GDP (RGDP) and 1.37 with respect to real gross capital formation (RGCF). The export supply responded very well to real gross capital formation. The cointegrating relations among the variables are shown in Figure- 1. The curve indicates the long run convergence relationship among the variables.

Figure- 1: Cointegrating Relations of Aggregate Export Supply Model



Granger Causality Test: On the basis of test statistics the direction of causality is shown in Table- 8.

Table- 8: Direction of Causality Based on Granger Test

Null Hypothesis	Results	Conclusion
$H_0 : 1$	Accepted	Relative Price has no Granger cause to Real Export Supply Price.
$H_0 : 2$	Rejected	Real Export Supply has Granger cause to Relative Price.
Direction of Causality		Uni-directional
$H_0 : 3$	Accepted	GDP has no granger cause to Real Export Supply.
$H_0 : 4$	Accepted	Real Export Supply has no Granger cause to GDP.
Direction of Causality		No casual relationship
$H_0 : 5$	Accepted	Real Gross Capital Formation has no Granger cause to Real Export Supply
$H_0 : 6$	Rejected	Real Export Supply has Granger cause to Real Gross Capital Formation
Direction of Causality		Uni-directional
$H_0 : 7$	Accepted	Real GDP has no Granger cause to Relative Price
$H_0 : 8$	Accepted	Relative Price has no Granger cause to Real Gross Capital Formation
Direction of Causality		No casual relationship
$H_0 : 9$	Accepted	Real Gross Capital Formation has no Granger cause to Relative Price
$H_0 : 10$	Rejected	Relative Price has Granger cause to Real Gross Capital Formation
Direction of Causality		Uni-directional
$H_0 : 11$	Accepted	Real Gross Capital Formation has no Granger cause to Real GDP
$H_0 : 12$	Rejected	Real GDP has Granger cause to Real Gross Capital Formation
Direction of Causality		Uni-directional

Estimation of Export Supply Model by OLS: Since all the variables are stationary at the first difference and they are cointegrated the export supply model is run by OLS method. The estimated equation is as follows:

$$\text{LRX} = -6.55 + 0.25\text{LRPX} + 0.50\text{LRGDP} + 0.73\text{LRGCF} + 0.16\text{LIBD}$$

All estimated coefficients are found in expected sign but all are not statistically significant (Table A.2). The R-squared (R²) of the model is very high i.e. 0.969 and adjusted-R² is 0.965. It signifies that about 97 per cent variation in the dependent variable i.e. supply of real export (RX) is explained by the independent variables i.e. relative price of export supply (RPX), real GDP (RGDP) and real gross capital formation (RGCF). The DW statistic is low i.e. 1.10. The F-statistics of the model is computed at 255.92. The mean of the dependent variable in logarithm is found to be 6.59 and the standard deviation is 1.33. The relative price of real export is positively related to the supply of real export as expected but the relationship is not statistically significant meaning that relative price is not an important determinant of export supply.

The coefficient of real GDP is positive, meaning that the supply of real export is positively related with real GDP and the relationship is statistically significant. The coefficient of real gross fixed capital formation is positive, meaning that the supply of real export is positively related with real gross fixed capital formation and the relationship is statistically significant. The coefficient of liberalization dummy is positive; meaning that the supply of real export has increased in post-liberalization regime but the relationship is not statistically significant. Since all the variables except dummy variable are taken in natural logarithm form, the estimated coefficients represent the respective elasticity of export supply of Bangladesh. The price elasticity of export supply is estimated at 0.25, the income elasticity of export supply is estimated at 0.50 and the gross fixed capital formation elasticity of export supply is estimated at 0.73. The estimated coefficient of liberalization dummy is very low (0.16) which is insignificant meaning that liberalization of trade has no significant impact on the export supply performance of Bangladesh. Therefore, the policy makers should be more cautious in designing the trade policy reforms in Bangladesh for reaping the full benefit of trade liberalization.

Vector Error Correction Model (VECM) for Aggregate Export Supply Model

The estimated coefficients of VECM for aggregate export supply function are shown

in Table Appendix Table A.3. The short run elasticity of real export supply is 0.672 with respect to real export at one lag and it is statistically significant at 5 per cent. The short run elasticity of real export supply is 0.159 with respect to relative price at one lag but it is not statistically significant. The short run elasticity of real export supply is 0.109 with respect to real GDP at one lag but it is also not statistically significant. The short run elasticity of real export supply is 0.232 with respect to real gross capital formation at one lag but it is not statistically significant.

Vector Auto-regression Model (VAR) for Aggregate Export Supply Model

The estimated coefficients of VAR for aggregate export supply function are shown in Appendix Table A.4. The elasticity coefficient of real export supply is 0.672 with respect to real export at one lag and it is statistically significant at 5 per cent. The elasticity coefficient of real export supply is 0.16 with respect to relative price at one lag and it is statistically significant at 5 per cent. The elasticity coefficient of real export supply is 0.13 with respect to real GDP at one lag but it is not statistically significant. The short run elasticity of real export supply is 0.23 with respect to real gross capital formation at one lag and it is statistically significant at 5 per cent.

Long Run and Short Run Elasticity of the Aggregate Export Supply Model:

The long run and short run elasticity of aggregate export supply model is presented in Table 9. The short run elasticity is coefficients of independent variables at one lag in VECM and the long run elasticity is estimated by dividing the respective lag one level coefficient of independent variables by lag one level coefficient of dependent variable.

Table- 9: Long Run and Short Run Elasticities of Aggregate Export Supply Model

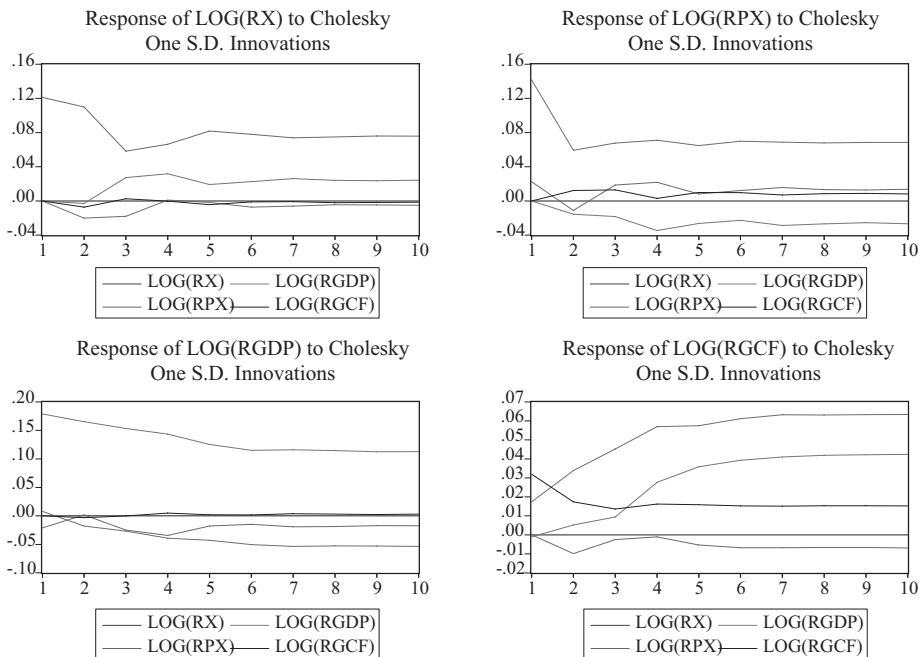
Dependent Variable: LRX		
Variables	Short Run	Long Run
Log(RPX)	0.16	0.24
Log(RGDP)	0.11	0.16
Log(RGCF)	0.23.	0.34
LIBD	0.02	0.03

Source: Researcher's Own Estimation.

The short run elasticity of real export supply is 0.16 with respect to relative price, 0.11 with respect to real GDP, 0.23 with respect to real gross capital formation and 0.02 with respect to liberalization dummy. The long run elasticity of real export supply is 0.24 with respect to relative price, 0.16 with respect to real GDP, 0.34 with respect to real gross capital formation and 0.03 with respect to liberalization dummy.

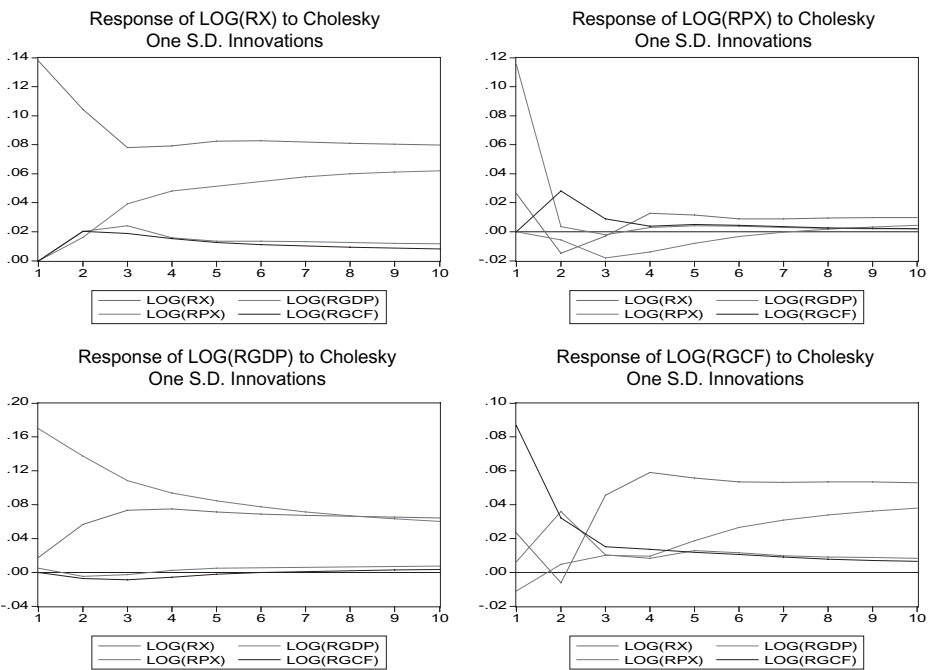
Impulse Response of the variables based on VECM: The impulse response of the variables based on VECM is shown in Figure 2. The effect of a one-time shock on one of the innovations on current and future values of the endogenous variables can be traced out by an impulse response function. A shock to the *i*-th variable not only directly affects the *i*-th variable but is also transmitted to all of the other endogenous variables through the dynamic (lag) structure of the VAR. The response of real export is correlated with other variables in the dynamic structure of VAR. In response to real export the other three independent variables are convergent in the long run. In case of relative price, real export and real gross capital formation are convergent but real GDP moves divergently. The response of real GDP shows that all independent variables strongly responded and are convergent. The response of real gross capital formation shows that all variables move divergently.

Figure- 2: Impulse Response of the variables based on VECM



Impulse Responses based on VAR: The impulse response of the variables based on VAR is shown in Figure 3. The response of real export is correlated with other variables in the dynamic structure of VAR. In response to real export real GDP is convergent and relative price and real gross capita formation are convergent. In case of relative price, real export, real GDP and real gross capital formation are convergent and all variables strongly responded. The response of real GDP shows that real export moves in convergent way with real GDP and relative price and real gross capital formation are found convergent. The response of real gross capital formation shows that all variables tend to be long run convergent.

Figure- 3: Impulse Response of the variables based on VECM



Conclusion

It is revealed from the study that relative price of export is not an important determinant of export supply of Bangladesh meaning that Bangladesh, as a small open country, is a price taker in the international market. The export supply is positively related with GDP but its contribution in increasing export supply is very low. The gross capital formation appears as the most important determinant of the

export supply of Bangladesh. So the enhancement of export supply of Bangladesh is largely dependent on gross capital formation meaning that more investment in exportable sector could significantly contribute in this sector. The policy makers should give proper attention to the gross capital formation in designing our export policy. The liberalization dummy variable for regime change from inward looking strategy to export led growth strategy is found negative and insignificant. Therefore, the policy makers should also be more cautious in formulating policies under trade liberalization programs.

References

- Annual Report*, Dhaka: Export Promotion Bureau, Ministry of Commerce, various issues.
- Balassa, B. (1978). Exports and Economic Growth: Further Evidence. *Journal of Development Economics*, 5.
- Bangladesh Economic Review*, Dhaka: Ministry of Finance, various issues.
- Bangladesh Economic Survey*: Government of the People's Republic of Bangladesh. Dhaka: Ministry of Finance, various issues.
- Bangladesh Export Statistics*, Dhaka: Export Promotion Bureau, Ministry of Commerce, various issues.
- Bhuyan, A.R., & Rashid, M.A. (1993). *Trade Regimes and Industrial Growth: A Case Study of Bangladesh*, Dhaka: Bureau of Economic Research, University of Dhaka.
- Chow, P.C.Y. (1987). Causality Between Export and Industrial Performance: Evidence from NICs. *Journal of Development Economics*. 18.
- Dickey, D. A., & Fuller, W.A. (1981). Likelihood Ratio Statistics for Autoregressive Time Series with a Unit Root. *Econometrica*,. 49.
- Engle, R.F., & Granger,C.W.J. (1987). Co-integration and Error Correction: Representation, Estimation and Testing. *Econometrica*, 55(2).
- E-Views User Guide. Chapter 20: Vector Autoregression and Error Correction Models.
- Export from Bangladesh (1972-73) to (1999-2000)*. Dhaka: Export Promotion Bureau, Ministry of Commerce, 2000.

Froyen, R. T. (Eds.). (1996). *Macroeconomics: Theories and Policies*. USA: Prentice Hall.

GOB, *A Study of Constraints to Growth and Diversification in the Export Sector in Bangladesh*, Dhaka: Ministry of Commerce, 2002.

Gordon, R.J. (Eds.). (2000). *Macroeconomics*, USA: Wesley Longman Inc.

Gujarati, D. N. (Eds.). (2003). *Basic Econometrics*. McGraw Hill: New York.

Johansen, S. (1988). Statistical Analysis of Co-integration Vectors: *Journal of Economic Dynamics and Control*, 12.

Johansen, S., & Juselius, K. (1990). Maximum Likelihood Estimation and Inference on Co-integration with Application to Demand for Money. *Oxford Bulletin of Economics and statistics*, 12.

Philips, P.C.B., & Perron, P. (1988). Testing for a Unit Root in Time Series Regressions, *Biometrika*, 32.

Statistical Pocket Book of Bangladesh, Dhaka: Bangladesh Bureau of Statistics, Statistical Division, Ministry of Planning, various issues.

Statistical Year Book of Bangladesh, Dhaka: Bangladesh Bureau of Statistics, Statistical Division, Ministry of Planning, various issues.

The Fifth Five Year Plan 1995-00, Dhaka: Planning Commission, 1973.

The Fourth Five Year Plan, 1990-95, Dhaka: Planning Commission, 1990.

The Second Five Year Plan 1980-85. Dhaka: Planning Commission, 1980.

The Third Five Year Plan 1985-90. Dhaka: Planning Commission, 1985.

Appendix A

Table A.1: Compound Growth Rates and Compound Annual Growth Rates for Exports

Period	Estimated Trend Regression	CGR ¹ (%)	CAGR ² (%)
Pre-liberalization 1972-1973 to 1989-1990	LX= 5.71 + 0.084T	8.81	8.54
Post-liberalization 1990-1991 to 2009-2010	LX= 5.45 + 0.112T	11.90	11.88
Overall 1972-73 to 2009-2010	LX= 5.50 + 0.109T	11.56	10.63

Note: 1. CGR = [Anti-log of estimated b - 1] X 100, log means natural logarithm
 2. CAGR = [Ending Value/Beginning Value]^{1/N} - 1

Source: Author's own calculation.

Table A.2: Regression Results of Aggregate Export Supply Model

Dependent Variable: LRX(Real Export in logarithm)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-6.55	1.30	-5.03	0.000
LRPX	0.25	0.38	0.66	0.516
LRGDP	0.50	0.16	3.24	0.003
LRGCF	0.73	0.14	5.32	0.000
LIBD	0.16	0.20	0.82	0.419

Test Statistics

R-squared	0.96	Mean dependent var	6.59
Adjusted R-squared	0.96	S.D. dependent var	1.34
S.E. of regression	0.24	Akaike info criterion	0.17
Sum squared resid	1.95	Schwarz criterion	0.39
Log likelihood	1.85	F-statistic	255.93
Durbin-Watson stat	1.80	Prob (F-statistic)	0.000

Source: Author's own calculation.

Table A.3: Vector Error Correction Model (VECM) ResultsDependent Variable: $\Delta\text{Log}(\text{RX})$

Regressors	Coefficients	t-statistics	Test Statistics	
C (Intercept)	-0.176	-1.38	R-squared	0.376
$\Delta\text{Log}(\text{RX})(-1)$	0.672	3.34	Adj. R-squared	0.141
$\Delta\text{Log}(\text{RX})(-2)$	0.039	0.24	Sum sq. resids	0.352
$\Delta\text{Log}(\text{RPX})(-1)$	0.159	0.73	S.E. equation	0.121
$\Delta\text{Log}(\text{RPX})(-2)$	0.017	0.076	F-statistic	1.603
$\Delta\text{Log}(\text{RGDP})(-1)$	0.109	0.68	Log likelihood	29.46
$\Delta\text{Log}(\text{RGDP})(-2)$	0.074	0.46	Akaike AIC	-1.145
$\Delta\text{Log}(\text{RGCF})(-1)$	0.232	1.00	Schwarz SC	-0.696
$\Delta\text{Log}(\text{RGCF})(-2)$	-0.068	-0.43	Mean dependent	0.125
ΔLIBD	-0.015	-0.155	D.W	1.86
EC(-1)	-0.007	-0.35	HET.	0.141

Source: Researcher's Own Calculation

Table A.4: Vector Auto-regression Model (VAR) Results

Regressors	Coefficients	t-statistics	Test Statistics	
C (Intercept)	-1.76	-1.38	R-squared	0.990
$\text{Log}(\text{RX})(-1)$	0.67	2.33	Adj. R-squared	0.987
$\text{Log}(\text{RX})(-2)$	0.196	0.76	Sum sq. resids	0.494
$\text{Log}(\text{RPX})(-1)$	-0.362	-0.15	S.E. equation	0.137
$\text{Log}(\text{RPX})(-2)$	-0.266	1.42	F-statistic	340.41
$\text{Log}(\text{RWY})(-1)$	1.019	0.80	Log likelihood	24.87
$\text{Log}(\text{RWY})(-2)$	-0.464	-0.39	Akaike AIC	-0.907
$\text{Log}(\text{RWY})(-1)$	1.01	0.80	Schwarz SC	-0.507
$\text{Log}(\text{RWY})(-2)$	-0.464	-0.39	Mean dependent	6.73
LIBD	0.095	0.96	D.W	1.67

Source: Researcher's Own Calculation.

Consumer Choice of Soft Drinks: A Causal Path Analysis

Mohammad A. Arafat*

ABSTRACT

This paper presents a framework for assessing consumer perceptions on soft drinks evaluation. This study clarifies the roles of perceived quality, perceived product attributes, perceived product availability and perceived product price in evaluating process of consumers' soft drinks choice. To test hypotheses, data were collected from 592 respondents. Data were analyzed via structural equation models using Amos 5.0. Results from structural equations analysis revealed consumer perceived quality in Bangladesh as shown in the model-fit. In particular, it was found that when consumers evaluate the quality of a product, they may retrieve the constructs directly related to quality. One of the shortcomings of this study is that variables like brand image, packing, advertising techniques may play important roles in understanding consumer perception about choosing soft drinks that were not included.

Keywords: Perceived quality, perceived product attributes, perceived product availability, perceived product price, size of the market, growth of the market, consumers' choice

Introduction

Carbonated beverage entered into Bangladesh market in the later part of 1980s. At that time, there were only a few companies in Bangladesh. But with the change of time and by western cultural influences it has become very popular in Bangladesh. By 2000, more than 12 Beverage Companies started business in Bangladesh and most of them are foreign companies (Bangladesh Beverage: 2006).

On the basis of an exclusive Franchise for Bangladesh from Pepsico USA, Transcom Beverage Limited manufactures the famous Pepsi range of beverages-Pepsi, 7up, Mirinda Orange, Mirinda Lemon, Slice and Soda. As a corporate citizen Pepsico believes that it has a responsibility contribute to the quality of life in the communities. TBL has put into action this philosophy through

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support of social agencies, projects and programs and the scope of this support is extensive and it has not been difficult to blend with this philosophy since the TRANSCOM group also followed such a corporate ideology.

AMCL market its products under the brand name PRAN that stands for Program for Rural Advancement Nationally. The Agriculture Marketing Co. Ltd. (AMCL) was incorporated in Bangladesh on 15th May 1985 as private limited company under the companies Act 1913 and subsequently on 2nd June 1993 the co. was converted into a public limited co. The shares of the co. were listed in Dhaka and Chittagong stock exchanges.

Initially PRAN had jam, Jelly and Pickle in its product line. In January 1995, production of orange juice and in June production of PRAN mango bottled juice started. PRAN now operates by having eight zones throughout the country. The zones are Dhaka Metro, Adjacent Dhaka, Comilla, Chittagong, Sylhet, Khulna, Barisal and Rajshahi. The company also has three more sub zones.

Virgin, the third most recognized brand in Britain is involved in planes, trains, finance, soft drinks, music, mobile phones, cars, wines, publishing, bridal, wear, etc. They created over 200 companies worldwide, employing over 25,000 people. Their total revenues around the world in 1999 exceeded US \$5 billion. They claim that their brand Virgin is now becoming the first global brand name of the 21st century.

National Beverage Industry Ltd., a unit of Sunman Group, first bought Bangladesh Suncrest. Initially the company used to produce eight flavors, but it is now continuing with five flavors. Suncrest was the company to introduce a 1.5 liter plastic bottle, which turned out to be a profitable step for them. It is called the Suncrest Mega. Its varieties are:

- i. Suncrest Cola
- ii. Suncrest Orange
- iii. Kickapoo Joy Juice

Royal Crown (RC) Cola made by the Royal Crown Cola Company is the third most popular Cola in America. It is a tasty, refreshing soft drink. In 1905, it was at first designed merely to meet the needs of grocery customers in a limited geographical territory.

In 1959, the company name changed to Royal Crown Cola. Royal Crown Cola company's technicians made what industry leaders term "The most amazing breakthrough in soft drink technological history." Royal Crown Cola Company was the first soft drink company to introduce a sugar free product in 1962 and it was the first company to introduce a salt/sodium free cola in 1980.

In early 70s, RC Co. decided to go for global reach and at that time a number of experienced soft drink people assembled to manage and direct the company's international efforts. Since then, RC Cola has been able to establish a viable base in the world market and it is currently sold in 63 countries through a network of 78 franchise bottling plants.

Purpose of the Study

The main purpose of this study is to find out the overall market position of soft drinks in Bangladesh. Different attributes of soft drinks like price, availability, perception of quality are used for investigating the process of consumer perception in Bangladesh. More specifically, this study has 3 primary objectives.

The first objective is to know the size and the growth of the market. As Bangladesh is a developing country and the most of the people live below the poverty line, size is an important factor for soft drinks companies. Growth has also been a vital concern of this study. The size and growth of the market depends on some criteria for evaluating the attributes of soft drinks.

The second objective is to address the overall mechanism of consumers' taste or choice of the market. In this study, it is predicted that different cues have direct effects on consumers' perception on soft drinks. To conduct the research it is essential to know the number of brands existing in the market with their market share.

The third objective is to discuss the implication of the above for urban and rural markets. It is expected that this study would substantially contribute to theoretical and managerial understanding of consumer perception about soft drinks in Bangladesh.

Hypotheses of the Study

Influence of price

Consumers often perceive price as an extrinsic quality cue (Dodds and Monroe 1985; Dodds et al. 1991). Several studies have searched consumer perception of price as an indicator of quality, and many of these have shown price to operate in this manner (Erickson and Johansson 1985). Consumers perceive price in evaluating product choice, because they often are unable to detect the actual choice of a product before purchase. This view is analogous to the role of other extrinsic cues, such as, attributes, availability or perception of quality on consumers' choice about soft drinks. When consumers face a product associated with affordable price, they will infer positive impression about that product, even though the product is not belonging to the same product in that the consumers already have use experience. The hypothesis is:

H₁: Price of soft drinks has a direct positive effect on the consumer soft drinks choice.

Attribute Influence

If consumers are familiar with the attributes of a product, they will be less likely to rely on brand image as one of the extrinsic cue on what consumers usually depend. According to Aaker (1991), "If consumers lack the ability to judge products; they often rely on seemingly trivial but observable attribute to judge overall quality." Most of the soft drinks now available in the market have different attributes which influence consumers in their preference. Sometimes soft drinks companies try to introduce new attributes by changing taste, color, or packing. But it does not seem that always new attributes can attract consumers' mind. For example, when Pepsi Company introduced 'Blue Pepsi' in Bangladesh market, consumers did not like the flavor/ taste. That means, sometimes consumers prefer the old attributes of the product with which they are habituated. So, every company should be conscious about consumers' choice, preference and expectations.

H₂: Perceived product attributes of soft drinks have a direct positive effect on the consumers' soft drinks choice.

Impact of availability

Consumers often perceive availability of soft drinks as a cue to choose the product. It is important to ensure that the consumers will get the product when they desire it. As a soft drink is not an expensive product; so consumers always want to get it in every retail shop. Every consumer has their own preference to choose the brand; so the question will arise: "Is consumers' preferred brand available whenever they want to buy that?" The positive responses will develop into favorable evaluation toward the brand. The opposite will happen in case of negative responses.

H₃: Availability of a soft drink has a direct positive effect on the consumer soft drinks choice.

Influence of perceived quality

The perceived quality has received considerable attention in the marketing literature (Chowdhury & Islam, 2003; Holbrook & Corfman, 1985; Jacobson & Aaker, 1987; Olshavsky, 1985). Quality is the ability of a product to satisfy a consumer's needs and requirement (McCarthy & William, 1991). Quality is the totality of features and characteristics of a brand based on its ability to satisfy stated and implied needs (Chowdhury & Parvin, 2006). Consumers may use perceived quality information to evaluate a brand when the consumers do not have sufficient knowledge of intrinsic cues. Several studies have searched consumers' perception of quality as an indicator of their preference. We should not forget that consumers serve the ultimate judge of quality in the marketplace. While introducing a new product, well reputed organizations may fail if it does not fit consumers' perceptions of high quality. To identify how consumers perceive quality is a difficult task.

H₄: Perception of quality of a soft drink has a direct positive effect on the consumer soft drinks choice.

Research Methodology

Subjects & Sampling

The data were collected from both primary and secondary sources. The secondary data sources include internet articles, some foreign and local websites on

beverages. Most of the data required for the study were collected from primary source through structured questionnaire. A total of 592 data were obtained from the respondents. Briefly, the male-female ratio is around 3 to 1 (male=73.7% Vs female=25.9%)

Different occupational people are used as sample of this study. To conduct the research 7 divisions of Bangladesh were selected by the researcher. Data have been collected based on simple random sampling procedure.

Data Collection

A questionnaire was served as a data-gathering instrument. A total of five brands of soft drinks were used for the study. The first part of the questionnaire contained demographic questions related to the respondents. It is important to know the general information of each respondent. The second part of the questionnaire is related to the choice/taste of the consumer. This part contained different brands and flavors of soft drinks which the consumer can choose from the market. The following pages contained the scale items of those measures needed to test the proposed model. Most subjects spent between 10 & 15 minutes for filling in the entire questionnaire.

Variables and Their Measurement

After first specifying the domain of each construct multiple item scales were developed, as suggested by Churchill (1979). Consumer quality perception was assessed using thirteen measure scales developed by Lee (1994) and these were again validated for this study. Perceptions of product attributes were based on scales developed by Zaichkowsky (1985) and Laurent and Kapferer (1985). Consumers' perception of product price and availability was based on the items developed for this study.

Plan for Data Analysis

The ultimate intent of this study was to test a model of consumer value perceptions and to estimate the parameters for the structural model depicted in figure 1. Thus, data were analyzed via structural equation models using AMOS (Analysis of Moment Structures) 5.0 to perform path analysis. AMOS is a computer program for estimating the unknown coefficients within a system of structural equations,

and is but one of the several computer-based covariance structure models for conducting such analysis.

The data were analyzed in two stages. The measurement model was assessed to confirm that the scales were reliable. When the reliability of the measures had been established, the structural model was tested. The evaluation of structural equation models is more commonly based on a likelihood test. The assumption is that the null hypothesis (H_0) is the observed covariance matrix (S) that corresponds to the covariance matrix derived from the theoretical specification (Σ) and that the alternative hypothesis (H_1) is that the observed covariance matrix is any positive definite matrix. For these hypotheses, minus twice the natural logarithm of the likelihood ratio simplifies to:

$$N * F_0 \sim \chi^2 \left[\frac{1}{2} (p+q)(p+q+1) - Z \right]$$

Where:

N = the sample size

F_0 = the minimum of fitting function $F = \log|\Sigma| + tr(S \Sigma^{-1}) - \log|S| - (p+q)$,

Z = the number of independent parameters estimated for the hypothesized model,

q = the number of observed independent variables, and

p = the number of observed dependent variables

The null hypothesis ($S = \Sigma$) is rejected if $N * F_0$ is greater than the critical value for chi-square at a selected significance level.

The linear structural equation is:

$$B\eta = \Gamma\xi + \zeta$$

Where:

B = An $(m+m)$ coefficient matrix ($\beta_{ij} = 0$ means that η_j and η_i are not related),

Γ = An $(m+n)$ coefficient matrix ($\gamma_{ij} = 0$ means that η_i is not related ξ_j)

η = An $(m+1)$ column vector of constructs derived from the dependent variables (y),

$\xi = A_n (m+1) = A_n$ column vector of constructs derived from the independent variables (x),

$\zeta = A_n (m+1) = A_n$ column vector of the errors in the structural equations,

The number of constructs (latent variables) developed from the observed dependent variables, and

$m =$ The number of constructs (latent variables) developed from the observed independent variables.

The measurement equations are:

$$y = \Delta_y \eta + \epsilon$$

and,

$$x = \Delta_x \xi + \delta$$

Where:

$y = A (p+1)$ column vector of observed dependent variables,

$x = A (q+1)$ column vector of observed independent variables,

$\Delta_y = A (p+m)$ regression coefficient matrix of y on η ,

$\Delta_x = A (q+n)$ regression coefficient matrix of x on ξ ,

$\epsilon = A (p+1)$ column vector of errors of measurement in y ,

$\delta = A (q+1)$ column vector of errors of measurement in x ,

$\Psi =$ The $(m+m)$ covariance matrix of ζ ,

$\Phi =$ The $(n+n)$ covariance matrix of ξ ,

$\theta_\epsilon =$ The $(p+p)$ covariance matrix of ϵ , and

$\theta_\delta =$ The $(q+q)$ covariance matrix of δ .

This testing determined the strength of individual relationships, the model's goodness of fit, and the various hypothesized paths.

Results

Results of the Measurement Model

The first step of the data analysis was a test of the measurement model. Objectives of this test were: (1) to contain the validity and reliability of measures developed and tested in previous phases of the study; and (2) to select the best subset of observed measure for use in testing the structural model. The data approximated a normal distribution with acceptable skewness and kurtosis values. The measurement test proceeded in a manner identical to the procedure discussed in the previous chapter. Coefficient alpha was computed for each set of observed measures associated with a given latent variable, and a confirmatory factor analysis (CFA) was conducted. Alpha values of each item in each dimension were performed separately and were within an acceptable range (see Table 1). Because of the large number of items used to measure the dimensionality of most of the constructs, responses of these items were averaged to form a single measure for each of the dimension.

Table- 1: Values of Coefficient Alpha

Constructs in the Model	Total Items	Alpha Value
Consumer Evaluation (CE)	4	0.84
Perceived Quality (PQ)	2	0.89
Perceived Product Attributes (PPA)	3	0.88
Perceived Product Availability (PA)	2	0.71
Perceived Product Price (PPP)	2	0.73

Results of Overall Model Fit

Bagozzi and Yi (1988) have pointed out that “one of the first things that should be done before examination of the global criteria is to see if any anomaly exists in the output (p.76).” Examples of anomalies that exist in the output are: (1) negative estimates for the variances, (2) correlation estimates greater than 1, and (3) extremely large estimates for the parameters. None of these anomalies were present in the output of the analysis.

The model fits the data well, producing a non-significant chi-square value (Chi-square = 65.87; $df = 55$; $p = 0.15$), a goodness-of-fit index (GFI) of 0.95, adjusted goodness-of-fit index (AGFI) of 0.97, Root Mean Square Residual (RMR) of 0.03, Akaike Information Criterion (AIC) of 137.87, CFI = 0.99, RMSEA = 0.02, and, BIC = 368.89.

Tests of Hypotheses

All the path coefficients are significant and are consistent with the hypothesized direction (see Table-2). Hypothesis 1 (H1) states that perception of price (higher price compared to lower price) would have positive effect on the consumer choice of soft drinks. The results support this hypothesis as the path between perceived product price (PPP) and consumer evaluation (CE) is significant ($\gamma = 0.004$, $p = 0.04$). Hypothesis 2 (H2) states that the evaluation of consumer choice will be positively affected by the perception of favorable product attributes. That is, if consumers perceive the product as unique, then it will boost up consumers' perceptions of the product's overall quality. The structural equation results support this hypothesis: the direct effect of perceived product attribute (PPA) on consumer evaluation is positive and significant ($\gamma = 0.35$, $p = 0.05$). Hypothesis 3 (H3) states that the evaluation of consumer choice will be positively affected by the perception of product availability. Specifically, when consumers purchase a product which is available when they desire it, they will infer positive impression about that product. The direct effect of perceived product availability (PA) on consumer evaluation is positive and significant ($\gamma = 0.12$, $p = 0.06$). In hypothesis 4 (H4), the prediction was that perceived quality would have a direct positive effect on consumer choice of soft drinks. That is, when consumers face a product associated with a perceived high quality, their impression toward the product will be positive. The direct effect of perceived quality on consumer evaluation is positive and statistically significant ($\gamma = 0.16$, $p = 0.05$).

Table- 2: Structural Model Estimation Results

Hypotheses	Parameter (From – To)	Estimate (Significant at)	Fit Indices
Exogenous to endogenous			Chi Square: 65.87
H1:	PPP to CE	$\gamma = 0.004$ ($p = 0.04$)	$df = 55$ $p = 0.15$
H2:	PPA to CE	$\gamma = 0.35$ ($p = 0.05$)	GFI: 0.95
H3:	PA to CE	$\gamma = 0.12$ ($p = 0.06$)	AGFI: 0.97
H4:	PQ to CE	$\gamma = 0.16$ ($p = 0.05$)	RMR: 0.03 AIC: 137.87 CFI=0.99 RMSEA=0.02 BIC=368.89

Conclusion

Results of this study substantially contribute to theoretical and managerial understanding of consumer evaluation formation process in Bangladesh. At the theory level, this study has produced greater understanding of the variables that appear to be most responsible for structuring consumer choice of soft drinks. In other words, the model as a whole means that when a consumer evaluates the quality of a product, s/he may retrieve the constructs directly related to quality.

In this study, consumers' soft drinks choice process was tested using some exogenous variables. Mainly this study was conducted for developing a theory. This study recognized and conceptually defined four perception related constructs. The four constructs are perceived price, attributes, availability and perceived quality. This study measured the effects of price, attributes, availability and quality information on how individuals subjectively choose a soft drink brand.

This study states that beverage is very popular in Bangladesh. Among different age groups, young generation (age between 16-25) likes to take soft drinks more. 7up is the most favorite beverage among all the soft drinks products available in Bangladesh. Findings of the analysis show that family income of more than Tk.10000 prefer to take beverage daily. Majority of the respondents (70%) prefer to take beverage in lunch time. Students are the main consumers of beverage product.

Limitations and Future Research

The investigation of consumer evaluation of soft drinks is crucial to both researchers and marketers. This study has emphasized that much additional research remains before a thorough understanding of consumer choice can be achieved. Thus, this research indicates that there is great potential for developing more sophisticated models of consumer evaluation formation process.

There are some limitations in this study and thus future research should continue to test and to refine relationships investigated in the present study and variables that moderate them. More specifically, this study suggests two fertile directions for future research. Firstly, it is clear that future research is required to yield a complete understanding of the phenomena surrounding consumer evaluation criteria. This study attempted to outline major variables that logically and theoretically should impact the linkages in consumer evaluation scenarios in Bangladesh.

Many of the areas requiring research have been highlighted in the preceding pages, but there are certainly others that remain unearthed. The additional variables, yet to be identified, may play important roles in understanding consumer perception about choosing soft drinks. Brand image, packing, various advertising techniques should also be examined in the same research setting in addition to the constructs considered in this study. By building on the substantial search for literature already available and by incorporating these additional variables our understanding and the perception of consumer evaluation process to provide substantial insights into consumer decision-making will be greatly enhanced. It is hoped that the proposed relationships and accompanying tests will stimulate work in the area of consumer soft drink choice.

References

- Aaker, D. A. (1991). *Managing Brand Equity: Capitalizing on the Value of a Brand Name*. Macmillan, Inc.
- Bagozzi, R. P., & Youjae, Y. (1988). On the Evaluation of Structural Equation Models. *Journal of the Academy of Marketing Science*, 16, 74-94.
- Chowdhury, M. H. K., & Islam, M. R. (2003). Critical factors in consumer quality perceptions: A cognitive approach. *Journal of Business Research*, 5(1), 22- 34.
- Chowdhury, M. H. K., & Parvin, N. (2006). Consumer Evaluation of Beautification Products: Effects of Extrinsic Cues. *Journal of the Asian Academy of Management*, 11(2), 89-104.
- Churchill, G. A. (1979). A Paradigm for Developing Better Measures of Marketing Constructs. *Journal of Marketing Research*, 16, 64-73.
- Dodds, W. B., & Kent, B. M. (1985). The Effect of Brand and Price Information on Subjective Product Evaluation in Advances in Consumer Research, 12, Elizabeth Hirschman and Morris Holbrook, eds., UT: Association for Consumer Research, 85-90.
- Dodds, W. B., & Kent, B. M., & Dhruv, G. (1991). Effects of Price, Brand, and Store Information on Buyers' Product Evaluation. *Journal of Marketing Research*, 28, 307-319.
- Erickson, G. M., & Johny, K. J. (1985). The Role of Price in Multi-Attribute product Evaluations. *Journal of Consumer Research*, 12, 195-199.
- Holbrook, M. B., & Corfman, K. P. (1985). *Quality and value in the consumption experience: Phaedrus rides again*. In J. Jacoby, & J. C. Olson (Eds.), Perceived quality. Lexington, MA: Lexington Books.
- Jacobson, R., & Aaker, D. A. (1987). The strategic role of product quality. *Journal of Marketing*, 51, 31- 44.
- Laurent, G., & Jean-Noel, K. (1985). Measuring Consumer Involvement Profiles. *Journal of Marketing Research*, 22, 41- 53.

- Lee, D. (1994). *Effects of Perceived Quality, Product Category Similarity, and Brand Breadth on Consumers' Perceptions of Brand Extensions: Tests of Categorization Theory and Cognitive Response Theory*. Doctoral Dissertation, University of North Texas, Denton, Texas.
- Olshavsky, R. W. (1985). *Perceived quality in consumer decision making: An integrated theoretical perspective*. In J. Jacoby, & J. C. Olson (Eds.). *Perceived quality*. Lexington, MA: Lexington Books, 3- 29.
- McCarthy, J. E., & William, P. D. (1991). *Essentials of marketing (5th ed.)*. New York: McGraw-Hill, 524.
- Zaichkowsky, J.L. (1985). Measuring the Involvement Construct. *Journal of Consumer Research*, 12, 341-352.

The Most Important New Literacy?: Overcoming Seemingly Impossible Obstacles to Make 'Education for All' and Related UNESCO Goals and Policies a Reality in the 21st Century

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ABSTRACT

Aspirations to achieve UNESCO's millennium goals by 2015 increasingly seem to many people as an ever remote possibility and even an impossible or utopian dream. With reference to the particular policy commitment of 'Education For All', this paper will explore two related questions. Firstly, it poses the question of whether UNESCO is projection of goals such as education for all by 2015 or indeed any date is really an impossible notion? Secondly, if we accept the proposition that a dramatic change in the global human condition should be and can be possible in practice and not just as utopian projection, then what is needed to overcome negative self-fulfilling prophecies of failure to achieve the 'right direction' of knowledge and action? In response to these two questions, the paper pursues a thought experiment which in practice as well as in principle refuses to accept the inevitability of the present reality that there is an ever-widening knowledge as well as economic gap between modern, rich and developed countries and traditional, poor and developing societies.

Keywords: education for all; millennium goals, knowledge-building, dialogical thinkers, digital divide, literacy education, new literacies, productive imagination; aporia, cross-cultural communication

Introduction

If the central strategy of the international *Education For All* (EFA) movement or 'commitment' (UNESCO, 1990) was to focus global awareness on the potential and general importance of particular educational goals for addressing human inequity and disadvantage in the world, then like other Millennium Goals it has

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been somewhat successful. However, the gap between rich and poor in the world has continued to increase – and, likewise, associated education and knowledge ‘gaps’ despite some progress in the six key goals of the Education of All commitment (free and compulsory primary education for all, etc.). As the EFA Global Monitoring Report puts it, the ‘inequality of opportunity is undermining progress towards achieving Education for All by 2015’ (UNESCO, 2009). In other words, as various summits on global climate change exemplify, ‘growing awareness’ is admirable but clearly not sufficient in itself to achieve significant change. This is especially so in light of a range of associated 21st Century challenges and obstacles to either achieving a global community where there is a much fairer and more reciprocal sharing of resources and even knowledge in light of the growing and increasingly urgent realization around the world of fundamental human inter-dependence.

There are endless examples in human history of individuals and also groups who have overcome very difficult circumstances or a lack of formal educational opportunities to realize significant achievements and contributions to different kinds of human knowledge in various ways. Although many would and do interpret this as evidence of a natural elitism of some kind (i.e. the exception proves the unlikely or generally ‘impossible’ rule), there is also the alternative perspective to such self-fulfilling notions of the human condition that such cases exemplify the potential of all individuals and societies for development or self-determination. To apply this analogy to the global human condition, there is perhaps a conflict of perceptions between those who view the achievement of UNESCO’s *Education For All* concept in the near future (i.e. before it is ‘too late’) as increasingly unlikely or even simply impossible on one hand, and those on the other who hold that there must be a way to make such an important as well as ethically noble aspiration some kind of meaningful or emergent reality. This contrast of alternative perspectives is linked to the possible distinction between an *economic* and *cultural* concept of globalization. *Economic* globalization tends to look backwards to the past and represents the last vestiges of an industrial revolution model of historical progress focused on the exploitation of human as well as natural resources. In contrast, a *cultural* notion of globalization rather looks *forward* to a possible future social convergence of humanity and emergent notions of the human potential for ‘learning’ (e.g. Brown & Duguid, 2000; Stiglitz, 2006).

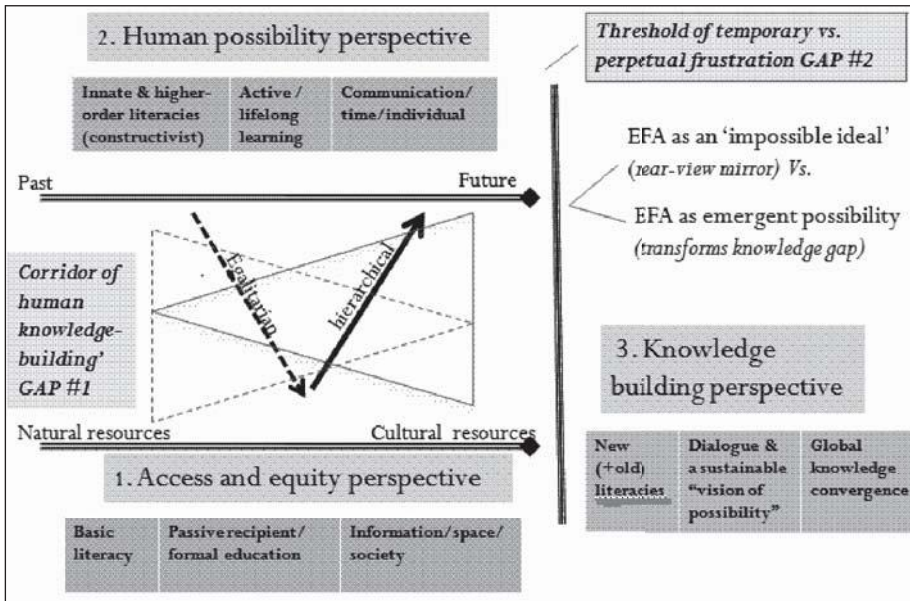
This paper proposes to explore some of the different ways the concept ‘education

for all' might be understood as the basis for addressing its central focus question (and some related questions below in the three sections of the paper): *Is the concept of 'education for all' in any or all senses of the term simply impossible to achieve in the near future of humanity, or is there 'another way' which is possibly sustainable and achievable?* It will frame this inquiry as a potential quest for a 'global knowledge-building convergence' which addresses a myriad of missing links and obstacles in terms of a related proposal: that the truly convergent function of various senses of 'knowledge' is one of transforming *vicious circles of inevitability* (ranging from the poverty cycle to 'knowledge passivity' in the classroom and beyond) into 'virtuous circles' of social dialogue and cultural reciprocity on one hand, and innovative problem-solving, applied thinking, and meaningful inquiry on the other.

Thus the paper will identify, distinguish, and link together three different if related perspectives of the notion *Education for All* (see Figure- 1 below). Most commonly the concept of EFA is seen as directly linked to basic literacy provision in terms of an *access and equity perspective* that the required natural and human resources of support around the world are neither unlimited nor equally distributed. However, the concept of EFA is also often invoked in terms of how the lack of access and equity also limits and often denies the opportunity for expressing or realizing the naturally 'unlimited' learning potential of every child – a key to the associated human right to achieve a reasonable degree of human dignity (i.e. the assumptions of the United Nations' 1948 Universal Declaration of Human Rights). This might be referred to as the *human possibility perspective*. Such a perspective is linked to various learner-centered aspirations and constructivist models increasingly informing contemporary educational theory and policy around the world – models of 'active' individual learners more effectively realizing their learning potential and taking at least some small control of their own basic capacity for self-determination. But neither proactive theories or policies on one hand, nor the provision of expensive learning resources on the other are sufficient in themselves to achieve the most effective and relevant learning, development or capacity building by either individual learners or their social context. Thus we will outline a third convergent *knowledge-building perspective*. In terms of the open-ended and future possibilities (rather than 'rear-view' inevitability or contingency) of 'dialogically' linking the first two perspectives, this approach views a globally applicable notion of EFA as a potentially *emergent* social and cultural process but also a potentially explicit

framework of knowledge-building by which individuals and societies might achieve a greater *convergence of human possibility* linked to a more equitable sharing of limited natural and human resources.

Figure- 1: Three distinct but related Education For All perspectives



These three perspectives will be linked to the main three sections of the paper in terms of a developing and inter-connected (i.e. emergent) exploration of the ‘most important new literacy’ needed to transform: (a) the first two EFA perspectives indicated above into a convergent knowledge-building process and framework; and (b) 21st Century *obstacles* into ‘Education for All’ *opportunities*. As indicated above, the concept of EFA typically revolves around a basic notion of formal learning as a matter of learning to ‘read and write’. As will be discussed, the ‘gap’ between those who tend to define *literacy* in terms of specific particular verbal skills and information access purposes on one hand, and those who rather identify this with communication and knowledge-building contexts of applied understanding and practical purposes on the other, also needs to be addressed in terms of the ‘new literacy’ implications and possibilities of an emerging knowledge economy, network society, and cultural globalization transformed by new information and communication technologies.

Thus the three sections of the paper will discuss ‘the most important new literacy’ in terms of: (a) the connection between educational technology and a digital divide; (b) the challenge of achieving more ‘egalitarian’ intercultural communication or cross-cultural understanding; and (c) the connection between new models of learning and knowledge-building (Richards, 2003; 2007; 2009a; 2009b; 2009c). This is in the initial context that a pessimistic perspective towards the Education for All commitment might be interrogated in terms of related projections about a growing ‘digital divide’ fuelling the forces of international and social disadvantage in the 21st Century global economy. Then, building on the original ‘dialogical’ insight of the literacy educator Freire, the papers further explores the idea that the greatest educational challenge for people in diverse contexts around the world is the ability to recognize how we can learn from other people with different perspectives or new experiences – and on this basis, to promote a globally convergent framework for knowledge sharing. To achieve such a framework there needs to be more than lip-service to the idea that every individual and society is potentially a productive and meaningful ‘knowledge-builder’ in any of various related senses of knowledge as a process of developing greater understanding and wisdom and not just the accumulation of information or achievement of ‘progress’ for its own sake. As another great dialogical thinker (Paul Ricoeur) has pointed out with ‘productive imagination’ what sometimes seem like impossible problems can also be changed into more positive scenarios or opportunities for change and transformation. In this way, the vision as well as humility to engage and overcome obstacles and realize ‘education for all’ opportunities are the key aspects of ‘active knowledge-building’- perhaps the most important new literacy of the digital age, and one that more ‘developed’ peoples may well have much to learn about from the less advantaged.

The Real ‘Digital Divide’ in the Emerging Global Network Society

Does the so-called ‘digital divide’ of information and communication technology use in the 21st Century necessarily reinforce the perceptions of many that there is an increasing and potentially irreversible gap between modern, rich and/or developed societies on one hand, and traditional, poor and/or developing ones on the other?

The EFA concept is commonly associated with the formal provision of basic literacy education – that is, the opportunity to learn to ‘read and write’ in order to

effectively participate in extended networks and institutions of modern 'society' beyond the local. In this perspective the *EFA* commitment emphasizes the 'access and equity' principles of providing assistance to those in need to make this a reality. Thus such a perspective implies the notion of a significant global gap between modern, rich and/or developed societies where basic education provision is the norm and those traditional, poor and/or developing societies where such principles and goals are not yet a regular and sustainable reality. Hence also, despite progress in particular contexts with particular goals, larger developments such as war, famine, and instabilities in the global economy reflect a generally widening gap of human possibility, opportunity, and 'sharing' of finite resources.

There are additional '21st Century' factors and elements which further suggest not only an apparently widening 'opportunity gap' but new or extended notions of 'basic literacy' (e.g. UNESCO, 2004). In such wider frameworks of definition, 'literacy' is increasingly understood as (a) the generic ability to visually as well verbally access shared sources of human information and to use different forms of language-use to communicate with others, and (b) new meanings, understandings, and contexts by which 'written or printed materials' are subsumed not only within the digital texts of new information and communication technologies but also recognized as extensions of human interaction with physical, oral/aural, and other visual aspects or semiotic realms of meaningful 'signification'. The distinction or connection between formal education and non-formal learning and knowledge-building has likewise become especially blurred in terms of the emerging possibilities and requirements of digital literacy in an increasingly inter-connected world (e.g. Lankshear & Knobel, 2008).

The concept of a 'digital divide' is often invoked to refer to aspects of this additional layering, with the result that any possible reversal of associated condition such as the *poverty cycle* and growing inequities in the global knowledge economy seems increasingly remote and unlikely at best (e.g. Servon 2002). Generally the concept of a *digital divide* is held to refer to a gap between 'haves and have-nots' when it comes to the access of not only computers and the internet more widely but also the associated knowledge and 'literacies' of these technologies and their possible applications (Norris, 2001, Compaigne, 2001). By extension the 'digital divide' in this view involves an important distinction between 'access' to global stocks of information or knowledge resources on one hand, and global networks of communication and knowledge building on the other. Thus it is a term which has particular relevance to formal education on one

hand (i.e. *rich vs. poor schools*) and social participation (e.g. disadvantages faced by rural margins in relation to urban centers) in a larger context of inequities both within and across different societies around the world on the other.

However, we propose to challenge such a 'hopeless' perspective in two distinct but ultimately related ways. One 'solution' is hinted at by the central principle of the 2000 Dakar Framework for Action (UNESCO, 2000) that '*Education for All* should not be 'thwarted... by a lack of resources'. This was generally understood in terms of financial pledges by richer and more developed countries to assist those governments in poorer more developing countries which were committed to the concept locally. Perhaps predictably, many of those pledges were never honored (UNESCO 2009). However, faced with an access 'digital divide' many local communities as well as individuals around the world are not waiting for assistance which is often unlikely to arrive – and indeed, are thus not letting themselves be thwarted by a lack of resources (Richards, 2006). Around the world, there are inspiring stories in both non-formal and formal educational contexts (including 'new' as well as 'basic' literacy learning) where local educators with community support are 'doing a lot with very little'. Thus one of the most exemplary models of EFA is Bangladesh's 'total literacy movement' linked as it is with the national project 'integrated non-formal education program' (INFEP) and an associated community library program (Hoque, 1997). Many such examples and accounts have been linked to what has been called 'ICT for development' (ICT4D) – an increasingly central focus of UNESCO initiatives around the world. As Heeks (2009) has pointed out, ICT4D projects have often not been sustainable because of the failure of top-down approaches to sufficiently engage a local context. Yet, the more successful NGO-sponsored projects or, better still, wholly local initiatives in digital learning or ICT4D can provide models for others rather than be simply explained away as exceptions which prove the rule of typical failure, passivity, and inadequacy. Indeed, the initiative being shown by those who are either motivated by sheer survival instinct or the possibilities of a value-added approach to getting the maximal use out of a resource by wide cross-section of a community can be an inspiration to a much wider audience than just other traditional, poor and/or developing communities.

Schools, universities and other educational institutions in many modern, rich and developed societies generally spend a lot of money on providing computer and internet access to their learners and users. But often little is spent on appropriate professional development of teachers and the development of appropriate learning

resources (e.g. Healy, 1999). This contrasts with how the constructivist learning theories which have heavily influenced changing educational policy in many countries (e.g. in terms of the valorisation of generic skills and learning outcomes – especially the elusive goal of developing ‘innovative’ graduates) typically emphasize the active, learner-centered possibilities of new information and communication digital technologies (Jonassen et al, 2007). In short, for all the money spent on access and despite all the innovative policy and rhetoric about how technology can revolutionize education and schools in these societies, there is a general sense that: (a) modern educational institutions have generally failed to harness the great educational promise of computers, multimedia, and the internet (e.g. Robertson, 2003); and (b) there are ‘missing links’ which somehow obstruct the conversion of often well-meaning policy and rhetoric into effective and integrated practice (Richards, 2007).

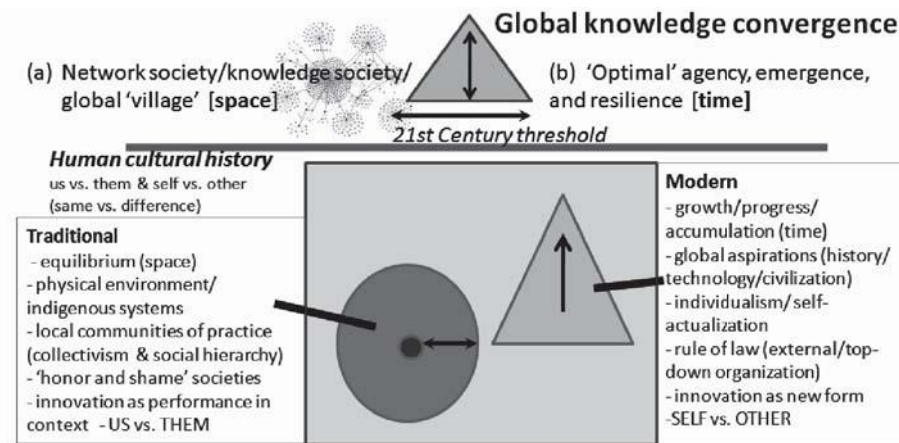
This contrasts with the great interest and adoption of digital technologies outside the classroom by a generation of younger learners in societies around the world. Thus, for instance, Prensky (2004, 2006) has insightfully described a digital divide between a younger generation of ‘digital natives’ who, he argues, are learning to think differently compared with an older generation of ‘digital immigrants’. In similar fashion, other commentators have recognized the productive new literacy implications of: (a) such extra-curricular activities as digital and online games (e.g. Gee, 2006); and (b) the more interactive ‘Web 2.0’ paradigm of rich media lending themselves to innovative designs of customized ‘mashups’ or the blending of different resources and ‘multimedia’. In contrast to the relatively passive medium of television, interactive digital games and constructive multimedia blending are increasingly recognized for their potential to encourage many of the kind of generic skills and ‘active learning’ approaches which educational policies are increasingly aspiring to internationally. In short, new media presuppose ‘new literacies’ which have extended basic reading and writing into active constructions of meaning through design and evaluation modes of interacting with internet and multimedia resources (Kress, 2003; Lankshear & Knobel, 2006). What is also clear is that the preoccupation with exciting uses of new literacy and technologies ‘outside’ the formal classroom and the related inability of teachers and schools to harness the interest and fascination of the ‘digital natives’ are reinforcing perceptions of a crisis in formal education in developed countries generally (Somekh, 2007).

One of the most insightful models of the educational implications of new information and communication technologies was developed by the educator and thinker Seymour Papert (e.g. 1994). In contrast to humanistic educators such as Neil Postman (1992) who tended to emphasize only the negative aspects of technology for human knowledge-building and was not able to recognize the more productive aspects, Papert emphasized the 'constructionist' or 'active learning' possibilities and implications of computer-based technologies. Although much of his work focused on the cognitive implications of technological tools for learning, perhaps Papert's most significant model (Papert & Calvallo, 2000) was of a future 21st Century society where community ICT 'learning hubs' are increasingly key centers of human knowledge-building. This is a vision which goes beyond the influential concept of an emerging 'network society' governed by the 'spatial flows... of information' (Castells, 2000) to suggest the concrete possibility of a global 'knowledge-building' convergence encompassing both formal and non-formal learning.

The concept of an emerging network society made possible by, but not reducible to, new technologies has profound and significant implications for recognizing a fundamental paradigm shift in both human social organization and paradigms of knowledge building, many of which are still to be understood or explored. As Castells outlines in his influential work, the nodes of human networking encouraged and extended by new technologies can include both individuals and social groups of various sizes who communicate, express themselves, and share information in a way which cuts across the historical human tendency in both traditional and modern forms of society to delineate: (a) socially hierarchical as well as culturally networked notions of *us vs. them* (traditional) or *self vs. other* (modern); and (b) *dialogical* rather than *oppositional* views of the interplay between local contexts and global imperatives of the human condition. This larger notion of a networked global society provides a sustainable, interactive, and imaginative corrective or antidote to relativist, postmodernist and technologically determinist emphases rather on transient or specific interactions between concrete things and abstract concepts. However, there are certain versions of this model which blur or even ignore the distinction between technological and human agency on one hand, and social and individual agency on the other (e.g. as described by Latour and others, actor-network theory's notion of *material-semiotic networks*).

In other words, the internet and related digital technologies have been a critical factor in encouraging the global extension or convergence of personal and shared imagination: (a) beyond the ‘separateness’ of both modern individualism and traditional senses of local community; and (b) in light of greater educational and other awareness of the potentially endless and unlimited human possibility common to all societies and individuals. In this way McLuhan’s (1982) prediction of an emerging *global village* builds on the anticipation of Ong (e.g. 1982) that digital technologies would productively converge with the history or social evolution of human knowledge and communications. Such a notion describes the possibility and knowledge-building perspective of a shared human consciousness and conscience which goes beyond merely the instantaneous and endless information accessible via the internet and related technologies.

Figure- 2: The far-reaching implications of an emerging 21st Century network society

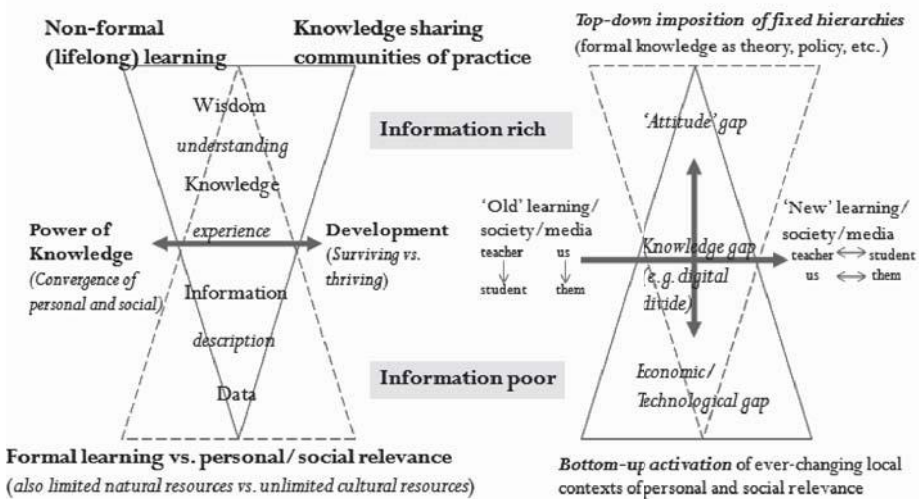


Thus as Figure- 2 above outlines, an emerging network society is encouraged by, but not reducible to, the ‘technological extensions’ *in space* of greater information-sharing, communication, and interactive dialogue between people around the world. Although this is not sufficient by itself for achieving a greater global convergence of human knowledge-building, it is a crucial and paradigm-altering foundation for both a more constructive, egalitarian, and reciprocal sharing of knowledge *in time* between humans in general, and for a recognition that even the richest, most technologically developed and educationally sophisticated people have much to learn from those that seem to have and know little worth sharing.

The *digital divide* is often or typically represented as a gap between the information poor and information rich in terms of how computers and digital networks provide a foundation for the acceleration and accumulation of knowledge (e.g. Compaine, 2001). In this way, technologically backward or undeveloped societies would seem to be also missing out on the whole process of knowledge-building understood as mere data and information accumulation. This is reflected in a model starting to become influential in such areas information systems and knowledge management referred to as the ‘data-information-knowledge-wisdom pyramid’ (Fricke, 2009).

Such a model essentially proposes that ‘organized *data* produces *information* which is constructed as *knowledge* in time may even produce *wisdom* through human understanding’.

Figure- 3: Formal vs. non-formal perspectives on the human knowledge divide



Generally speaking this model remains mainly focused on the process of accumulating data and converting this into information – with notions of higher-order knowledge and wisdom somehow possible but unlikely events. It is thus a self-fulfilling prophecy of such views that modern, rich and developed societies – indeed, even an emerging ‘network society’ - may have accumulated a great deal of data and information but not necessarily great stocks of understanding and wisdom. Hence, examples of people and especially teachers in traditional, poor, and developing countries doing ‘a lot with very little’ to harness

the educational and other uses of new information and communication technologies (indeed any educational or literacy resource) indicate the needs and possibilities of a convergence or sharing of different kinds of knowledge-building.

As further outlined in Figure- 3 the suggestion here is that like other *knowledge gaps*: (a) the ‘real digital divide’ is ultimately not so much a matter of technological access or social inequity *per se* but of applied knowledge and ‘attitude’ (that is, more appropriate *cognitive* as well as *social* strategies of constructive knowledge-building); and (b) in this respect, educators, administrators and policy-makers in modern, rich and developed societies can learn much from the ‘models’ of informal educators and community leaders as well as teachers in ‘not-so-well-resourced’ social contexts – that is from people who are ‘inspired’ more as a matter of necessity and possibility than by sheer policy or rhetoric. To put this way, the convergent human possibility for constructive knowledge-building in life as well as learning represents the key to transforming *vicious circles* of apparently negative inevitability into *virtuous circles* of emergently positive or constructive change. Of particular relevance to the EFA concept is the convergent notion that money and resources alone are not sufficient for an effective harnessing of educational possibilities - and, indeed the attitude or view that they are is perhaps somehow the greatest obstacle to be overcome. If the most productive knowledge-building is a gap between ‘what we know’ and ‘what we don’t know’, then perhaps some of the tacit knowledge which is presently being ignored and dismissed out of hand by those who ‘don’t know what they don’t know’ (especially when it comes to both literacy learning and the digital divide) can provide a crucial foundation for a global convergence of different aspects and kinds of human knowledge generally.

New Literacies and the Learner- Centred Paradigm Shift in Formal and Non-formal Education

How can the ‘active learner’ models of literacy and other learning be most effectively linked to the diverse and changing contexts of an emerging knowledge society and new digital technologies?

As also suggested by the United Nations’ ‘Universal Declaration of Human Rights’, a second and related meaning of the term ‘education for all’ refers to the inherent possibilities of all people around the world to pursue and achieve a sustainable future in terms of different personal and social needs as well as

convergent aspects of human knowledge-building. As outlined earlier, an *access and equity EFA perspective* tends to focus on local contexts of formal educational provision in terms of related social justice issues of not only basic literacy provision but also the increasing need for a global sharing of information and technology as well 'economic' resources more generally. In contrast, a *human possibility EFA perspective* emphasizes the global potentials and ever changing requirements for individual learners to take active roles and responsibilities for their own learning in non-formal as well formal educational contexts. The growing importance of this view in contemporary education from a pragmatic angle is suggested, for instance, by how users of the internet are increasingly required to negotiate (critically evaluate, etc.) the often unreliable sources of knowledge distributed or shared online. Exemplifying a paradigm common-place to 21st Century educational theorizing and policy-making, this perspective is suggested or epitomized by various *constructivist, learner-centered, and outcomes-based* models of learning on one hand (i.e. the applied knowledge potentials as well as generic literacy and learning skills typical to such approaches as *problem-based learning, inquiry-based learning, and project-based learning*), and to related notions of *life-long learning* and 'informal' as well as non-formal notions of education on the other as extensions of or supports for formal education systems.

Just as formal education practices have generally failed to significantly or effectively harness the educational implications of new information and communication technologies, so too the 'learner-centred' paradigm shift of constructivist learning, outcomes-based education and related 'active learner' models (Weimer, 2002, Pass, 2004). This is despite the extent to which such a paradigm has been embraced in contemporary theorizing and policy-making around the world in relation to rationales extending from 'personal growth' to the need to produce a new kind of worker with a range of generic skills relevant to the emerging global economy and knowledge society. Just as there are exemplary models of 'ICT for development' so too for various notions of *digital learning* harnessing the educational possibilities of multimedia, the internet, and new communications technology (Richards, 2004). In other words, there has been a similar missing link between the *top-down imposition* of new theory and policy and the required 'cultural change' needed to support more extensive *bottom-up activation*. Or, to put this another way, the learner-centered paradigm shift in formal education has tended to be undermined by the kind of oppositional or 'either-or' thinking which tends to ignore emergent dialogue and reinforce

oppositional views of a *necessary vs. sufficient* relation between a range of related educational terms: content vs. process, curriculum vs. assessment; thinking vs. doing; theory/policy vs. practice, etc. If the concept of ‘constructivist learning’ has been central to such debates, even this term has been inherently confused or compromised by the uncritical alternation between distinct *cognitive* and *social* notions of constructivist knowledge-building (Pass, 2004).

To cut through the confusion and better appreciate the potentially convergent connection between the *active learner paradigm* and the *human possibility EFA perspective*, we propose to re-visit and re-claim an important insight of the great literacy educator Paulo Freire in light of new insights into the language and literacy acquisition process in children. Research into language and speech development (e.g. Kagan, Herschkowitz & Herschkowitz, 2005; Gleason & Ratner, 2008) in particular and into the cognitive processes of the brain in general (Souza, 2005) has produced a deal of evidence that there are common developmental milestones in young children open to variation within different physical, social, and cultural contexts. These effectively universal aspects and stages of children’s language development also reflect greatly underestimated capacities of learning and knowledge-building inherent to individual cognition which: (a) get largely activated and demonstrated before formal schooling; and (b) reflect initial conditions of human possibility which are framed by the non-formal language community and environment extending from mother and family to include wider social networks. Every child who learns to speak the mother tongue of their immediate community gets to not only master (generally by the age of five) its basic rules of phonetics, syntax, word formation and speech rhythm but also basic rules for social and physical interaction with the world of human actuality. *First language acquisition* before the age of schooling is often taken for granted. Yet when we compare this to the difficulties of *second language acquisition* faced by older learners within a formal learning context we get a better appreciation of the inherent human capacity for knowledge building in terms of emergent possibilities. As both cognitive and social constructivists have recognized, such capacities compare with the assumptions of the dominant *transmission model of modern schooling* that learners are basically empty vehicles or passive recipients of information or skill transmission.

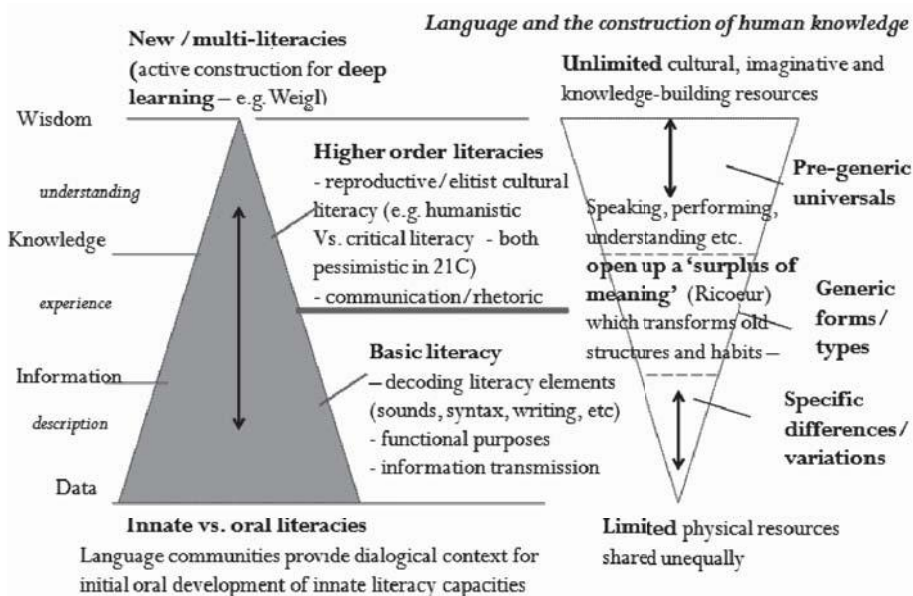
Many of the researchers into the extraordinary and prodigious talents of autistic savants (as well as other exceptional or accelerated learners) have similarly proposed that the kind of ‘genius’ demonstrated in such examples may reflect a

latent and basic human potential or capacity in everyone (e.g. Treffert, 2009). Such thinkers as Howard Gardner and Joseph Chiltern Pearce have likewise identified the imaginative capacity for ‘metaphorical thinking’ (as well as what Piaget called ‘reversibility thinking’) as the potential bridge between the apparently limitless learning possibilities of young children and the integrative emergence of abstract reasoning and applied ‘intelligence’ in mature adults. There are some important implications to be considered here for subsequent literacy learning as well as discussions about a convergent and achievable notion of ‘education for all’.

Firstly, however this is interpreted, it is clear that the *active learning* styles demonstrated by all children in their first language acquisition reflects the importance of both authentic and imaginative interests on one hand, and social nurturing on the other, for guiding the emergence of the initial stages of human language acquisition and knowledge building. Secondly, as not just the constructivists but a tradition of both ‘progressive’ and alternative notions of modern formal education (from Rousseau through to Bruner and Gardner, including many others such as Montessori and Steiner) have long advised, children are generally ‘wired’ with much greater capacities than conventionally thought. However, the learning potential of individuals in general and children in particular tends to be severely underestimated and restricted in terms of ‘vicious cycles of expectation’ often encountered in the modern schooling system with its dominant ‘transmission’ assumptions reinforcing the concept of the typically passive, empty-minded learner. Thirdly, it would seem to be the case that in formal schooling children effectively lose or rather *forget* the significant and powerful capacities for effective learning and innovation as the price to be paid for acquiring the capacities of abstract reasoning and socialization (perhaps this is linked to a similar contrast between traditional and modern knowledge systems). Fourthly, then, whilst individuals learn to recapitulate the social structures, expectations and standards of either formal or non-formal education, they do so as part of a dialogical process in several related ways – that is, not just the cognitive and social interactions of actual ‘talk’ within a shared language community context open to change ever to some degree but also as an interplay of meaningful structures and emergent learning, thinking and communication. In this way, an important foundation of a projected global knowledge convergence perhaps lies in the kind of potentially limitless knowledge building possibilities demonstrated in early childhood language acquisition or in exceptional cases such as typified by autistic savants.

Such implications might be further discussed in relation to the great insights of the literacy educator Paulo Freire (1975). For many people Freire is synonymous with principles of social justice and the resistance to forms of imposed social or cultural tyranny and oppression. However, more importantly for our discussion here, he was also a great innovator of basic literacy education using a specific version of a *dialogical model* of knowledge-building. Challenging what he called the *banking model* of education (i.e. the hierarchical model of authoritative teacher transmitting information ‘deposits’ into the empty minds of passive learners), Freire insisted that basic literacy programs in poor developing countries could still be efficient and effective even with very limited resources. Perhaps Freire’s most important insight was that the teaching and learning of basic literacy skills and knowledge will be more effective if strategically and dialogically linked to or situated in authentic human interests and concerns extending from *personal* domains of action through to the *cultural* aspects of local community contexts. It is this insight which has important implications and applications we believe for not only a more integrated framework of literacy in terms of new digital media of information sharing and global communications but also for engaging with the respective literacy education needs of the young in different contexts around the world within a larger convergent framework (see Figure- 4 below).

Figure- 4: The dialogical framework for an integrated model of literacy learning



The bottom-up, egalitarian, and knowledge-building aspects of Freire's *dialogical methodology* can be distinguished from the 'anti-hierarchical' critical framework of a 'pedagogy for the oppressed' which he is perhaps better remembered for – that is, the promotion of the concept of *concientization* or critical awareness in resistance to educational, social and cultural projections of a ubiquitous and hegemonic oppression. As some of his critics have pointed out, the larger framework tended to not only inadvertently reinforce a deterministic or inevitable notion of *us vs. them* relations (also in teacher-student interactions) but also the very kind of formal pedagogy and curriculum which his dialogical model aimed to challenge and undermine (e.g. Taylor, 1993). In this way, it may be further argued, selective adaptations or interpretations of his work within a *critical literacy* and *critical pedagogy* framework have often tended to: (a) forget or underestimate the central contribution of his dialogical model of literacy grounded in concrete personal, social, and cultural interests as a basis for encouraging active learners as well as more effective basic literacy education; and (b) to view the cultural interests of the young condescendingly as much more a symptom of inevitable oppression than also ever an opportunity to engage active learners (i.e. to focus on critical literacy and pedagogy aspects of *top-down imposition* rather than *bottom-up activation*).

Figure- 4 adapts Freire's foundational 'dialogical methodology' of literacy learning and knowledge as a process of *bottom-up activation* grounded in concrete social and cultural contexts as well as practical purposes and interests of particular language communities. It compares this process with Ricoeur's (1976) dialogical notion that any discursive act or cultural 'performance' within a particular local context potentially opens up a potential *surplus of meaning* able to transform existing structures and habits of both personal and social meaning. In this way we are able to construct a *more integrated model* of: (a) not only the different oral, print and digital dimensions of 'innate' human literacy as a convergent process of 'transformational' and not just 'translational' information sharing and communication, but also (b) a continuum from basic or functional notions of literacy through to higher order modes associated with processes of active or constructive interpretation on one hand, and innovative knowledge building on the other. This includes the new literacy implications and 'active learning' possibilities of interactive digital technologies (e.g. Weigel, 2002). Such a framework also incorporates the concept of *critical literacy* as an important and provisional part of a larger constructive framework open to dialogical engagement.

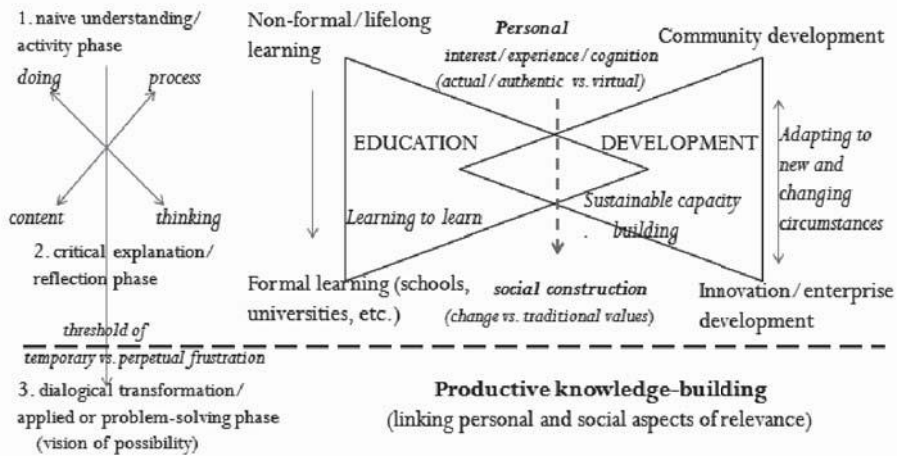
There are two *either/or* tendencies which such a model avoids or rather goes beyond. The first is the kind of simplistic separation between *lower-order* and merely functional notions of especially written or print literacy and *higher order* concepts such as critical literacy as outlined, for example, in Luke & Freebody's (1990) model of the four key literacy competencies (*coding, functional, semantic, critical*) which might be taught or learnt. The second tendency is the *either/or* contrast between the reproductive elitism and naïve and exclusive 'humanism' of privileged cultural literacies on one hand (e.g. Hirsch, 1987) and the kind of ostensibly anti-elitism and anti-hierarchical thinking as outlined in the critical literacy model associated with Freire's work on the other. There is a common pessimism in both perspectives, as well as convergent condescension towards the new literacy interests of the young in digital media and popular culture.

An initial variation of the critical literacy approach which was adapted to ambivalently incorporate both new, digital literacies and global tendencies for multicultural pluralism was the concept of 'multiple literacies' (e.g. Cope and Kalantzis, 2000). However, as epitomized by the further refinement of this model by Kress (2003) especially, the emergent concept of 'new literacies' has increasingly embraced the notion that meaningful critical literacy is a convergent 'listening/reading/evaluation' phase or perspective which needs to be grounded in the productive 'speaking/writing/design' process of active learners constructing meaning selections and combinations of both personal and social meaning. In ultimately similar fashion to Ong's (1982) notion that new literacies represent a 'secondary orality' convergence of primary (traditional) orality and the modern technologies of writing and print media, Kress's (2003) focus on new literacies recognizes the 'multimodal' interplay and convergence of not just verbal and visual aspects of multimedia texts but the convergent speaking and writing aspects of online or digital communications (Cf. also Manovich, 2001). In other words, in a network society where the fixed meanings of the past are quickly disappearing or confused with the 'shock of the new', everyone can and should be able develop the new literacy (and rhetorical) design skills for particular communication or self expression purposes – and likewise be able to simultaneously evaluate and reconstruct the oral, literate and digital 'designs' of others in order to participate socially and culturally with an effective balance of 'active learning' and critical literacy on one hand, and competency and innovation on the other.

There are a number of implications of this framework for revisiting and re-framing the EFA concept. The knowledge gap between traditional non-formal learning and modern basic literacy programs has been 'reconciled' in terms of an *active learner* paradigm for emergent knowledge-building which cuts across (or, rather, dialogically reconciles) the top-down theory/policy imposition vs. practical bottom-up activation divide. Both sides of the divide can learn from the other. Just as the apparent failure of a learner-centered paradigm in modern education can be overcome through a 21st Century framework of 'global knowledge-building convergence', likewise basic literacy programs for developing countries which adapt modern transmission pedagogies and curriculum focusing on de-contextualised skills and knowledge need to be strategically rethought or transformed to become more relevant, effective and cost-efficient. As discussed above, such a needed global convergence lies naturally at the intersection between: (a) the kind of dialogical methodology of literacy learning with few resources and in difficult situations advocated long ago by Paulo Freire, and (b) the 'new literacy' implications of a younger generation around the world who need to individually and collectively find a balance between transient and enduring aspects of meaning-making (i.e. who need to be encouraged to achieve the sustainable knowledge and hopefully also wisdom to deal with the confusions and uncertainty of global change and information overload).

Any kind of effective individual or collective learning, development or capacity-building involves an often unacknowledged 'thread' of coherence in space and convergent purpose in time. Without this any *bottom-up* efforts will get lost in irrelevance and confusion. But, similarly, *top-down* (e.g. theoretical or policy) impositions of a particular direction or an objective which are not designed to engage bottom-up activation in particular local contexts are also likely to ultimately fail or be unsustainable. As reflected on the right hand part of Figure-6, the knowledge gap between an *access and equity EFA perspective* on one hand, and a *human possibility EFA perspective* on the other can generally be reconciled in terms of a productive as well as emergent convergence linking personal and social aspects of relevance. This can be achieved either as a convergent pedagogical and curriculum strategy within a formal educational context, or as a non-formal strategy of lifelong learning linked to various local (and also potentially global) contexts of community.

Figure- 6: The ‘active learning’ process and local vs. global community capacity-building



Adapted from Richards, 2010

Such a convergence involves the need to overcome an additional ‘knowledge gap’ in time between some particular or general *vision of possibility* and both initial designs and ongoing commitment to overcoming various obstacles in the process of attempting to realize or actualize this. Thus, as exemplified by the dialogical methodology of thinking for productive knowledge-building represented to the left of Figure- 6, a *thread of resilience* needs to be aligned to designed threads of coherence and purpose in order to achieve or develop productive outcomes, applications, and problem-solving resolutions.

Cross-cultural Communication as a Critical Basis for Crossing the Threshold of Human Possibility

What can people in modern, rich and/or developed societies learn from those in traditional, poor and/or developing ones? [Why is this such an important question?]

Perhaps the greatest obstacle to making the concept of *Education for All* concept a reality is a ‘cultural’ one rather than a financial one? We have already discussed how transmission models of teaching and learning have generally represented a negatively self-limiting and retrospectively ‘condescending’ educational

paradigm which has tended to not just ignore or deny emergent notions of human possibility but also ‘active learner’ models such as constructivism – linked as they are to national education policy aspirations around the world to produce innovative, thoughtful graduates with an integral range of generic skills and applied knowledge(s). As touched on already, we have noted how *traditional* and *modern* forms of society have in common a tendency to reinforce the kind of *us vs. them* (or *self vs. other*) delineations which either implicitly or explicitly reinforce constructions of social hierarchy as well as latent senses of exclusion, condescension, and superiority. Thus the challenge of intercultural communication represents not only a key obstacle to the achievement of a global knowledge convergence as an abstract concept, but also the ethical common sense of aiming to achieve a more egalitarian reciprocation or sharing of both (limited) natural and (unlimited) cultural resources. To put this another way, latent senses of cultural superiority (and the inverse of this, cultural inferiority) of different kinds in most forms of human society are ultimately the means by which significant human ‘inequities’ - or failures to address these - are often retrospectively explained or even justified and further reinforced.

The very concept of a *global knowledge convergence* implies that an effectively universal concept of human society will either reflect or be the product of a sufficiently *critical mass* of reciprocal knowledge sharing and/or collaborative knowledge building. However, on the face of it, modern developed societies would seem to be so advanced and ‘information rich’ and other societies so ‘information poor’ that there could be no real basis for any meaningful sharing, reciprocation or comparative ‘equilibrium’ of knowledge sharing or building. What if a case could be made that much of this ‘superiority’ is selective distortion and self-defeating arrogance in the grand scheme of things or from a more universal perspective? We will thus introduce here several related proposals which are developed more fully elsewhere (Richards, 2011): (a) that the only real and sustainable remedy for cultural exclusion and ‘knowledge arrogance’ lies in the humility to be gained from realizing that we have something valuable to learn *from another*; (b) however, it is barely possible to either learn from or recognize we can learn from others if we are ‘looking down’ upon them; (c) all forms of modern and traditional culture and society have much to learn from others (if we/they only realize it); (d) that what we have most to learn from others lies in their particular ‘configurations’ of universal insights and specific differences in relation to their own such configurations; and (e) that the prerequisite ‘literacy’ of being able to

effectively tell the difference (i.e. between enduring aspects of universality or commonality and transitory elements of '*cultural difference*') requires an 'active knowledge-building' approach.

There is an additional related idea which we propose to investigate in this section: that there is perhaps a connection between the cultural tendency to 'look down' on others and the historical dominance of a 'rear-view mirror' model of knowledge-building. By the latter we refer to a view of human knowledge as basically a process of mere information accumulation on one hand, but also on the other the top-down or positivistic reductionism and retrospective 'rationalizations' of viewing both human and physical nature as either a necessarily determined (objectivist) or ad hoc and contingent (relativist) process (e.g. Bernstein, 1981). In this view, the twin pillars of knowledge building (representations of *causality* and *classification*) tend to be seen separately except in retrospect and in terms of viewing any particular 'whole' in a de-contextualized way (as distinct from a 'systems' view) or reducible to the mere sum of its ostensible parts. As an antidote to how such a view tends to reinforce notions of 'vicious cycles' of apparent inevitability in human affairs and in nature more generally, we will further outline a dialogical and productive (as distinct from 'reproductive') model of knowledge building in terms of the self-sufficient principle of *emergent possibility*. This section of the paper will explore these related points in relation to the exemplary *knowledge building models* represented in the relevant ideas and example of several great 'dialogical' thinkers extending from the distant past (Socrates) to more recent times (Clifford Geertz and Paul Ricoeur).

As exemplified by his *The Interpretation of Cultures* (1971), the work of Geertz is able to provide a useful reference point for reconsidering the role of particular cultural patterns as knowledge systems and symbolic 'storehouses of pooled learning' from several related angles. Geertz may not have been the only modern cultural anthropologist or ethnologist to have a non-superior, respectful, and genuinely interested attitude or approach to people from 'other cultures' but he was arguably ground-breaking in the way he exemplified this as an effectively universal method of dialogically linking outsider and *insider* perspectives to the interaction between different meaning systems. Such an approach thus lies 'in between' the conventional condescension and superiority of viewing especially 'others' from 'traditional' cultural contexts in relation to the standards of modern civilization and knowledge on one hand, and on the other the relativist 'turn' in various contemporary models of cultural studies which typically denies any

substantial importance to the concept of cultural difference per se beyond evidence of descriptive diversity. In other words, Geertz recognised that there are universally convergent insights to be realized in coming to understand not just the particular cultural contexts of other individual and collective agents but their specific actions, words and various texts of meaning. Thus the significance of Geertz's work goes well beyond the boundaries of anthropology and ethnography in its development and application of a 'cross-cultural' or dialogical notion of knowledge building and communication. Geertz's model of cultural interpretation represents a basis for going beyond the modernity-tradition divide and overcoming the historical human tendencies for *us vs. them* or *self vs. other*—both in concrete practice as well as emergent theoretical knowledge-building.

But as well as recognizing other cultures as effective 'ecosystems', Geertz's dialogical approach itself represents an *ecological* approach to knowledge building and sharing. His own demonstrated ability to contextualize and interpret cultural actions, words, and other texts within the coherent richness and cultural profundity of societies with no great external signs of meaning-making or 'progress' represented a knowledge convergence in which concepts of causality and classification are linked as an emergent process of *interdependence* and *interconnectedness* (i.e. very much in the manner of a 'network society'). Thus, in between the gap of *traditional mystification* and *modern reductionism* there rises an emergent notion for viewing both the concept of 'cause and effects' on one hand, and the 'description' of particular categories or types on the other, as a perpetual *process of transformation* in time which includes but goes beyond a subsidiary concept off *spatial networking*. Likewise, instead of ignoring the importance of either local or immediate context and judging a cultural configuration of knowledge and meaning in terms of its external 'parts', the relationship between any social or cultural 'whole' and its various parts might be approached as an interplay of both human universality and difference.

The ideas of Paul Ricoeur were an acknowledged central inspiration for Geertz's *The Interpretation of Culture*. This provides the clue to Geertz's indebtedness to or convergence with the dialogical model of knowledge building of the man credited with being the 'father' of western and modern thought and thus ostensibly responsible for the *modernity-tradition* divide which informs fundamentally conflicting notions of human knowledge. However, it might be argued that the full imports of Socrates' interactive strategy of knowledge building are even more relevant for a 21st Century context of potential global knowledge convergence

(Richards, 2009). Socrates' use of the so-called 'elenchus method' of inquiry through dialogue based around question-and-answer format is generally acknowledged as a seminal prototype for the scientific method in terms of its rigorous and uncompromising challenge to any pretence, contradiction or distortion which would obstruct the apprehension or adherence to universal principles and standards of knowledge (e.g. Vlastos, 1994). Some like Aristotle have approached the Socratic *elenchus method* as a prototype of an inductive model of the scientific method, and others focusing on it as 'negative method of hypothesis elimination' suggest it is more an indirect version of the hypothetic-deductive model.

As also evidenced in many of the Socratic dialogues recorded by his student Plato, Socrates was well-known for his understanding that arrogance and pretention represented a closed off denial of or distortion of people's innate knowledge and wisdom. Not so well-known but consistent with his essentially egalitarian perspectives and educational motivations, is the inverse notion that Socrates' method sought to bring out or 'emerge' the implicit or underestimated knowledge of every individual with at least some degree of an open mind. In other words, most people know much more than they think they know, but may need assistance to overcome their lack of confidence or feelings of ignorance to realize and apply this. Socrates' self-conception as a 'mid-wife' was reported in the *Theaetetus* with the associated claim that: 'Some of them appear dull enough at first, but afterwards, as our acquaintance ripens... they all make astonishing progress... the many fine discoveries to which they cling are of their own making. But to me they owe their delivery'.

This *emergent* rather than *transmission* model of learning and knowledge-building answers the criticism often made against Socrates that his 'elenchus' (i.e. guided question-and-answer) threads of inquiry typically end up as 'aporia' (i.e. seemingly un-resolvable or impossible queries) rather than direct answers. Rather, such an approach may be more accurately interpreted as part of a dialogical strategy that an indirect design - rather than direct lecturing or 'spoon-feeding' of convenient answers - is the most effective way to encourage active learning, productive thinking, and emergent knowledge building. Thus, also, the *Socratic questioning* model has not only remained a key tool for educators across the ages but also a key to *inquiry-based learning* - along with *problem-based learning* and *project-based learning*, a central pillar of the learner-centered paradigm of education (Paul & Elder, 2006).

Another important clue to the 21st Century relevance of Socrates' embodiment of applied wisdom is provided by Ong (1982) whose focus on new literacies was referred to earlier. Ong's work generally describes the decay of 'dialogue' in the emerging modern society of the West - the progressive 'literalization', spatialization, formalization, 'bureaucratization', and especially 'interiorization' of human thinking as part of the historical process of 'the technologising of the word' (the process of going from *orality* to various new stages and aspects of *literacy* including writing, print and mass communications). Ong's model also describes the paradoxical emergence of a new and 'secondary' form of orality in the global context of humanity increasingly defined by new communication technologies building on the 'chirographic conditioning' of modern peoples (pp.175-179). It is perhaps Ong better than anyone else who recognized that Socrates' famous resistance to writing (for 'destroying memory... and weakening the mind', etc.) represents a kind of anticipatory antidote for the 'decay of dialogue', loss of memory, and passive literalism of written and print technologies in the historical emergence of modern society in the West which he himself is indirectly responsible for (via the 'idealistic' writings of Plato). We might also propose that it represents and remains the crucial antidote to the negative aspects of 'secondary orality' and, in this way, a key to the most effective 21st Century knowledge building.

The 19th Century Philosopher Kierkegaard described Socrates as the first of the moderns in light of the very 'self-aware irony' which informed his use of the elenchus method - that is, an 'infinite, absolute negativity... [which potentially opens up] the infinity of possibilities' (Cited by Storm, 2009). Such references to Socratic irony typically describe Socrates' repeated claims of personal 'ignorance' when engaging with 'clever' people (e.g. Egan, 1997). But as indicated above (and as Kierkegaard later realized), there are consistent and solid grounds for distinguishing between a retrospectively imposed modern (or even post-modern) irony and what Kenneth Burke called 'consubstantial irony'. In the words of Ricoeur, this distinct kind of irony involves an *egalitarian* as distinct from *condescending* perspective of viewing 'oneself as another' (and vice versa). The elusive universals sought in Western thinking - even inversely in the 'absolute negativity' of modern forms of irony - are referenced in Socratic (*dialogical*) *thinking* by the very elements discarded by Plato, Aristotle and the whole western tradition of *either/or thinking* (idealism vs. realism, rationalism vs. empiricism, objectivism vs. relativism, etc.). In other words, universality lies

inherent in the very process of either implicit or explicit dialogue itself, and the ethical as well as knowledge ‘reference-point’ of an organizing or sustainable sense of ‘self-knowledge’.

The pivotal distinction made by Socrates between the *ignorance of close-minded arrogance* and the *wisdom of open-minded ignorance* inform a consistent thread linking his particular philosophical ideas, educational methods, and rhetorical techniques into a consistent and powerful framework of knowledge building. In particular, Socrates used his questioning method to provisionally ‘open up’ and guide not just old, inaccurate, and simply lazy structures of thinking to a more dynamically relevant and universal reference point or perspective. In short this method was conceived to *produce* and not just *reproduce* various forms of new or innovative knowledge in the sense of practical and applied understanding. In this way, the elenchus method was not only a rigorously disciplined and uncompromising model of critical thinking but also a productive and innovative method of producing new insights, understandings, and knowledge in a convergent sense.

There are many connections between the ideas of Socrates and the dialogical framework of Paul Ricoeur, one of the greatest philosophers of the Twentieth Century. One such connection exemplifies and frames the notion of a potential global convergence of the human knowledge building of various kinds (e.g. ranging from the non-formal to the formal, and inclusive of social as well as cognitive aspects). In one of his final major works *Oneself As Another* (1992) Ricoeur outlined a *philosophical* ethics for the 21st Century which through a strategic interplay of *appropriation* and *critical distanciation* engaged with and went beyond the characteristically modern ‘hermeneutics of suspicion’ (i.e. the critical opposition between objectivism and relativism) to outline the vision of a truly global and ‘reconstructive’ human knowledge convergence. In contrast to nearly all his modern contemporaries Ricoeur viewed ‘critical thinking’ as a *provisional* phase (not just a fixed position) in the dialogical and emergent process of knowledge building as transformation. Ricoeur’s debt here and elsewhere to Socrates is acknowledged in a short related paper ‘Life in Quest of Narrative’ (1992) which argues that the dialogical mediation between man and himself (the ‘irreducible dimension of self-understanding’) remains a key to the social (communicative) and *natural* (referential) orders of human knowledge-building. The apparently endless process of past ‘sedimentations’ (e.g. social traditions or ideologies) are ever transformed by the infinite human possibilities associated

with the principle of 'innovation'. In such terms Ricoeur (1986:235) identified how the greatest challenge for humanity lies in the growing disconnection between past and future: 'the entire present is in crisis when expectancy takes refuge in utopia and tradition congeals into a dead residue'.

One of the central ideas in Ricoeur's work is that the human capacity for innovation needed to redeem (or continue to transform) the sedimentations of 'past innovations' (and thus the central crisis of the modern age) lies in the function and 'perpetual new literacy' of *productive imagination*. In similar fashion to Socrates' linking of *self-knowledge* to a theory of knowledge building as 'recollection', Ricoeur viewed self-knowledge as the truly sustainable basis for human 'innovation' - as the dialogical or emergent antithesis of knowledge building viewed fundamentally (or even antithetically) as the objective accumulation of information. The capacity for *innovation* is exemplified by the ever-present potential for human actors and language-users to generate a 'surplus of meaning' in a particular event or text as an exemplification of some whole context. The opportunities for human innovation thus extend from the specific genres of typical individual or social patterns of interaction to more universal aspects and elements of knowing. This is especially so when guided by teachers or leaders who serve as 'mid-wives' to emergent human possibility. Also in terms of the alternately *linguistic* and *cognitive* functions of verbal 'predication' (especially in the posing of relevant questions), Ricoeur (1981) recognized that the innate human capacity for metaphorical thinking and language-use is the key to knowledge-building. This is so not just in the learning of children but in all human endeavors including the formalization of the most abstract concepts and scientific modeling. In other words, the key to the emergent interplay between the alternately *horizontal* aspect of associative thinking and the *vertical* notion of abstractly linear or 'logically' hierarchical thinking lies primarily with the former rather than the latter.

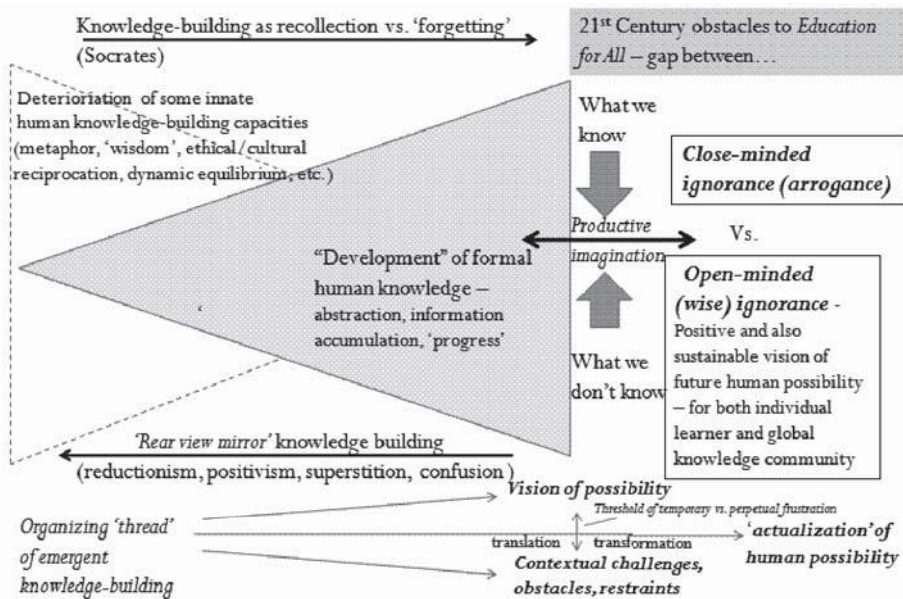
Ricoeur's (1981) pivotal concept of 'productive imagination' is to be distinguished from all variations of what he called a 'reproductive imagination'. Such a concept includes but goes beyond a reflective or empirical notion of visualization (the reception of external images) on one hand, and various 'passive' models and paradigms of learning and knowledge-building on the other to embrace what we earlier referred to as retrospective notion of both causality and classification. In terms of a *new literacy perspective*, productive imagination thus provides an integrating focus for not only reconciling but transforming both basic

and critical modes of literacy on one hand, and the connection between verbal and multimodal dimensions of textuality and communication in a human world increasingly mediated by new digital technologies. We adapt this concept here as the required element to overcome what might be called the *threshold of temporary versus perpetual frustration, confusion, and uncertainty* in human knowledge building. For instance, the most productive thinking and learning requires an active response to overcoming (the *virtuous vs. vicious circles* of) inevitable obstacles, challenges and restraints in order to sustainably achieve and apply some practical or conceptual *vision of possibility* in terms of a related *thread of resilience*. Such knowledge building represents an alternately disciplined and innovative convergence of thinking and doing on one hand, and content and process on the other.

Figure- 7 outlines how, as a model of essential human knowledge building, the crossing of this ‘threshold of human possibility’ represents a further convergence between Ricoeur’s dialogical notion of how applied knowledge integrates and transforms both *naïve understanding and critical explanation* on one hand, and Socrates’ similarly productive negotiation of the gap between ‘what we know’ and ‘what we don’t know’. On the other for both men, the endless *aporia* (i.e. the retrospective, ad hoc, and/or reductionist perceptions of seemingly impossible predicaments and apparently un-solvable or inevitable problems) of the human condition can begin to be more productively engaged or transformed at either the individual or global levels if addressed with the strategic indirectness of a simple question or insight. Figure- 8 also provides an outline of not only how a projected future knowledge convergence represents alternately the *culmination* of formal human knowledge building on one hand, and on the other the recovery of what Socrates understood as the (perpetually *forgotten*) innate human capacities for wisdom and universal recollection or remembrance. In terms of the crucial obstacles to the global need for greater and more ‘egalitarian’ intercultural and interpersonal understanding and communication, it represents a sustainable means of arguing that: (a) in the larger scheme of things every individual and every community in the world (past as well as present) is not just ‘oneself as another’, but (b) *really* is fundamentally and potentially no ‘better’ than anyone else. Whilst we can *often* learn some useful new information from other people if we are prepared to listen, we can *always* learn that our own perspectives are inevitably partial and incomplete in various senses. We can ever be humbled (a concept synonymous with the most effective learning and knowledge building, as Socrates

has taught us) by the insights or alternative perspectives of others which are a constant potential reminder of our own inevitably limited and inadequate efforts to directly negotiate the gap between ‘what we know’ and ‘what we don’t know’.

Figure- 7: Productive imagination: a key to the most effective knowledge-building



The diagram suggests the modern emergence of what Ong called ‘human interiorisation’ (the social and cultural externalization of egotistical individualism). Blind adherence to notions of ‘progress for its own sake’ epitomize other similarly passive, reproductive, and merely *externalized* social and personal ideologies of ‘growth’ or development in conflict with dynamic principle of balance and equilibrium. This is perhaps the hidden side of privileged, elitist, and condescending notions of achieving a ‘formal knowledge’ pyramid in terms of a merely cumulative notion of information. The price of such progress has arguably been the historical *deterioration* or *forgetting* of early childhood, traditional, and generally ‘innate’ human capacities for thinking metaphorically, reciprocally, and ecologically. Or, to put this in terms of the renewed (i.e. 21st Century) relevance of Socrates’ pedagogical efforts to reconcile *innate* human ‘recollection’ and the universal requirements of self knowledge, those who suffer

from close-minded arrogance might realize that they are not really superior to those who are prepared to acknowledge 'wise or open-minded 'ignorance'. Yet, of course, there remains genuine inequity between those who exercise (or not) their ostensible right not to actualize their potential or develop their knowledge and those who have little choice because they are unable to or denied access (sometimes by the latter) to basic natural or cultural resources required to do so. On the contrary, the same humility required of a genuinely *productive imagination* is arguably the most critical component for both achieving a future *global knowledge convergence*. This is also the key to transforming the *Education for All* concept – for going beyond just another unachievable utopian ideal and achieving an actual reality of the greatest importance.

Conclusion

This paper has explored the possibility of whether well-meaning but apparently idealistic policies or doctrines such as UNESCO's *Education For All* (EFA) might ever be transformed into actuality. It has done so in terms of how, from the outset of the 21st Century, the EFA concept really does exemplify some of the key dilemmas about and challenges to do with the historical human enterprise of knowledge-building in general, and new 'literacy' requirements in particular. The discussion of the paper has built upon the enduring knowledge-building' implications of Freire's dialogical model of literacy learning in traditional, poor or developing societies on one hand, and the 'new literacy' as well as global and intercultural implications of an emerging network society expedited in modern, rich and developed societies through the increasing use of digital technologies for ostensibly greater information sharing and communication. Perceptions that an apparently accelerating 'digital divide' is reinforcing the inevitability of the failure of the EFA concept have been challenged and re-framed in order to assist with investigating the potential convergence of different notions and aspects of knowledge building and sharing. Clarification was sought for how and why the greatest obstacles to global efforts to address various aspects of human inequity on one hand, and to achieve better knowledge sharing on the other, are not simply about technological, financial or even cultural resources *per se*.

In this way, we have argued that the most important 'new literacy' is an either recovered or sufficiently supported human capacity for 'active' learning and knowledge-building – that is, both the individual and collective capacity to transform vicious circles of inevitability into more positive and productive scenarios

and opportunities. Such a notion is perhaps most effectively conceptualized in terms of what Paul Ricoeur has called the often forgotten and denied but the ever-presently available and infinitely as well perpetually renewable egalitarian capacity for 'productive imagination'. Thus a projected future global knowledge convergence has been suggested in terms of the timelessly universal 'educational' methods of Socrates for encouraging *productive imagination* - the requisite humility to productively navigate the gap between 'what we know' and 'what we don't know' as an emergent human knowledge building process.

References

- Bernstein, R. (1983). *Beyond objectivism and relativism: Science, hermeneutics, and praxis*, Philadelphia: University of Pennsylvania Press.
- Brown, J., & Duguid, P. (2000). *The social life of information*, Harvard Business School.
- Castells, M. (2000). *The rise of the network society*, Blackwell Publishing.
- Compaine, B. (Eds.). (2001). *The digital divide: Facing a crisis or creating a myth?*, Cambridge, Massachusetts: MIT Press.
- Cope, B., & Kalantis, M. (Eds.). (2000). *Multiliteracies: Literacy learning and the design of social futures*, London: Routledge.
- Elias, N. (1991). *The society of individuals*, Oxford: Blackwell.
- Ferdig, R. E., & Dawson, K. (2005). Technology and the deep play of intercultural teacher education: A reflection on two seminal writings of Clifford Geertz. *Contemporary Issues in Technology and Teacher Education [Online serial]*, 4, 4. Available: <http://www.citejournal.org/vol4/iss4/seminal/article1.cfm>
- Fricke, M. (2009). The knowledge pyramid: A critique of the DIKW hierarchy, *Journal of Information Science*, 35(2),131-142.
- Freebody, P., & Luke, A. (1990). Literacies programs: Debates and demands in cultural context. Prospect: *Australian Journal of TESOL*, 5(7), 7-16.
- Freire, P. (1993). *Pedagogy of the oppressed*, New York: Continuum.
- Gardner, H. (1991). *The unschooled mind: How children think and how schools should teach*, Basic Books.

- Geertz, C. (1963). *Agricultural involution: The process of ecological change in Indonesia*, University of California Press.
- Geertz, C. (1971). *The interpretation of cultures*, New York: Basic.
- Gee, J. (2007). *What video games have to teach us about learning and literacy*, 2nd edition, Palgrave Macmillan.
- Giroux, H. (1997). *Pedagogy and the politics of hope: Theory, culture, and schooling*. Boulder, CO: Westview.
- Gleason, B., & Ratner, N. (2008). *Development of language*, 7th edition, Boston: Allyn & Bacon.
- Hall, E., & Handley, R. (2005). *High schools in crisis: What every parent should know*, Greenwood Publishing.
- Harding, D. et al (2005). The changing effect of family background on the incomes of American adults, in Bowles, S., H. Gintis, and M. Osborne Groves (Eds.) *Unequal Chances: Family Background and Economic Success*, Princeton University Press.
- Healy, J. (1999). *Failure to connect*, Simon & Schuster.
- Heeks, R. (2009). The ICT4D 2.0 Manifesto: Where next for ICTs and International Development, *University of Manchester Institute for Development Policy and Management*, online at http://www.sed.manchester.ac.uk/idpm/research/publications/wp/di/di_wp42.htm
- Hirsch, E. (1987). *The schools we need and why we don't have them*, Doubleday.
- Hoque, A. (1997). Adult education in Bangladesh: Recent innovations, <http://www.literacy.org/products/ili/pdf/alrfsf.pdf>
- Huba, M., & Freed, J. (2000). *Learner-centered assessment on college campuses: Shifting the focus from teaching to learning*, Allyn & Bacon.
- Johnson, S. (2006). *Everything bad is good for you*. Riverhead.
- Jonassen, D., & Land, S. (1999). *Theoretical foundations of learning environments*, Lawrence Erlbaum Associates.

- Jonassen, D., Howland, J., Marra, R., & Crismond, D. (2007). *Meaningful learning with technology*, 3rd edition, Prentice Hall.
- Kagan, J., Herschowitz, N., & Hershkowitz, E. (2005). *A young mind in a growing brain*, Lawrence Erlbaum Associates
- Kist, W. (2004). *New literacies in action*. Teachers College Press.
- Kellner, D. (1998). Multiple literacies and critical pedagogy in a multicultural society. *Educational Theory*, 48 (1) 103-22.
- Kress, G.R. (2003). *Literacy in the new media age*. London: Routledge Falmer
- Lankshear, C., & Knobel, M. (2006). *New literacies: Changing knowledge in the classroom*. Open University Press.
- Lankshear, C., & Knobel, M. (2008). *Digital literacies*, Peter Lang.
- Manovich, L. (2001). *The language of new media*, MIT Press.
- Ong, W. (1982). *Orality and Literacy: The technologizing of the word*, Penguin Books.
- Papert, S. (1993). *Rethinking school in the age of the computer*, New York: Basic Books.
- Papert, S., & Calvallo, D. (2000). Entry point to Twenty-first century learning, MIT Media Labs, online at <http://learning.media.mit.edu/learninghub.html>
- Pass, S. (2004). *Parallel paths to constructivism: Jean Piaget and Lev Vygotsky*, Information Age Publishing.
- Paul, R., & Elder, L. (2006). *The art of Socratic thinking*. Foundation for Critical Thinking.
- Postman, N. (1992). *Conscientious objections: Stirring up trouble about language, technology and education*, New York: Vintage Books.
- Prensky, M. (2004). *Digital games-based learning*, McGraw-Hill.
- Prensky, M. (2006). *Don't bother me Mom – I'm learning*, Paragon House.
- Prigogine, I. (1997). *The end of certainty: Time, chaos and the new laws of nature*, The Free Press, New York, NY.

- Richards, C. (2000). Hypermedia, internet communication and the challenge of redefining literacy in the electronic age. *Language Learning and Technology*, 4, 2, 59- 77.
- Richards, C. (2004). From old to new learning: Global dilemmas, exemplary Asian contexts, and ICT as a key to cultural change in education. *Globalisation, Societies and Education*, 2, 3, 337– 353
- Richards, C., & Nair, G. (2008). 21st Century knowledge-building in Asia Pacific contexts: Towards a multi-disciplinary framework for linking ICT-based social and personal contexts of education and development, *The Electronic Journal of Information Systems in Developing Countries*, Information Society special edition.
- Richards, C. (2009a). The potentially crucial role of the ‘humanities’ in the new university. Refereed proceedings of the *Regional Conference on the Humanities*, Petronas University, 18- 19 February.
- Richards, C. (2009b). E-learning 2.0: Using a Web 2.0 paradigm to design effective online academic research or learning communities. Refereed proceedings of the *Malaysian National Centre for Excellence E-Community Seminar*, Kuala Lumpur, 19-20 March.
- Ricoeur, P. (1976). *Interpretation theory: Discourse and the surplus of meaning*. Texan Christian University Press.
- Ricoeur, P. (1977). *The rule of metaphor: Multi-disciplinary studies of the creation of meaning in language*, Buffalo: University of Toronto Press
- Ricoeur, P. (1991). Life in quest of narrative, *On Paul Ricoeur*, ed. D.Wood, Routledge.
- Ricoeur, P. (1992). *Oneself as another*, The University of Chicago Press.
- Robertson, J. (2004). *Stepping out of the box: Rethinking the failure of ICT to transform school*. *Journal of Educational Change*, 4(4), 323- 344
- Servon, L. (2002). *Bridging the digital divide: Technology, community, and public policy*, Malden, MA: Blackwell,
- Somekh, B. (2007). Taking the sociological imagination to schools: An analysis of the (lack of) impact of ICT on education systems, *Pedagogy and learning with ICT*.

- Sott, G. (Eds.). (2002). *Does Socrates have a method? Rethinking the elenchus*, Pennsylvania State University.
- Sousa, D. (2005). *How the brain learns*, 3rd edition, Corwin Press.
- Stiglitz, J. (2006). *Making globalization work*, Penguin books
- Taylor, P. (1993). *The texts of Paulo Freire*, Buckingham: Open University Press.
- Treffert, D. (2009). The savant syndrome: An extraordinary syndrome, *Philosophical Transactions of the Royal Society B: Biological Sciences*, 364 (1522), 1351– 7.
- UNESCO (1990). World Declaration on Education for All (Jomtien Declaration), online at <http://www.unesco.org/education/wef/en-conf/Jomtien%20Declaration%20eng.shtm>
- UNESCO (2000). EFA 2000 Assessment, online at <http://www.unesco.org/education/wef/en-leadup/assess.shtm>
- UNESCO (2004). The plurality of literacy and its implications for policies and programs: Position Paper. online at <http://unesdoc.unesco.org/images/0013/001362/136246e.pdf>
- UNESCO (2009). EFA Global Monitoring Report, online at <http://www.unesco.org/en/efareport>
- Weigel, V. (2003). *Deep learning for a digital age: Technology's untapped potential to enrich higher education*, Jossey-Bass Books.
- Weimer, M. (2002). *Learner- centered teaching: Five key changes to practice*, Jossey- Bass.

Critical Explorations into the Politics of Institutionalized/Estatized-Human Rights and Adivasi Displacement and Dispossession in India

Dip Kapoor*

ABSTRACT

This paper advances the proposition that a dialectical appreciation of the politics of state-institutionalized human rights in colonial and neoliberal hegemonic (imperial) contexts helps to shed light on why Adivasis facing development displacement and dispossession are unlikely to advance their political and existential interests through recourse to an estatized human rights mechanism embedded in global and national political and economic structures imbricated in the historical projects of colonialism and imperialism (globalization of capitalism). Adivasi social movement inspired “human rights” (and related conceptions) informed by an anti-colonial/imperial project that transgresses these trajectories continue to provide the primary political impetus for asserting the continued place of Adivasi. The paper is informed by funded research into “learning in Adivasi social movements in eastern India” (2006-2009), the author’s long-stranding relationship with Adivasi/rural movements/activism in this region since the early 1990s and secondary literature/reports addressing the politics of human rights in Adivasi contexts of development displacement and dispossession.

Keywords: Adivasi/original dwellers; Anti/Colonialism; Social Movements; Human Rights; Empire/Neoliberalism; Hegemony.

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The 'new' nations of Asia and Africa somewhat understandably insisted that the right to self-determination extended only to situations of 'classic colonialism', available to their 'peoples' only once in history: to determine their collective status as sovereign states within the meaning of international law. That right once exercised was extinguished for all times; this presumed that the 'logic' of colonialism, which made all sorts of different peoples, cultures, and territories vessels of imperial unity, should continue in the post-colony. (Baxi, 2002, p. 36)

The law has been constructed on the assumption of the individual dislocated person. There is no understanding of communities as the subjects of dislocation or ways of life that are destroyed. There is an abyss of incomprehension on the part of the Indian elites toward rural and tribal communities. Ripping them out from lands that they have occupied for generations and transplanting them overnight in to an alien setting (which is the best they can expect) is understood as rehabilitation and liberation from their backward ways of life. (Menon & Nigam, 2007, pp. 72-73)

Introduction

According to the UN's Working group on Indigenous Populations and the International Work Group for Indigenous Affairs (IWGIA), problems faced by indigenous peoples of Asia include, "plundering of resources", "forced relocation" and "forced integration of indigenous peoples into market economies" (Eversole, McNiesh, Cimadamore, 2005, p. 32). These problems have been exacerbated in the post-1991 New Economic Policy (NEP) environment in India (Guha, 1997; Kapoor, 2011; McMichael, 2010; Mehta, 2009; Menon & Nigam, 2007; Oliver-Smith, 2010; Patnaik, 2007; Ray & Katzenstein, 2007; Sanyal, 2010) where the key neoliberal response to the Adivasi as a *state-defined category of impoverished peoples* in need of inclusion and amelioration, i.e., what continues to be predominantly a political exercise in *exclusive governmentality* and socio-economic control (Ghosh, 2006; Kapoor, 2010), has entailed disciplining the subaltern who are presented as inhabiting a series of local spaces across the globe that, marked by the label 'social exclusion', lie outside the normal civil society... Their route back...is through the willing and active transformation of themselves to conform to the discipline of the market. (Cameron & Palan, 2004, p. 148)

Subsequently, while Adivasis constitute eight percent of the Indian population (or 80 million or more people belonging to some 612 Scheduled tribes), they account for forty percent of development-displaced persons (DDPs). In the state of Orissa (the context of the research base for this paper), which is home to sixty-two groups numbering eight million or more people where Adivasis make up twenty-two percent of the population, they account for forty-two percent of DDPs (Fernandes, 2006). According to some estimates, dams, mining, industries and parks have displaced 21.3 million people between 1951 and 1990 (prior to the neoliberal-turn in the Indian economy and the establishment of Special Economic Zones or SEZs that have accelerated this process) of which 40 percent were Adivasi and 20 percent were Dalit (or Scheduled Castes) peoples (Nag, 2001). The government of India acknowledged 15.5 million displaced persons when it finally drafted a national rehabilitation policy in 1994, of which 75 percent are/were still awaiting “rehabilitation” (Bharati, 1999, p. 20).

Development-displacement and dispossession of Adivasi and rural subalterns (including Dalits) continues to proliferate while India remains a signatory to the International Labor Organization (ILO) Convention No.169 (and several other inter/national human rights and legal commitments) that requires governments to recognize indigenous “rights of ownership and possession ... over the lands, which they traditionally occupy”, while further stipulating that indigenous peoples have the right to decide their own priorities for the process of development as it affects their lives, beliefs, institutions and spiritual well-being and the lands they occupy or otherwise use, and to exercise control, to the extent possible, over their own economic, social and cultural development. (Hannum, 2003: 88)

A UN document entitled “The Practice of Forced Evictions: Comprehensive Human Rights Guidelines on Development Based Displacement” states that evictions constitute a prima facie violation of a wide range of internationally recognized human rights, while a 1990 UN document (Global Constitution on the Realization of the Right to Development as a Human Right) explicitly recognizes “that the most destructive and prevalent abuses of indigenous rights are a direct consequence of development strategies that fail to respect the fundamental rights of self-determination” (Das, 2001, p. 86). Indigenous peoples have finally, after persisting over a 30-year period, secured ratification (including more recent endorsement by the US, Canada, Australia and New Zealand who had voted against in 2007) for the United Nations Declaration of the Rights of Indigenous Peoples (UNDRIP) (November 2007).

This paper attempts to make sense of these processes of on-going Adivasi development displacement and dispossession despite the proliferation of various human rights instruments and guarantees that should in effect supposedly pre-empt such continued colonization and neoliberal exploitation of Adivasi space. The proposition advanced here is that a political analysis of human rights as a politics of imperialism and colonial continuity in contexts of development-displacement and dispossession of Adivasi provides a compelling explanation why human rights-based approaches to address the coloniality of the contemporary neoliberal project (or what Peruvian political-sociologist, Anibal Quijano has referenced as the *coloniality of power* being expressed through a globalizing capitalism, 2000, p. 215) remain paradoxical at best and/or equivocal by design. Such human rights deployments, whether as paradox or as *necessary* equivocation in hegemonic designs, require close scrutiny in the Age of Rights (Henkin, 1990), when, “for many in the West, human-rights discourse has emerged as the sole language of resistance to oppression and emancipation in the Third World” (Rajagopal, 2003, p. 172). Furthermore, such scrutiny is also warranted given that some observers have pointed to the symbiotic relationship between human rights and imperialism, suggesting that “Empire’s powers of intervention might best be understood as beginning not directly with its weapons of lethal force but rather with its moral instruments” such as those “global, regional, and local organizations that are dedicated to relief work and the protection of human rights” (Hardt & Negri, 2000, pp. 35-36), i.e., international human rights activism as a form of high moral imperialism in the service of Empire. According to Randall Williams (2010), there is an urgent need to re-examine the politics of human rights given the “ascendancy of rights as the privileged discourse for the symbolic articulation of international justice in an era of advanced global capitalism” (p. xv), especially since the demise of state-socialisms in the late 1980s. Reading the politics of the Zapatistas in Chiapas, Mexico, Williams (2010) describes their attempt to construct another way of practicing politics as a turn away from a statist-rights-defined approach and as “a refusal to accept any modified project of modernity that reproduces the colonial capitalist divisions of humanity” (p. xxiv).

Having acknowledged these dubious links between human rights and colonialism and imperialism, human rights simultaneously offer an albeit problematic ethico-political-legal space and a derivative-politics/discourse for Adivasi/other rural subaltern social movement politics addressing continued colonization and

neoliberal hegemony (imperialism). The paper subsequently alludes to the relatively limited potential of official/estatized human rights (as opposed to movement-generated conceptions of human rights which are briefly referenced) for Adivasi and rural subaltern movements that seek to deploy these state human rights mechanisms for redress and the *delivery of human rights* (Stammers, 2009) in the age of imperialism (Boron, 2005; Chomsky, 1998; Evans, 1998; Hardt & Negri, 2000; Harvey, 2003; Williams, 2010).

These insights are developed from funded research exploring and contributing towards Adivasi (Kondh, Saora and Panos/Dalits) social movement learning (Kapoor, 2009a; 2009b) between 2006 and 2009 in South Orissa (Gajapati district) that has addressed the politics of the Adivasi-Dalit Ektha Abhijan (ADEA) movement (encompasses 120 villages or some 20,000 people) and translocal Adivasi/subaltern activism in Orissa (Kapoor, 2011); the author's engagements with Adivasi movement activism in South Orissa since the early 1990s; and pertinent theoretical and secondary literatures concerning Adivasi and/or the politics of human rights. The academic project addressed here seeks to avoid an anthropologization of Adivasi (Tuhiwai-Smith, 1999) as objects of knowledge-production for efficient statecraft or for purposes advancing the reproduction of capital (Kapoor & Jordan, 2009); the attempt is to objectify, scrutinize and expose the processes and institutions of continuous colonial domination and neoliberal (imperial) penetration and exploitation of Adivasi and rural subalterns, including related hegemonic constructions and deployments of a human rights in-service of this project.

**Towards a Political Appreciation of State-Institutionalization of Rights
and the Politics of Human Rights in the Contexts of
Development-Displacement: Colonialism, Neoliberalism and Adivasi
Dispossession in the "Post-Colony"**

Popular conceptions of human rights are often associated with the international system that was initiated in 1948 as the Universal Declaration of Human Rights (UNDHR). As noted by Neil Stammers (2009), in contrast to a process whereby human rights have arisen out of various social struggles and then been institutionalized, the construction of the international human rights system was an institutionalized process from the outset; an institutionalized process between elite actors at the level of the inter-state system (p. 116). Critics of this institutionalization have pointed out the western and Eurocentric bias of the

UNDHR in terms of the foundational values and ethics embedded in the declaration (e.g. primary commitment to liberal-individualism), in turn serving the wider political-economic and cultural interests of capital and powerful western states (Evans, 1998), despite the shaping influence of non-western states and anti-colonial critics like Gandhi and Nkrumah (Ishay, 2004). Randall William's (2010) analysis points to the predictability of such an arrangement once we shift our analytical perspective from one that assumes that colonialism and imperialism is a problem for international law and human rights to one that "grasps their mutually constitutive relationship" (p. xx). China Mieville's (2005) Marxist analysis of international law, similarly argues that international law and human rights, in fact, "assumes imperialism" (p. 293) (*italics added*). According to this line of thinkers, the rise to prominence of international human rights regimes needs to be understood keeping in mind the context of the post-war era and the advance of global capitalism driven by the ascendance of US imperial power (economic and military) and the reconfiguration of global power under the aegis of "the collective imperialism of the triad of the US, Europe (west of the Polish frontier) and Japan" (Amin, 2006). Williams (2010) points out the need to recognize that the post-war re-formation of international institutions "did not constitute a break with the historical structures of colonial violence but instead was part and parcel of an imperialist-directed reorganization of relations within and between contemporary state and social formations: the colonial, the neocolonial, and the neoimperial" (p. xxi). The post-1991 (New Economic Policy) opening-up of the Indian political-economy to the historical development and reproduction of capital advanced by the imperial collective, arguably, makes the Indian state a complicit actor in this project with associated implications for similar deployments of an institutionalized human rights apparatus.

Estatized-Human Rights and the Politics of Institutionalization

The institutionalization of human rights thus conceived have served to not only propagate a post-colonial capitalist development project in the post-colony but by being located in the very structure of power of the state (given the associated conception of *delivery of human rights by the State*—see Stammers, 2009) seriously constrained the possibility of using human rights to challenge the power of the state. Indeed, the power of *eminent domain* or the power that the Indian State may exercise over all land within its territory and the law related to the compulsory acquisition of land for a *public purpose* (Ramanathan, 2009) with a

wide open interpretation of *what exactly constitutes public purpose* or for which public is pertinent here in relation to development displacement and dispossession of Adivasi for state-corporate projects (e.g., mining in Orissa) as appeals to relevant human rights enshrined in Covenants, Conventions and Constitutional Schedules/Provisions by Adivasi social movements/struggles becomes “a matter solely for executive determination and statement, and, is therefore, non-justiciable” (p. 133). In fact the endorsement of the *eminent domain* power of the State in the early constitutional years of independent India was assisted by jurisprudence that developed around the colonial Land Acquisition Act of 1894... it has also not been tempered by altered notions of the relationship between citizens and the State which independence from colonial power may well be expected to bring in its wake. (Ramanathan, 2009, pp. 133-134)

Thus, as noted by Stammers (2009), the “institutionalization of human rights within modern nation states has resulted in understandings, approaches and policies with respect to human rights which are often deeply ambiguous in relation to power” (p. 115).

The institutionalization of human rights in State power and mechanisms for redress was also largely predicated on the assumption that the people’s right to self-determination enshrined in Article 21 of the UNDHR which states that “the will of the people shall be the basis of the authority of government” (Rajagopal, 2003, pp. 192-193), was to be understood exclusively as a right of national self-determination for independent statehood during the time of national anti-colonial struggles, as Third World states accepted human rights because there was an understanding that this would expand the ambit of the state and the sphere of governance. Such a truncated notion of the right to self-determination or what Richard Falk (2000) describes as a “sanction that only repudiates alien rule at the level of the state” (p. 102), effectively precludes similar appeals to self-determination by Adivasi peoples and internal minorities subsequently apparently failing to provide a similar rights mechanism for such struggles against various forms of internal colonization (see related quote by Uppendra Baxi at the commencement of this paper), thereby negating what Falk (2000) calls a potentially “powerful mobilizing instrument with which to resist involuntary governance” (p. 97) as in the case of development-dispossession of Adivasi and rural subalterns, i.e., “neocolonialism is born just when the practices of the right to self-determination seem to succeed [national decolonization in the post-war period]” (Baxi, 2002, p. 26). In the words of a Kondh Adivasi elder, “We fought

the British thinking that we will be equal in the independent India (Interview notes, January, 2007). Furthermore, even at the international level, some observers have noted that “the wider human rights network does not see development aimed at integrating indigenous peoples into the national society as a human rights violation” (Blaser, Feit & McRae, 2004, p. 6). That is, the ability of indigenous organizations to call on human rights groups to further indigenous projects is limited since the latter tend to view the state’s integrationist agenda as being legitimate, as long as the development state follows the model of the developed countries and avoids the most flagrant violations of human rights in executing its projects.

The institutionalization of human rights within State power not only limits (or renders relatively ineffective) Adivasi people’s recourse to such rights when questioning the actions of the State in relation to the dispossession of Adivasi, the content and reach of human rights is also subject to State-corporate monopolization and definition. For instance, in the contexts of Adivasi development displacement and dispossession (neocolonial appropriations of space and peoples) for accelerated neoliberal-inspired economic growth projects (exploitation of Adivasi land, labor and ecology in the pursuit of profit), fundamental relationships between violence and human rights discourse can be assessed to determine which types of violence are recognized as ‘violations’ by the human rights discourse and which are not and why. As Balakrishnan Rajagopal (2003) puts it, “does human rights discourse have a theory of violence and how does this theory relate to development?” (p. 173). His own analysis suggests that the “estatization of human rights” and the role of the state in the realization of human rights are as Upendra Baxi explains, “a discourse concerning justified violence” (quoted in Rajagopal, 2003, p. 174). Human rights discourse then, is not based on a theory of non-violence but it approves certain forms of violence and disapproves certain other forms. Pertinent to the Adivasi context of development displacement, dispossession and colonization, Rajagopal (2003) suggests that while the mass deportation of 1.5 million people from Phnom Penh by the Khmer Rouge in 1975 is considered a crime against humanity, “the mass eviction/deportation of 33 million development refugees from their homes due to development projects such as dams, by the Indian government, is simply seen as a social cost (if at all) of development” (p. 195). He concludes that such selective blindness around certain forms of violence can be explained by the pathological link between human rights and models of the state in the economy that are

derived/embedded in the development discourse, i.e., human rights discourse ... remains aloof from the 'private' violence of the market on individuals and communities. This tendency has become more pronounced in an era of globalization and privatization wherein the march of the market is celebrated unreservedly. ... In essence, economic violence—that is, violence caused by the market – is treated as out of bounds of human rights law, even as it attempts to assert itself as the sole liberatory discourse in the Third World. (Rajagopal, 2003, p. 196)

It follows that the biggest myth, then, is that human rights is an anti-state discourse or an unambiguous avenue for Adivasi resistance to neoliberal state-market-led displacement, dispossession and continued colonization or what Jack Donnelly (1989) has referenced as “development repression” (p. 188) in the contemporary Indian scenario.

Frantz Fanon's (1963/2004) theorization of violence is instructive here in relation to an Adivasi political response to market and colonial violence and the related blindness of statized-human rights recourse to the same, while simultaneously advocating for civility and nonviolence as axiomatic principles for any response considered by Adivasi. Violence, as Fanon saw it, is the *sine qua non* of imperialism and colonialism and in his conception, the totalizing nature of colonial violence must not only be challenged by the absolute violence of decolonization but such a confrontation also carries with it an obligation to take sides, i.e., an injunction to affirm the material praxis of anticolonial violence as a necessary and strategic response to colonial violence (Williams, 2010, p. xxviii). A Jhodia Adivasi shares the following concerning violence and resistance to the Kashipur bauxite mine in Rayagada, South Orissa, that has now clocked some 17 years: People were questioning why after so many years of protesting for a school and a health centre which is not available in a 35km radius, they are now building a police station in Kuchipadar village instead! ... There were at least 5000 of us when they fired. I too was one of 12 injured (pointing to scar on the thigh) but I never spoke up for fear of police retaliation. I have endured my lot in poverty and silence and could not get treated but we will never back down... even in Chilika, after Tatas got shut down by the Supreme Court decision because they violated the Coastal Regulation Zone with their aquaculture project, their mafias came and destroyed people's fishing boats...it seems we act non-violently and use the law and the courts but they always respond with customary violence and break their own laws...signatures of “consent” for the project (in Kashipur) were some times

taken at gun point and under heavy police presence and after “consenting” we were forcibly fed meat and liquor. (Focus Group notes, February 2008)

State-sanctioned market violence and the selective blindness of a human rights regime predominantly wedded to neoliberal market-developmental interests also enlist a racist-colonial ploy once used to justify British colonialism in India (and to downplay the threat to British rule posed by anti-colonial movements), against Adivasi (and related rural subaltern, including Dalits) struggles in order to play down this threat to unjust State-market neoliberal rule today. Essentialist and racist views pertaining to the duality of modern India/ns (with moral/caste-race superiority) and Adivasi traditionalism and backwardness (inferiority) are frequently marshaled to justify development repression of Adivasi as expressed by Evans-Pritchard in 1965 in relation to Indian anti-colonial movements: we are rational, primitive peoples prelogical, living in a world of dreams and make believe, of mystery and awe; we are capitalist, they are communists; we are monogamous, they are promiscuous; we are monotheists, they are fetishists, animists, pre-animist or what have you and so on. (as cited in Rajagopal, 2003, p. 179) In the words of a Kondh Adivasi woman leader of the ADEA in South Orissa, The *sarkar* (government) and their workers think that we Adivasis do not know anything and we are good for nothing... That is why they think they do not need to ask us anything before going ahead. That’s why they think they can put their pressure and power on us (*shakti a bong prayogo karanti*). So they are selling our forests, they are selling our water and they are selling our land and may be they will sell us also. (Interview notes, February, 2007) Or, as a Dalit leader of the ADEA puts it, “where we live, they call this area *adhusith* (akin to an Adivasi-Dalit ‘pest infestation’), we are condemned to the life of the *ananta paapi* (eternal sinners), as *colonkitha* (dirty/black/stained), as *ghruniya* (despised and hated)” (Interview notes, February, 2007).

As Evans (1998) has also noted, when rights are construed as “power over people, expressed in exclusionary practices that deny the full participation of those who fail to support the interests of the dominant group” (p. 4), i.e., when rights are concerned with establishing and maintaining the moral claims that legitimate particular interests such as neoliberal state-market interests or religious conservative casteist interests in the Adivasi or Dalit context (Prasant & Kapoor, 2010), such exclusions are often justified on the basis of an alleged lack of rational or moral capacity of excluded groups to engage in decision-making processes or the simple prejudiced assertion that such groups are ‘mad’ (Keeley, 1990).

Hegemony and the Subversion of Human Rights Commitments: Controlling Realities

In Gramscian terms (1971), in a bid to secure the right to exercise social and political control that binds the ruler and the ruled in a consensual order that legitimates power, the hegemon or neoliberal Indian state or corporate-state nexus utilizes human rights rhetoric (made evident in numerous examples cited in this paper of state duplicity in delivering rights to Adivasi and rural subalterns around development displacement and dispossession) as part of a process of socialization to enhance control based on might with that based on right, in order to secure its intellectual and moral leadership; i.e., the human rights commitment of an increasingly corporatized Indian state can be convincingly construed as an instrument in the exercise of hegemonic control by the corporate state, as different and potentially resistant groups like the Adivasi are encouraged to accept an order characterized by a common social-moral language, namely, human rights and citizenship, “that expresses a singular version of reality informing with its spirit all forms of thought and behavior” (Evans, 1998, p. 5). While force and dominance without hegemony is always a possibility/reality in Adivasi contexts of dispossession as has been alluded to by Partha Chatterjee, the use of force is always a costly affair and Gramsci’s proposition that coercion alone can not guarantee the long term success of a hegemon, a process that requires the building of (false) consensus around a set of values (e.g., expressed as human rights) that support the hegemon’s interests, remains instructive. The hegemon exercises control through a combination of might and the legitimation of right, the highest form of hegemony being exercised when the hegemon’s values (e.g. all forms of political expression are boiled down to a human rights-based politics) are accepted as “common sense” (Evans, 2005, pp. 17-18; Gramsci, 1971). More importantly, as Randall Williams (2010) suggests, regardless of whether Adivasi accept elite values/conceptions and political conceptions (e.g. human rights), by being encouraged (e.g., by INGOs) or compelled (by the State) to resort to a state-sanctioned and administered human-rights based politics, they effectively enter into a dependent politics whose rules and possibilities are dictated by the State and into a realm of depoliticization (or a sanitized politics) that has little to no room for a more militant brand of politics for decolonization (see point above in relation to Fanon) in response to the daily violence of colonial control which characterizes processes of displacement and dispossession (Kapoor, 2009c; Nandy, 2008), i.e., the institutionalization of human rights “helped to manage mass resistance” (Rajagopal, 2003, p. 53).

In understanding the working of human rights and hegemonic propensities alluded to by Evans (1998), an examination of several examples of human rights duplicity and contradiction would help to begin to substantiate the case and lend credence to the argument that human rights provisions are merely part of the state's arsenal in securing hegemonic control over the populace (by offering them rights in a bid to secure the moral right to govern) while all the while simultaneously usurping these rights in the service of securing the dominant interests of a global and national corporate-consumer class/caste elite as is being suggested. Since the first notification to recognize Scheduled Tribes in India in 1950 and the Indian commitment to indigenous/tribal peoples expressed through the ILO and other international Covenants and Conventions, according to a report on the Draft National Policy on Tribals by the Asian Center for Human Rights (ACHR), "non-implementation of these laws and adoption of laws and procedures to negate these legal protections has had an adverse impact on indigenous people" (ACHR, 2005, p. 2). The report notes that "contradictory legal provisions and failure to implement or translate constitutional provisions in to reality" (p. 4) continue to undermine indigenous assertions as self-determined peoples. For instance and as pointed out in this report, while the Fifth Schedule of the Constitution and the Provisions of the Panchayat's Act (Extension to the Scheduled Areas) (1996) or PESA, "recognize the ownership rights of indigenous peoples to their traditional lands recognized as Protected Areas" (p. 4), such assertions are undermined by forest laws that confer "usufruct rights" to use minor forest products without a right to ownership and subject to a "whimsical no damage to the forest" determination by forest officials (p. 5). In the words of a Kondh Adivasi man, The government and the companies come and take away truckloads of bamboo. The forests which our ancestors nurtured (*banchaye chonti*) is getting destroyed by these *bahari ko lok* (outsiders). When these things happen, the forest guards give them protection and when we have needs, they ask us if we have paid our royalty or have you paid your taxes on the tamarind trees—we are taxed for each of these trees. When they take tuck loads of sal, timbers, bamboos and the paper mills exploit this for their business—how can they say the Adivasis are destroying the forests? We depend on forests for life, the *vyavasahi* (business people) and the government are destroying them for their own profit (*labho*). When it comes to forced or illegal evictions (euphemistically referred to as "displacement" in official parlance), the report of the ACHR notes several such contradictions between protections under the Fifth and Sixth Schedules of the Constitution (or commitments under the international Covenants on Civil and Political Rights and Economic, Social and

Cultural Rights) on the one hand and specific Acts such as the Forest Conservation Act (1980), the Wild Life (Protection) Act (1972) and the Land Acquisition Act (1894). On the other the latter has been instrumental in the eviction of indigenous and tribal peoples for more than a century and until recently, had no provisions for resettlement and rehabilitation (R&R), not to mention right to free, prior and informed consent. Some studies have demonstrated, for instance, that there is practically no evidence of consultation of the Gram Sabha by the state (despite said stipulations in PESA) when it comes to land acquisition and/or R&R packages, not to mention that the latter is not even recognized as a right under the Constitution of India (Bandopadhyaya, 2004; Das, 2001).

Under the Indian Forest Act (1927) and the Forest Conservation Act (1980) (FCA), cultivable lands that existed prior to both Acts are being categorized as encroachment areas. For instance, the National Commission on Scheduled Castes and Tribes has noted that as a result of the FCA (1980), some 148,000 people (mainly tribals) occupying 184,000 hectares of land in forest areas in the state of Madhya Pradesh suddenly became encroachers on October 24, 1980, and thus liable to eviction (ACHR, 2005). Under the recent Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act or FRA (2006), hailed in some quarters as a victory by people's movements in the struggle for Adivasi autonomy and sovereignty as the Act appears to recognize the Adivasi way of life, there is now a growing skepticism in some quarters that this is yet another "law and 'new welfare model' used by the State to retain its authority, power and supremacy over resources, alienate people from their land and way of life, and create and sustain capital markets" (Ramdas, 2009, p. 72). While the FRA recognizes community and customary rights to the forest and confers power to the communities to protect forests in accordance with their own modes of conservation, the Ministry of Tribal Welfare and the Forest Department have interpreted these provisions as a license to sanction export/urban market oriented mono/cash-crop rubber, coffee, and fruit plantations in conjunction with the National Rural Employment Guarantee Scheme (NREGS), whereby tribals are reduced to being a source of cheap labor for these so-called tribal development schemes (Kapoor, 2010). Now tribals can cultivate their lands with dignity and without any fear. Tribals can plant rubber plants, mango, cashew nut, orange, lime, or palm oil as per local conditions. The state government would also develop lands in tribal areas and the tribals will be paid daily wages under the NREGS program though they are working on their own land. (Ramdas, 2009, p. 69)

The “free choice” between palm oil and coffee mono-crop for markets is ironic to say the least, as Adivasi agriculture (indigenous choice of crops) focused on their food for families is being viewed by the Forest Departments (for instance) as “encroachment” and being met with considerable aggression to evict Adivasi/forest dwelling communities from their homelands across the country (see World Rainforest Movement bulletin 135, October 2008, for a disturbing analysis of atrocities committed by State agents against Adivasi/Dalit women, while allegedly implementing the FRA), when FRA and PESA is actually supposed to strengthen the hands of Adivasi communities and local Gram Sabhas to decide on whether or not to implement mono-crop plantations or any other programs that might threaten to displace Adivasi production, cultures, ecosystems, knowledge and ways. The claim on the State, that continues to fall on deaf ears, is to recognize Adivasi ways of living and being as a political right and not as an essentialized-inferiority in need of protection and welfare from a self-appointed guardian or paternalistic state. (Kapoor, 2010, pp. 28-29). In the words of a Kondh woman, The Forest Department comes and asks us to create a Forest Protection Committee (*jungle surakshya manch*). Protection from whom should I ask?... We do not cooperate because they really do not care about the forest! We need to protect the forest from them! (Interview notes, January 2007, village D). Such examples of consistent and widespread legal/rights contradictions and duplicity in relation to forced/illegal evictions, forest and land rights, lend credence to the argument that human rights commitments serve hegemonic aspirations of the state and the dominant interests that inform state partiality to elite projects that contradict the well being of Adivasi despite these various so-called protective provisions.

In their analysis of neoliberal impacts on land policies and processes of land alienation, Pimple and Sethi (2005) conclude that “under the application of neoliberal land policies...traditional occupiers of land under customary law confront the prospect and reality of becoming illegal encroachers on land they have cultivated and sustained for generations” (p. 239) (see above reference to example from Madhya Pradesh re same). They identify some key strategies and approaches employed by the neoliberal State to accomplish this: (1) Originally practiced by the British in the 1800s, reservation of forests whereby large tracts of land are declared as reserved or protected forests and cultivable and wasteland areas and these demarcated territories are declared to be out of bounds (leads to eviction unless a cheap source of labor is required to work the land/forest); (2)

leasing of forests to industrialists for timber felling, regeneration, agribusiness, mining, and tourism ventures; (3) land alienation enabled by the Land Acquisition Amendment Act, which simplifies the procedures for the acquisition of land by state-controlled or state-owned enterprises on the grounds of serving the public purpose; and (4) the Wild Life (Protection) Act (1972) “which has been used to define the tribal as the enemy of ecology and the outsider/environmentalist as protector” (p. 242), as tribals are displaced from lands and forests demarcated as national parks and sanctuaries and even grudging concessions such as licenses that permit limited access are challenged by some environmentalists (conservationists). We fought the British thinking that we will be equal in the independent India—there will be land settlement for instance...but the *savarnas* (upper castes) and the rich people have controlled (*akthiar*) the land, including Adivasi land. Today they are at the center of wealth and *rajnithi* (politics). It is going to be a stupendous task to try and remove them (*toleiba*—likened to an attempt to remove a massive boulder/rock from the pathway). (Kondh Adivasi Elder, Interview notes, February 2007)

Even today you will find there is not enough cultivable land available for our people because they have taken it away... They have the power of *dhana* (wealth) and *astro-shastro* (armaments). They have the power of *kruthrima ain* (of artificial laws and rules)—they created these laws to maintain their own interests. (Adivasi Leader of the ADEA, Interview notes, February 2007)

And the way they have framed laws around land-holding and distribution, we the poor are being squashed and stampeded in to each other's space and are getting suffocated (*dalachatta hoi santhollito ho chonti*). This creation of inequality (*taro tomyo*) is so widespread and true. (Kondh Adivasi man, Interview notes, February 2007)

There is communal conflict around land and forests because the political powers, in order to keep their control and access to these vital resources, are promoting division and hatred among the communities (Domb, Kondh and Saora). Our communities once had equal access to land and forests, which today is being controlled by these outside methods of the *sarkar* (government) and the *vyaparis* (business classes) and upper castes (Brahmins). They want to perpetuate their ways and ideas among us and always keep us divided. We are all *garib sreni* (poor classes) and land and forest are vital for our survival. And if they succeed in controlling them, they also end up controlling our lives. As has the case over the

ages, they want us to live in disharmony and difference so that they can be the *shashaks* (rulers) all the time. So they have done this. (Adivasi Elder, Interview notes, February 2007)

The likelihood of such displacement and dispossession increasing, regardless of the state-institutionalized legal/human rights “protections” (or blindness) regarding the same, is real and on-going as noted in relation to what is being referred to as the global *land grab*, i.e., the purchase or lease of large tracts of land by wealthier, food insecure nations and private investors from mostly poor, developing countries in order to produce crops for export. According to the International Food Policy Research Institute (IFPRI), foreign investors sought or secured between 37 million and 49 million acres of farmland in the developing world between 2006 and 2009 (Daniel & Mittal, 2009). Such market-driven neoliberal policy prescriptions around land markets, development and poverty alleviation are actively promoted by the World Bank, a central agent and global architect of imperial control, which sees similar opportunity in addressing climate change (Ramdas, 2009), i.e., it is deemed to be an investment opportunity that will assist communities to use forests as a means for moving out of poverty, suggesting that local ownership offers opportunities to capitalize on forest assets, an approach being pursued through the bank’s short-term financing from the BioCarbon Fund to mobilize small/marginal farmers to raise plantations of tree species with high rates of carbon sequestration in their lands, from which they will earn income from carbon credits. According to Ramdas (2009), “The powerful convergence of global climate change policies and neoliberal markets, appears to be an overriding force that is shaping current environment and forest policy in India... All initial evidence points towards the displacement of Adivasi subjectivities and livelihoods” (p. 72). The Indigenous People’s Declaration on Climate Change (The Anchorage Declaration, 2009) exposes sustainable development dispossession of Adivasi and indigenous peoples globally, while still appealing to “human rights”: We, Indigenous People challenge States to abandon false solutions to climate change that negatively impact Indigenous People’s rights, lands, air, oceans, forests, territories and waters. These include...agro-fuels, plantations and market based mechanisms such as carbon trading, the Clean Development Mechanism and forest offsets. The human rights of Indigenous Peoples to protect our forests and forest livelihoods must be recognized, respected and ensured. (as cited in Kapoor, 2010, p. 28)

The preceding examples and arguments have been used to demonstrate the active, premeditated and non-accidental (consistent pattern) nature of the subversion of Adivasi and indigenous human and legal rights around displacement/dispossession, forest and land related issues and the related implications for Adivasi's exercising sovereign control over their own ways/development processes as affirmed in the Fifth and Sixth Schedules of the Indian Constitution. There is good and ample reasons to believe that state-institutionalized human/legal rights discourse in India has been used by the corporatized and developmentalist-state to advance colonial controls and neoliberal and dominant religious conservative interests in relation to the Adivasi place (or active exclusion) in the contemporary Indian polity, subsequently raising critical questions in relation to the limitations of a human-rights based state-institutionalized politics of justice/redress with respect to displacement and dispossession of Adivasi and other marginalized rural subaltern communities.

Colonial Continuities, Neoliberal-hegemony and the Re-Politicization of Human Rights: Concluding Reflections

If, at some level, the modernist purpose of rights and related notions of citizenship are to create the conditions for individuals and peoples to lead a dignified and peaceful life, then the promise of non-institutionalized human rights lies in its potential to stimulate political struggles (movements and movement-defined conceptions of human rights or other political possibilities thereof?) (Kapoor, 2011) that transgress the hegemonic hijacking of the construction, interpretation and mis/application of rights in the wider interests of an Adivasi and indigenous politics for pluri-nationalism and co-existence (Kapoor & Shizha, 2010; Meyer & Alvarado, 2010), while being against colonization and imperial appropriations of peoples, cultures, lands and ecology. The Eurocentric and state-centric institutionalized conception of human rights/legal codings, as discussed, are mostly constitutive of (or re-shaped in the interests of) the project of colonialism and today's neoliberal hegemonic project (imperialism), with limited prospects for deployment by Adivasi/indigenous peoples who are compelled (when engaging in *real politik*) to resort to this mostly derived politics/discursive formation to repeat what has always already been said before. A human rights discourse is deemed *necessary* in order to enhance the prospects of becoming audible in imperial/metropolitan society. If there is an Adivasi conception of some thing akin to "human rights", it probably resides in an affirmation of a way/state of being that

is under constant challenge by the imperial and colonial project of a globalizing capitalism. At a global level, a statement by Via Campesina (the largest peasant-indigenous people's network of movements) expresses the claim as follows: No agrarian reform is acceptable that is based only on land redistribution. We believe that the new agrarian reform must also include a cosmic vision of the territories of communities of peasants, the landless, indigenous peoples, rural workers, fisherfolk, nomadic pastoralists, tribal, afro-descendents, ethnic minorities, and displaced peoples, who base their work on the production of food and who maintain a relationship of respect and harmony with Mother Earth and the oceans. (Via Campesina, 2006)

In Adivasi terms from the South Orissa region, a manifesto developed by 13 Adivasi-Dalit-landless peasants and displaced peoples movement organizations expresses their claim as follows: We, the people's movements present here representing people's struggles from South and coastal Orissa have discussed and debated our issues and are hereby resolved to stand as a broad-based platform known as Lok Adhikar Manch (LAM) in support of the following manifesto [people's statement]: We are communities dependent on natural resources like land, forest and water, which are more than resources for us—our life system depends on them. Our way of life, beliefs, knowledge and values have historically and as it is today revolve around our natural surroundings. More than at any point of time in our lives as traditional communities, today we feel pressurized and pushed hard to give up our ways and systems and give way to unjust intrusions by commercial, political and religious interests for their development and domination [*shemano koro prabhavo abom unathi*]. We have been made to sacrifice, we have been thrown out through out history by these dominant groups and forces for their own comfort and for extending their way of life while we have been made slaves, servants and subordinates [*tolualoko*]. Our natural systems have taught us that each of us is important, each of our communities are important and we are an integrated part of the natural order we live in. At this critical juncture, we resolve to work together to protect ourselves, our interests, our natural bases [*prakruti adhar*] and fight against any unjust appropriation of our natural habitations by commercial and state developmentalist interests. The manner in which industrialization is taking place [especially mining and dam projects] displacing the sons and daughters of the soil, destroying our resource and life base, we collectively oppose it in the future. We have nothing to gain from liberalization [mukto bojaro], privatization [*ghoroi korono*] and globalization [*jagothi korono*],

which are talked about today. We want to live the way we know how to live among our forests, streams, hills and mountains and water bodies with our culture, traditions and whatever that is good in our society intact. We want to define change and development for ourselves [*amo unathi abom parivarthonoro songhya ame nirupono koribako chaho*]. We are nature's friends [*prakruthi bandhu*], so our main concern is preserving nature and enhancing its influence in our lives (LAM Statement, field notes, April 2009). While the conception of the claims is clear, the issue is one of politics and possibility thereof around moving from where we are to where we need to be. Drawing on the work of Frantz Fanon, Randal Williams (2010) alludes to the pitfalls and cul-de-sacs of the recourse to a human-rights-based politics in colonial circumstances by any anti-colonial formation (in this case, an Adivasi/indigenous challenge) or by euphoric advocates for a human rights-based approach to these political conundrums: Fanon offered, well beyond what was specific to the conditions of colonialism proper (and wholly relevant for today), a critical set of political directives developed out of the relative certainty that any strategic appropriation of dominant structures and forms in the course of struggle must reckon with the corrupted histories of those same forms after the achievement of their tactical ends. This enduring lesson should trouble, albeit in different ways, any nondialectical advocacy of human rights or decolonization, insofar as any readily available "way" out of the structures of domination is, both, likely at the same time, a "way" back in. In the case of human rights, for example, inserting the formal equality of the universal human into structures of violence regulated by domestic and international law subjects any "successful" appropriation of juridical terms to swift and effective counterappropriation. (p. xxix)

References

- Amin, S. (2006). *Beyond US Hegemony? Assessing the Prospects for a Multipolar World*. NY: Zed Books.
- Asian Center for Human Rights (ACHR) (2005). *Promising Picture or Broken Future? Commentary and Recommendations on the Draft National Policy on Tribals of the Government of India*. Retrieved from, www.achrweb.org.
- Bandopadhyaya, D. (2004). Rayagada Story Retold: Destitutes of Development. *Economic and Political Weekly (Kolkata)*, 31 January, 3250.
- Banerjee, P. (2006). West Bengal- Land Acquisition and Peasant Resistance in Singur. *Economic and Political Weekly (Kolkata)*, 18 November, 4718-4720.
- Baviskar, A. (1995). *In the Belly of the River: Tribal Conflicts Over Development in the Narmada Valley*. New Delhi: Oxford Publications.
- Baxi, U. (2002). *The Future of Human Rights*. Oxford: Oxford University Press.
- Bharati, S. (1999). Human Rights and Development Projects in India. *The PRP Journal of Human Rights*, 3(4), 20.
- Blaser, M., Feit, H., & McRae, G. (Eds.). (2004). *In the Way of Development: Indigenous Peoples, Life Projects and Globalization*. London: Zed Books.
- Boron, A. (2005). *Empire and Imperialism: A Critical Reading of Michael Hardt and Antonio Negri*. London: Zed Books.
- Cameron, A., & Palan, R. (2004). *The Imagined Economies of Globalization*. London: Sage.
- Chomsky, N. (1998). The United States and the Challenge of Relativity. In T. Evans (Ed.), *Human Rights Fifty Years On: A Reappraisal*, 26- 56. Manchester: Manchester University Press.
- Daniel, S., & Mittal, A. (2009). *The Great Land Grab: The Rush for the World's Farmland Threatens Food Security for the Poor*. Oakland, CA: Oakland Institute.
- Das, J. (2001). *Human Rights and Indigenous Peoples*. New Delhi: A.P.H Publishing House.

- Donnelly, J. (1989). *Universal Human Rights in Theory and Practice*. Ithaca, NY: Cornell University Press.
- Evans, T. (1998). *Human Rights Fifty Years On: A Reappraisal*. Manchester: Manchester University Press.
- Evans, T. (2005). *The Politics of Human Rights: A Global Perspective*. London: Pluto Press.
- Eversole, R., McNeish, J., & Cimadamore, A. (Eds.). (2005). *Indigenous Peoples and Poverty: An International Perspective*. London: Zed Books.
- Falk, R. (2000). *Human Rights Horizons*. London/NY: Routledge.
- Fanon, F. (2004). *The Wretched of the Earth* (Trans. Richard Philcox). New York: Grove Press.
- Fernandes, W. (2006). Development Related Displacement and Tribal Women. In G. Rath (Ed.), *Tribal Development in India: The Contemporary Debate* (pp. 112-132). New Delhi, India: Sage.
- Ghosh, K. (2006). Between Global Flows and Local Dams: Indigeness, Locality and the Transnational Sphere in Jharkhand, India. *Cultural Anthropology*, 21(4), 501-534.
- Gramsci, A. (1971). *Selections from Prison Notebooks* (Q. Hoare & G. Howell, Eds. & Trans.). London: Lawrence & Wishart.
- Guha, R. (1997). The Environmentalism of the Poor. In R. Fox & O. Starn (Eds.), *Between Resistance and Revolution: Cultural Politics and Social Protest*, 17- 40. New Brunswick, NJ: Rutgers University Press.
- Hannum, H. (2003). Indigenous Rights. In G. Lyons & J. Mayall (Eds.). *International Human Rights in the 21st Century: Protecting the Rights of Groups* (pp. 72-99). Lanham, MD: Rowman and Littlefield.
- Hardt, M., & Negri, A. (2000). *Empire*. Cambridge, Mass: Harvard University Press.
- Harvey, D. (2003). *The New Imperialism*. London: Oxford University Press.
- Henkin, L. (1990). *The Age of Rights*. NY: Columbia University Press.

- Ishay, M. (2004). *The History of Human Rights*. Berkeley: University of California Press.
- Kapoor, D. (2009a). Participatory Academic Research (par) and People's Participatory Action Research (PAR): Research, Politicization and Subaltern Social Movements (SSMs) in India. In D. Kapoor & S. Jordan (Eds.), *Education, Participatory Action Research and Social Change: International Perspectives*, 29-44. New York: Palgrave Macmillan.
- (2009b). Subaltern Social Movement Learning: Adivasis (Original Dwellers) and the Decolonization of Space in India. In D. Kapoor (Ed.), *Education, Decolonization and Development: Perspectives from Asia, Africa and the Americas*, 7-38. Rotterdam: Sense Publishers.
- (2009c). Adivasi (Original Dwellers) 'In the Way of' State-Corporate Development: Development Dispossession and Learning in Social Action for Land and Forests in India. *McGill Journal of Education*, 44(1), 55-78.
- (2010). Learning from Adivasi (original dweller) Political-Ecological Expositions of Development: Claims on Forests, Land and Place in India. In D. Kapoor & E. Shizha (Eds.), *Indigenous Knowledge and Learning in Asia/Pacific and Africa: Perspectives on Development, Education and Culture*, 17-34. New York: Palgrave Macmillan.
- (2011). Subaltern Social Movement (SSM) Post-mortems of Development in India: Locating Trans-local Activism and Radicalism. *Journal of Asian and African Studies*, 46(2), 130-148.
- Kapoor, D. & Jordan, S. (2009). Introduction: International Perspectives on Education, PAR, and Social Change. In D. Kapoor & S. Jordan (Eds.), *Education, Participatory Action Research and Social Change: International Perspectives*, 1- 11. New York: Palgrave Macmillan.
- Kapoor, D., & Shizha, E. (Eds.). (2010). *Indigenous Knowledge and Learning in Asia/Pacific and Africa: Perspectives on Development, Education and Culture*. New York: Palgrave Macmillan.
- Keeley, J. (1990). Towards a Foucauldian Analysis of International Regimes. *International Organization*, 44(1), 83-105.

- McMichael, P. (Ed.). (2010). *Contesting Development: Critical Struggles for Social Change*. USA: T & F Books.
- Mehta, L. (Ed.). (2009). *Displaced by Development: Confronting Marginalization and Gender Injustice*. New Delhi: Sage.
- Meiville, C. (2005). *Between Equal Rights: A Marxist Theory of International Law*. Chicago: Hay Market Books.
- Menon, N., & Nigam, A. (2007). *Power and Contestation: India Since 1989*. London: Zed Books.
- Meyer, L., & Alvarado, M. (Eds.). (2010). *New World of Indigenous Resistance: Noam Chomsky and Voices from North, South and Central America*. San Francisco, CA: City Lights Books.
- Nag, S. (2001). Nationhood and Displacement in the Indian Subcontinent. *Economic and Political Weekly*, March 1.
- Nandy, A. (2008). *Romancing the State: And the Fate of Dissent in the Tropics*. New York: Oxford University Press.
- Oliver-Smith, A. (2010). *Defying Displacement: Grassroots Resistance and the Critique of Development*. Austin: University of Texas Press.
- Patnaik, U. (2007). *The Republic of Hunger and Other Essays*. Gurgaon, India: Three Essays Collective.
- Pimple, M., & Sethi, M. (2005). Occupation of Land in India: Experiences and Challenges. In S. Moyo & P. Years (Eds.). *Reclaiming Land: The Resurgence of Rural Movements in Africa, Asia and Latin America*, 235- 256. London: Zed.
- Prasant, K., & Kapoor, D. (2010). Learning and Knowledge Production in Dalit Social Movements in Rural India. In A. Choudry & D. Kapoor (Eds.), *Learning from the Ground Up: Global Perspectives on Social Movements and Knowledge Production*, 193- 210. NY: Palgrave Macmillan.
- Quijano, A. (2000). Coloniality of Power and Eurocentrism in Latin America. *International Sociology*, 15(2), 215-232.

- Rajagopal, B. (2003). *International Law from Below: Development, Social Movements and Third World Resistance*. Cambridge: Cambridge University Press.
- Ramanathan, U. (2009). A Word on Eminent Domain. In L. Mehta (Ed.), *Displaced by Development: Confronting Marginalization and Gender Injustice*, 133- 145. New Delhi: Sage Publications.
- Ramdas, S. (2009). Women, Forest Spaces and the Law: Transgressing the Boundaries. *Economic and Political Weekly*, 64(44), 65-73.
- Ray, R., & Katzenstein, M. (2005). *Social Movements in India: Poverty, Power and Politics*. Lanham, Maryland: Rowman & Littlefield.
- Sanyal, K. (2010). *Rethinking Capitalist Development: Primitive Accumulation, Governmentality and Post-colonial Capitalism*. New Delhi: Routledge.
- Stammers, N. (2009). *Human Rights and Social Movements*. New York: Pluto Press.
- Tuhiwai-Smith, L. (1999). *Decolonizing Methodologies*. London: Zed Books.
- Via Campesina (2006). *Sovranita Alimentare, Final Declaration*. Retrieved from, http://viacampesina.org/main_en/index.php?option=com_content&task=view&id=180&Itemid=27
- Williams, R. (2010). *The Divided World: Human Rights and its Violence*. Minneapolis: University of Minnesota Press.

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