Seminar Paper

127th ACAD COURSE

Held on 06 October – 14 December, 2019

Part-I

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Seminar Paper
On

Assessing Service Quality and Passengers Satisfaction: A Case Study on Platform Services of Kamalapur Railway Station

Submitted to:

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Abstract

In spite of being a very popular mode of transport in Bangladesh Railway services especially the platform services has not been given due attention. Improving service quality is a must to ensure customer satisfaction of any service oriented organization. Therefore, this study aims at assessing the level of the quality of platform services of Kamalapur railway station, the largest and the most important junction in Bangladesh. There is no alternative of improving service quality to attract more passengers for BR. Researcher found that passenger satisfaction relays on the level of service quality delivered. In this study a questionnaire survey of passengers randomly selected has been conducted to know their perception regarding the factors affecting platform services such as waiting room condition and facilities, toilet facilities and cleanliness, information availability, ticketing arrangement, announcement at the station, behavior of the staff, safety and security, cleanliness of the platform and refreshment. They are asked to rank from very poor, poor, fair, good to excellent. The outcome of the study revealed that overall service quality of Kamalapur Railway Station is not satisfactory. Passenger rated poorly of toilet facility, waiting room condition and facilities and behavior of the staff. However, announcement, information availability and safety and security system has been considered comparatively batter. This study suggests that the service quality of Kamalapur Railway Station needs to improve to meet the passengers demand and to be survived in this competitive atmosphere of transport sector.

Keywords: Platform services, Railway Station, Passengers Satisfaction, Bangladesh Railway, Kamalapur Railway Station

Introduction

Railway Transport is one of the most popular modes of transport for passengers in all over the world. This is also a very popular means of transport in Bangladesh and significantly contributing to the economy by transporting passengers and freight as well as generating employment. It carries about 10% of total passenger's every year and contributing significantly for resolving the transport demand for the citizens. Its attractiveness is increasing day by day as it is safe, economical and environment friendly mode of public transport. It enhances the quality of life in societies on condition that it provides safe, efficient and inexpensive transportation services. At the same time, it ensures resilience of economy and improvement of mobility as it is ease of use (availability) and cost effectiveness transport system. Societies also can become benefited from the existence of public transportation services such that it reduces traffic jam on our roads, saves money and creates jobs opportunities within the society (OJO T.,K. et al,2014).

Considering the importance of rail transport Bangladesh Government established a new Ministry named Ministry of Railways in 2011. However, the history of rail transport is ancient in Bangladesh .The first rail started its journey in 1862. The recent development of BR is the outcome of continuous administrative and infrastructural reform (Annual report, 2017).In recent years Bangladesh government has given special emphasis for the development of railway transport. Bangladesh Railway (BR) is a subordinate organization of Ministry of Railways which is concern for operating and managing the whole railway network in Bangladesh. It is conducting its operation by separating the services in two separate Zone namely East and West zone. It has now 2929 km of rail route and 4341.85 km of rail line connects 44 districts in Bangladesh and engage in important economic activity (Annual report, 2017).There are several types of rails operated by BR namely local, intercity,international and commuters .It is not at all a profitable as it provides services at very low cost.

Kamalapur Railway Station is the biggest station in Bangladesh and it connects whole the railway network with the rest of the country. From Kamalapur station 64 trains moves daily for different destinations and around one lakh passengers are travelling daily through this station. That is why, it becomes an important railway junction and people's perception about the service delivery from the platform becomes important to be assessed. However, this will help to know the present level of service quality of the platform services of Kamalapur Railway Station hence improve the service quality. But there is no alternative to ensure the quality of service for facing the growing competition in this sector. The major challenge to the railway authorities at the present is to confirm expected quality of services that the target audiences want to avail that makes use of this sector for much purpose (Shikha et al, 2018). According to Han H.,W.,et al.(n.d) passengers satisfaction is none but the felling of happiness after travelling by trains. He also added that measuring the satisfaction is rather a complex task as every person differs regarding expectation.

Quality is one of the important determinants in order measure the performance of the products or services and even it is one of the basic indicators to institutional performance. It is meant to help the organization train, motivate and reward workers (Rajeswari, V.,& Kumara, K., S, 2014).Therefore, it is clear that customer satisfaction of railway transport is significantly depends on the service delivery system of the station. According to Pryadharshini&Selladurai (2016), as the result of poor perception passenger service and for the lake of customer responsiveness Indian Railway lost its market share in freight and Passenger segment. Many research found that passenger's satisfaction is highly related to the service quality. Therefore, Passengers satisfaction of any service related concern is highly depends on the service quality of that particular organization.According to HossainB., & Islam M., S.,(2013),Bangladesh Railway is in a

monopolistic position among the transport industries and most passengers are not that much literate, their income level is lower or middle income group and theyare hardly concern about quality of services.They also argued that this kind of non competitive market situation leads to ignore the aspect of passengers satisfaction,product diversification and quality of services. Therefore, it becomes important to assess the service quality of platform services of Kamalapur Railway Station for determining the passenger's satisfaction to the respective services.

Not much research has been conducted in relation to this particular problem in Bangladesh. Geetika(2010) argued that scholars have undertaken studies on various aspects of railway services, but platforms have failed to attract researcher attention. Platforms of the railways are an integral segment of the railway system. In the context of Bangladesh, a few studies have been undertaken on railway services, especially of platform services of Kamalpur Railway Station. It is the most important railway junction of the country and the image of railway services is a large extent depends on the quality of service rendered from this station. Therefore, it is required to assess the passenger's perception in relation to service quality of Kamalapur Railway station. However, in this paper it is tried to measure the service quality of the platform services of Kamalapur Railway Station to evaluate passenger's satisfaction so the steps can be taken to improve service quality.

Objectives of the Study

This research aimed at achieving following objectives:

1. To explore the socio-economic background of the passengers.
2. To assess the quality of existing platforms services of Kamalapur railwaystation.
3. To measure the level of passengers satisfaction regarding platform services of KamalapurRailway Station.

Literature Review

Different attributes of service quality has been taken into account for measuring service quality and passengers satisfaction by the researchers. The term "service quality" generally means a state of service rendered which is efficient in nature and fulfilling the expectations of the passengers. According to American society for quality, service quality is termed as the total features and attributes of a product or service which has the ability to meet the stated needs or implied demand of the passengers.Service quality can be measured in terms of customer perception, customer expectation, customer satisfaction, and customer attitude (Sachdev and Verma 2004 cited in Buluma V.,V. 2014)

Many studies have been proved that passenger's satisfaction is greatly related to the level of quality of services offered.Passenger's satisfaction is the overall level of fulfillment of a customer's desire. It is measured as the percentage of passengers expectations which has actually been attained (Buluma V.,V. 2014).In recent time passenger satisfaction plays an important role in the way to success and development of a particular venture in such a competitive market. Therefore, for pragmatic business policy it becomes important to assess the customer's satisfaction level relating to services provided by the organization both in private and public sector as they are competitor of each other.

Gleave S., D.(2000) conducted a study to assess the importance of rail passenger into improving the range of quality of facility and services on station. This studywas done to provide some important factors that can be used in various aspects of assessing of railway services. Another study undertaken by Geetika S.N.,(2010) has been explored the attributes of service quality of Indian railway at the platforms. This study was exploratory in nature and uses factor analysis to

measure the most important attributes of customer satisfaction with service quality and found five factors such as refreshment, behavior towards passengers, information system, basic facility and security are treated as significant for measuring satisfaction.

A study conducted by Rajeswari, V.,& Kumara, K., S.(2014) on "Satisfaction and Service Quality in Indian Railways - A Study on Passenger Perspective" to measure the relation between service quality and passengers perception travelling to major cities in India using SERVQUAL method. Study used modified SERVQUAL consists of eight service quality such as reliability, assurance, timeliness, tangibles, food responsiveness, empathy information system, , and safety and security were used to assess the passengers perceptions about the service quality of railways. This study suggested that service quality was not upto the mark to satisfy the passenger's perception.

In Bangladesh, Rahaman, R., K., &Rahaman, Md., A.(2009) conducted a study on selective route in southern part of Bangladesh using a Satisfaction model for measuring the relation between level of service quality and passengers satisfaction. They found that so far eight distinct service qualities attributes influence passenger satisfaction inside the train of which security inside the train was worst. On the other hand, environment inside train and waiting arrangement found identical.

Han H. W.(n.d) carried out a study on "Determinants of Passengers Satisfaction towards Rail Transport Service" by using comparative analysis where secondary data were used and found that service quality, availability of substitution mode, and demographic factors would affect passengers satisfaction towards rail transport service. It also showed that, level of service quality is affected by customer's expectation, satisfaction and attitude towards rail service.

However, Hossain B.,& Islam M., S., (2013) conducted a research on "Determinants of Customer Satisfaction on Service Quality of Railway Platforms in Bangladesh: A Study on Chittagong and Dhaka Railway Platforms" which was exploratory in nature and used factor analysis. Survey method has been applied and inferred that six factors are significant with railways platform such as, security, refreshment, behavior, information, lighting and basic facilities.

Khuong M.,N. &Uyen L.,T.(2014) have conducted an study to assess the overall service quality attributes of airline service in Vietnam found that employers service, image and timeliness played the most important role for determining passengers satisfaction.

Priyadharshini J.,&Selladurai M., (2014) undertaken a study using descriptive research approach by using SERVQUALModel with a view to assess the socio-economic background of the passengers to evaluate passengers satisfaction and service quality. They found that service quality of the station failed to meet the passengers expectation, thus made then unhappy and dissatisfied.

Sheeba A., A. & Dr. K.,Kumuthadevi (2013) undertaken a research on finding whether there is any relation between service quality and customer satisfaction considered 16 variables affecting satisfaction. Researcher also analyzed reliability coefficient, Eigen value and component correlation matrix. They found that the most important factors determining satisfaction of passengers in train are serially comes as basic facilities, safety & security, catering, health care service, punctuality, hygiene, behavior towards passengers.

Recently, Islam Md. et al.(2016) conducted an study of service quality assessment of Airport Railway Station of Bangladesh using preference survey to identify factors regarding service quality of Airport railway station such as ticketing time, availability of information ,

security within station, safety precaution, waiting arrangement in the station, , toilet facilities, , announcement facility and customer service quality. They asked the respondent to scale each factor from excellent, good fair poor and very poor. Then the data were transformed into numerical values from one to five respectively to establish a mathematical model for overall service quality measurement. However, this study has given a conceptual framework and methodological assistance for conducting this study.

Therefore, some relevant factors such as waiting room, toilet facility, refreshment, ticketing arrangement, behavior of the staff, Security arrangement, announcement, cleanliness of platform and refreshment facilities in the platform of Kamalapur Railway Station has beenconsidered for developing a model and the attributes that might influence service quality and passengers satisfaction.

Methodology

Both Quantitative and Qualitative approach has been applied for this study. Primary and secondary resources have been used for collecting data. Primary data was collected from Kamalapur Railway Station through a structured questionnaire. A structured questionnaire survey among the 60(sixty) passengers of Kamalapur Railway Station at random basis has been conducted for data collection. The questionnaire included some demographic information of the passengers such as name, age, sex, occupation, income level and 9(nine) factors such as (a) Waiting room condition and facilities (b) Toilet facility & cleanliness (c) Information Availability (d)Ticketing arrangement (e)Announcement in the station(f) Behavior of the staff (g) Safety and security (h) Cleanliness of the platform and (i) Refreshment including their demographic evidence such as name, age, occupation, sex income level, nature of travel . Then, a five point Likert scale ranging from "very poor" to "excellent" used to measure passengers

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satisfaction and the score of "1"to "5" has been counted for the degree of each attribute. On the other hand, secondary data has been collected from books, journals, publications, annual report of the Ministry of Railways and internet. However, Officials of BR working at Kamalapur Railway Station were interviewed.

An Overview of Bangladesh Railway

Railway transport has given highest priority among the major transport systems considering its importance in the way to economic development. If Railway transport is developed it will make communication easier and cheaper. However, BR is a government organization to promote transport facilities for which around 24748 regular staff and official are employed. Though a separate ministry has been formed BR is an ancient organization. It has first started its operation in July 1962.After that it tends to expand indifferent parts of the country. It has been operated under Railway board during undivided Bengal. However, in 1973 the operation of Railway Board had been banned and it has been attached to Ministry of communication and operated by a General Manager (GM). Again in 1976 its operation is vested to railway board. After that in 1982 railway division has been formed. The secretary of this Division served as DG and secretary up to 1995. During 1996-2003 under ADB financed institutional reform project two divisions named Road Division and Railway Division has been formed.BR ensures all operations including passenger's service quality under direct supervision of MOR. It plays vital role in transporting goods and passengers domestically to economic development. At the same time to set up international rail road network, form deeds regarding it and coordination of establishing national and international railway network. Many activities are in operation regarding Trans Asian railway network, Asian route,SARRC Route, BSMTEC route and transit route connectivity. Now 48 projects are in execution of which 45 are of investment

and 3 are of technical assistance. Under these projects building of new roads, development of existing route, commuter trains, procurement of locomotives and wagons, starts new trains and procurement of parts and machineries are in progress.Rail transport cost is much cheaper than any other mode of transport in Bangladesh. Every railway station has ticketing arrangement for the passengers.BR renders various types of services ranging such as shuttle service for university students to freight and cargo services. Recently all the stations ticketing system has been modernized by introducing online ticketing system and launching an app named "Rail Sheba".One can easily buy tickets with help of this app ten days before travelling. Now around 50% of the total tickets are sold through mobile app. As a government transport BR has to carry some essential commodities such as jute, fertilizer, cement, iron steel, coal, salt, petroleum sugar and food grains at very cheap rate. However, BR earns a substantial amount of freight from transporting commodities.

An Overview of Kamalapur Railway Station

Before liberation there were only one station in Fulbaria. After the portion of Bangal and Dhaka become the important city and Kamalapur has been selected for extension. At early 60s the station was constructed and became one of the most important establishments in East Pakistan. Kamalapur Railway Station is the largest railway station in Bangladesh which connects capital Dhaka city with the rest of the country. It is also one of the most modern and striking buildings in Dhaka designed by Berger Consulting. It has stated its journey in the year of 1969. With a view to replace of old Fulbaria with a new and modern one and to establish a more grand and symbolic gateway to capital this project has been initiated. There are 21 ticket counters and ticket for travelling to India is also available. It has eight platforms and exists two restaurant in front of the station.32 intercity trains and thousands of passengers pass through this station regularly.

Data Collection and Analysis

This study applied both quantitative and qualitative approach for data analysis to assess the service quality and passengers satisfaction of Kamalapur railway Station. Socio-economic background such as gender, age, occupation, income level also observed inthis study. This station has been taken intoaccount for study as it is the most important railway station in Bangladesh and thousands of passengers are moving through this station regularly. However, a questionnaire survey has been undertaken of 60 passengers at the platformof the Kamalapur Railway Station to know about the perception of the passengers about different services provided by this station.Study observed that thepassengers are 75% male and 25% female,which indicate that woman are less likely to travel by train. It was observed that the age mainly fall 20-30 (67%) of the passengers that indicate that the majority of the passengers are young in age. Therefore, rail service should take such measures so that child and old people are being interested in rail journey. Data on the occupation of the passengers reveal that 37% of the passengers are service holder, 35% are student,Business 10% and others 18%.It means that students are dominating the rail journey and business man are not interested in travelling by trains. It is also inferred from the data that train service has been neglected by the comparatively richer section of the society as 53% of the respondent income is under 1 lakh.It was observed that majority of the respondent (62%) are regular in travelling by trains.

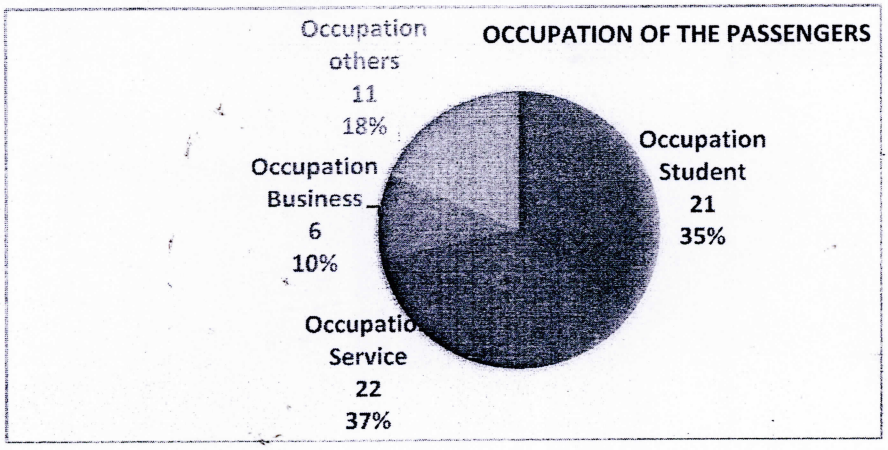
Passengers profileby socio-economic background:Table-1

Demographic classification	Passengers profile		Total	%
Gender	Male	45	60	75
	Female	15		25
Age	Range	frequency	60	
	20-30	40		67
	31-40	14		23
	41-50	3		5
	51-60	0		0
	61-70	3		5
Occupation	Student	21	60	35
	Service	22		37
	Business	6		10
	others	11		18
Income(Annual)	100000>	32	60	53
	200000>	17		27
	300000>	08		13
	400000>	03		5
Travelling frequency	Regular	37	60	62
	0ccasionally	23		38

This study also observed that the travelers are almost service holders (37%)and students (35%).Figure-2

Figure-2

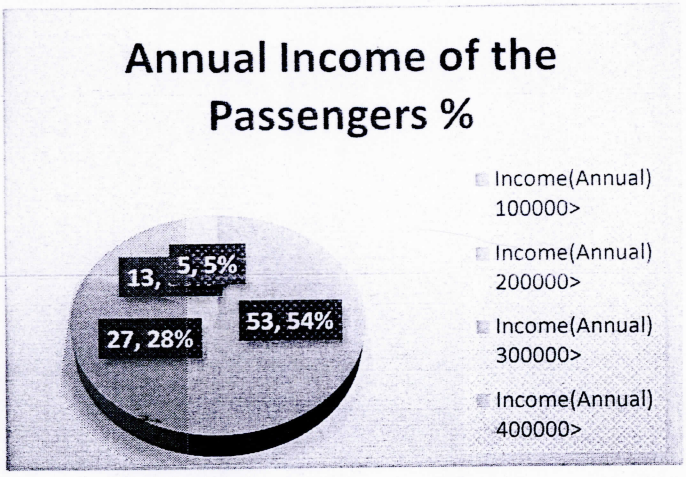
Demographic classification	Passengers profile		Total	%
Occupation	Student	21	60	35
	Service	22		37
	Business	6		10
	others	11		18



This study alsotried to know the incomelevel of the passengers which revealed that almost (53%)of the passenger fallinto income level between 100000> annually.

Figure-3

Demographic classification	Passengers profile		Total	%
Income(Annual)	100000>	32	60	53
	200000>	17		27
	300000>	08		13
	400000>	03		5



Score method has been applied for evaluating the survey data. Mark has been allocated 1 for very poor,2 for poor,3 for fair,4 for good and 5 for excellent commentbythe respondent.From this method it has been observed that service quality is directly proportional to the average value. For example, in case of 'Waiting roomcondition and facilities', the average score is 2.72, which is calculated from passenger feedback (1,2 % passenger gave their opinion in favor of excellent, 17,28% good, 18,30% fair, 12,20% poor and 12,20% very poor). The calculated 'Average Score for Waiting Arrangement' = 1*5+17*4+18*3+12*2+12*1/ 60=2.72

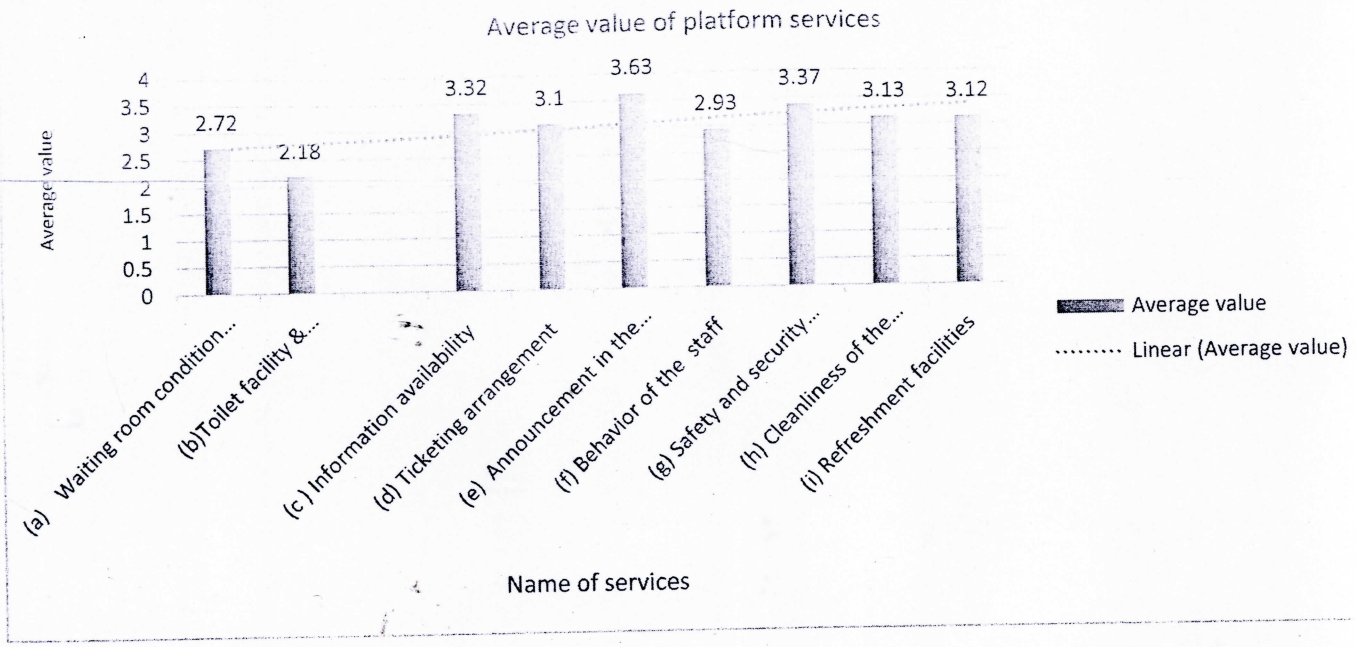
The detail analysis of service quality and the corresponding average scores are shown in Table-2. .

Table 2: Analysis of Passenger Evaluation

Name of Service / Remarks	Very poor	Poor	fair	Good	excellent	Total	Average	Overall
(a) Waiting room condition and facilities	12	12	18	17	1	60	2.72	3.05
(b)Toilet facility & cleanliness	16	25	11	8	0	60	2.18	
(c) Information availability	6	8	15	23	8	60	3.32	
(d) Ticketing arrangement	7	12	15	19	7	60	3.10	
(e) Announcement in the station	3	9	6	31	11	60	3.63	
(f) Behavior of the staff	4	21	13	19	3	60	2.93	
(g) Safety and security measures	5	8	12	31	4	60	3.37	
(h) Cleanliness of the platform	6	11	14	27	2	60	3.13	
(I)Refreshment facilities	5	15	12	24	4	60	3.32	

This table shows the average value of each factor affecting passenger's satisfaction with overall mean value. The average value of response of sixty passengers for the factor waiting room condition and facilities was 2.72.For toilet facilities they rated 2.18 which is lowest. For availability of information the average rating was 3.32.On the other hand ticketing arrangement it was 3.10.Announcement in the stationhas been ranked 3.63.However,behavior of the staff was ranked as 2.93.

Bar Diagram of average value of Platform services:

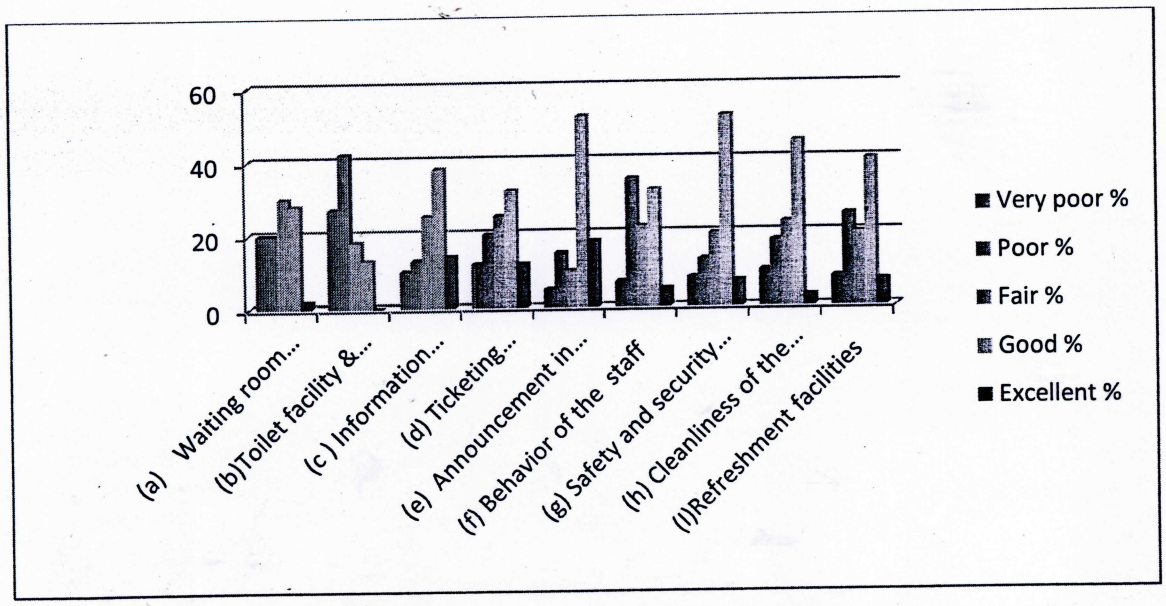


Previously the relation between level of satisfaction and service quality attributes has been established through score method. Study observed that passenger's satisfaction on platform services is depended on service quality attributes.Toilet facilities in this stationhasbeen determined as the worst as it scored the lowest (2.18).However, waiting room condition and facilities and behavior of the staff also has such unfavorable condition as they rated 2.72 and 2.93 respectively. On the other hand information availability, announcement and safety measures are comparatively better as they rated 3.32, 3.63 and 3.37 respectively.

The percentage of passenger's Evaluation

Table-3

Name of attribute / Remarks	Very poor %	Poor %	Fair %	Good %	Excellent %	Total
(a) Waiting room condition and facilities	20	20	30	28	2	100%
(b)Toilet facility & cleanliness	27	42	18	13	0	
(c) Information availability	10	13	25	38	14	
(d) Ticketing arrangement	12	20	25	32	12	
(e) Announcement in the station	5	15	10	52	18	
(f) Behavior of the staff	7	35	22	32	5	
(g) Safety and security measures	8	13	20	52	7	
(h) Cleanliness of the platform	10	18	23	45	3	
(I)Refreshment facilities	8	25	20	40	7	



Above Figure-3 shows the bar diagram of the passengers evaluation.

Findings

This study has been used structured questionnaire to assess the level of service quality render by Kamalapur Railway Station and to measure the passenger's satisfaction. During study it was evident that passenger's satisfaction is related to the degree of service quality provided to the Passengers. Analyzing the collected data from 60 passengers following observation has been made:

(a)**Waiting room condition and facilities**: This was the first factor that has been considered and passengers showed their dissatisfaction as the average score of the attribute was only 2.27. Besides,20% respondents marked as very poor and poor respectively.

(b)**Toilet facilities**: Regarding the attribute Toilet facilities passengers showed their highest dissatisfaction as its average score is 2.18 which is lowest among the attributes.42% respondent marked as poor and nobody has given excellent. Study also observed that respondent has put their comment and suggestion to improve the toilet condition.

(C) **Information availability**: Passengers are comparatively satisfied with information availability attribute its average score comes 3.32 and highest number of passengers commented as good (38%).

(d) **Ticketing arrangement**: Ticketing arrangement has been scored 3.1 which is satisfactory.However, 32% respondent marked as good and 12% given excellent for ticketing arrangement.It shows comparatively better arrangement but still require some improvement.

(e) **Announcement at the platform**: Announcement at the station ranked the best position as it got the highest average score of 3.63 and 52% of the respondent marked it as good. Therefore, this factor ranked the highest position among all the attributes.

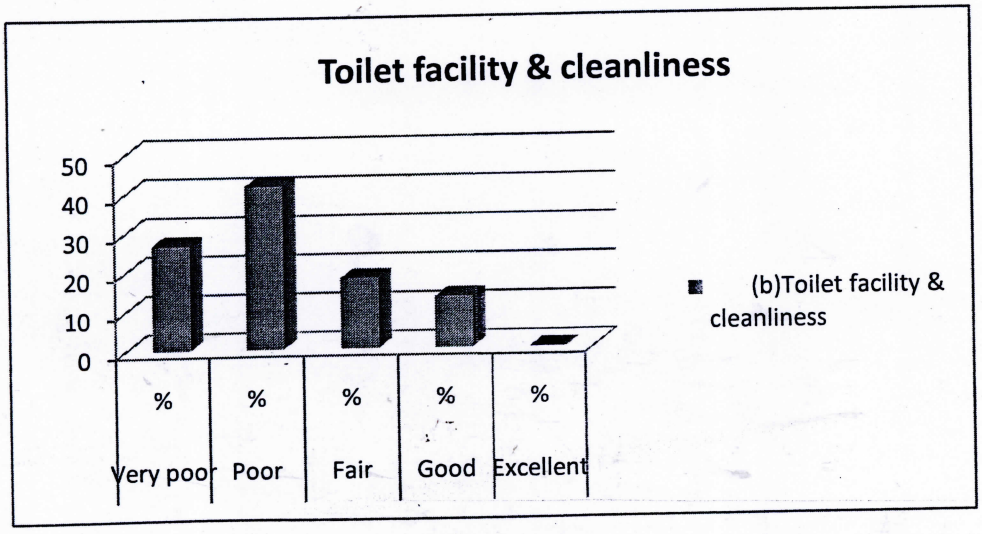
(f) **Behavior of the staff**: Behavior of the staff has become one of the worst things the major concern of the respondent which was reflected in their opinion such as the average score is one of the lowest (2.93%). 35% of the respondent mentioned that as poor and 7% expressed as very poor.

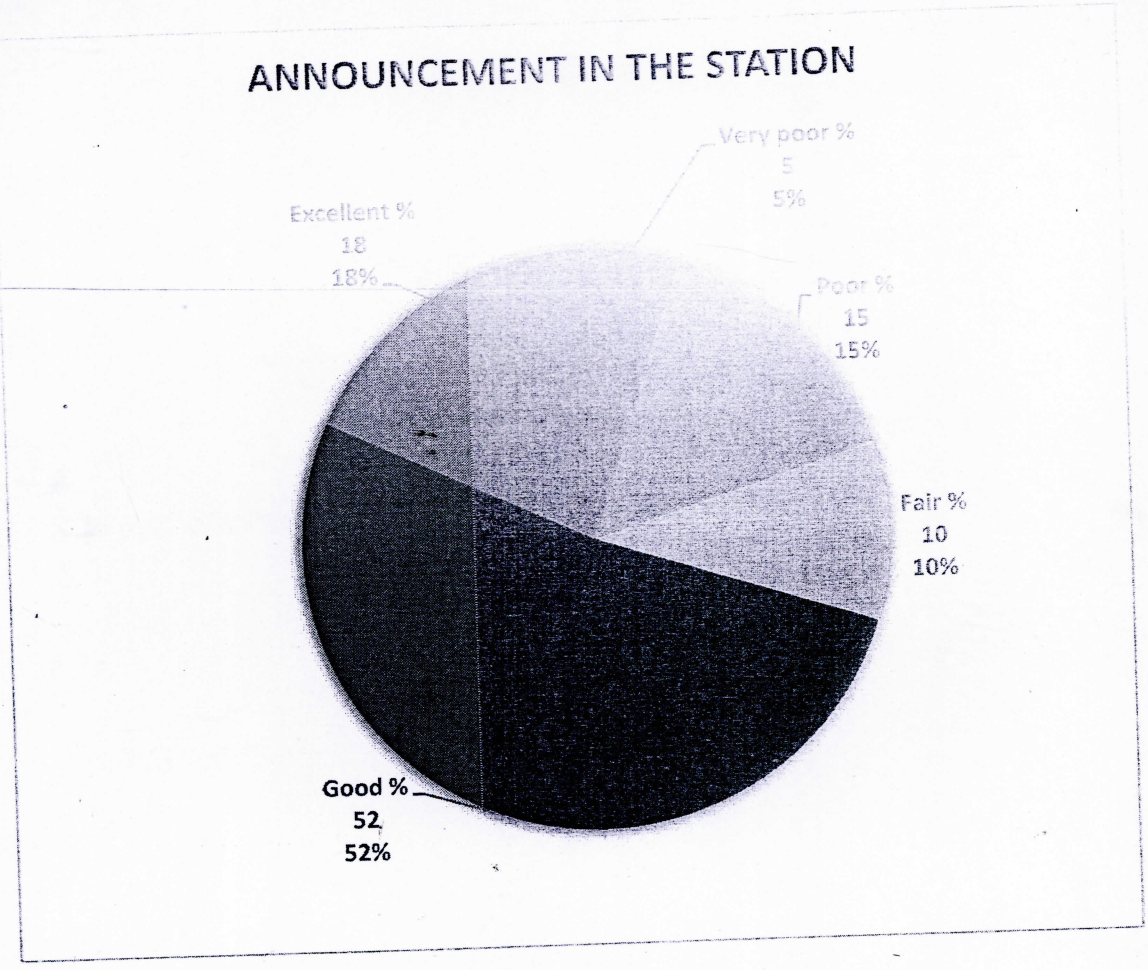
(g)**Safety and security system**: Safety and security system remains in satisfactory level as 52% respondent marked it as good and average score is3.37. However, that is a bit better as it leveled higher than overall score of 3.05.

(h)**Cleanliness of the platform**: Cleanliness of the platform condition is good enough as 45% respondent marked as good and average score is 3.13.But still there is a need for improvement in this service area as many of the respondent have shown their dissatisfaction regarding cleanliness of the platform of Kamalapur Railway Station.

.(i) **Refreshment**: Finally, the refreshment facilities has been liked by the passengers as 40% of the passengers marked as good and 7% given excellent, average score is 3.32,that means it gives a good impression about the attribute.

Discussion





One of the main objectives of the study was to find the demographic feature of the respondent to the socio-economic background of the passengers so the policymakerscan assess the pattern of passengers and their socio economic features of passengers. The observation of this study found that the male passenger are significantly high than that of female ones.Study also observed that majority of the passengers is younger people 67% of which 35% are student.However, smaller result was found in a study conduct by Islam (2018).HanH.,W (n.d) found that the factors which that may influence the passenger satisfaction is quite familiar with the passenger expectation such as quality of the railway services, employee behaviors, information system and so on. This study also observed that passengers have shown their concern about the behavior of the staff, information

system of the platform. A study conducted byRajeswari V.& Kumara K., S.(2014) on "Satisfaction and Service Quality in Indian Railways-A Study on Passenger Perspective", found that customer werenot satisfied with the service qualitywhich was similar to this study. Hossain**B, &** Islam M., S.,(2013) found that staff behavior and porters in platform can be one of the major determinants of passengers satisfaction at the station. At the same time security at the station and refreshment facility affordability are critical factors for passengers satisfaction in the platform. This study also observed that passengers have shown their highest concern about the toilet facility and behavior of the staff which ultimately affects their satisfaction level. Therefore,it can be generalize that toilet facilities and staff behavior of the station is not satisfactory and needs improvement.

Recommendations

This study was done to assess the present level of service quality of platform of Kamalapur railway station and also to measure the passenger's satisfaction thereof. It is to admit that a passenger satisfaction is significantly depends on the quality of services offered. Platform services are important to realize as passengers use it for the time being during travelling and it create an impression. However, in this study it is observed that the overall service quality is not up to the mark. It could not able to meet the passenger's demand which has been reflected in their opinion. Therefore, considering the passengers response and on ground perspective following recommendations are made:

- The waiting room condition and facilities are founddisliked by the passengers as it was not up to the mark. The infrastructural facilities of waiting room as well as adjunct toilet need to be improved.

- Toilet facilities are another important concern for the passengers. They showed their great depression regarding toilet facilities. Therefore, BR authority might give due attention to resolve this issue.
- Behavior of the staff can create a deep impression on passengers mind. Staff greatly affects satisfaction, their appearance, knowledge and interpersonal attributes have been rated as highly expected (Buluma, 2014).This study also suggests that staff behavior should be improved by giving them necessary training to develop their inter personnel skill and behavioral pattern.
- Close monitoring and supervision of BR authority is highly recommended to ensure the expected level of service delivery. Though there is a citizen charter for effective service delivery to the passengers it is hardly maintained.
- This study only focuses on the platform services of Kamalpur Railway Station. Therefore, similar work can be done in other stations to assess the level of service quality of BR so that steps can be taken to improve service quality of overallrailway network..

Conclusion

It is to note that the popularity of railway transport has been increasing rapidly. Therefore, to attract more passengers to avail this mode of transport improvement of its service quality is needed not to mention. Furthermore, BR citizen charter specially mentioned some specifics services at the stations that should be provided to the passengers.This study observed that not any assessment has been conducted on behalf of railway authority to find out the gap between service quality of the Kamlalpur Railway Station and customer satisfaction.Thus, this study aims to assess the present level of service quality of Kamalpur Railway Station platform services. Study also tried to find the level of passenger's satisfaction in relation to services offered by this station. The outcome of this study reveals that passenger is not fully satisfied with the service delivery system of this station.Study also revealed that passengers showed theirgreat concern over the toilet facilities of the platform and waiting room condition and facilities and behavior of the staff also rated very low.From the study it was also revealed that the female passengers are less likely to travel by train at the same time child and olderly people are also fewer in numbers. Therefore, there is a room for improvement of service quality. Some recommendations have been put based on the observation of the study for the planners to take further steps to enhance the service quality of the platform of Kamalapur railway station.

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Annexure

Questionnaire for platform Services and Passengers satisfaction assessment study

(Kamalapur railway Station)

SL. No.....

1. Name of the Respondent : .....

2. Age : ..... Years

3. Gender : Male/Female

4. Education : Below SSC/SSC/HSC/ Graduate/others

5. Occupation : Student/Service/Business/ Others

6. Annual income (Approximate) : .....

6. How often do youtravel by Trains? Regularly/Occasionally

7. What is your opinion regarding following platform services of this station?

Name of service / Remarks	Very poor	Poor	fair	Good	excellent
(b) Waiting room condition and facilities					
(b)Toilet facility & cleanliness					
(c) Information availability					
(d) Ticketing arrangement					
(e) Announcement in the station					
(f) Behavior of the staff					
(g) Safety and security measures					
(h) Cleanliness of the platform					
(I)Refreshment facilities					

8. Any other comment/remarks/opinion:... .....

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Seminar Paper Proposal

on

Factors influencing the effectiveness of Government Audit: A case study of Ministry of Commerce, Bangladesh

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Abstracts:

The C&AG of Bangladesh is currently engaged in pursuing different types of performance related audit which is designed to enhance accountability by linking resource allocation to performance of the ministry and feeding the results back into improvement in service delivery by putting recommendations in the audit observations. It is assumed that the government offices such as ministries and the attached departments will conduct their activities more efficiently and deliver service more promptly after audit. In this context this research assesses the study gap between the factors influencing government audit in the ministry and the effectiveness of that audit in the ministry. This paper selects four characteristics (a) competencies of auditors, (b) responses of both auditee and auditors after audit, (c) economic use of resources and (d) improved service delivery after audit against which to assess whether the effectiveness of the government office has been improved after audit. This paper also analyzes two audit reports of the subsequent years of the Commerce Ministry of Bangladesh that shows positive improvement on budget spending and target achievement. The research findings shows that the skill of the auditors, Timely response of the audit observations from both auditor and audittee sides helps to get the desired output from audit and to increase the performance of the ministries. Audit reports of the subsequent years and respondent's opinion regarding use of economic resources has given contrasting results in terms of audit effectiveness. Audit effectiveness also has been shown when analyzing the audit report, APA and respondent's opinion to judge the factor better service delivery after audit. The above findings do not ensure present condition of service delivery is the result of audit effectiveness. There are other factors those are closely associated with better service delivery of the ministry.

Key Words: Comptroller and Auditor General(C&AG), Annual Performance Agreement (APA), Audittee, Auditors, Competencies.

Research Title: Factors influencing the effectiveness of Government Audit: A case study of the Ministry of Commerce, Bangladesh

Introduction:

Now a day the attention of the citizen has been increased on how the public sectors run, use public financial resources to deliver service and try to achieve the predetermined objectives and goals. Public financial resources encompass expenditure, revenue and debt in the context of budgeting, accounting, internal and external control and financial reporting. Generally the Parliament of a country on behalf of citizen approves the government for obtaining and effectively spending public money to run the public institutions, deliver public services and implement various programs of the government. Government is accountable to the parliament on how the public money is spent to improve its performance in pursuit of more efficiency and effectiveness and in order to revive citizens' trust in public institutions. The Auditor General of the country provides assurance to the Parliament that the information provided by government is credible and complete. So there is a relationship of accountability among the Parliament, the Government and the Auditor General of the country.

Article 127 to 132 of the constitution of Bangladesh gave full independence to the Controller and Auditor General of Bangladesh to conduct audit and report to the Parliament through President about the public sector activities and performance. For that purpose C&AG or any person authorized by C&AG in that behalf shall have access to all records, books, vouchers, documents, cash, stamps, securities, stores or other government property in the possession of any person in the service of the republic (Constitution of Bangladesh article 128). The C&AG decide independently what to audit, when to audit, how to audit and prepare different types of audit report such as appropriation audit report, compliance audit report, annual audit report, issue based audit report, special audit report and performance audit report etc. The traditional concept of audit only focuses on the issues that ensure the expenditure control of government's programs but does not provide a complete picture of the programs whether expected results are achieved, or resources are wasted or used efficiently (Minu 2012). The concept of traditional audit has been changed and improved with the introduction of New Public Financial Management (NPFM)

the Parliament to facilitate government auditors through the availability of sufficient resources, training and growth opportunities.

Siddiqui (2009) investigates the effect of audit education in reducing the audit expectations gap (AEG) in an emerging economy, namely Bangladesh. Although the respondents were from the private sectors, he finds that audit education significantly reduces the AEG, especially in the area of audit reliability. His study finds out the reasons of some unreasonable expectation regarding audit responsibility and shows evidene that the effects of both traditional and case-based auditing education can reduc the AEG in an emerging economy context.

Roudla et al (2015) states that there is no trade off between the accountability and improvement functions of performance audit and there is slim chance to hold the audited organization accountable for their actions through performance audit. Although internal factors of the audit process such as the perceived expertise of the auditors, their openness to dialogue with the auditees and the quality of audit report influence the perceived usefulness of the audit but there is less chance on the adoption of changes by the audited organizations as well as not lead to specific changes in policies or organizational practices. In that situation performance audit can be useful and may lead to adoption of changes when parliamentarians pay attention to performance audit and when media attention leads to political debate.

Minu (2012) analyses the impact of performance audit in a specific social program and shows the significant correlation between economic use of resources and improved management of that social program after introducing performance audit although the desired output related to participation of beneficiaries on estimation of cost, or decision-making at all levels are not achieved . The management authorities became more concern to maintain records, accountability of the program authorities has been achieved to verify the records with actual results and all of these have been reflected on getting more feedback of audit observation from that social program to audit department.

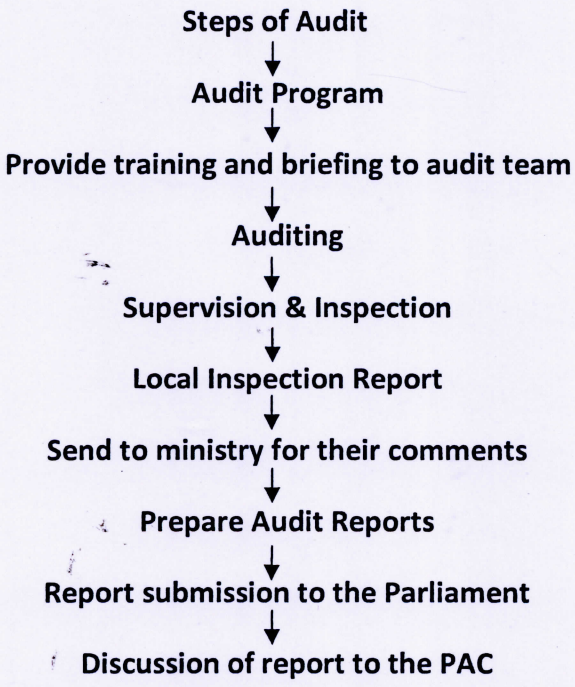
This paper also analyzes two audit reports of the Commerce Ministry of Bangladesh which had been made by the Commercial Audit Directorate. Commercial Audit Directorate is the office under the C&AG and this directorate is responsible to do audit of the Commerce Ministry and other commercial organizations of the Government of Bangladesh. The first audit report is

the Audit Report of the Commerce Ministry for the year 2015-16 to 2016-17'' which comprises 14 different types of audit observations related with procurements of the ministry and failure to achieve targets stipulated in the Annual Performance Agreement of the ministry along with comments and recommendations of the C&AG office. The second audit report is the Audit Report of the Commerce Ministry for the year 2017-18'' which comprises 7 different types of audit observations along with comments and recommendations of the C&AG office. In the second audit report there was no procurement related audit objections which is a positive improvement of the spending of budget in terms of effectiveness of audit.

Government Auditing System in Bangladesh

The Supreme Audit Institution (SAI) is the Office of the Comptroller and Auditor General of Bangladesh (C&AG). C&AG office has been created as a constitutional body according to the article 127-132 of the constitution of the People's Republic of Bangladesh and has full independence to conduct audit on public sector activities, performance, revenue, expenditure etc make report to the Parliament through President. According to the delegation of power of the C&AG the concerned Audit Directorate send audit team to the respective ministry for audit purpose. After auditing, the audit team made audit inspection report (AIR) and send that audit report to the respective ministry or its attached department for their reply or comments. There is possibility to drop some observations if satisfactory replies come from the auditee and local AIR is finalized with rest of the audit observations. If reply is not satisfactory or the auditee organization does not give any reply within 30 days, then the observations are incorporated into the final audit report. Finally C&AG submits audit reports to the Parliament through Honorable President and Parliament send those audit report to the Public Accounts Committee (PAC) which is the Standing Committee of the Parliament for discussion. PAC discusses the audit reports with the presence of C&AG and his team and Secretary of the concerned ministry and his team. After discussion PAC gives directions to the executives for further improvement and to take necessary corrective measures on irregularities. PAC ensures accountability and measure the effectiveness of the government activities with the help of C&AG through this process. So the audit report made by C&AG is the integral part of this institutional framework.

The following steps are followed to conduct audit and prepare audit reports properly, accurately and efficiently.



Related Legal Bindings, Act, Policy and Rules

To measure the scope of government audit in the ministries as well as other government offices the following policy, rules and articles of the Constitution of the People's Republic of Bangladesh have to be discussed whenever necessary to make more clarification. A brief account of the following policy, rules and articles of the Constitution is given accordingly.

(1) Constitutional Mandate of Comptroller and Auditor General of Bangladesh (Article 127-132)

(2) Comptroller and Auditor General's (Additional Functions) Act, 1974 & its subsequent amendments in 1975 and 1983

(3) Formation of Public Accounts Committee (PAC)

(1) Constitutional Mandate of Comptroller and Auditor General of Bangladesh: "Establishment of the office of the C&AG (Comptroller and Auditor General), and Functions of the C&AG" are derived from Article 127 to 132 of the Constitution of the People's Republic of

Bangladesh. Article 128 empower the C&AG to audit all public accounts of the Republic and, for that purpose, to have unrestricted access to all records, books, vouchers, documents or other items required for the audit. The C&AG is required to submit reports to the President, who shall cause them to be laid before Parliament in accordance with Article 132 of the Constitution (Government of Bangladesh, 2000).

(2) Comptroller and Auditor General's (Additional Functions) Act, 1974: The C&AG may make rules and give directions in respect of all matters pertaining to the audit of any accounts that he is required to audit. The act also empowers C&AG to inspect any government office that is responsible for the keeping of any accounts (Performance Audit manual, 2000: 1).

(3) Formation of Public Accounts Committee (PAC): The formation of Public Accounts Committee (PAC) is laid down according to the Article 76 of the Constitution of the People's Republic of Bangladesh and the Rules of Procedure of Parliament. Rules 202, 203 and 204 mention the power of PAC and Rules 233 mentions the functions of PAC (Azad, 2008).

Conceptual Framework:

This paper use the term audit in government offices or ministries and better performance of the office after audit to emphasize on the factors that are influencing auditing in the field level. Those factors are very much related with both the audit department and executive branch of the government that ultimately affect the effectiveness of the executive's office. From this above discussion and literature reviews this paper selects four characteristics against which to assess whether the effectiveness of the government office has been improved after audit. It is assumed that these four characteristics (a) competencies of auditors, (b) responses of both auditee and auditors after audit, (c) economic use of resources and (d) improved service delivery after audit can positively contribute to improve the performance of the office after audit.

Competencies of auditors: The constitution of Bangladesh (Article 127-132), Comptroller & Auditor General (Additional functions) Act, 1974 etc functionally give audit considerable independence. This independence made auditors morally strong to do their job in the ministry with no hesitation. Finance ministry usually gives budget according to the demand of C&AG office. But C&AG have to depend on ministries for recruitment of staffs. There is always a scarcity of subject matter specific staff in Comptroller and auditor general's office. So

there is always a knowledge gap of auditors which is detrimental to make audit more effective. On the job training is needed for auditors to develop perceive expertise in the related field to overcome it.

Timely response of auditee and auditors after audit: Usually auditors are warmly accepted by the audittee at least by norm. It is assumed that Audittee cooperate the audit team during audit. But there is a problem of timely response of both audittee and auditors regarding audit observations after submitting audit report.

Economic Use of Resources: Economy deals with acquisition of inputs. It finds out the answer whether physical, financial, human resources and information inputs acquired at the right cost, right place, right quantity and quality. It also assesses whether resources were acquired at the lowest cost while maintaining quality. Usually the lowest price is not the best price if the quality is different.

Economic use of resources concerned with minimizing the cost of resources used to run the ministries activities, whilst maintaining quantity and quality. In this regard, we can ascertain that ministry uses its input resources such as the budget provided from the Finance Division, made estimation of cost to run and implement the set goals of the ministry. It is assumed that if resources are used economically it will make positive impact to achieve target.

Improved service delivery: It is related with efficient use of resources to achieve predetermined objectives. Efficiency builds relation between inputs and outputs through optimum utilization of resources. Efficiency is maximizing inputs to obtain given outputs without sacrificing quality. On the other hand effectiveness measures whether predetermined objectives achieved or not. To measure effectiveness it is need to be aware of unstated as well as stated objectives and to consider unintended as well as intended results. There are different kinds of effectiveness such as organizational, program and operational. It is difficult to measure effectiveness because there might be goals/objectives not well defined or not clear at which level to measure performance such as activities, output or impact or impacts can be longer or data collection can be expensive.

Flow chart of Conceptual Framework:



Research Methodology:

In an appropriate research method there should be three points which are: answering to the research question, current state of knowledge and the nature of the variables involved in research (Bennett, 1983:85 cited on Aminuzzaman, 1991:34). To keep this in mind semi-structured questionnaires has been prepared using the four characteristics of conceptual framework to take a comprehensive interview of 8 (eight) respondents from the Commercial Audit Directorates who were either involved auditing in the Commerce Ministry directly or engaged with paper or file works of the audit reports/ audit observations in Audit Office that is Commercial Audit Directorate. This paper also reviews and analyses different audit manuals of C&AG of Bangladesh, peer reviewed journals, academic research, government policies, appropriate literature and two latest Audit Reports made for Commerce Ministry by C&AG of Bangladesh. As far the researcher's knowledge, this type of audit effectiveness after audit in Bangladesh is not studied before. So content analysis from secondary sources is not enough to understand the current state of knowledge for this research. For that a combination of literature review and interview methods has been used to bring the comprehensive findings and to overcome the limitations. Experience has established the fact that the use of one single method in

social research is not always enough to respond to the research need rather a combination of methods is more useful to bring desired level of methodological sophistication (Aminuzzaman, 1991:34).

Limitations of the Study:

As nothing is perfect in Social Science research because of the distinct view and argument of each person, some limitations have also come out to this research. The information related to gradual corresponding of paper/file works of the reply of audit observations, audit reports and subsequent attached documents were not properly stored both in the audit directorate and ministry. This has been created problems to get information from those offices although the researcher assumed to get information as a privilege of being an ex mid level officer of the audit department and a mid level officer (Deputy Secretary) of the commerce ministry of government of Bangladesh at present. There were also limited time and fund to collect data from the respondents. For that data was collected only from the auditors who were available in office during stipulated time and involved to deal with audit related activities of the commerce ministry. Another limitation is the failure of collecting data from the ministry personnel who were directly involved to deal audit in the ministry during auditing period as well as after audit due to unavailability in the ministry to meet.

Data Analysis:

One set of quesnneire has been provided to the respondents who were directly involved in auditing in the ministry and later doing file works with those observations of the ministry on behalf of Commercial Audit Directorate. At the same time an intensive face to face interview has been taken from those auditors based on the supplied quesnneire. There were 8 auditors from lower, mid and upper level of the office organogram who are working in Commercial Audit Directorate under C&AG office.

Question related to the factor competencies of the auditor:

Questions related to the factor competencies of the auditor were whether they got training on audit of performance evaluation and whether they ever do any audit irrespective of compliance or performance evaluation in the field. Among 8 respondents 6 replied that they got

training on audit of performance evaluation and 2 replied that they did not get training. 5 respondents replied that they did audit in the field and 3 respondents told that they didn't do any audit in the field. All of the respondents are opined that both compliance and performance audit is effective in the field if they are able to do audit effectively.

Question type	Yes	No
Have got training on audit of performance evaluation	6	2
Did you ever do any audit whether it is compliance or performance in the field?	5	3

Question type	Performance	Compliance	Both
What type of audit is effective? Compliance, performance or both?	-	-	8

Question related to the factor Timely response of audit observations:

Questions related to the factor 'Timely response of audit observations' have given contrasting pictures from the auditors' point of view. When auditors were asked that whether they had got response on time of the audit observations from the audittee, 6 respondents replied that they had not always get response on time and 2 respondents replied that they had never got response on time from the audittee. On the contrary when auditors were asked that whether they response on time after getting reply of audit observations from the audittee organization. 7 amongst 8 auditors replied yes and one replied that it would not possible to response on time due to shortage of manpower, huge workload and different tiers of correspondence of file approval process.

Question type	Yes	No	Not always
Did you get response of audit observations from auditee on time?	-	2	6
Did you response on time after receiving reply from auditee?	7		1

Question related to the factor Economic use of resources:

Question related to the factor 'Economic use of resources', I have found that none of the auditors responded positively regarding use of resources more economically after raising audit observations. 2 of them replied no and 5 of them replied not always of the question whether the audittee organization i,e, the ministry uses the resources more economically after raising audit observations. Here resources refer to budget that is used to operational and developmental purposes to achieve specific objectives.

Question Type	Yes	No	Not Always	Didn't asses yet
Use of resources more economically after raising audit observation		2	5	1

Question related to the factor Better service delivery after audit:

Question related to the factor 'Better service delivery after audit', I have found that 5 respondents didn't asses yet or think about it, 2 respondents replied 'no' and 1 respondent replied 'yes' when they were asked whether they noticed improvements of the service delivery of the ministry/organization during next year audit.

Question Type	Yes	No	Not Always	Didn't asses yet
Improvements on next year service delivery	1	2		5

Findings:

A) Although all of the auditors specially in the lower tier of the human resource of the audit office have not got training on the respective field of audit but all of the auditors agreed that audit irrespective of performance or compliance or any other type of audit is effective if they able to do audit in the field in perfect manner. Moreover some auditors amongst respondents have not yet done field audit, only have been doing paper work in the office which is also a shortcomings of the auditors to judge effectiveness of audit in

the ministries and other government offices. In order to get the desired output from audit and to increase the performance of the ministries and other government offices, competencies of the auditors is an important criterion.

B) According to the auditors point of view, although the audit office response on time of the audit reply from the ministry but the ministry usually do not response on time of the audit observations raised by the auditors during audit. One of the compulsory objectives of the APA (Annual Performance Agreement) of the government to reduce audit objections up to 50% in the respective year. Timely response of the audit objections both from the auditee organizations and audit office is an important tool to reduce audit objections raised by the auditors against the ministry and its departments. Timely response of the audit observations on both sides will increase the performance of the ministry that will ultimately led to the better performance of the ministry and its attached departments.

C) An economic resource which is budget is allocated to the ministries both for operational and developmental purposes to achieve specific objectives. Most of the auditors said that the ministry and its respective offices do not always use budget more economically even after raising audit objections regarding uses of fund especially in procurement purposes that hindrance the better performance of the ministry and its respective offices. .

D) Auditors are skeptical or they did not bother about the improvement of service delivery after audit. Most of the auditors among respondents said that they didn't assess yet or think about the improvement of the service delivery after audit. Only one upper level officer from audit directorate said that there has been considerable improvement of service delivery after audit.

E) Improvements in service delivery has also been seen in next year audit report because the number of audit observations lessened to half that is from 14 observations to 7 observations from combined 2015-16 and 2017-18 audit report to 2017-18 audit report of the commerce ministry. Moreover achievement of the target that sets in APA have been increased that also reflected in 2017-18 audit report of the ministry.

Conclusions:

The C&AG of Bangladesh is currently engaged in pursuing different types of performance related audit which is designed to enhance accountability by linking resource allocation to performance of the ministry and feeding the results back into improvement in service delivery by putting recommendations in the audit observations. In this context this research analyzes the competencies of the auditors who are engaged in doing audit and audit related activities, the current practices of managing audit in the government offices, economic use of budget in the mobilization of resources and delivery of services in order to assess the activities of the ministry after audit. To better manage the government activities or programs, there needs an interaction with input that is competencies of the auditors, use of resources economically and timely response of the audit objections to output that is improvement in service delivery of the ministry and its respective offices. The key department for measurement of those activities regularly is the Comptroller and Auditor General (C&AG) who aims to conduct effective audit. Nevertheless improved management of those activities will be ensured if auditors, auditee organizations and the audit report users generally recognized the three dimensions namely economic use of inputs, efficient utilization of inputs according to rules and effectiveness of the program to achieve objectives.

There is not any exhaustive research regarding effectiveness and impact of audit to any of the government program or activities in Bangladesh, although follow up of audit recommendation after audit is a part of audit activities. Audit department has a responsibility to deliver quality audit addressing the linkage between objectives of the ministry and budget as public expenditure is strategically applied to achieve those objectives of the government. In the changing public sector environment, there is increasing pressure by the stakeholder to assess the effectiveness of fund or resources rather compliance of spending. Government of Bangladesh is following MTBF system where the line ministry must set medium term strategic objectives and targets which are directly link back to the APA. These targets can be measured and reported to illustrate their level of progress in achieving the goals of the ministry. So there is scope for research in linking the service delivery related activities of the line ministry to the audit activities of the subsequent years. Unfortunately there is no modern research in any of the above discussed

topic in Bangladesh. So the future researcher can carry out research on the above discussed topic to establish a trend to measure the impact of government program.

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Appendix A

Checklist for interviewing auditors

- **Name**
- **Designation**
- **Office**

1. For how long are you doing audit in the field?

2. Did you ever do performance audit or did any audit to measure performance of the organization?

3. Have you ever got training on audit of performance evaluation?

4. According to you what type of audit is effective to ensure accountability and transparency in government offices?

5. Did you get response of audit observations that you raised on time from auditee? If not, after how many days have you received response of audit observation?

6. Did you response on time after receiving reply of audit observations form auditee? If you late to response, for how long? What was the reason for delay?

7. Do you think that audit organization uses its resources economically? If not, have you found out the reason?

8. Do you think audittee organization uses its resources more economically after raising audit observation? Have you got any evidence of that?

9. Did you go through performance evaluation of the office during audit or only do compliance audit?

10. After conducting performance audit have you seen/heard any improvement in audittee organization on next year's service delivery?

Seminar Paper

on

Posts Training Utilization of Foundation Training of National Academy of Social Service (NASS) on Office Management Module: A Study of Field Level Officers of Department of Social Service (DSS)

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ABBREVIATION

AARDO	=	Afro – Asian Rural Development Organization
ACAD	=	Advance Course on Administrative Development
BCS	=	Bangladesh Civil Service
BPATC	=	Bangladesh Public Administration Training Centre
DD	=	Deputy Director
DSS	=	Department of Social Service
FTC	=	Foundation Training Course
IT	=	Information & Technology
KSA	=	Knowledge, Skills & Accountability
MSW	=	Ministry of Social Welfare
NASS	=	National Academy of Social Service
PA	=	Participant Assesment
PTU	=	Post Training Utilization
Q	=	Question
SSO	=	Social Service Officers
TKM	=	The Kirkpatrik Model

Posts Training Utilization of Foundation Training of NASS on Office Management Module: A Study of Field Level Officers of DSS

Abstract

Post Training Utilization (PTU) is an essential evaluation process of a Training programme that helps optimizing an organization's resources used in Training purposes. It also helps the participants learn and identify to assess the needs of management module in DSS foundation training. This research article will look into the extent of utilization of knowledge, skills and accountability (KSA) learnt from Foundation Training Course's (FTC). Data were collected from the participants of 38th to 45th foundation training courses by online survey questionnaires and also their some of district level Controlling Officers (Deputy Directors) through sets of questionnaires & in-depth interview on the basis of the Kirkpatrik Model(TKM). In this model post training utilization are assessment by 4 level (Reaction, Learning Behavior, Result) are analysis with qualitative and quantative methods. Social Service officers carry out a variety of jobs. National Academy of Social Service (NASS) as an institution that provides training to the officials of DSS .During this study most of the FTC participants strongly believe that the application of the knowledge and skills and accountability learnt from this course was satisfactory. On the other hand perspective of Controlling Officers the foundation course isn't highly standardize in terms of knowledge, skills and accountability in participants work place. There is a huge understanding gap between participants and controlling officers. National Academy of Social Service (NASS) as an institution that provides training to the officials of DSS is not alone responsible for application of acquired knowledge, skills and accountability (KSA) acquired from the FTC. It is also the responsibility of the DSS has to provide the working environment for the trainees to work in to use their knowledge and skills.

Throughout this research study the PTU assesses that the office management module of FTC is highly essential for newly required DSS gazetted officers. But to some extent the NASS needs to ensure that the well-equipped training facility, experienced resource personnel, modernized training methods and techniques to be applied in this module. And also incorporate with ethics and patriotism.

Key words: Organizational resources, skill, knowledge, Kirkpatrik model, working environment, technique of training method.

1. INTRODUCTION

The main purpose of providing training to employees is to improve their knowledge and skills as well as to change attitude so as to ensure that they perform well in their roles. Trainings enable employees to reap highest possible benefits for their organizations by applying improved knowledge and skills and positive attitude and thus, it can be a great source of achieving competitive advantage. Therefore, Management training in the foundation level is one of the most important modules taught in both public and privet sectors in a fast-growing economy like Bangladesh. Civil servants' Foundation Training is a crucial tool for effective and efficient administration of a development of a country like Bangladesh. Hence, the Government institutions in Bangladesh offer Foundation Training Courses (FTC) mostly for newly appointed Grade 9 officers. The objective of the FTC is to instill leadership qualities, improve attitude and personality and stimulate creativity so that it enables the participants to have detailed insights on how a government functions and what role an officer plays in order to accomplish specified objectives in various dimensions of socio-economic development of Bangladesh.

National Academy of Social Services (NASS) provides 90-days long FTC for the officers of the Department of Social Services (DSS). One of the modules taught in the FTC is 'Office Management' which describes the correct practices of day-to-day 'Office Management' related activities as per the Secretariat Instructions 2014. Upon completing the FTC, DSS officers return to their respective workstations and start implementing the knowledge and skills developed from the training.

1.1 Post Training Utilization (PTU)

Evaluation is an essential part of any training programme. Therefore, Post Training Utilization (PTU) with helps the participants learn and identify the application of knowledge, skills and attitude in various practical situations. PTU is an evaluation that helps identify the relevance of training in workplace and the degree of relevance with regard to the degree of utilization of knowledge and skills and attitude while performing day-to-day activities, (Hossain and Husain 1991:45). Therefore, PTU Study is absolutely essential part that must be carried out in a methodical manner. For a valid training programme, PTU Study must be conducted in the workplace of the trainees and a reasonable time should be given to the trainees for applying newly developed knowledge and skills in performing their tasks or jobs before any PTU Study is carried out.

1.2 Background

Being an officer is tough and being a gazetted government officer is even tougher. He/she has to know the rules and regulations, how to maintain an office and to lead a team ,exhibit proper etiquette and manner in his/her day to day activities and perform certain duties and responsibilities as per the expectation and rules. People acquire some of these traits in their early life, e.g. during academic years, from family etc. However, for many, a comprehensive training is required. And that defines the role of FTC.As the core programme under various induction programs, FTC outlines the knowledge and skill level that a direct recruit should have and also showcases how to acquire that level. The reason for a common foundation course is to have a better understanding of the government and the role of the officer in fulfilling the government functions. And to find the impact and the outcome of the training programme, this PTU study is being conducted.

1. 3 Statement of the Problem

The Office Management module is a vital course in the FTC on the basis of There is a lack of proper knowledge of the newly required officers .It is necessary to identify implementation of comprehensive development plan .There is a lack of proper managerial skill of the officers . However, the FTC of NASS lacks both quantitative and qualitative aspects in a PTU study which would help identifying the application of knowledge, skills and attitude in their workplace. This PTU study will analyze the outcome of the training programme and its impact.

1.4 Objectives

The FTC curriculum of NASS has twenty modules covering various topics like Office Management, Financial Management, Development Planning and Project Management, Action Plan, Innovation Idea Generation, Field Attachment, Video Editing and Documentation, English Language Skill, Human Resource Management, Information and Communication Technology, various services of DSS, Essential Acts and Rules, People Management, Basics of Social Services etc. Unlike long-known government training academies like BPTAC or Police Academy, NASS, the flagship training institute of DSS under Ministry of Social Welfare (MSW), has been raised to prominence in last few years. The academy is now offering three foundation courses a year for Social Services Officers (SSO) who are Grade 9 officers under 8th National Pay Scale 2015. Each FTC is 90-day long residential course and is being conducted at the academy campus which is located at Agargaon, Dhaka. From 2019-2020 fiscal year, the FTC for Social Services Officers is expected to be of 120 days.

The 'Office Management' module, that is how an officer should maintain his/her office, write various types of letters, keep records, conduct meetings, write summary, write meeting minutes, maintain various registers, write annual report, manage logistics etc. The major legal or official framework in doing the tasks mentioned above is Secretariat Instructions 2014, issued by

Ministry of Public Administration, Government of Bangladesh. Apart from that, other directives issued by Ministry of Public Administration have also been counted as the guiding rules on how to run a government office .The specific objectives of the study are as follows:

- To assess the needs of management module in DSS foundation training.
- To assess the needs of post training utilization of foundation training among the field level officer.

1.4 Justification

NASS has allocated twenty class hours to cover various topics of 'Office Management'. The main goal of teaching any topic, particularly in the professional arena, is to get it implemented in the workplace. It is to be noted that, these officers have not started the foundation training the day they joined Department of Social Services. Rather, they have on average 17-months experience of working in/leading various field offices including Upazila Social Services Office, Sorkari Shishu Paribar, Probation Office and Hospital Social Services Office. That's why it would be interesting to see how 'Office Management' has changed in the workplace of an officer who has completed the foundation training. The examination and identification of the extent of positive change, a change that drifts pre-existing practices to the format prescribed in the Secretariat Instructions, is vital to assess the performance of the course module and teaching method. It would also help gain insights on the learning curve of the trainee officers and the willingness of the officers to decode the classroom lectures into everyday office practices.

2. LITERATURE REVIEW

According to the report, by Dr. Tapash Kumar Biswas et al 2010, on 'Post Training Utilization of AARDO (Afro-Asian Rural Development Organization) Courses in Bangladesh', a study/survey was conducted in 2010 to evaluate the outcomes of the trainings/workshops/seminars and to determine the level of achievement derived from the investment in training to develop human resources in AARDO member countries. One of AARDO's principal roles is to provide efficient and effective training programmes for its member countries to develop human resources. The training/workshops/seminars were divided into areas such as Rural Poverty Alleviation, Agricultural Development and Social and Gender Development. According to the report, AARDO sponsored courses' overall achievement level was very high. The report states that all the respondents of the study/survey directly or indirectly utilized their attitude, knowledge and skills developed from the training. However, utilization of newly developed knowledge and skills varied from person to person. According to the report, the study/survey found that approximately three-fourths of the knowledge and skills developed from the training/workshop were applied in various practical affairs which indicates that the training/workshop/seminar conducted to develop human resources in AARDO member countries were highly effective. The report also recommends the following key points:

- Training institute must ensure the selection of relevant participants
- More emphasis should be given to sharing of experience
- Training institute must ensure the relevant and experienced resource person, use of modern training techniques and methods
- Continuous follow-ups are needed and post training utilization study/survey must be conducted

Acton et al.2003, found that the trainings and workshops gives not only the ability to manage stress at work but also positively motivates employees to job satisfaction. Lopez et al. states that high performing human resource and business achievements are directly related to organizational learning. Broad 2000 states that poor design of training is one of the drawbacks in achieving knowledge and skills from training programmes/workshops/seminars and relevant and experienced resource person is also very important factor because he or she is the one who has the skills that will set the foundation of the participants or trainees.

(Jackson 1999) suggests that providing scope for discussion prompts to trainees is one of the key ingredients for an effective and successful training session and its outcome (Choo et al. 2007), stated that trainees improve through training when it is conducted by a resourceful trainer.

(Maurer et al. 2008), stated that training is absolutely essential part of the process that improves employees' commitment and satisfaction towards job. It was also found that the training programmes/workshops/seminars are high contributor in achieving and implementing new knowledge and skills and evaluation detects the effectiveness of the employees at both the individual and organizational level.

Many organizations in government and private sectors invest a lot of resources in training, workshops and seminars to develop and improve their human resources. However, regardless the investment to improve individual and organizational performance, sometimes, it is found that the training programmes often fail to achieve desirable outcomes due to ineffective methods used and inexperienced and unresourceful trainer. And it is often found that combination of relevant training sessions with effective training methods and techniques, relevant trainees and experienced and trainers, the training outcomes are often achieved.

Performing the assigned duties Government Officials face various types of challenges every day. Therefore, to perform their best, every new recruit must participate in Foundation Training Course (FTC); according to the Recruitment Rules, 1981. Although there are various PTU Studies which have been conducted earlier for other agencies and departments of the Government of Bangladesh, there has never been a qualitative and quantitative PTU Study for FTC on Office Management Module – A Study of Field Level Officers of Department of Social Service (DSS). Hence, the PTU Study will be able to analyze and evaluate the training programmes output in terms of the need of the training programme and the degree of application of the newly acquired knowledge, skills and attitude.

3. METHODOLGY

Both the quantities and qualitative method used for outcome of this study. In this PTU Study 'The Kirkpatrick Model' (TKM) is being chosen for analyzing and evaluating the training programme. Here is the evaluation in 4 level evaluation process (Donald L., K. 1994). First two level are related to FTC participants and last two level are related participant's direct controlling officers for evaluation the participants overall outcome. TKM is linked to evaluating the application level of change in behavioral workplace. The evaluation levels areas shown below:

Level 1	Reaction :	Whether the course was effective or not
Level 2	Learning :	Whether participant have learned enough of running his office effectively
Level 3	Behavior :	Whether participant using their Knowledge, Skills & Accountability in office work
Level 4	Result :	Outcome of the participants work place

3.1 Selection of FTC and Respondents:

Although many FTCs were conducted since the beginning of NASS, we will collect data from the trainees attending FTC 38th to 45th in November 2019 for this PTU study. We selected 189 out of 272 DSS officials randomly as respondents and conducted census survey to collect data and sent a set of online questionnaires to them for their responses. And 11 controlling officers are randomly chosen from those FTC participants who are directly under their control. The post of their controlling officer's Deputy Director. They are all district level officers. We confidentially use a set of questionnaires and in-depth interview. The interview based on their direct sub ordinate 54 participants among 189 participants improvement after FTC training.

3.2 Data for the Study:

We first prepared set of questionnaires (Annexure -1) for the participants who completed the 38th to 45th FTC which were preliminary tested. Out of many course modules we chose 'Office Management Module' and its trained officials. We sent them online questionnaire forms related to their learning from foundation course and their application in their respective workplace.

Another questionnaire for district level controlling officers (Annexure -2) we use this questionnaire in face to face in-depth interview related overall participants behavior and capability and some sort of comment also.

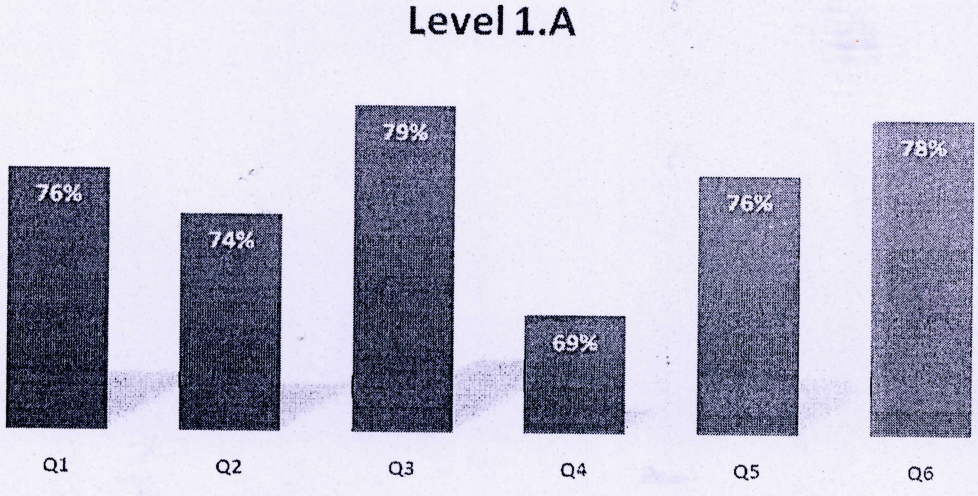
The set of questionnaires used to collect the trainees' responses also contained some behavioural questions that were rated on a scale of 1 to 5 where 1 represented lowest value and 5 represents the highest value. Upon completing the survey, we analyzed all questionnaires and their responses. We consulted relevant research reports, books and documents as well as online resources.

4. ANALYSIS:

We use a systematic process to evaluated training at all level. Both quantities and qualitative data were collected. Data collection techniques included existing tools as well as measurements designed for this evaluation.

LEVEL - 1 (REACTION)

Findings indicate that course participants were satisfied customers. The participant assessment (PA) questionnaire form was used to capture this level evaluation data on participants satisfaction with course relevant. Knowing the effectiveness of the course module we asked 6 (six) questions to the FTC participants in this level. Their response is shown in the graph below (Figure-1A)

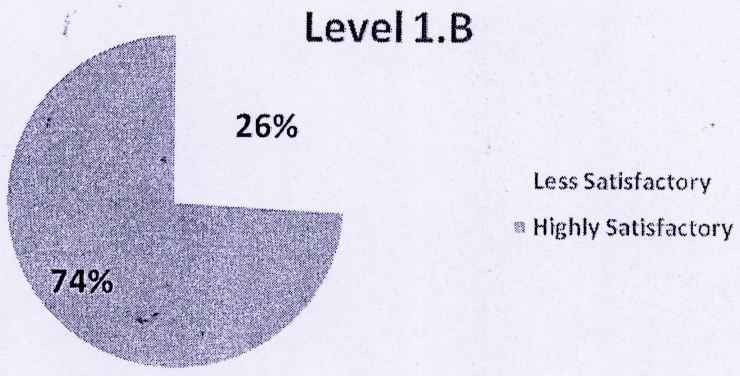


(Figure-1A)

LEGEND

Q-1. Satisfaction of teaching method	Q-4. Satisfaction of quality of cover all subject
Q-2. Satisfaction of quality resource personal	Q-5. Satisfaction of understanding(learning)
Q-3. Satisfaction of course management	Q-6. Satisfaction of use of electronic device

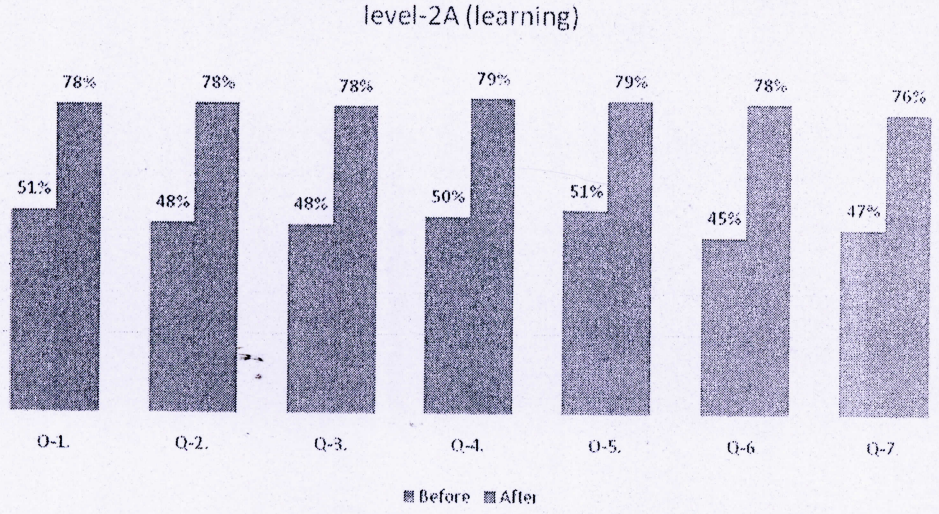
The satisfaction of course management authority is highly appreciated (79%) the DSS field level officers who are recently completed FTC course. But necessity of related subject including this module. because cover the all subject Q4 is only 69%. The majority of participants felt that the course objectives had been met and that the course was highly relevant to this work(74%). Respondents' overall satisfactory level is shown in the graph below (Figure-1B):



(Figure-1B):

LEVEL- 2 (LEARNING)

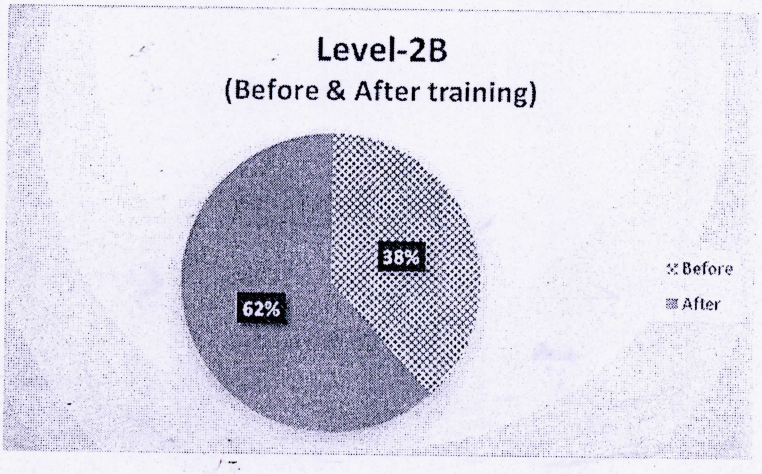
The participants of FTC were asked another set of questionnaires in Level 2 where they gave feedback of their knowledge and skills relating their workplaces before and after the course this is called the learning level. There is a graph (Figure-2A) before and after the training participants have learned enough for running their office efficiently.



(Figure-2A)

Q-1 File Management	Q-5 Subordinate Office Monitoring
Q-2 Record Management	Q-6 Knowledge of Rules of Service
Q-3 Note, Drafts & summaries	Q-7 Store management
Q-4 Meeting Management	

So that action plans to improve learning can be implemented. The graph (Figure-2A) above shows that the knowledge and skill level of the participants are increased in all cases. Their overall success of the training is very high because the graph (Figure-2B) below indicates that the knowledge and skill level of the participants were increased and improved by almost double.



(Figure-2B)

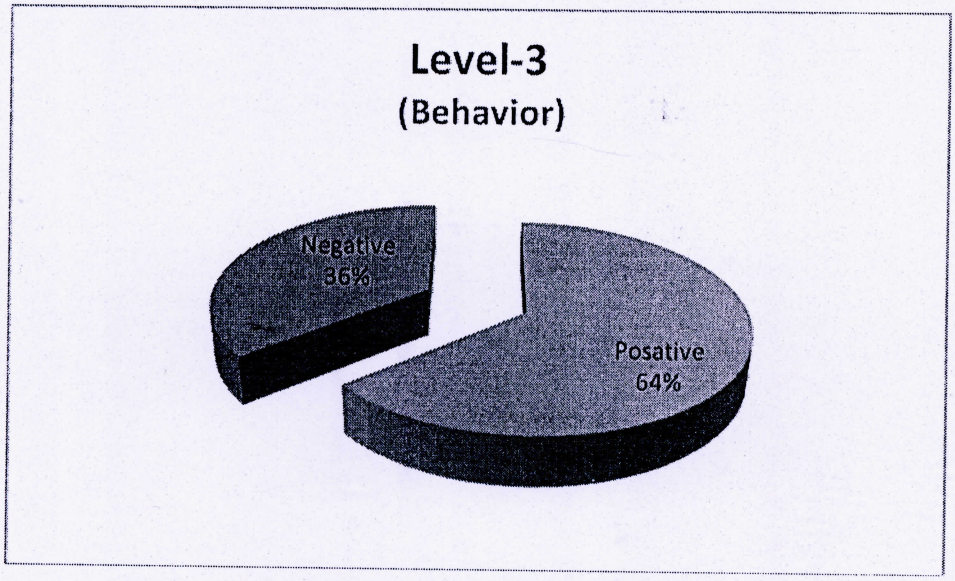
LEVEL – 3 (BEHAVIOR)

District level 11(eleven) Controlling Officers of the trainees were asked to give feedback on their 54 subordinates' improvement of knowledge, skills and attitude in workplace to reflect the improvement of the participants after the FTC is completed. They marking their sub ordinate who completed FTC on the basis of participants use knowledge, skills & accountability (KSA) in their work place. It is the most effective level to judge the evaluation by third person who are directly involve .The matrix is given below:

TABLE-1
(Trainees Overall Behavior)

Question topic	1	2	3	4	5	%
Knowledge of file management (notes, drafts, etc.)	6	12	12	15	9	63%
Punctuality	14	5	11	14	14	63%
Skill of e-nothi (use of digital equipments)	5	11	19	15	4	61%
Time management (timing)	14	6	9	19	6	59%
Subordinate controlling quality	8	10	10	13	13	65%
Knowledge use of law in drafting	5	12	7	25	10	67%
Team work (leadership)	1	6	2	22	13	68%
Behavior with the citizen	12	1	5	20	12	65%
Quality of problem analysis	8	9	9	15	13	66%
Decencies	13	3	4	22	12	66%

Above The table -1 shows that, according to their Controlling Officers, the participants are performing well after the training is complete their team work (68%), knowledge (67%) is improving but time management is only 59% in real situations at workplaces. Overall performance is only 64% is not remarkable graph (Figure-3) in shown below. On the basis of this graph there is a message that participants are not using their knowledge, skill & accountability (KSA) in their office appropriately. This is a tendency of negative behavior.



(Figure-3)

LEVEL – 4 (RESULT)

In Level 4 analysis for determining the outcome of the training in field level, we asked Controlling Officers some questions and according to the response of the Controlling Officers and the participants of FTC, the foundation training is very effective for the participants working in field level. It helps the participants manage day-to-day activities more efficiently, many controlling officers have confirmed. We asked the controlling officers in depth interview confidentially to determine the outcome of the training to the DSS field level officers.

The Controlling Officers' response regarding the interviews confirms that they are mostly satisfied about the outcome of the training course. Many Controlling Officers have commented that their subordinates after the FTC complete are more energetic and efficient and their IT skills have improved and making visible impacts at workplaces.

Some are disappointed the FTC participants and also the training effectiveness. The reason for their dissatisfactions, as the Controlling Officers have mentioned in some cases, are that some participants tend to seek better opportunity in elsewhere, such as Bangladesh Civil Service (BCS). So, their concentration at workplace aren't up to the mark. Some have commented about the recruiting system in DSS need to improve so as to recruit better and more qualified officials. Some have mentioned that the Training techniques being currently used are very old and new techniques must be deployed so that DSS new recruits get the best training available in the country.

5. Recommendations

According to Level 1 analysis, it is found that the course participants were highly satisfied with the training and the knowledge and skills the acquired. Although the satisfaction of course management authority highly appreciated those who recently completed FTC course, they believe that inclusion of Management module in FTC is an absolute necessity. And according to Level 2, learning level, analysis and the participants of the FTC's feedbacks shows significant improvement in their knowledge, skills and attitude after the training is complete.

On the other hand, Level 3, behavior analysis which is derived from the feedbacks from the Controlling Officers in District level shows that participants' team work performance is 68%, knowledge level is 67% and time management is only 59% in real situations at workplaces. Controlling officers' overall satisfactory level in this regard is only 64% which needs to improve more. This is an indication that some of the participants are not using their knowledge, skill & accountability (KSA) in their office appropriately which is indicates a tendency of negative behavior. If I compare the level 1, 2 and 3 there is a gap between the participants and their controlling officer's understanding. This understanding gap will clarify in the level 4 in depth interview to the controlling officer and participant.

In Level 4 analysis for determining the outcome or the result of FTC in field level, controlling officers' feedbacks indicate that the foundation training is very effective for the participants working in field level. Many Controlling Officers believe that their subordinates after the FTC complete are more energetic and efficient and their knowledge and skills have improved and making visible impacts at workplaces. However, some Controlling Officers are disappointed in the FTC participants and also in the effectiveness of course because in some cases some participants tend to seek better opportunity in elsewhere; such as Bangladesh Civil Service, overseas job etc. Some participants have lack of patriotism and ethics

According to the findings regarding the dissatisfaction from the controlling officers' end, participants think that their supervisors also need refreshers training and used to digitalization so that the understanding gaps between controlling officers and field level officers no longer exists and they all are in the same page. According to the participants also mentioned that the Training materials and techniques must be developed and resource personnel also need to be trained in modern training method and techniques so that the course is taught with up to date methods and techniques and in order that the course is more fruitful for the participants.

It is also assumed that the ethics and patriotism are the foundation of the conducts of an employee. Therefore, many controlling officers suggested that the training programme should also include knowledge on ethical practice and patriotism. And, NASS as an institution that provides training to the officials of DSS is not alone responsible for the poor level of application of acquired knowledge, skills and attitude acquired from the FTC. It is also the responsibility of the DSS as an organization to ensure provide the working environment for the trainees to work in

to use their knowledge and skills. NASS has to ensure that the training facility, resource personnel, training methods and techniques are all need to be improved.

6. Conclusion

PTU study is one of the fundamentals of evaluation of any training. Hence, PTU should not be done for the sake of evaluation only. In fact, it helps organizations identify their training team or department's strengths and weaknesses as well as optimize the time and resources used in training human resources. National Academy of Social Services (NASS) is one of the top training institutions in the public sectors in Bangladesh. And since the beginning, it has been providing training courses to the new recruits and other officials of Department of Social Service. It is without a doubt that Management Module helps officers manage their tasks in real situations more efficiently and improves knowledge and skills and attitude. Therefore, inclusion of Management Module in the FTC is absolutely essential.

However, according to many controlling officers or supervisors, outcome of the course is not up to the mark and requires state-of-the-art techniques for more developed method of trainings and up to date training materials for significant and positive change to take place in participants in terms of knowledge, skills and Accountability (KSA). And as many training participants mentioned that the controlling officers also need the training to fill the knowledge gap between them. Therefore, this PTU study assesses that the requirement of modernized training that ensures training for both newly recruited gazzetted officers and their controlling officers and also include topics such as ethical practice and patriotism.

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Annexure-1

Survey Questionnaire:

1. Name:
2. Name of Workstation:
3. Designation:
4. First Joining date:
5. Participate of FTC:

38	39	40	41	42	43	44	45

A. How much themodule (office management) was effective in the foundation training course of DSS field level officers.

Satisfaction level	1	2	3	4	5
1. Satisfaction of teaching method					
2. Satisfaction of quality resource personal					
3. Satisfaction of course management					
4. Satisfaction of quantity of cover all subject					
5. Satisfaction of understanding (learning)					
6. Satisfaction of use of electronic device					
7. Satisfaction of leaving and fooding (dormitory and cafeteria situation)					

B. What was your level of knowledge (in management module) before and after foundation training

Module Subject	Before Training					After Training				
	1	2	3	4	5	1	2	3	4	5
1. File management										
2. Record management										
3. Note, Drafts and summery										
4. Meeting management **(Conduct meeting, preparation minutes and working paper writing)**										
5. Subordinate office monitoring (Inspection report, instruction writing)										
6. Knowledge of service rules										
7. Store management										

signature

Annexure-2

Survey Questionnaire (participate controlling officer):

Name:
Designation:
Name of Workstation:
Participate Name:

A. How much the module (office management) was effective in the foundation training course of DSS field level officers.

Satisfaction level	1	2	3	4	5
1. Knowledge of file management (Note, Drafts and summery)					
2. Punctuality					
3. Skill of E-nothilnternet					
4. time management (timing)					
5. Subordinate controlling quality					
6. Knowledge use of law					
7. Team work (leadership)					
8. Behaviour with citizen					
9. Quality of analysis problem					
10. Decencies					

B. Over all statement (In-depth interview)

1.
2.
3.

Signature

Seminar Paper

On

Land Survey Procedure in Bangladesh: A Critical Evaluation

Submitted & Prepared By:
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127th ACAD Course

Submitted to:
Course Management
127th Advanced Course on Administration and Development
Date of Submission: 01 December, 2019

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Land Survey Procedure in Bangladesh: A Critical Evaluation

Abstract

This article examines the required time, cost and visit of the service receiving people during the land survey procedure. It also intends to highlight the behavior pattern of the service providing government personnel and explores way forward to establish a smooth service delivery system in the field administration of land survey. In our land hungry country land plays a very crucial role for the sustenance of a large number of poor peasants and the stability of the whole society. Questions arise as to the sincerity and devotion of the government personnel in this department. The service providers tells that they are logistically supportless while the service seekers alleges that the service providers show denial mood towards them. The reality is there exists a mysterious gap which the state, as the guardian must find and fill up with due urgency. By far, land is one of the most neglected sectors. The laws which are dominating the land need to be updated in some cases. But the prime necessity is setting right men at the heads of the field administration. Secondly, the government should support them with necessary logistics.

Introduction:

Land is the surface of the Earth we live in. Our life starts its journey by landing on it. In our lifetime we cultivate and utilize it in various form. At the end of our life we physically disappear into it. So land is a natural and universal need in our life.Everyone has the right to own property alone as well as in association with others and no one shall be arbitrarily deprived of his property. (Article 17, UDHR, 1948). Again the right to property is included in the basic necessities of human (Article 15, The Constitution of the People's Republic of Bangladesh)

But the right of a human to land sustains as long as he remains alive. After the demise of a man, his ownership get transferred to other inheritors. Land is measurable by area and this area is a constant figure. Though the land of the earth is limited, its size and shape may get changed and take different forms due to various natural and artificial reasons. Again, the increasing number of population and development works have led to the fragmentation and amalgamation of the land. All these changes in ownership and reformation of land have acted as push factor for evolving a land administration to supervise the system.

Background: Land administration has a long 500 years of history in our country. In the past there was a crude management system supported by a simple and naive settlement system until the Commissioning of the Cadastral Survey (CS) record. Now it is a part of the civil administration in our country. The current land administration has three core wings. Those are:

(i) Land Management
(ii) Land Registration
(iii) Land Survey and Settlement.

It is worth mentioning that a flawless and dynamic land settlement is the base of the smooth functioning of other two wings of land administration. The land settlement is done through ten

consecutive stages from *kistower* to *hand over* to the collector. Survey procedure of any land is done through the field measurement and paper-pen exercise while settlement is done at the office. At the end of the operation the system produces two things. One is the map, another is the Record of rights (ROR). The map is a horizontally minimized picture of a certain land. It is drawn on an specialized type of paper strictly complying certain ratio of scale. In case of measuring any land area this map is just translated into figure. And in respect of the measurement of any piece of land the ROR and the map equate and support each other like the two surfaces of the same coin. The ROR contains some additional words and figures, like the name of the co-sharers, share and amount of the total land area of any plot, the class/type and the occupier of the land.

Problem Statement: Most of the Bangladeshis are mainly dependent on land for their daily living. Fairland management can protect the interests of the bonafide peasants and make their lives smooth and happier.(Islam, 2005: p.245). Land survey is the system for producing land record and this record is the base for land management. The latest Revisional Survey (RS) Settlement operation started from 1990 in all over the country. But still it is incomplete in a vast number of mouzas. The operation activities seem to be sluggish or halted in anystage for unknown reasons. Compared to the CS operation which could produce and deliver a flawless and trustworthy record without any delay, the RS operation is lagging far behind in view of its quality and utility.

RS records of some mouzas which have been handed over to the collectors are reported to have been plagued with tampering and mistakes. This record in many cases can't serve the purpose for which it have been prepared. Again, it has ignited enmity, malice and opposition in the society. Collectors from many districts are alleging to the Survey and settlement department in black and white that a chunk of their khas lands have been illegally recorded to the name of some persons. Again, due to the lax and lengthy course of settlement operation the government can not acquiesce some pieces of land for development work or other purposes.

On the other hand, people just want nothing other than their fair share of land. Anybody hardly can compromise in case of settling land dispute. So it is natural that any flaws and injustice in land administration will lead to social chaos as a chain effect. It ultimately pushes the deprived people to the criminal justice court. In our country near about eighty percent of the criminal offences are committed as a result of land dispute.

It is reported that more than five million land-related litigations are pending in the civil court.The civil courts are bogged down with the booming numbers of new cases being filed everyday while the existing cases are remaining undisposed of. The dailies are covering the crying of hundreds of service seekers who are getting lined up in the corridors of the upazila settlement offices and zonal settlement offices.

Objectives: The objectives of this study are-

(i) To make an evaluation of the time, cost and visit required for the various stages of land survey procedure.

(ii) To identify the behavior pattern of service providers towards the service seeking people in the land survey procedure;

(iii) To explore the wayforward to establish a smooth service delivery system in Bangladesh.

Justificationof this study: This study intends to identify the inherent weakness of the settlement procedure and the resultant public sufferings. On that count, it is a timely study which will address the extreme need of millions of people.As a land hungry country, our people feel the necessity of every inch of land seriously. Most of them are the landless rural people. They again get deprived of their right to justice because of their financial inability.They consider a slice of land under their feet as like as a resort for a drowning manin the water. It is the reality of our country. In many cases they are to fight for the same toy. The intended findings of this study may be very much useful for addressing a burning issue of our country. It will give millions of people a sigh of relief from a long and complex predicament.

Literature Review: The ownership is a legal concept and it is common to all systems of law. The idea of ownership came when the primitive people began to plant trees, cultivate lands and establish their accommodation. The concept of ownership originated with the transformation of agricultural system from the pastoral system of livelihood. From then people started to think the idea of "mine and thine". (Islam,Moula, Islam, 2015, cited inMahajan, 1998: p. 332).Land disputes started totake place among the people from the consideration of scarcity as well as the ownership of land. In a study, it is found that around 80% cases including civil and criminal have ensued from land disputes (Islam, Moula, Islam, 2015,cited in Hoque, 2000: p. 255). Land record is updated in a systematic way but the problems infiltrate into it by the collusion of the record makers and the self-seeker public. At the end the self-seeker and powerful people win the systematic battle while the poor and weaker keep to seek justice. The Conventional survey procedure was manual, labour-intensive and it required long time. The insufficiency of logistic support ultimately made the procedure inefficient. Moreover, distortion of land records at various stages i.e. plot-to-plot survey, preparation of records and drawing of maps through conventional methods, objections, junchworks, etc.is an oft repeated incident. (Hossain, M, 2010: p.101).
Land dispute emerges from the competition of interest. But a fare and dynamic disposal system may reduce the dispute to an acceptable level. The legal system of Bangladesh is burdened with land related litigations. Most of the cases pending in the Courts reflect this truth in a very sensible way.The attraction for land is human right and there is no wrong or offence in feeling this attraction. The recognition of the inherent dignity and of the equal and inalienable rights of all members of the human family is the foundation of freedom, justice and peace in the world (Preamble, UN Charter, 1945).Right to property is recognized with dignity as fundamental human right in all national and international law. TheUDHR declares that everyone has the right to own property alone, as well as in association with others. No one shall be arbitrarily deprived of his property (Article 17, UDHR, 1948). It further declares that everyone has the right to a standard of living adequate for well-being of himself and of his family, including food, housing and necessary social services (Article 25, UDHR, 1948).

Had there been a proactive and responsive land administration and land management system in place, perhaps we would not have to see this pile of problems around us. The available literatures regarding land survey and settlement have highlighted various aspects and problems butnone of those studied about the typical behavior pattern of the government service providers. This study finds here a research gap.

3. Methodology: In this study qualitative method was used. Qualitative data approximates or characterizes but cannot measure the attributes, characteristics, properties etc. of a

thing.(http://www.businessdictionary.com/definition/qualitative-data.htm, Accessed 15th November, 2019) It can be observed and recorded. This data type is non-numerical in nature and is collected through methods of observations. It is also known as categorical data. It is useful in determining the particular frequency of traits of something. This data is about the emotions or perceptions of people, what they feel. It is exploratory in nature and is used for in-depth analysis and research. It focuses on gaining insights, reasoning, and motivations. This data are collected through six methods. Those areone-to-one interview, focus group discussion, record keeping, observation, longitudinal studies and case studies. In one-to-one method the researcher collects data directly from the interviewee. It is informal and conversational. The questions are close and open ended. In the focus group a moderator leads a group of 6-10 discussant people having a common platform and trait. Record keepingmethod makes use of the already existing reliable documents and similar sources of information as the data source.In the observation process the researcher camouflage himself/ herself in the atmosphere where his respondents stay, and keeps a keen eye on the participants and takes down notes. He also can use video and audio recordings, photography and similar methods.

In the longitudinal method data is collected time and again over a long period of time. It is a long observational research method that goes on for a few years or for even decades. The aim of this method is to find correlations between or among the common traits. In the case studies method, data is gathered by in-depth analysis from a track record of any happened event. It judiciously uses the elements of an event to draw inferences about any subject.

In my studies a semi structured interview checklist was prepared to get data from the field. Two sets of questionnaire with eight questions in each set were served. First set was served among the service seeking land owners from four upazillas of Faridpur district and one upazilla of Rajbari district. The second set of questionnaire was served among the service provider public servants of land survey department.

Secondly, two field group studies were conducted separately taking five surveyors in one group and six land owners in the other group. The researcher was the moderator of both the groups. Moreover, twenty appeal cases were taken by random sampling and studied for in-depth analysis. This mouza crossed the tenth stage of land survey and it was kept awaiting to be handed over to the collector, the preserving authority. The analysis has indeed disclosed a tip of the iceberg regarding the presumptive anomaly casting a long shadow over the land survey sector for a long time.

Data Analysis: The activities of land survey is obviously a semi technical process. Before beginning the analysis of the collected data it is necessary as well as relevant to give some brief idea about some land survey related terminologies. The foremost among them is the **Mouza**. The smallest unit of the settlement operation is called Mouza. As per the Survey and Settlement manual, 1935, the area range of a Mouza can be 100 acres to 2500 acres. The history of the scientific and modern land survey can be found only in the previous 100 years.Before that time land survey was not done as per any scientific scale and universally. In the last 100 year period, the following settlement operations have been conducted in our country:

CS (Cadastral Survey) Operation: This operation was conducted from 1888 to 1940 AD. It started from Cox's bazar and ended at Dinazpur district excluding Sylhet and three hill districts. Later, Sylhet was brought under the operation from 1950-1963. Three hill districts are still beyond the operation. This record recognized the land lords as the owner of the vast land and at the same time it gave the cultivators just the tenant status.

SA (State Acquisition) Operation: After the enactment of State Acquisition and Tenancy Act,1950 (SA&T Act), in order to abolish the Land lords and the intermediaries a settlement operation was conducted hastily during the year 1956-1962. This operation brought no change in the map and prepared just three copies of manuscript RORs. This the first time ever the cultivators got ownership of the land they had been cultivating ancestrally for the past many years.

Revisional Survey (RS) Operation: After 50 years of the Cadastral Survey the Revisional Survey operation was undertaken from1990 all over the country with the supervision of Zonal Settlement Officers. In this operation, each of the former greater nineteen districts was made an independent cluster and it was named as Zone. This operation is still unfinished in thousands of Mouzas.

Diara Settlement Operation: In the alluvian-dilluvian riverine areas of Bangladesh with the help of some different equipment a different settlement operation package was undertaken in 1862.Again, ten stages of the settlement operation processare summarily as following :

01. Traverse Survey: It is the construction or reconstruction phase of a mouza. An enclosure is made in an area equivalent to the mouza size by setting some bamboo or wooden stake into the ground. Initially it makes the skeleton of the mouza. These stakes are called traverse.

02.Kistower: Two Amins (sardar amin and bodor amin) and one chainman are detailed to draw mouza map as per certain scale showing every plot, installation, objects, and characteristics of land. In order to comply the scale they are to fragment the mouza area into various sheets. They do it very much cautiously and keenly following the demarcation of mouza boundaries.

03.Erection of boundary marks: After completing the kistower the accurate size and figure of a mouza emerges as a fragmented appearance. Then concrete pillars are established in several prominent points including the tri-junction point of the mouza border considering its intactness in case of river erosion and other construction works. These pillars are treated as zero point and those bear the milestone like value for the measurement of any distance.

04.Preliminary record writing (khanapuri): Adjudging the claimant's previous documents Sardar Amin fills up the columns of the khatian (record of rights) form, gives plot number, khatian number and classify the land (that affects land revenue). He writes the area, name of the owner etc. on the format.

05.Local explanation (bujharat): Amin hands over draft khatian to the owners of the land and entries of various figures and words into it are explained to them.

06. Attestation (Tasdik): A Sub Assistant Settlement Officer checks the ownership related papers. If he is satisfied with the information contained in it, then he attestes the khatian by signing it with red ink and hand over it to the owner.

07. Draft publication: The office copy of bujharat khatian is dressed up as per the chronology of alphabetic order and given to it a new number. It then turns into draft publication khatian. It is then placed for thirty days in the Upazila ASO office for public watching.

08. Hearing of objections: Watching the Draft Publication if any owner raises an objection during the publication, a case is filed and heard later on by an ASO in the Upazila settlement office. He records the decision in violet ink.

09. Appeal: If any aggrieved person appeals against the decision of the objection case, ZSO or an ASO hears the appeal at Upazila settlement office. The decision is written in black ink.

10. Printing and publication: In this stage the execution of the orders passed in the two previous stages are checked. Corrections of maps and Khatians, if any, are incorporated in it. Both khatians and maps are printed centrally at DLRS press, Dhaka. Then for thirty days it is placed at the upazila settlement office for public watching. If any printing mistake or fraudulent entry is noticed it is corrected by the ZSO at the zonal settlement office by way of getting application or by suomoto.

After completing the functions of final publication one copy of ROR is handed over to the District Judge. Another four copies of ROR are and a number of maps are handed over to the Collector for using one copy for giving the people certified copy, one copy for keeping reserved at double lock in the District treasury. Among the other two copies one is sent to the Ac Land office, another is sent to the Tahsil offices.

It is an obligation that as per the rules number 294 of Survey and settlement Manual (SS Manual), 1935 settlement operation of any mouza must be completed within five years from the date of its beginning. There must be the annual plan and the operation will advance gradually as per the plan. There are some relevant laws which dominate the settlement operation. Those are

(1) The Land Survey Act 1875
(2) The Bengal Tenancy Act 1885
(3) The Survey and Settlement Manual 1935
(4) The technical Rules, 1943
(5) The State acquisition and tenancy Act, 1950
(6) The Bengal Tenancy Rules, 1955

Analysis of Data: In the data collection process, fifteen service providers (government staffs and officers) and fifteen service seekers (land owners) were picked up. Questionnaire with eight questions were served among them. The analysis finds some pictures sadly painted in the survey tiers. Those are presented in the following three chapters.

Required Time, Cost and Visit frequency of the people in the land record procedure

Question number 1, 3,4, 5 and 7 of the first set reveal that a land owner had to pay on an average taka 49 bribe for per decimal cultivable land and at the same time he had to pay taka 219 bribe for per decimal commercial land. This money was absolutely realized illegally from the land owner by making them subjected to invisible threat. The land owners naively believed the threat and ceded to the might of the service providers. Juxtaposing the findings from the second field group (land owner) studies with the findings from this questionnaire more astounding information was got. The land owners tell seeking the anonymity that neither they now want justice nor they want to get their money back. They want only the ownership of their land at any cost. To them, their land is more precious than justice. They are determined and prepared all the time to pay any amount of price but at the cost of that they just wish their ownership sustain. They disclosed the reason of such airy threat believing the truth that they hardly know about the land laws. Furthermore, a large portion of them do not understand the arithmetic of inheritance and the decimal fraction. They are to depend on others for its explanation at the cost of certain fee. The other persons may be the officials or the local brokers. Nobody wants to do anything for others free of cost which was once the noble custom of our society. It appears that the wave of free economy has hit the remotest fort of our social tranquility.

We have found another picture in the case of the landowners who are government service holders, specially posted at the same upazilla head quarter or in that district head quarter. Apparently owing to the public shame, they as the closest neighbor were given waiver and showed some degree of honour by the service providers in the land survey office. They got rid of the financial or behavioral hassle and the frequency of visit but they had to experience also the same prolongation of time.

Question number 2 of the first set tells about the inordinate and enormous delay the survey procedure has made. It took on an average 22 years to complete the settlement procedure of a mouza whereas as per the rule the required time was hard and fast only five years. Resultantly the public as well as the government had to bear the brunt of the delay. Land acquisition process, selling and buying of land, realization of land development tax and dispensation of other administrative activities virtually hanged in this period.

In the answer to the question number 3 of the second set which seeks the main reasons for the delay in the land survey procedure, the service providerstold that serious lack of expert professionals, uncertain delay in the dispensation of pending litigations in the High court regarding the inter-district boundary and inter personal interest, undertaking a new action plan without completing the existing ones, transferring of an incumbent elsewhere at a time when his work in hand is yet be completed and finally the dire lack of logistic support is responsible the delay.

The second group study reveals some glaring truth in a confessional way. The government servants narrated that land owners get squeezed in every tier like attestation, objection case and appeal case. They are to appear at the same case for many times. In some cases their frequency

of appearance was increased artificially with the collusion of local touts and brokers. The purpose of this collusion is to weaken the weaker party so that they might end up gradually.

In this race of fighting an objection case or appeal case the poor and weaker one hardly gets justice. The settlement officials and the local touts always use to put their weight in favour of the influential and moneyed people for getting some illicit financial benefit. In this unleveled fieldthe poor in many cases inevitably lose the battle and get deprived of their fare share. They lag behind in proceeding the matter in the next higher court also and ultimately are pushed to the margin of the social mobility.

It is worth mentioning that violating the thirty day fixed time frame for filing an objection case, a bizarre nuisance of *especially permissioned objection case* was imported in the history of land survey during 2000-2015. This illegal system had made the settlement procedure unending. Because land transfer is a continuous process. None will get the opportunity of filing an objection case in a bid to having his ownership of land recorded in a survey procedure if his ownership is acquired after the thirty day fixed time frame is over. Therefore he should go for mutation process in AC Land office and have ownership recorded in his name and it is the ruleThis mutated record undoubtedly bears the same value as like as a survey record. But When the ownership of land was transferred, the new owner unknowing the rule and being motivated by someone from the land survey department used to rush to the ZSO office to avail the illegal opportunity of this so called *special permission* for objection case. The ZSO officials utilized this chance as a cash cow and this wave reached down the upazilla settlement office in the form of filing a new objection case. Thus an illegal system took birth in the history of land survey and it kept the objection case tier revolving around the same circle with blocking the system marching forward. This vicious circle has crippled and virtually halted the land survey activities for around fifteen years.

Behaviour Pattern of the incumbent at the upazilla and zonal settlement office

Question number 6 and 8 of the first set tell about a typical behaviour of the government office. No peasant land owner could be happy at their intellectually firm behaviour. This behaviour was between two unequal parties. This type of grim eyed behaviour of the strong and advantageous people towards the weaker and marginal one is the sad reminder of a long legacy in the human history. The land cultivating peasants had no prior familiarity with the officials which placed them at the receiving end of an unequal dealings. It is their unanswerable fault which they would never be able to remove.

On the other hand the authenticity of the service seekers' allegation was examined in the answers of the service providers' questionnaire. In the answer to the question number 4 the service providers confessed that they found it the easiest to serve the peasants among other professionals. The answer of the first set question number 6 and 8 corroborates the answer of the second set question number 4 in a rhythmic way. A truth comes out from the fact that the service providers like the unarmed naive peasant service seekers because it is easy to squeeze them and realize illegal financial benefits. Human history is full of such huge and long series of evidences. Any unchecked, mighty and powerful people hardly can show piety, sympathy, empathy and softness to the weaker one. The service seekers' allegation against their deprivation by the

equipped and mighty service providers but echoes that shameful reality. In the answer to the question number 8 of the second set, the service providers again confessed that it was only their sincerity which is enough to deliver the due service to the service recipients. But their honest confession has not been reflected honestly in their area of responsibility. They misused their raw power as did many of their contemporaries and predecessors in their domain and elsewhere. There are glaring and plenty of examples available across our society. So it is easily understandable that what they knew as true and code, hardly could they translate that into reality. This is natural for human being that until and unless he is forced to comply a set rule with strict discipline and potential retaliation, he chooses his sweet whims as his guiding rules in all activities. The episode does not end here. The second field group study tells in this regard that in the race of fighting an objection case or appeal case the poor and weaker one hardly gets justice. The settlement officials and the local touts always use to put their weight in favour of the influential and moneyed people for getting some illicit financial benefit. In this unleveled field the poor in many cases inevitably lose the battle and get deprived of their fair share. They lag behind in proceeding the matter in the next higher court also and are pushed to the margin of the social mobility.

Question number 7 of the second set seeks the cause behind the tampering in the record making procedure. The respondents tell that tampering takes place if undesignated persons are authorized to do the task. It occurs mainly after the appeal stage and continues up to the handover time even after that. The main reason behind it is the lack of proper preservation arrangement followed by close and adequate monitoring.

In the answer to the question number 5 of the second set 90% of the service providers told that it is the subordinates who have helped them most, while 5% told that their same ranking staffs/officers helped them most in the work field. There was also an option of making a tick mark on the higher official from whom, as per the rules of business they were supposed to get help most but the subordinates could not found them as their rescuer.This is the balancing point which if works well, underpins the total working system in a balanced way. Otherwise an erotic result is bound to come out.

Alongside this, findings of the second field group studies tells that it is the high officials who have done the real damage to this survey procedure. In the khanapuri tier, as like as the leasing out system, the zonal head used to lease out the sheets of a mouza map to the sardar amins. **Corruption formally kicks off just from this point** and it continues up to the selling of finally published khatian. All laws and rules in the history of human civilization stipulate the highest moral exercise in dispensing the issues. It is the beauty and uniqueness of the existing rules and regulation in any institution. But the unpalatable truth is that the high officials at any institution at first break the laws and shows the way to others. Then the subordinates just follow their footprints. If a high official follows the rules of integrity, a subordinate can never dare to commit any misdeed. Despite, if the subordinate derails he can no way survive any more.This is the foundation upon which the strength of an institution underpins.

Beside this, throw random sampling I took 20 case files, its related working volume and finally printed *khatians* for case study. In these cases dates were rescheduled from at least six times to at best twenty times. Moreover, I found the trace of tampering in six cases. Those who could not

valid documents in the objection and appeal case, they later on resorted to this clandestine tricks with the help of our land survey officials to get the records of right on their behalf. In these cases their ulterior moves were detected and corrected in the final *junch* stage. Though the owners of these corrected records are fortunate enough but in many cases those forgeries remain undetected which produces fabricated records. This triggers social disharmony and ultimately civilsuits in the court.

Service delivery system in land survey

The second field group study also reveals some other issues like public behavior and logistic support from the government.They alleges that the public specially having political might and influenceare another disturbing force.The influential persons in some cases block the normal functioning of this quasi judicious court activities. In that casethey get no support from the law enforcing agency. As to the logistic support they also narrated that they got noTA bill all through their service life, let alone the vehicle support. They get no paper, pen, stationery and sanitary items and like this. Eventhe office room in which they work, is the most shabby and vulnerable one amongst the other rooms in the upazilla complex. Their work is genuinely semi technical in nature. They are to perform a very much sensitive task of making the land map and khatian. Because it requires delicate and fractional calculation of number for measurement and share. It is remarkable that only the officials with artistic and arithmetic merit can perform these tasks correctly. On this account this task is quite technical. But this technical officials are direly unvalued, let alone rewarded. They bear frustration in their mind all through their service life. Again they hardly get their promotion in due time. They are to grease the palm to get a simple and convenient posting. There is a presumption to believe that this unaddressed deprivation in the lower level officials may have ignited corruption in this sector.

The group also suggested some way-out. They expressed confidently that they always choose the clean and fair way to perform their entrusted duty. They want to conduct fair play and wishes to get its consequent dignity. Therefore, the authority should establish smooth service delivery system and it is their sincere desire.

Recommendations: The smooth functioning of any organization depends on its logistic support behind human resource and mechanical equipment. Land survey department badly needs that support. There is a silver line above the horizon that digitalland survey procedure has started its functioning in our country. The whole procedure should be immediately brought under automation. Zonal Settlement Officer (ZSO) being the supervisor and the direct controlling officer at the field level must be a man of integrity. **This single man behind the steering can challenge all anomalies and ensure a steady performance in a zone. Therefore the Ministry of Public Administration (MOPA) should take a simple care of examining the track record of an officer before he is posted as ZSO. This simple innovation will bring about a phenomenalamelioration in the performance of land survey and settlement**. Secondly, necessary training and financial incentives which are long overdue for the personnel, should be given them on regular basis.These are the two basic needs and absence of which this department has sunk the shoddy low. For the time being, only these two changes can make this institution dynamic and people friendly.

Conclusion: Land is our primitive and eternal resort. It bears our every footstep but we are forgetful of it the most. Amongst other departments in our country, by far land is the most overlooked one.Many countries of the world have digitized their land and ensured the scientific use of every inch of it. We have no other option but to follow the same course like them. Finally, the much talked about step which we are keeping to hear for the past many years is to bring the three land related departments like settlement, management and registration as soon as possible under one umbrella. The sooner the government addresses the issue, the better it will be for our country and its inhabitants.

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Seminar Paper
Module No: 02

An Assessment of 'ONE DAY ONE WORD PROGRAMME' in Achieving Quality Education at the Primary Level of Moulvibazar Sadar Upazilla

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Abstract

It is quite evident that although the extent of Primary Education has increased convincingly in Bangladesh the quality issue remained neglected for decades. This study found several reasons behind it. In Bangladesh, the Ministry of Primary and Mass Education is mandated to ensure quality education and also the overall success of this sector according to the Allocation of Business of the Rules of Business. A number of initiatives have been taken so far to remove the deficiency. One of them is the 'One Day One Word Programme' introduced in October, 2018 all over the country. The Programme is a a brainchild of the present Secretary to the Ministry Md. Akram Al Hossain. The essence of the plan is that every child of the primary level will be taught one Bangla and one English word everyday. This way when a child will enter into the secondary level he will be able to continue his studies without any hesitation using the huge vocabulary learnt at the primary level. The present study deals whether this method of word teaching can bring any positive result in attaining standard level of Primary education. Sixteen schools of Moulvibazar Sadar Upazilla have been selected as the study area. Besides, the present Secretary and 30 other respondents have been interviewed as key informant and general data source respectively. The study found that more than 60% students could show convincing change within a year. Measures have also been adopted to upgrade the rest nonperformers with extra care at the same time. No such study has been done so far in this field. The research found the programme as a unique and a very effective one as a means of Quality enhancement in the academic sector of Bangladesh. Hence, regular effective practice by the students and teachers along with development of ownership by the stakeholders regarding the programme and of course proper supervision at every level is a must for successful implementation of the programme.

Keywords:

One Day One Word Programme, Quality Education, Primary Education, Sustainable Development Goal (SDG), Millennium Development Goal (MDG), Ministry of Primary and Mass Education (MoPME), Government Primary Schools (GPS)

1. Introduction:

1.1 Background of the study:

There is no denying fact that education is the key to overall human resource development and progress of any nation (Bangabandhu, 1972). In 1970 the Father of the nation Bangabandhu Sheikh Mujibur Rahman very rightly expressed in his historic election speech about the great significance of education with a vision to build Sonar Bangla free from illiteracy. Later in 1973 the greatest Bangali of all time the pioneer leader Bangabandhu very appropriately declared the primary education compulsory and free for all. Bangabandhu very rightly nationalized 36,165 primary schools and also absorbed 1,04,000 primary teachers as government servants. He formed Qudrat-E-Khuda education Commission to formulate education policy. Long after the brutal assassination of the Father of the nation his worthy daughter HE Prime Minister Sheikh Hasina again in 2013 nationalized 26,193 non government primary schools throughout the country (Annual Report of MoPME 2017).

In continuation to this, the targets of the Millennium Development Goals (MDG) were also achieved with the very able leadership of HE Prime Minister Sheikh Hasina. As a result of all such efforts the literacy rate and rate of enrolment have been reached up to 72.9% (BBS) and 97.85% respectively. At the same time the dropout rate has come down to 18.6%. Now proper stress has been imposed for attainment of Quality education which is delineated as the fourth goal of Sustainable Development Goal (SDG). Nevertheless, the issue of quality of education is yet to be achieved.(NAPE Barta, first edition, 2019) Therefore a well designed plan have been adopted along with the plan to revise the whole academic curriculum, develop the physical infrastructure and ICT and so on.

All plans will go in-vain if the quality of education is not achieved. The goal of attaining Quality Education may be regarded as the outcome of the whole process. For attainment of the status of middle income country by year 2021, achievement of SDG targets within 2030, becoming the member of developed nation by the year 2041 and of course managing appropriately the delta plan by the year 2100 the attainment of Quality Education is undoubtedly essential. To meet the above challenges successfully each and

every child is to be prepared with courage and devotion to lead 2021, 2030, 2041 and 2100. (Alam, 2019)

So far MoPME had been fully concerned with the implementation of the Article 17 i.e. ensuring 'education for all' which was one of the goals of MDG (NAPE Barta, January, 2019). Analyzing the present status of education of Bangladesh it is inferred that ensuring quality education is the prime concern throughout the country. Establishing inclusive education in all respect could be one of the ways forward to address the issue (SDG Goal4).

Further, the Ministry of Primary and Mass Education (MoPME) is mandated to deal with the problem according to the allocation of business of Rules of Business. The present Honourable Secretary of MoPME Md. Akram-Al-Hossain has introduced 'One Day One Word Programme' in October, 2018 with a very much new view to attain 'Quality Education' throughout the country. The theme of the programme is that being totally different from the non formal educational activities conducted by the .Bureau of Non-Formal Education (BNFE) and also the programmes operated by the so-called NGOs every child of the Government Primary Schools (GPS) will be taught one English and one Bangla word everyday. In this process a student will learn 1500 English and 1500 Bangla words after completion of class five. The word learning can be regarded as the output of the present study. Mr. Akram felt that until and unless a child is not learnt a word he/she will not be able to read a sentence, write something correctly, solve a mathematical problem and so on. Therefore the indicator of the impact assessment of the programme would be more of qualitative in nature than to be a quantitative one. The expectation from the programme is that the successful practice will positively bring a change in the scenario to develop quality education in Bangladesh. It has been inferred from the study that no such research has been done before in this field. The researcher is very modest to claim that the study is a unique one to reduce the gap in attaining the standard of education in Bangladesh. (MoPME Circular, 2018).

1.2 Problem Statement:

Diversified measures have so far been adopted to ensure Quality Education. The Government is distributing text books free of cost to all pupils on the very first day of every year. A number of 1500 primary schools have been opened at the non school villages. Colourful and child-friendly preprimary classes have been opened at all the primary schools throughout the country. The mothers of the students have been empowered by extending stipends in their account directly and so on. Nevertheless, Quality in the system is still seemed to be missing in present Bangladesh. Recently this was supported by UNESCO also where it accused that almost 65 percent pupils of Bangladeshi primary schools lack the quality to read a sentence properly. Facing these types of acquisitions from all other corners as well the present Secretary to the Ministry of Primary and Mass Education (MoPME) Md. Akram-al-Hossain introduced 'One Day One Word Programme' (ODOWP) in all schools throughout the country to overcome the problem. As the concept is very much new the present study assesses how far MoPME will be successful in building up a strong vocabulary among the students and thereby establishing a exemplary powerful academic future in the highly competitive changing world.

1.3 Research Objective:

The objectives of the study are

- to assess the present situation of the primary level education of the study area;
- to assess the present status of 'One Day One Word programme' in achieving quality primary education and
- to find out the challenges of implementing the programme and way forward.

1.4 Rationale of the study:

Ensuring Quality Education had always been a big challenge in our country. Still the national curriculum had not been seen to ensure Quality Education. Very rightly perceiving the significance of Quality Education a revolutionary Education Policy 2010 has been formulated under the dynamic leadership and guidance of Honourable Prime

Minister Sheikh Hasina. Appropriately she feels that even after very successfully achieving the Millenium Development Goal the young generation is struggling regarding the quality issues. It is the proper thinking by the very eligible Prime Minister that education sector should not be grabbed by commercial actors. Therefore the nationalized primary institutions are to come up with the responsibility for maintaining the standard of mass level education. Keeping the above view with due consideration, MoPME has been very rightly and timely implementing the One Day One Word Programme throughout the country. For this reading habit has to be developed. The students are to be able to spell, read, write and analyse accurately both Bangla and English words. They have to build a considerable stock of Bangla and English words. However, the programme has passed just one year. So it needs a midterm assessment at this point as well. Thus the study makes two significant contributions in this arena. First, it makes a modest attempt to find the present gap in achieving the desired standard of education throughout the country and by that it tries to express some policy recommendations that can bring high success in attaining ideal type of education. Since the concept is totally a new one it is well justified to conduct the whole research on the topic.

2. Literature Review:

The researcher has gone through quite a number of articles describing the methods to implement word teaching at mass level and rarely found a way similar to what MoPME Secretary has introduced. Every month the Mentors, the first class gazette officers of the ministry have to visit his designated district to get updated status and to monitor the latest performance of the schools. The Mentors also have to monitor and evaluate the performance of the teachers and the education officers. They, the mentors, are evaluated very much by the Honourable Secretary in every monthly coordination meeting of the ministry.. This is where the success of ONE DAY ONE WORD PROGRAMME lies. For perfect supervision of the programme 64 mentors from the ministry have been appointed to the 64 districts. They are responsible for ensuring the overall learning of the children. (MoPME circular, 15.10.2018). Although the researcher's prime objective is to assess the attainment of Quality Education the meaning of 'Quality Education' should be explained atfirst. Many researchers have studied on the matter.

2.1 Quality Education:

'Quality Education' means learning not only the facts, but also learning the way of determining the facts. It is about deeply thinking and learning a wide range of subjects. It refers not only to get high grades only, it is about learning skills which makes a person to face real life challenges successfully. (Billah, 2017).

Further, 'Quality Education' is that enables all learners to be academically, democratically, peacefully and overall sustainably sound i.e. they earn threshold level of literacy, numeracy, knowledge relating to all types of life skills. (VVOB, 2019). Therefore, increasing vocabulary is an obvious for attaining Quality Education.

2.2 Vocabulary:

'Vocabulary' means stock of words. In other words, it is the body of words used in a particular language. Until and unless a person has developed a good stock of words he will not be able to read correctly. Hence, failing to read properly will adversely affect the knowledge base subsequently. Therefore, the importance of vocabulary is indeed undeniable. The larger the stock of words the better the learning is. Pikulski and Templeton (2004). Moreover, the researcher attempts to explain some concepts connected to vocabulary. The term 'receptive vocabulary' refers to listen and read vocabularies, whereas, 'expressive vocabulary' refers to speak and write vocabularies. Pikulski and Templeton (2004). Besides, two other terminologies are 'oral' and 'literate' vocabularies. Oral means combination of listening and speaking; and literate means combination of reading and writing. Pikulski and Templeton (2004)

2.3 Benefits of learning at Primary level:

Children below 5 years seem to involve oral vocabularies. After that when they enter into the school they gather literate vocabularies. So including words which are around them more in the books will help them to learn literate vocabularies easily. Gradually they can learn the difficult ones as well. Pikulski and Templeton (2004). In another study it has been found that teaching words is more than foundational to success in school. It is more than about understanding the text. Having a large stock of vocabulary will of course lead to attain successfully the goal of life. Stahl and Nagy (2006). Similarly, the Honourable Secretary of MoPME Md. Akram-Al-Hossain also showed that teaching of words at the primary level is more effective than teaching in secondary level. Stahl and Nagy have opined also in the same way.

2.4 Teaching-learning Tools:

Correctly reading ability is crucial for success in all areas of academic field. In a research conducted in United States of America it has been found that forty percent children have reading problem in United States of America. In this type of case proper techniques of teaching must be explored. (Headsprout Early Reading, 2003). In addition,

the text books should not be monotonous for reading. Children learn more by including cartoon based episodes, space world, Dianosaur world, Jungle world related pictures and topics in their books.(Reliably teaching children to read). Therefore making the text books suitable and effective for the pupils is very essential. Supporting compact discs containing colourful pictures are provided to the students which helped Vietnamese to enhance literacy rate to 99%. (Moon, 2005)

2.5 Training of Teachers:

The Honourable Secretary of MoPME alleged that a large number of teachers of Bangladesh lack both Bangla and English language proficiency. They also seem to suffer from pronunciation problem for which staff development is a must, he added. The need to develop themselves by going through extra innovative and updated academic materials regularly (MoPME Circular, 2018)

2.6 One day one word:

The programme for teaching everyday one Bangla and one English word very much from the text book of the students is totally a new initiative in the task of achieving quality education. The researcher has gone through quite a number of studies related to this field and found it to be a unique one. At present the programme is being successfully implementing in all the 65,193 government primary schools over the country. Since securing quality education has become a challenge to us teaching words in accurate manner can be a epoch-making step forward. Whether it is going on the right track it is to be assessed here in this research.

3. Methodology:

3.1 Selection of Study Area:

The MoPME Secretary appointed 64 Mentors at their home districts to supervise and monitor the programme. Hence the researcher had been designated the responsibility of his home district Moulbibazar. On the hand, the BPATC authority allowed 3 days time for collecting data from the area of researcher's choice. The literacy rate of Moulvibazar district and obviously the greater Sylhet division is known to be not up to the mark. This was another reason to most humbly select Moulvibazar Sadar upazilla for the area of data collection. There are a total number of 193 government primary schools in the region. Out of them 16 schools have been selected purposefully giving equal weights on the level of urbanity and remoteness to remain neutral at the time of data collection.

3.2 Data Collection Method:

This study has attempted to use both Qualitative and Quantitative method to analyse the data. In doing primary as well as secondary data were used for in-depth analysis. No other sampling technique other than the typical purposive sampling technique has been used to select the 16 schools out of the 193 schools of the sadar upazilla of Moulvibazar district. As there were time, cost and resources constraints for data collection the researcher used multi-stage technique to select the number of teachers, students, parents and members of school management committee. Resources were gathered through asking structured as well as non-structured questions from Focused Group Discussions with 4 teachers, 4 parents and 2 SMC members of 3 schools each. Word learning statuses were checked by oral interviews with the children. At that time personal observation were used. Hence, the study required to create personal rapport with the respondents. Accordingly, the most important present and future plans, directions and opinions regarding the topic were obtained from the interview with the key informant person and sole dreamer of the programme the present Honourable Secretary to the Ministry of Primary and Mass Education (MoPME) Md. Akram-Al-Hossain. Thus, the researcher applied MS-Excel programme to graphically explain the results found.

4. Data Analysis and Findings:

First of all, attention had been imposed to get a picture of how many children from class one to class five can read Bangla and English sentences correctly on their own, how many partially can and how many cannot at all. Data from 16 Government Primary Schools (Class One to Class Five) regarding those children who can read Bangla and English without any hesitation, those who are partially able to read and those cannot read at all have been collected. These data and the distribution are shown in tabular form in appendix.

The total numbers of students across the 16 schools are given below.

CLASS	No. OF STUDENTS
One	510
Two	484
Three	518
Four	524
Five	437
Total	2473

So the number of pupils of the study area is equal to 2473.

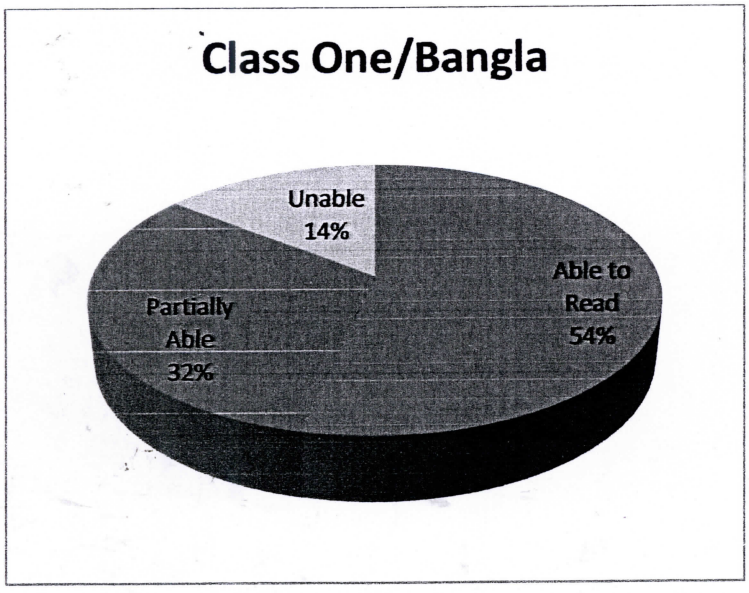


Figure : Performance of Class One/Bangla

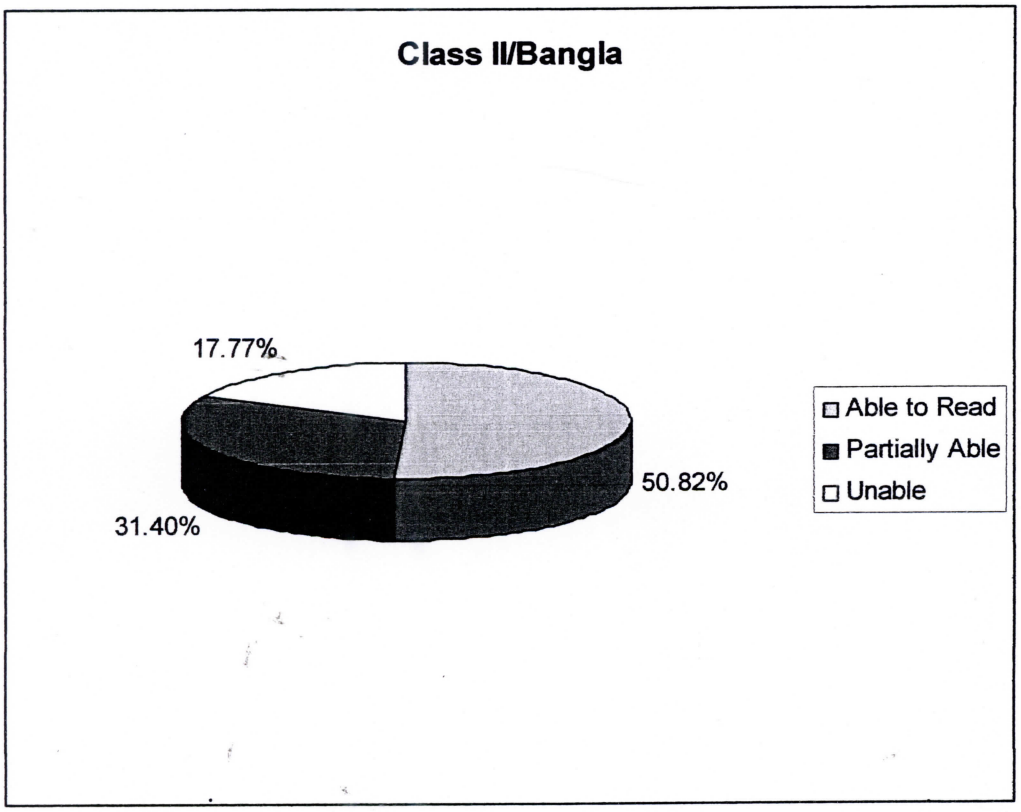


Figure : Performance of Class Two/Bangla

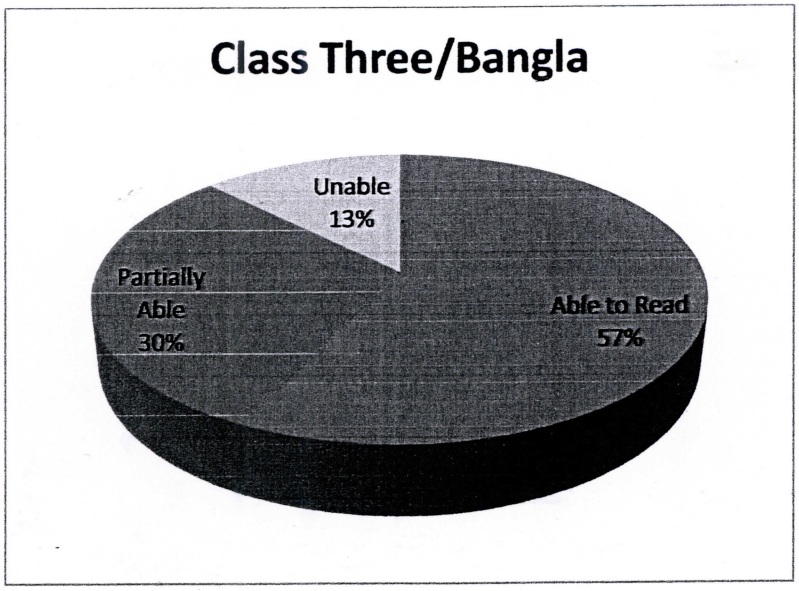


Figure : Performance of Class Three/Bangla

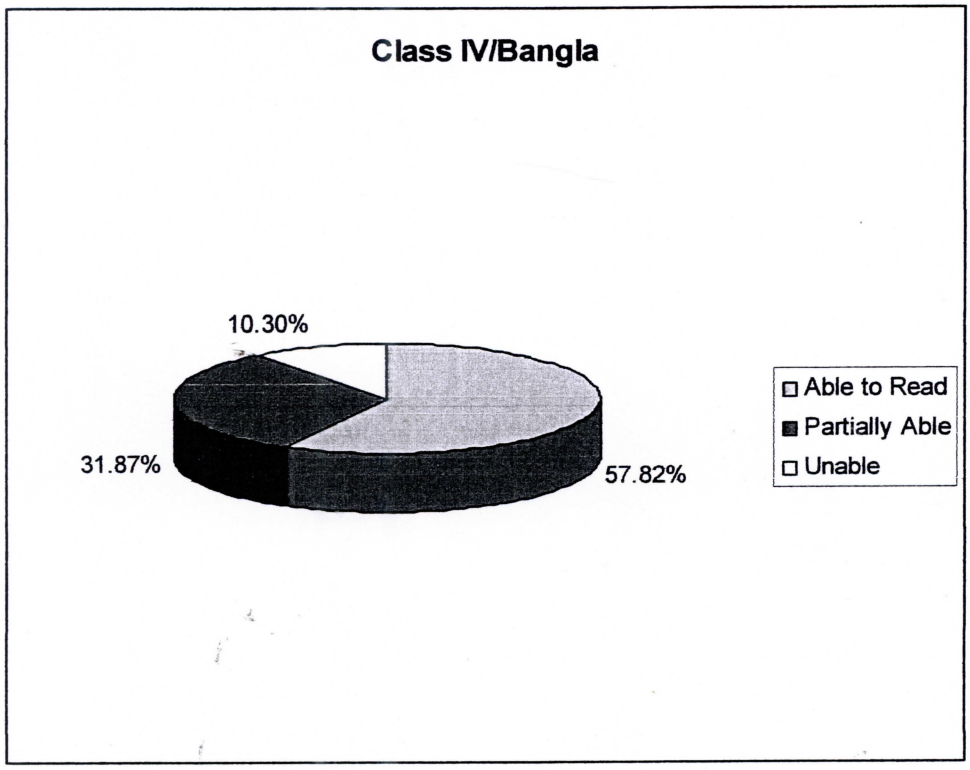


Figure : Performance of Class Four/Bangla

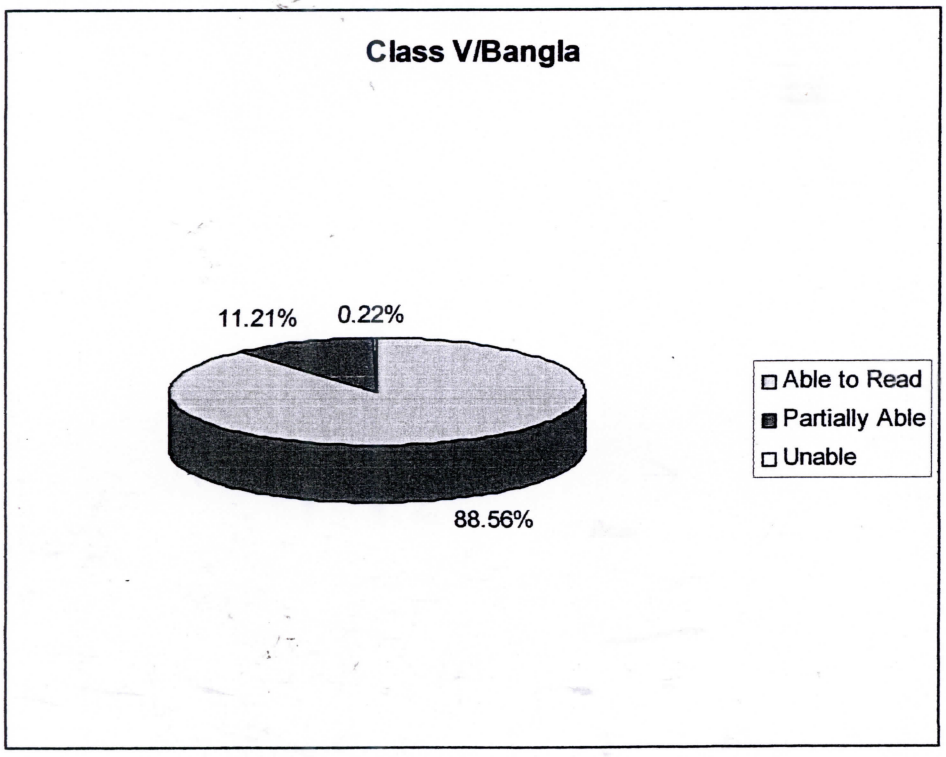


Figure : Performance of Class Five/Bangla

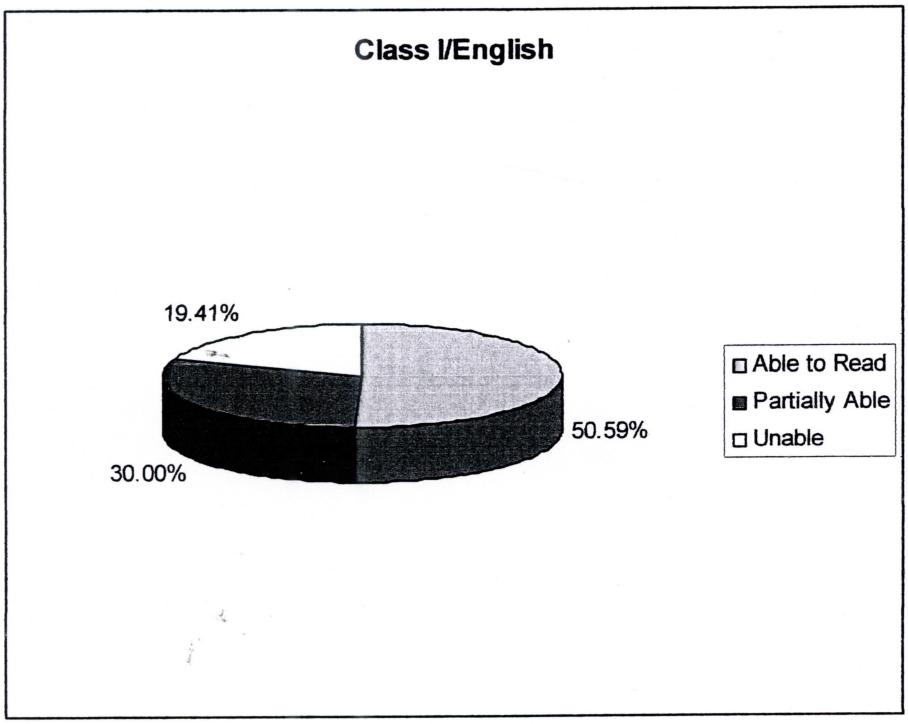


Figure : Performance of Class One/English

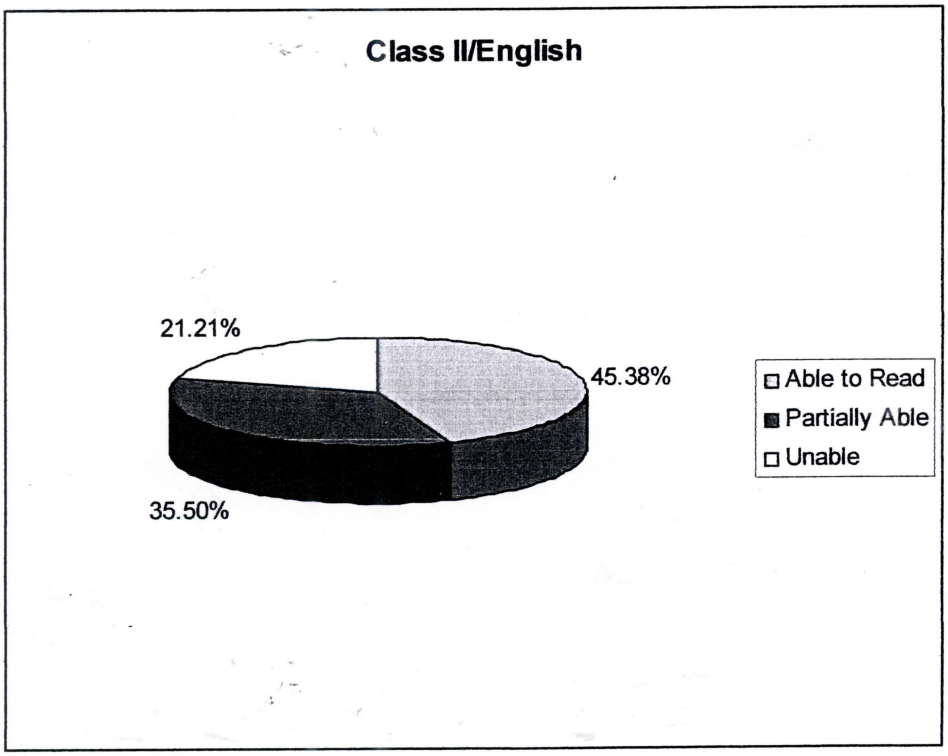


Figure : Performance of Class Two/English

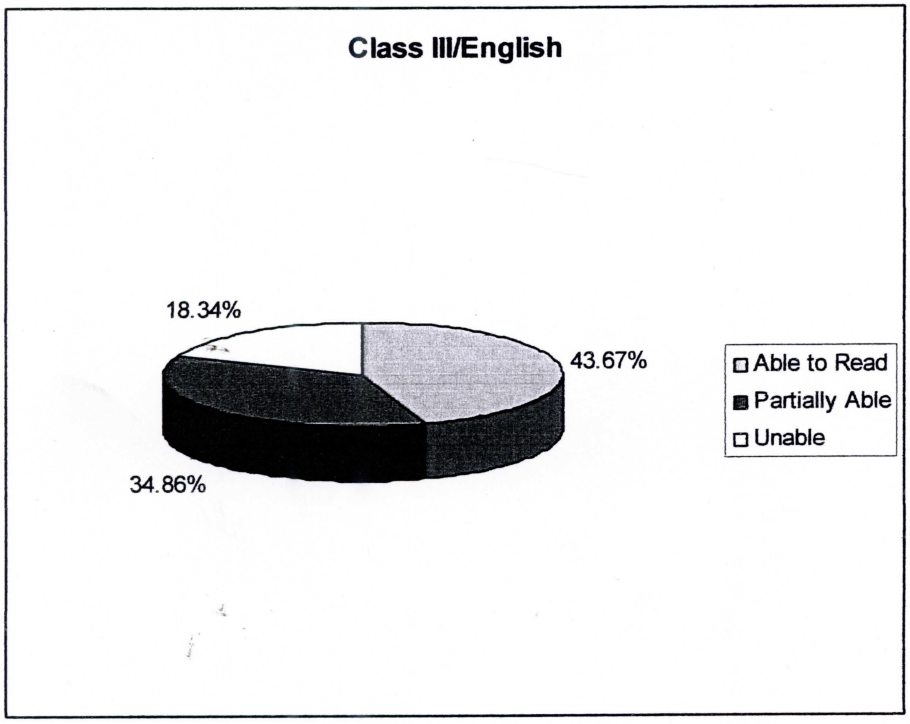


Figure : Performance of Class Three/English

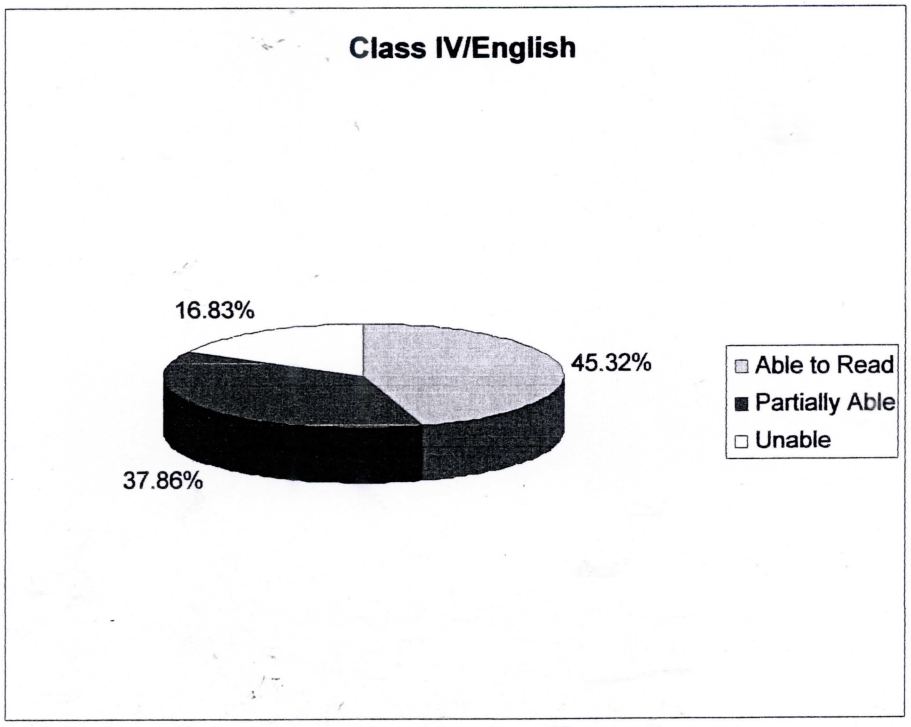


Figure : Performance of Class Four/English

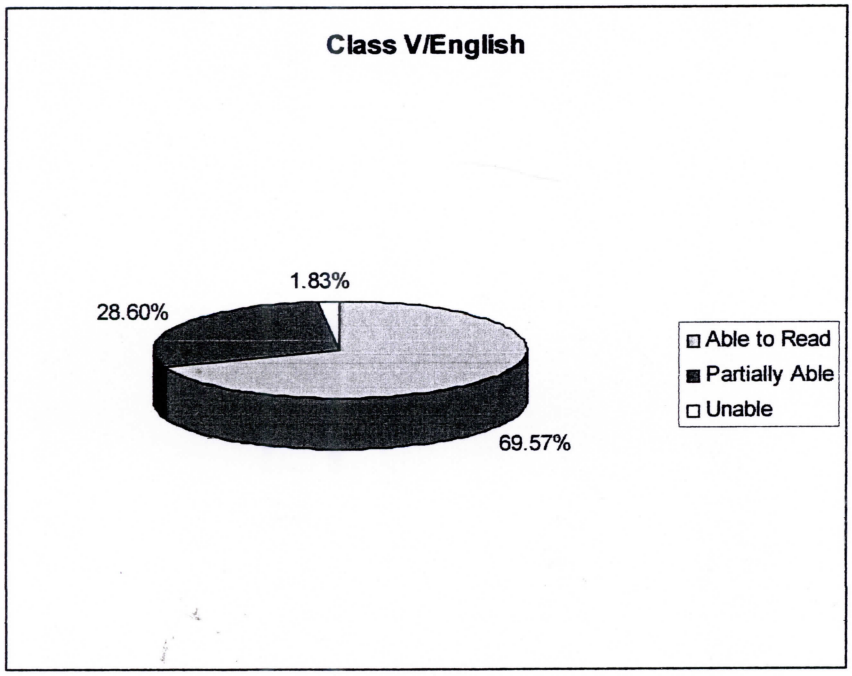


Figure : Performance of Class Five/English

Table: Comparative position of reading in Bangla.

BANGLA			
CLASS	**ABLE TO READ**	**PARTIALLY ABLE**	**UNABLE**
I	53.5%	32.15%	14.31%
II	50.82%	31.4%	17.77%
III	57.14%	30.30%	12.5%
IV	57.82%	31.87%	10.30%
V	88.56%	11.21%	0.22%

Table: Comparative position of reading in English.

ENGLISH			
CLASS	**ABLE TO READ**	**PARTIALLY ABLE**	**UNABLE**
I	50.59%	30%	19.41%
II	45.38%	35.50%	21.21%
III	43.67%	34.86%	18.34%
IV	45.32%	37.867%	16.83%
V	69.57%	28.6%	1.83%

Findings:

From the field study of the 16 schools the followings can be summarized that

1. Almost first 55%----60% students can read, write and spell Bangla and English words or sentences properly.(Group-1)

2. The second 30 % to 35% students can read, write or spell Bangla or English word, sentences partially correct.(Group-2)

3. The frustration lies among the backbencher10% to 12%. They cannot even read write or spell a Bangla or English word from their text book.(Group-3)

Now, the challenge is that the study has to extend some exemplary efforts in order to uplift the position of Group3 and also Group-2 up to the position of Group 1 in such a way so that all the groups are equally benefitted.

The students seem to forget the word learnt in the previous day. In a school it has been found that the teacher even could not recollect the word taught in the last day. These are because they do not seem to own their work at all. Word taught on a specific day need to be repeated with examples and pictures. again and again. Everyday at the very beginning of the class the teacher needs to recapitulate the previous day's work. The schools that recapitulate the words with examples and writing practice the students of those schools are found to remember them with more accuracy.

The students of Group 1 are found to catch up slightly advanced books or tasks. As they show better performance in terms of learning they need to be nurtured with proper care so that they do not become de-motivated at all.

Reactions of the Teachers:

1. All the teachers recognize that the One Day One Word Programme is a very successful Programme in securing Quality Education.
2. 98% teachers commented in favour of the programme i.e. it should run in the same way as it is running now.
3. 2% teachers opined that 2days for one word teaching may bring more success.

Reactions of the Parents:

1. 10% parents found the programme as 100% successful.
2. 70% Parents said that the improvement rate of the programme is 75%. The rest 25% will come in time.
3. 10% parents observed 10% improvement among the children.
4. 10% parents expressed that they are ignorant of the programme.

SMC Members' Impressions:

1. 25% members found 100% success in the programme.
2. 75% members observed 80% improvement among the students.
3. Nobody were against the programme.

Where lies the problem of the non performers?

The study found few reasons for which 100% success in reading could not be materialized. A sample of 30 persons comprising of teachers, parents and SMC members asked several unstructured open end questions. From them the reasons were summarized as follows.

- 20% respondents said that the academic condition of the non performer students could not be improved as they remain engaged in agricultural or household works with their parents. While in an answer to the same question that whether they are involved in any sort of laborious job the 20% children answered positively. It may be mentioned here that, involving children into in any kind of pains-taking work is a clean violation of the section 34-44 and section 5(i-ii) of Labour Act 2006 and National Child Labour Elimination Policy 2010 respectively.

- 25% persons accused that the parents are unconscious or ignorant about the learning of their children.

- 20% persons argued that since the parents are uneducated they do not understand the importance of word learning.

- 15% respondents blamed the teachers by saying that they are not caring enough.

- 20% candidates concluded that the children are not attentive enough.

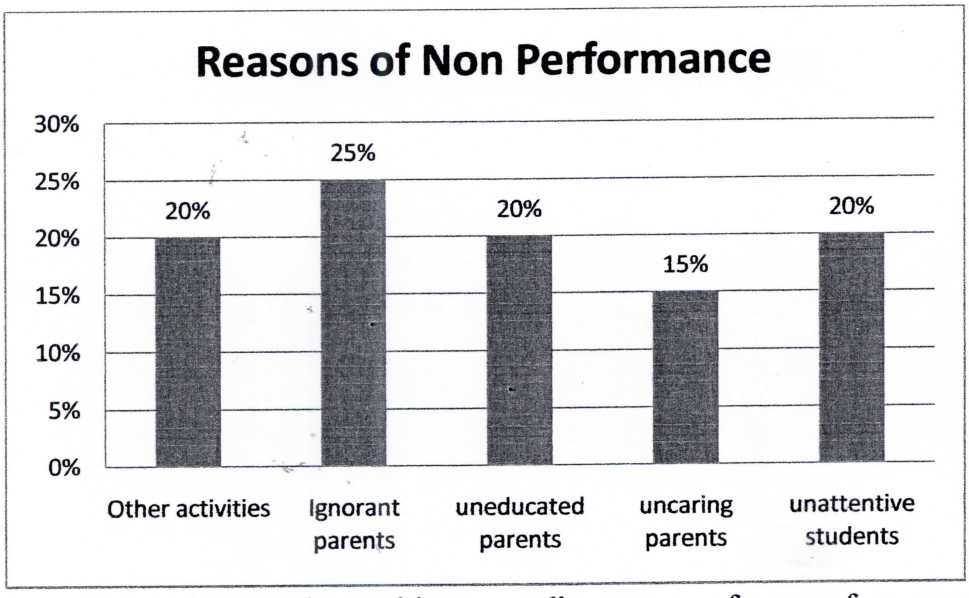


Figure: Comparative positions regarding reasons of non-performance.

Common Finding:

A common finding of the study is that all the respondents conclude similarly about the exemplary success of the performers. The respondents and the first 55%-60% students admitted that they were not at all familiar with the words learnt before. But the success of the programme is that within a year they have been able to learn almost 300 Bangla and 300 English words. Now the change is that they can easily spell, read and write a sentence correctly.

Limitations of the Study:

1. **Small sample Size:** The number of school and the number of respondents chosen are very small in number. They may not reflect the actual scenario.
2. **Biasness:** The study were attempted to remain free from any sort of biasness. Nevertheless, practically and unconsciously it might not be materialized.
3. **Time constraint:** It was a tedious task to collect all the data within two days. To submit a quality report within the hectic schedule of the training course was always been very challenging.
4. **Logistic and resource constraint:** Last but not least, there were some logistic limitations regarding collection of data from Moulvibazar, 200 Kilometer away from Dhaka

Interview with Key Informant

Profile



Md. Akram Al Hossain
Secretary
Ministry of Primary and Mass Education

Md. Akram Al Hossain is at present working as the secretary of Ministry of Primary and Mass Education. He was born on 1 November, 1961 in an aristocratic muslim family at Hajipur village of Magura district. His father Md. Altaf Hossain was a renowned politician and union board member of the then Magura. Mr. Md Akram Al Hossain completed his Master's Degree from Rajshahi University and joined Bangladesh Civil Service as Assistant Commissioner in 1985 batch.

He performed in several capacity of Field Administration, such as, Assistant Commisssioner (Land), Nezarat Deputy Collector, Land Acquisition Officer, Zonal Settlement Officer, Dhaka City Corporation etc. He acted also as the Assistant Private Secretary and Private Secretary to the then Environment and forest Minister and the Deputy leader of National Parliament respectively. He also served as Joint Secretary and Additional Secretary of Local Government Division and Ministry of Primary and Mass Education. He was promoted as the Secretary in charge of Bangladesh Petroliam Corporation in May 2018. During his long career Mr. Hossain participated in different training programmes and led Government delegations. In his long glorious career Mr. Hossain had been recognized as the best project performers of various projects quite a number of times. He is still involved as a resource person in many well-known training academies all over the country.

Mr. Md. Akram Al Hossain is married to Mrs. Khondaker Ferdousi and blessed with two daughters and a son.

1. How and when did the idea of the One Day One Word programme develop in your mind?

It was a great pleasure for me that I had the opportunity to work in my area long time before in the field of academic and social aspect. Atfirst, I started this programme in my school and adjacent schools of Magura. After watching the success of the programme it was introduced in the schools of Jessore also. When I became the Additional Secretary of MoPME, I tried to spread this programme in to the total 65626 government primary schools of the country. When I was posted as a full secretary of MoPME I got the opportunity to materialize my dream fully.

2. Are you satisfied with the present progress?

At present some schools are doing excellent and some schools have not been able to do up to the mark. Nevertheless on average every school has been able to learn 150-175 words at the end of one year. This success is not at all negligible. If the process goes on like this then at the end of five year a student will be able to learn at least 750 words.

3. What are the challenges of the programme?

In all schools the teachers are not equally sincere. The students have some limitations also in case of learning attentively. There is also lacking in case of supervising by the cluster heads, government supervisors. All the Upazillas are not equally committed about the success of the programme. When I will retire the same pace is to be continuing. Otherwise the programme will not bring targeted result.

4. How far you are optimistic?

I am of course optimistic about the success of the programme. In some schools the teachers are making game trees with words. They are calling it 'Innovation tree' or ' One Day One Word Tree'. In fact, everyone, i.e. the stakeholders need to own the programme. Every school must take it competitively to sustain the achievement.

5. What are your future Plans?

When every child will learn to speak, read and write in English and Bangla fluently and correctly then the success will appear. That is my dream and it is not at all impossible. That will bring quality in education. The success of the programme can be replicated to the lower secondary, secondary and of course to the higher secondary as well. Then the impediments of achieving higher education will be diminished to some extent, I believe.

5. Conclusions:

The objective of the study was to assess the present condition of the primary level education of Bangladesh. In doing that the present study attempted to dig out whether there is any relationship between Bangla and English word teaching and Quality Education. The study found a figure of almost 45% to 50% students who cannot express themselves properly in English and as well as in Bangla. Although the figure of 50% students can easily read, write and speak Bangla and English properly the rest resembles a great concern in achieving quality education in Bangladesh. he Secretary of MoPME accused that the students and even the teachers are not well concerned about quality education. The teachers do not go through co curricular materials to boost up themselves. 30% to 35% respondents of this study opined that the teachers and the students are ignorant about their duties. On the other hand, a percentage of people seem to become self satisfied by showing the present achievement of securing Literacy rate of 72.9% according to Bangladesh Bureau of Statistics. But we should not stop here with self satisfaction. Now after achieving the Millennium Development goal, the goal 4 of Sustainable Development Goal is in front of us which is about to secure Quality Education at all level and for that purpose the basic thing is to ensure reading, writing and speaking ability accurately. But this is here we are lacking. Even after getting good grades in SSC and HSC level a large portion of students have been seen to fail in the admission examination of University of Dhaka and also in other universities. Hence, the One Day One Word programme can be regarded as a well justified, timely and appropriate initiative of the Ministry of Primary and Mass Education in the academic field of the country. It is well expected that the Programme will surely boost up the students as they are the section of population Bangladseh who are going to face the challenges as a developed nation in 2041 and obviously 2100.

6. Recommendations:

1. The One Day One Word Programme should be spread more all over the country with accuracy and more attention.
2. The students who are lagging behind should be brought in the front line by giving extra care everyday and recapitulating the study with proper example and writing practice.
3. The Advanced students can be provided with slightly higher academics so that they do not become de-motivated. These types of teaching methods are practices in modern United States of America and Vietnam.
4. The teachers should also make themselves academically more sound and fit to face the challenges of new decade.
5. The students should not be involved in any kind of laborious job. Therefore mass alertness should be created in order to strictly maintain section 34-44 and section 5 of Labour Act 2006 and National Child Labour Policy 2010.
6. Similar Academic quality enhancement programme may be introduced in secondary, higher secondary and tertiary level as well.
7. Primary, Secondary and tertiary academic curriculum specially the language learning methods and teaching meterials must be modernized, easily available and free of cost to students.
8. Interpersonal and communicative skills specially amongst the primary students must be developed.
9. Students and the teachers should be free from all types of local dialects at the time of formal learning sessions.
10. Everyday teachers should give students atleast one page reading and hand writing home work.
11. Teachers should keep record of the word learning without any bias regularly.
12. Monitoring at every level starting from the cluster up to the ministry must be regular and accountable.
13. Special rewards may be given for the outstanding performers.

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Appendix

Questionnaire

1. **Do you think the 'One Day One Word Programme' has brought some improvement among the students?**

2. **If so, then How much?**

3. **What are the reasons behind the non performance by the non performers?**

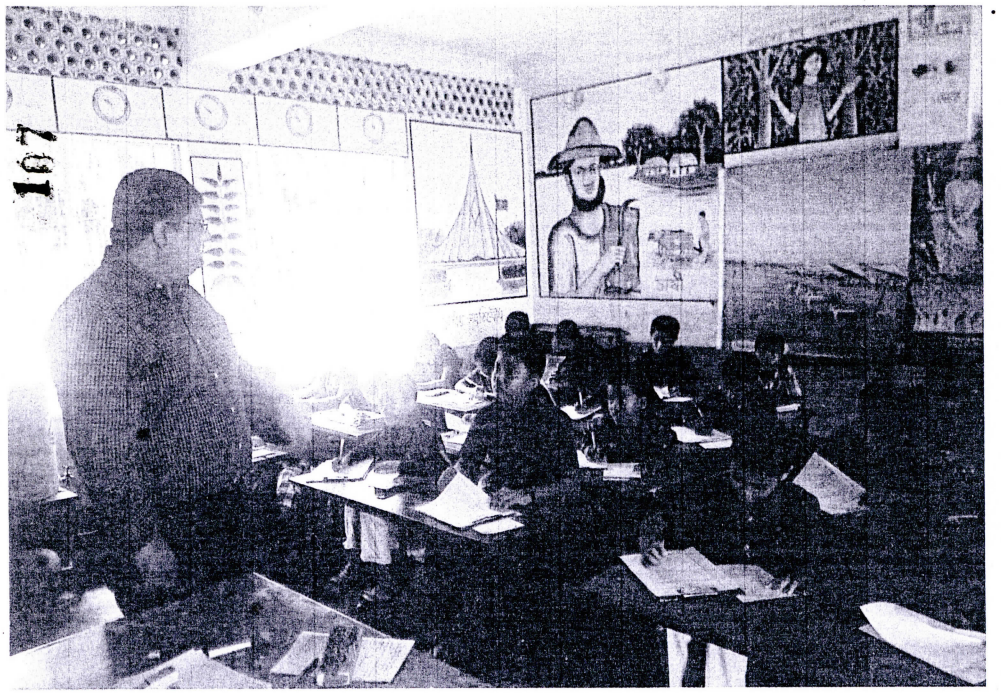
4. **One word in one day is ok? Or one word in two day or more is Ok?**

5. **Are the teachers' roles satisfactory?**

6. **What are the ways for improvement?**

The Schools studied are as follows.

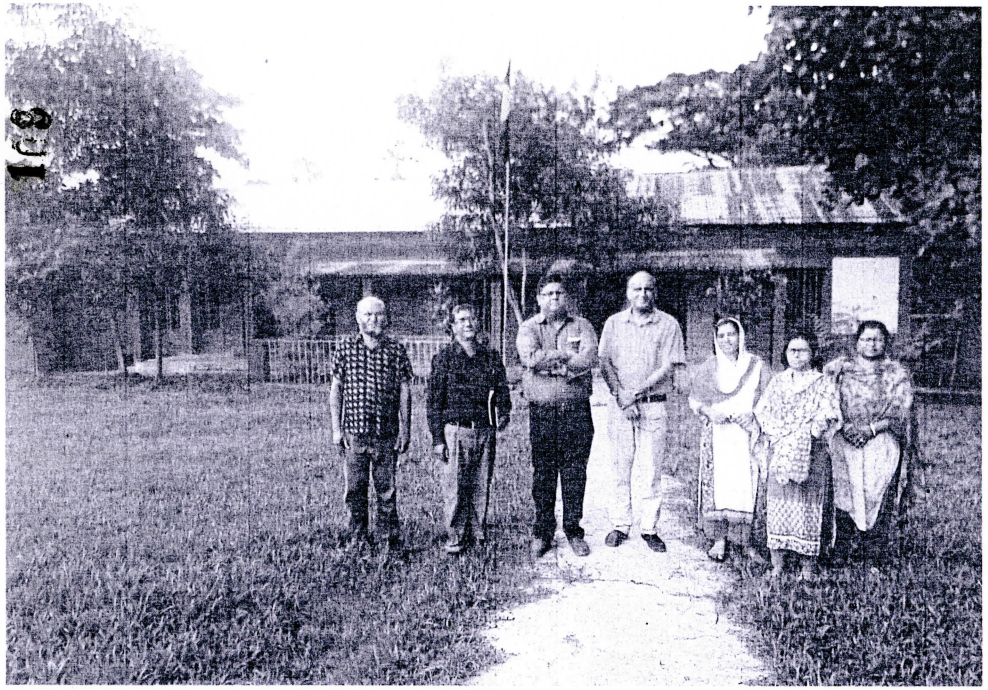
1. Bashudevshri Government Primary School
2. Trailakhyabijoy Government Primary School
3. Paschim Sampashi Government Primary School
4. Jagannathpur Government Primary School
5. Jagathshi Government Primary School
6. Baidyajyoti Government Primary School
7. Sardarbari Government Primary School
8. Roypur Government Primary School
9. Radhakantapur Government Primary School
10. Fazilpur Government Primary School
11. Barabhim Government Primary School
12. Pagulia Government Primary School
13. Gandharbapur Government Primary School
14. Shahbandar Government Primary School
15. Buddhimontapur Government Primary School
16. Noldariya Government Primary School



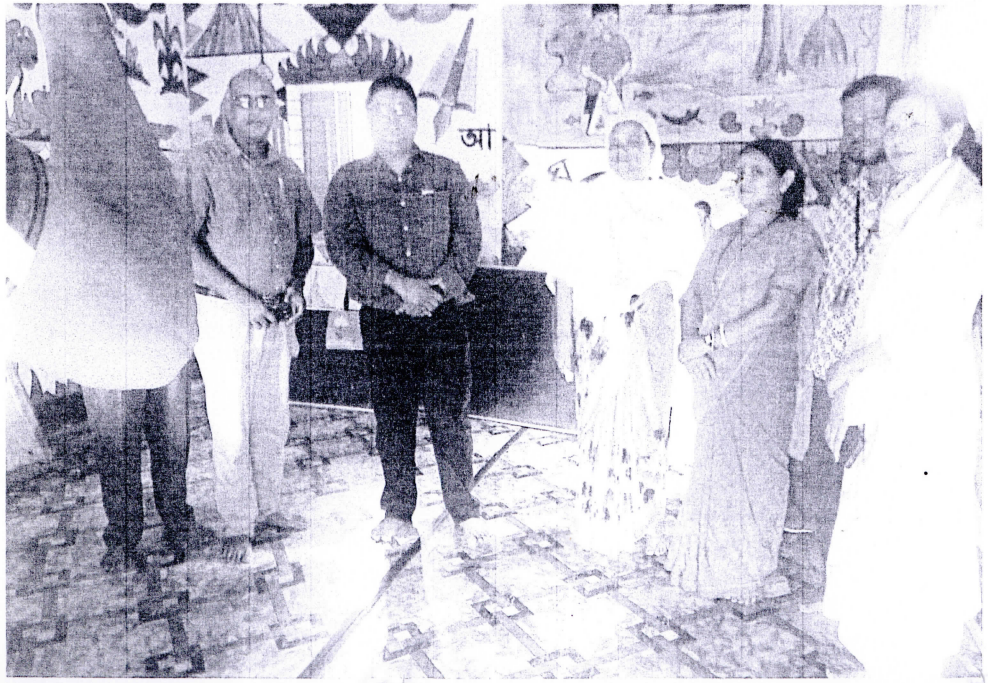












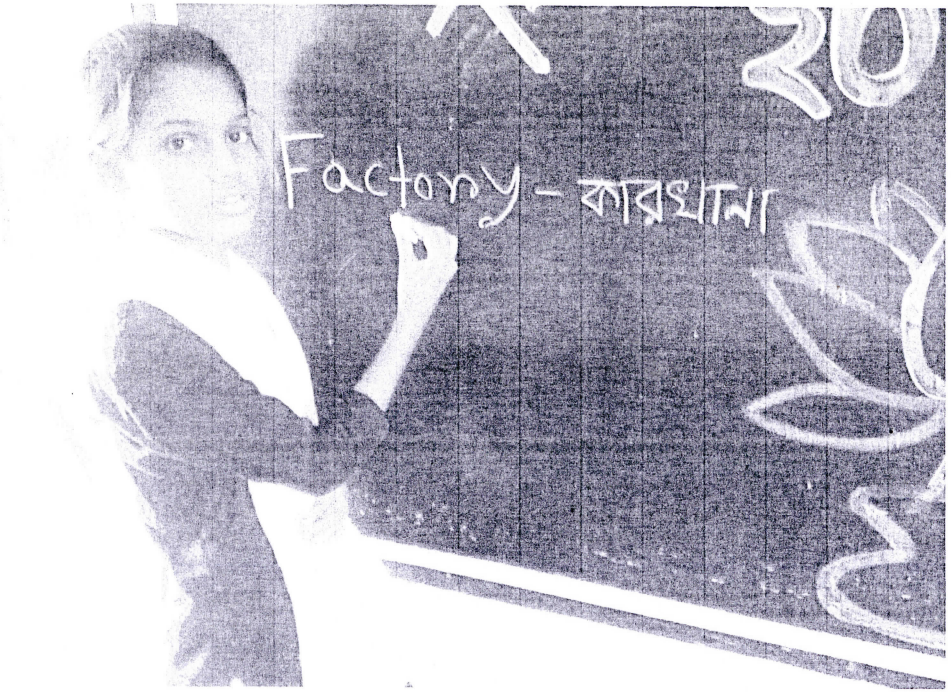

পশ্চিম সম্পাসী সরকারি প্রাথমিক বিদ্যালয়





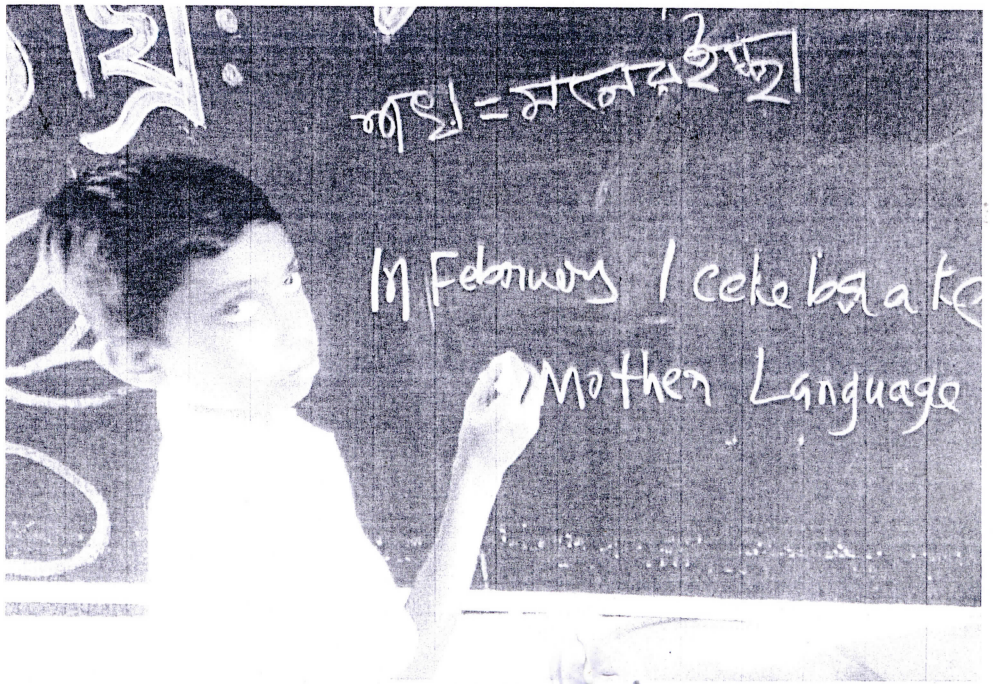





Factory - কারখানা


বুদ্ধিমন্ত
রসরকারি প্রাথমিক বিদ্যালয়
স্থাপিত: ১৮ ২৬ খ্রিঃ.
ডাক ঘর:
উপজেলা- জেলা মৌলভীবাজার,




=সকলের ইচ্ছা
Mother Language


গফরগাঁও পুর রহমান তরফদার সরকারি প্রাথমিক বিদ্যালয়
১১ নং সোতেরখা পুর ইউনিয়ন,




পাওলিয়া সরকারি প্রাথমিক বিদ্যালয়
স্থাপিত-১৯৬৯ ইং
বাস্তবায়নে এল জি ই ডি অর্থায়নে ২০০৪-২০০৫ ইং

Sch. no- 29

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
প্রাথমিক ও গণশিক্ষা মন্ত্রণালয়
সমন্বয় ও মনিটরিং শাখা
www.mopme.gov.bd

One Day One Word কর্মসূচির বাস্তবায়ন অগ্রগতির ছক

(মেন্টরের ব্যবহারের জন্য)

জেলা : মৌলভীবাজার
উপজেলা : মৌলভীবাজার সদর
মাস : অক্টোবর/২০১৮
ক্লাস্টার : কামালপুর
বিষয় : বাংলা

১ম শ্রেণি

শ্রেণি শিক্ষকের নাম : নাছরিন সুলতানা

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
বাসুদেবশ্রী স.প্রা.বি.	০৭ জন	০৪ জন	০৩ জন	২জন স্থানান্তর

২য় শ্রেণি

শ্রেণি শিক্ষকের নাম : শিউলী আক্তার সীমা

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
বাসুদেবশ্রী স.প্রা.বি.	০৪ জন	০৪ জন	০৩ জন	

০২.১০.১৮ খ্রি:
মোঃ মুজিবুর রহমান
প্রধান শিক্ষক
বাসুদেবশ্রী সরঃ প্রাঃ বিদ্যালয়
মৌলভীবাজার সদর।

৩য় শ্রেণি

শ্রেণি শিক্ষকের নাম : নাছরিন সুলতানা

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
বাসুদেবপুর সঃপ্রাঃবিঃ	১৯ জন	০৫জন	০৬জন	০২জন অনুপস্থিত

৪র্থ শ্রেণি

শ্রেণি শিক্ষকের নাম : শিরিনা আক্তার খান

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
বাসুদেবপুর সঃপ্রাঃবিঃ	২২ জন	০৬ জন	০১ জন	০২ জন অনুপস্থিত

৫ম শ্রেণি

শ্রেণি শিক্ষকের নাম : মোঃ মুজিবুর রহমান

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
বাসুদেবপুর সঃপ্রাঃবিঃ	২০ জন	০৪ জন	—	০২ জন অনুপস্থিত

০৩.১১.২০ খ্রিঃ

মোঃ মুজিবুর রহমান
প্রধান শিক্ষক
বাসুদেবপুর সঃ প্রাঃ বিদ্যালয়
মৌলভীবাজার সদর।

Sch: No - 27

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
প্রাথমিক ও গণশিক্ষা মন্ত্রণালয়
সমন্বয় ও মনিটরিং শাখা
www.mopme.gov.bd

One Day One Word কর্মসূচির বাস্তবায়ন অগ্রগতির ছক

(সেন্টরের ব্যবহারের জন্য)

জেলা : মৌলভীবাজার
উপজেলা : মৌলভীবাজার সদর
মাস : অক্টোবর/২০১৮
ক্লাস্টার : কমলাপুর
বিষয় : ইংরেজি

১ম শ্রেণি

শ্রেণি শিক্ষকের নাম : শিল্পী আক্তার মনি

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
বাসুদেবশ্রী সরঃ প্রাঃ বিঃ	০৮জন	০২জন	০৪জন	০২জন খুলাশুর

২য় শ্রেণি

শ্রেণি শিক্ষকের নাম : নাছরিন সুলতানা

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
বাসুদেবশ্রী সরঃ প্রাঃ বিঃ	২২জন	০৬জন	০৪জন	

০৩.১১.২০১৮ খ্রিঃ
মোঃ মুজিবুর রহমান
প্রধান শিক্ষক
বাসুদেবশ্রী সরঃ প্রাঃ বিদ্যালয়
মৌলভীবাজার সদর।

৩য় শ্রেণি

শিক্ষকের নাম : নিলুফা আক্তার মনি

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
বাসুদেবশ্রী স.প্রা.বি.	১৫ জন	০৮ জন	০৪ জন	০২ জন অনুপস্থিত

৪র্থ শ্রেণি

শ্রেণি শিক্ষকের নাম : মো: মুজিবুর রহমান

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
বাসুদেবশ্রী স.প্রা.বি.	১৪ জন	০৮ জন	০৪ জন	অনুপস্থিত ০২ জন

৫ম শ্রেণি

শ্রেণি শিক্ষকের নাম : মো: মুজিবুর রহমান

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
বাসুদেবশ্রী স.প্রা.বি.	১৫ জন	০৭ জন	০২ জন	অনুপস্থিত ০২ জন

০৩.১১.১৯ খ্রি:
মোঃ মুজিবুর রহমান
প্রধান শিক্ষক
বাসুদেবশ্রী সরকারি প্রাথমিক বিদ্যালয়
গৌরীপুর সদর।

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
প্রাথমিক ও গণশিক্ষা মন্ত্রণালয়
সমন্বয় ও মনিটরিং শাখা
www.mopme.gov.bd

One Day One Word কর্মসূচির বাস্তবায়ন অগ্রগতির ছক

(মেন্টরের ব্যবহারের জন্য)

জেলা : মৌলভীবাজার মাস : অক্টোবর
উপজেলা : মৌলভীবাজার সদর ক্লাস্টার : কাদিপুর

বিষয় :

১ম শ্রেণি

শ্রেণি শিক্ষকের নাম : সিরাজুন্নেছা আনজুমী / অনুপমা মেত্র

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
শ্রীলোক বিদ্যা: সা: প্রা: বি:				
বাংলা	২৮	০৮	০৯	
ইংরেজী	২১	০৯	০৭	

২য় শ্রেণি

শ্রেণি শিক্ষকের নাম : তাপস কুমার পাল / সাদি হরি মে

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
শ্রীলোক বিদ্যা: সা: প্রা: বি:				
বাংলা	১২	১০	০৬	
ইংরেজী	১২	০৭	০৬	

৩য় শ্রেণি

শ্রেণি শিক্ষকের নাম : তাপস কুমার পাল / চৈতন্যজ্যোতি পাল

বিদ্যালয়ের নাম ৺লোক বিদ্যা: স: প্রা:	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
বাংলা	২৮	২৮	০৭	
ইংরেজী	১৫	৯৭	১০	

৪র্থ শ্রেণি

শ্রেণি শিক্ষকের নাম : তাপস কুমার পাল / মো: নানু মিয়া

বিদ্যালয়ের নাম ৺লোক বিদ্যা: স: প্রা:	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
বাংলা	০৮	১৮	—	
ইংরেজী	১০	০৫	০৮	

৫ম শ্রেণি

শ্রেণি শিক্ষকের নাম : তাপস কুমার পাল / মো: নানু মিয়া

বিদ্যালয়ের নাম ৺লোক বিদ্যা: স: প্রা: ৭২	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
বাংলা	১৩	০৩	—	
ইংরেজী	০৭	০১৩	—	

০৩/১১/২০১৮

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
প্রাথমিক ও গণশিক্ষা মন্ত্রণালয়
সমন্বয় ও মনিটরিং শাখা
www.mopme.gov.bd

One Day One Word কর্মসূচির বাস্তবায়ন অগ্রগতির ছক

(মেন্টরের ব্যবহারের জন্য)

জেলা :
উপজেলা :
বিষয় : বাংলা

মাস :
ক্লাস্টার :

১ম শ্রেণি

শ্রেণি শিক্ষকের নাম :

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
	৭	৫	2	

বাংলা

২য় শ্রেণি

শ্রেণি শিক্ষকের নাম :

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
	৭	৬	2	

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
প্রাথমিক ও গণশিক্ষা মন্ত্রণালয়
সমন্বয় ও মনিটরিং শাখা
www.mopme.gov.bd

One Day One Word কর্মসূচির বাস্তবায়ন অগ্রগতির ছক

(মেন্টরের ব্যবহারের জন্য)

জেলা :
উপজেলা :
মাস : এপ্রিল
ক্লাস্টার :

বিষয় : ইংরেজি

১ম শ্রেণি

শ্রেণি শিক্ষকের নাম : [illegible]

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
	৭	৬	২	

ইংরেজি

২য় শ্রেণি

শ্রেণি শিক্ষকের নাম : [illegible]

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
	৭	৬	২	

[illegible]

One Day one Word কর্মসূচির বাস্তবায়ন অগ্রগতির

বিদ্যালয়ের নাম: বেদজোর্তে সরঃ প্রা. বিদ্যালয়, ভি

জেলা: মৌলভীবাজার

উপজেলা: মৌলভীবাজার, সদর.

মাস: অক্টোবর

ক্লাস্টার: নাজিরাবাদ

শ্রেণি	বিষয় শিক্ষকের নাম	বিষয়	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
১ম ৩৬	পলি রানী বিশ্বাস	বাংলা	২২	০৯	০২	
	রত্নীকা দেবনাথ	ইংরেজি	১৬	১০	০৭	
২য় ৩১	আছমা আক্তার	বাংলা	১৪	১৬	০৪	
	শান্তা রানী গোস্বামী	ইংরেজি	১২	১২	০৭	
৩য় ৪৫	শান্তা রানী গোস্বামী	বাংলা	২৪	১৬	০৫	
	আছমা আক্তার	ইংরেজি	২২	১৮	০৫	
৪র্থ ৪৫	রত্নীকা দেবনাথ	বাংলা	৩৭	০৮	—	
	পাপি দেবনাথ	ইংরেজি	২৩	২১	০১	
৫ম ৮৪	পাপি দেবনাথ	বাংলা	৩৪	—	—	
	পলি রানী বিশ্বাস	ইংরেজি	৩২	০২	—	

৩১/১০/২০২১

আশরাফ মাহমুদ কোরেশী
প্রধান শিক্ষক
বেদজোর্তে সরকারি প্রাথমিক বিদ্যালয়
মৌলভীবাজার সদর।

সরদারবাড়ী সরকারি প্রাথমিক বিদ্যালয়

"One Day One Word কর্মসূচির বাস্তবায়ন অগ্রগতির

জেলা: মৌলভীবাজার মাস: অক্টোবর

উপজেলা: মৌলভীবাজার সদর ক্লাস্টার: ভাদগাঁও

শ্রেণি	বিষয়	শ্রেণি শিক্ষকের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারেনা (সংখ্যা	একেবারেই পারে না (সংখ্যা)	মন্তব্য
১ম	বাংলা	রুমা বেগম	০৮	০৫	০৪	
	ইংরেজী	সৈয়দা নীলিমা বেগম	০৫	০৭	০৫	
২য়	বাংলা	রুমা বেগম	০৭	০৬	০৪	
	ইংরেজী	রহিমা আক্তার চৌ.	০৬	১০	০৪	
৩য়	বাংলা	অর্পনা রানী দেব	০৫	০৭	০২	
	ইংরেজী	সৈয়দা নীলিমা বেগম	০৯	০৯	০৪	
৪র্থ	বাংলা	রুমা বেগম	০৭	০৫	০২	
	ইংরেজী	রনজিৎ সূত্রধর	০৫	০৬	০৬	
৫ম	বাংলা	রুমা বেগম	০৮	০৯	০১	
	ইংরেজী	রনজিৎ সূত্রধর	০৯	০৭	০২	

তারিখ
৩১/১০/২০১৯ইং

রহিমা আক্তার চৌধুরী
প্রধান শিক্ষক
সরদারবাড়ী সরকারি প্রাথমিক বিদ্যালয়
মৌলভীবাজার সদর।

বিদ্যালয় নং—১

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
প্রাথমিক ও গণশিক্ষা মন্ত্রণালয়
সমন্বয় ও মনিটরিং শাখা
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One Day One Word কর্মসূচির বাস্তবায়ন অগ্রগতির ছক

(মেন্টরের ব্যবহারের জন্য)

জেলা : মৌলভীবাজার
উপজেলা : মৌলভীবাজার

মাস : অক্টোবর
ক্লাস্টার : বাহিরমর্দন

বিদ্যালয়ের নাম : জগদ্গী সরকারি প্রাথমিক বিদ্যালয়

১ম শ্রেণি

শ্রেণি শিক্ষকের নাম: [redacted]

	বিষয়	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
রহিমা আক্তার	বাংলা	১৫	২০	০৯	
সুবীর চন্দ্র দেব	ইংরেজী	১৭	১৫	১২	

২য় শ্রেণি

শ্রেণি শিক্ষকের নাম: [redacted]

	বিষয়	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
আফিয়া বেগম	বাংলা	২৫	১৫	০৬	
নাঈমা সুলতানা	ইংরেজী	২০	১৭	০৯	

৩১/১০/২০২১ ইং

আফিয়া বেগম
প্রধান শিক্ষক (চঃ দাঃ)
জগদ্গী সরঃ প্রাঃ বিদ্যালয়
সদর, মৌলভীবাজার।

৩য় শ্রেণি

শ্রেণি শিক্ষকের নাম :

বিদ্যালয়ের নাম	বিষয়	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
পূরবী ঘোষ	বাংলা	২২	১৪	০২	
আফিয়া বেগম	ইংরেজী	১৮	১৪	০৮	

৪র্থ শ্রেণি

শ্রেণি শিক্ষকের নাম :

বিদ্যালয়ের নাম	বিষয়	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
সুবীর চন্দ্র দেব	বাংলা	২৫	১১	০৩	
রহিমা আক্তার	ইংরেজী	২০	১৫	০৪	

৫ম শ্রেণি

শ্রেণি শিক্ষকের নাম :

বিদ্যালয়ের নাম	বিষয়	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
পূরবী ঘোষ	বাংলা	৩৭	—	—	
সুবীর চন্দ্র দেব	ইংরেজী	৩৫	০২	—	

০১/০৯/২০২৫

সহকারী শিক্ষক (ড: দা:)

One Day one Word কর্মসূচির বাস্তবায়ন অগ্রগতির ছক

উপজেলা : গৌলতীবাজার
পৌরসভা : গৌলতীবাজার
বিষয় : বাংলা
বিদ্যালয়ের নাম : জগন্নাথপুর সরকারি প্রাথমিক বিদ্যালয়

মাস : অক্টোবর
ক্লাস্টার : বাহারমর্দ্দান

ক্রমিক নং	শ্রেণি শিক্ষকের নাম	শ্রেণি	সাবলীলভাবে পড়তে পারে সংখ্যা	মাঝারিভাবে পড়তে পারে সংখ্যা	একেবারেই পারেনা সংখ্যা	মন্তব্য
০১	ছাদিয়া আক্তারকোরেশী	১ম	২২	১৩	০৫	
০২	কাকিলী দাস্তা	২য়	২৬	০৮	০৪	
০৩	কনিকা রানী চক্রবর্তী	৩য়	২৫	১১	০৮	
০৪	নুহুমুন্নেছা চামেলী	৪র্থ	২৪	০৮	০৪	
০৫	ফারহানা হক বাসু	৫ম	৩০	০৩	—	

প্রধান শিক্ষক
জগন্নাথপুর সরকারি প্রাথমিক বিদ্যালয়
গৌলতীবাজার সদর

One Day one Word কর্মসূচির বাস্তবায়ন অগ্রগতির ছক

জেলা: মৌলভীবাজার
উপজেলা: মৌলভীবাজার
বিষয়: ইংরেজি
বিদ্যালয়: জগন্নাথপুর সরকারি প্রাথমিক বিদ্যালয়

মাস:
ক্লাস্টার: বাহারমর্দান

ক্রমিক নং	শিক্ষকের নাম	শ্রেণি	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারেনা (সংখ্যা)	একেবারেই পড়তে পারেনা	মন্তব্য
০১	ছাদিয়া আক্তার বোরেশী	১ম	৩২	০৪	০৪	
০২	কাকলী দাশ	২য়	২৫	০৯	০৪	
০৩	কণিকা রানী চক্রবর্তী	৩য়	২৮	১১	০৫	
০৪	নুসরাত জাহান	৪র্থ	১৪	১২	১০	
০৫	ফারহানা হক শুভ্র	৫ম	২০	১১	০২	

[illegible]
[illegible] সহকারী শিক্ষক
জগন্নাথপুর সঃ প্রাঃ বিদ্যালয়
মৌলভীবাজার সদর

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
প্রাথমিক ও গণশিক্ষা মন্ত্রণালয়
সমন্বয় ও মনিটরিং শাখা
www.mopme.gov.bd

One Day One Word কর্মসূচির বাস্তবায়ন অগ্রগতির ছক

(মেন্টরের ব্যবহারের জন্য)

জেলা : মৌলভীবাজার
উপজেলা : মৌলভীবাজার সদর
মাস : অক্টোবর/১৯
ক্লাস্টার : ভাদগাঁও

বিষয় : বাংলা, ইংরেজি

১ম শ্রেণি

শ্রেণি শিক্ষকের নাম : সৈয়দা শামীমা বেগম

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে		সাবলীলভাবে পড়তে পারে না (দুর্বল)		একেবারেই পারে না		মন্তব্য
	বা (সংখ্যা)	ই	বা (সংখ্যা)	ই	বা (সংখ্যা)	ই	
নলদাতিয়া অ:প্রা:বিদ্যা:	১২	১১	০৪	০৪	০৯	১০	৩২ জন অন্যত্র বদলী

২য় শ্রেণি

শ্রেণি শিক্ষকের নাম : রাজিয়া বেগম

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে		সাবলীলভাবে পড়তে পারে না (দুর্বল)		একেবারেই পারে না		মন্তব্য
	বা (সংখ্যা)	ই	বা (সংখ্যা)	ই	বা (সংখ্যা)	ই	
নলদাতিয়া অ:প্রা:বিদ্যা:	০৮	০৮	০২	০২	০৭	০৮	০৯ জন অন্যত্র বদলী

৩য় শ্রেণি

শ্রেনি শিক্ষকের নাম : রাজিয়া বেগম

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)		সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)		একেবারেই পারে না (সংখ্যা)		মন্তব্য
	ছ	বা	ছ	বা	ছ	বা	
নলদাড়িয়া সঃ প্রাঃ বিদ্যাঃ	১০	১০	—	—	০৩	০৩	০১ জন অন্যত্র বদলী

৪র্থ শ্রেণি

শ্রেনি শিক্ষকের নাম : সুদীপ রঞ্জন পাল

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)		সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)		একেবারেই পারে না (সংখ্যা)		মন্তব্য
	ছ	বা	ছ	বা	ছ	বা	
নলদাড়িয়া সঃ প্রাঃ বিদ্যাঃ	১৩	১০	০২	০২	—	০৩	০১ জন অন্যত্র বদলী

৫ম শ্রেণি

শ্রেনি শিক্ষকের নাম : সুপ্রিয়া রানী পাল

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)		সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)		একেবারেই পারে না (সংখ্যা)		মন্তব্য
	ছ	বা	ছ	বা	ছ	বা	
নলদাড়িয়া সঃ প্রাঃ বিদ্যাঃ	০৭	০৬	—	০৯	—	—	

১৩/১০/১৭

পাগুলিয়া সরকারি প্রাথমিক বিদ্যালয় বিদ্যালয় নং – ১৪৫
মৌলভীবাজার সদর গ্রেড – "এ"
EMIS NO – 604011109

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
প্রাথমিক ও গণশিক্ষা মন্ত্রণালয়
সমন্বয় ও মনিটরিং শাখা
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(মেন্টরের ব্যবহারের জন্য)

জেলা : মৌলভীবাজার
উপজেলা : মৌলভী বাজার
বিষয় : বাংলা- ইংরেজী

মাস : অক্টোবর/১৯
ক্লাস্টার : বাহার মদন

১ম শ্রেণি

শ্রেণি শিক্ষকের নাম : সুলতানা পারভীন

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
পাগুলিয়া সরঃ প্রাঃ বিদ্যালয়				
বাংলা	৩১	১৩	০৭	
ইংরেজী	২৮	১৫	০৮	

২য় শ্রেণি

শ্রেণি শিক্ষকের নাম : মৌসুমী গোস্বামী

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
পাগুলিয়া সরঃ প্রাঃ বিদ্যালয়				
বাংলা	২৩	২২	০৬	
ইংরেজী	১৯	১৯	১৩	

পাগুলিয়া সরঃ প্রাঃ বিদ্যালয়

৩য় শ্রেণি

শ্রেণি শিক্ষকের নাম : সীমা রানী ভট্টাচার্য্য

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
পাগুলিয়া সরঃ প্রাঃ বিদ্যালয়।				
বাংলা	২৪	১৫	০১	
ইংরেজী	১৫	১৭	০৮	

৪র্থ শ্রেণি

শ্রেণি শিক্ষকের নাম : পূর্ণিমা দাকা

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
পাগুলিয়া সরঃ প্রাঃ বিদ্যালয়।				
বাংলা	২০	২৩	০৭	
ইংরেজী	১৫	২৯	০৬	

৫ম শ্রেণি

শ্রেণি শিক্ষকের নাম : একলিমুন্নেছা

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
পাগুলিয়া সরঃ প্রাঃ বিদ্যালয়।				
বাংলা	৩৬	১৪	—	
ইংরেজী	২২	২৮	—	

স্বাক্ষরিত ১০/২০১৯ খ্রি
একলিমুন্নেছা
প্রধান শিক্ষক
১০৫৮৮: পাগুলিয়া সরঃ প্রাঃ বিদ্যালয়
ডাকঘর: মৌলভীবাজার
উপজেলা ও জেলা: মৌলভীবাজার

সম্ভবতঃ ৩য় বা ৪র্থ বিদ্যালয়

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
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(মেন্টরের ব্যবহারের জন্য)

জেলা : সোনাডাঙ্গা
উপজেলা : সোনাডাঙ্গা
মাস : অক্টোবর
ক্লাস্টার : বাহাদুরমর্দান

বিষয় : ইংরেজি

১ম শ্রেণি

শ্রেণি শিক্ষকের নাম : নাজমা সুলতানা

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
গন্ধর্বপুর রহমান তরফদার সরকারি প্রাথমিক বিদ্যালয়	২০	০৪	০১	

২য় শ্রেণি

শ্রেণি শিক্ষকের নাম : সমীরণ দাস

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
গন্ধর্বপুর রহমান তরফদার সরকারি প্রাথমিক বিদ্যালয়	১৯	০৫	০২	

সপ্তাহভিত্তিক সহ: শি: কার্যক্রম

৩য় শ্রেণি				
শ্রেণি শিক্ষকের নাম : মো: নজরুল ইসলাম				
বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
গন্ধর্বপুর রহমান তরফদার সরকারি প্রাথমিক বিদ্যালয়	১৩	০৩		

৪র্থ শ্রেণি				
শ্রেণি শিক্ষকের নাম : মো: নজরুল ইসলাম				
বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
গন্ধর্বপুর রহমান তরফদার সরকারি প্রাথমিক বিদ্যালয়	১৯	০৬	০৭	

৫ম শ্রেণি				
শ্রেণি শিক্ষকের নাম : নাজমা সুলতানা				
বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
গন্ধর্বপুর রহমান তরফদার সরকারি প্রাথমিক বিদ্যালয়	২৩	—	—	

নাসু
প্র: শি:
২৯/১০/২০১৯ইং

নাজমা সুলতানা
প্রধান শিক্ষক (চ: দা:)
গন্ধর্বপুর রহমান তরফদার
সরকারি প্রাথমিক বিদ্যালয়
মৌলভীবাজার সদর।

সর্বশেষ পুঃ সঃ : বাংলা

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(মেন্টরের ব্যবহারের জন্য)

জেলা : মৌলভীবাজার
উপজেলা : মৌলভীবাজার

মাস : অক্টোবর
ক্লাস্টার : বাহারমর্দান

বিষয় : বাংলা

১ম শ্রেণি

শ্রেণি শিক্ষকের নাম : তাহেরা আক্তার ডলি

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
গন্ধর্বপুর রহমান তরফদার সরকারি প্রাথমিক বিদ্যালয়	২০	০৪	০১	

২য় শ্রেণি

শ্রেণি শিক্ষকের নাম : তাহেরা আক্তার ডলি

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
গন্ধর্বপুর রহমান তরফদার সরকারি প্রাথমিক বিদ্যালয়	১৩	০৩	০২	

সন্ধর্পুর নং: প্রা: বিদ্যালয়

৩য় শ্রেণি

শ্রেণি শিক্ষকের নাম : মো: নজরুল ইসলাম

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
গন্ধর্বপুর রহমান তরফদার সরকারি প্রাথমিক বিদ্যালয়	২০	০৪	০২	

৪র্থ শ্রেণি

শ্রেণি শিক্ষকের নাম : তাহেরা আক্তার ডলি

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
গন্ধর্বপুর রহমান তরফদার সরকারি প্রাথমিক বিদ্যালয়	১৫	২০	০৭	

৫ম শ্রেণি

শ্রেণি শিক্ষকের নাম : তাহেরা আক্তার ডলি

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
গন্ধর্বপুর রহমান তরফদার সরকারি প্রাথমিক বিদ্যালয়	১৫	০৮	—	

নাজমা সুলতানা
২৭/১০/২০১৯ই.

নাজমা সুলতানা
প্রধান শিক্ষক (ভঃ দাঃ)
গন্ধর্বপুর রহমান তরফদার
সরকারি প্রাথমিক বিদ্যালয়
মৌলভীবাজার সদর।

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
প্রাথমিক ও গণশিক্ষা মন্ত্রণালয়
সমন্বয় ও মনিটরিং শাখা
www.mopme.gov.bd

One Day One Word কর্মসূচির বাস্তবায়ন অগ্রগতির ছক

(মেন্টরের ব্যবহারের জন্য)

জেলা : মৌলভীবাজার
উপজেলা : মৌলভীবাজার সদর
মাস : অক্টোবর
ক্লাস্টার : ভাদগাঁও

বিষয় : বাংলা, ইংরেজি

১ম শ্রেণি

শ্রেণি শিক্ষকের নাম : রাজিয়া বেগম

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
কাশবনটি বিদ্যালয়	বাংলা:২০	বাংলা- ১১		
	ইংরেজি-২২	ইংরেজি- ০৯		

২য় শ্রেণি

শ্রেণি শিক্ষকের নাম : সালমা বেগম

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
কাশবনটি বিদ্যালয়	বাংলা-১০	বাংলা: ১২	বাংলা-৬	
	ইংরেজি-১৩	ইংরেজি- ১০	ইং -০২	

২৯/১০/১৯
সেলিনা খাতুন
প্রধান শিক্ষক
সরকারি প্রাথমিক বিদ্যালয়
মৌলভীবাজার।

৩য় শ্রেণি

শ্রেণি শিক্ষকের নাম : চিপ্রা দাস

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
কাংবলং সা: বিদ্যালয়	বাংলা-২০	বাংলা- ০৩	—	
	ইংরেজি-১৩	ইংরেজি- ০৬	ইং—০৪	

৪র্থ শ্রেণি

শ্রেণি শিক্ষকের নাম : স্মৃতি রানী ক্ষীন্স

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
কাংবলং সা: বিদ্যালয়	বাংলা-২৪	বাংলা : ২০		
	ইংরেজি-১৮	ইংরেজি-২০	ইং-০৫	

৫ম শ্রেণি

শ্রেণি শিক্ষকের নাম : পরানন্দা দেব

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
কাংবলং সা: বিদ্যালয়	বাংলা-৩০	বাংলা- ০৩	—	
	ইং-৩০	ইংরেজি- ০৩	—	

২৯/০৫/২২
সেলিনা খাতুন
প্রধান শিক্ষক
কাংবলং সনবন্যা প্রাথমিক বিদ্যালয়
লোগাংবাজার

One Day One Word কর্মসূচির বাস্তবায়ন অগ্রগতির ছক

(সেন্টরের ব্যবহারের জন্য)

জেলা: মৌলভীবাজার
উপজেলা: মৌলভীবাজার সদর।
বিষয়: বাংলা

মাস: অক্টোবর
ক্লাস্টার: ভাদগাঁও
বিদ্যালয়ের নাম: বুদ্ধিমন্তপুর সরকারি প্রাথমিক বিদ্যালয়

শ্রেণি	শ্রেণি শিক্ষকের নাম	অবলীলাভাবে পড়তে পারে (সংখ্যা)	অবলীলাভাবে পড়তে পারে না (সংখ্যা)	একেবারেই পারে না (সংখ্যা)
১ম	মনিকা রানী চন্দ	২৬	৩৩	১৮
২য়	মোঃ মোজাহিদ	৩৩	১৭	১৭
৩য়	স্বপ্না বেগম	৪৭	১৮	১৭
৪র্থ	সীমা রানী শীল	৩৪	২৩	১১
৫ম	শ্যামলী ভট্টাচার্য	৫০	০২	X
		১৯০	৯৬	৬৩

তারিখ: ২৭/১০/১৯
শ্যামলী ভট্টাচার্য
প্রধান শিক্ষক (চঃ দাঃ)
বুদ্ধিমন্তপুর সরকারি প্রাথমিক বিদ্যালয়
মৌলভীবাজার সদর, মৌলভীবাজার।

One Day One Word কর্মসূচির বাস্তবায়ন অগ্রগতির

বিদ্যালয়ের নাম: রায়পুর মামরকপুর সরকারি প্রা: বিদ্যালয়
জেলা : মৌলভীবাজার
উপজেলা: সদর , মৌলভীবাজার
মাস : অক্টোবর-২০২১ বিদ্যালয় নং-৯৭
ক্লাস্টার : তাদগাঁও

শ্রেণি	বিষয় শিক্ষকের নাম	বিষয়	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বলসংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
১ম	নুরুন্নাহার খাতুন	বাংলা	১০	০৬	০৪	
	ফেরদৌসী বেগম	ইংরেজি	০৮	০৬	০৬	
২য়	সুলতানা বেগম	বাংলা	১৪	০৫	০৭	
	ফেরদৌসী বেগম	ইংরেজি	১০	০৮	০৮	
৩য়	ফেরদৌসী বেগম	বাংলা	১৬	১৫	০৭	
	সুলতানা বেগম	ইংরেজি	১২	১৫	১১	
৪র্থ	সুলতানা বেগম	বাংলা	১০	১৬	০৭	
	আব্দুল কাইয়ুম	ইংরেজি	০৭	১২	১১	
৫ম	সুলতানা বেগম	বাংলা	২৪	০২	—	
	ফেরদৌসী বেগম	ইংরেজি	২২	০৪	—	

৩০.১০.২১

নুরুন্নাহার খাতুন
প্রধান শিক্ষক (চ. দা.)
রায়পুর মামরকপুর স. প্রা. বিদ্যালয়
সদর, মৌলভীবাজার।

রাধাকান্তপুর সরকারি প্রাথমিক বিদ্যালয়

ডাক ঃ করিমনগর, ক্লাস্টার ঃ আফবরপুর, উপজেলা ও জেলা ঃ মৌলভীবাজার।

One Day One word কর্মসূচির বাস্তবায়ন অগ্রগতির প্রতিবেদন

মাসের নাম ঃ অক্টোবর-২০২১ই.

শ্রেণি	মোট শিক্ষার্থী	বিষয়	দায়িত্বপ্রাপ্ত শিক্ষকের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) সংখ্যা	একবারেই পারে না (সংখ্যা)	মন্তব্য
১ম	৩৮	বাংলা	আছমা বেগম	২৬	১৩	২	
		ইংরেজি	সুস্মিতা পাল শান্তা	১৯	১৩	৬	
২য়	৩৫	বাংলা	সুস্মিতা পাল শান্তা	১৪	১০	১১	
		ইংরেজি	রতন রানি গোস্বামী	১১	১১	১৬	
৩য়	৪৬	বাংলা	শুক্লা রানী বিশ্বাস	২৩	১৮	৫	
		ইংরেজি	রতন রানি গোস্বামী	২০	১৫	১১	
৪র্থ	৩৪	বাংলা	আছমা বেগম	২২	৯	৩	
		ইংরেজি	শুক্লা রানী বিশ্বাস	২৪	৮	২	
৫ম	২১	বাংলা	আছমা বেগম	২৫	৪	-	
		ইংরেজি	শুক্লা রানী বিশ্বাস	১৩	১৬	-	

শুক্লা রানী বিশ্বাস ২০২২
প্রধান শিক্ষক
রাধাকান্তপুর সরকারি প্রাথমিক বিদ্যালয়
সদর, মৌলভীবাজার।

ফাজিল পুর সরকারি প্রাথমিক বিদ্যালয়

ডাক ঃ করিমনগর, ক্লাস্টার ঃ আকবরপুর, উপজেলা ও জেলা ঃ মৌলভীবাজার।

One Day One word কর্মসূচির বাস্তবায়ন অগ্রগতির প্রতিবেদন

মাসের নাম ঃ অক্টোবর

শ্রেণি	মোট শিক্ষার্থী	বিষয়	দায়িত্বপ্রাপ্ত শিক্ষকের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) সংখ্যা	একবারেই পারে না (সংখ্যা)	মন্তব্য
১ম	২৬	বাংলা	রুমানা আক্তার রুমা	১৫	০৭	০৪	
		ইংরেজি	উন্নতি সুবিধির	১৬	১১	০২	
২য়	২৬	বাংলা	বাসন্তী ভট্টাচার্য্য	১৪	০৮	০৯	
		ইংরেজি	রুমানা আক্তার রুমা	১৪	০৭	০২	
৩য়	২৬	বাংলা	রুমানা আক্তার রুমা	১৫	০৫	০২	
		ইংরেজি	নূরজাহান বেগম	১৬	০৬	০১	
৪র্থ	২৮	বাংলা	নূরজ্যহান বেগম	১৭	০৯	০২	
		ইংরেজি	উন্নতি সুবিধির	১৬	১০	০২	
৫ম	২১	বাংলা	নূরজাহান বেগম	১৯	০২	–	
		ইংরেজি	রুমানা আক্তার রুমা	১৮	০৩	–	

প্রধান শিক্ষক
ফাজিলপুর সরকারী প্রাথমিক বিদ্যালয়

বাড়াভীম সরকারি প্রাথমিক বিদ্যালয়

ডাক ঃ করিমনগর, ক্লাস্টার ঃ আকবরপুর, উপজেলা ও জেলা ঃ মৌলভীবাজার।

One Day One word কর্মসূচির বাস্তবায়ন অগ্রগতির প্রতিবেদন

মাসের নাম ঃ অক্টোবর

শ্রেণি	মোট শিক্ষার্থী	বিষয়	দায়িত্বপ্রাপ্ত শিক্ষকের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) সংখ্যা	একবারেই পারে না (সংখ্যা)	মন্তব্য
১ম	২৭	বাংলা	সুশ্রিতা পাল	১৭	০৮	০২	
		ইংরেজি	সুচেতা রানী ঘোষ	১৫	১০	০২	
২য়	২১	বাংলা	বিকাশ কান্তি পাল	১২	০৪	০৫	
		ইংরেজি	বিকাশ কান্তি পাল	১২	০৪	০৫	
৩য়	২৪	বাংলা	শৈলেন্দ্র কান্তি বিশ্বাস	১২	০৮	০৪	
		ইংরেজি	ঝুমা রানী দাশ	০৬	১৪	০৪	
৪র্থ	১৮	বাংলা	ঝুমা রানী দাশ	০৯	০৪	০৫	
		ইংরেজি	সুশ্রিতা পাল	০৮	০৬	০৪	
৫ম	২১	বাংলা	সুচেতা রানী ঘোষ	১৭	০৪	—	
		ইংরেজি	শৈলেন্দ্র কান্তি বিশ্বাস	১১	১০	—	

সুচেতা
সুচেতা রানী ঘোষ
প্রধান শিক্ষক (চলতি দায়িত্ব)
বাড়াভীম সরকারি প্রাথমিক বিদ্যালয়
সদর, মৌলভীবাজার।

ইংরেজি

৩য় শ্রেণি				
শ্রেণি শিক্ষকের নাম : তাসলিমা - তাসলিমা				
বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
	৫	৭	৩	

ইংরেজি

৪র্থ শ্রেণি				
শ্রেণি শিক্ষকের নাম :				
বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
	৮	১১	2	

ইংরেজি.

৫ম শ্রেণি				
শ্রেণি শিক্ষকের নাম :				
বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
	১০	৮	2	

৩/১২/১৯

বাংলা

৩য় শ্রেণি - বাংলা

শ্রেণি শিক্ষকের নাম : [illegible]

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
	৫	৮	২	

বাংলা

৪র্থ শ্রেণি

শ্রেণি শিক্ষকের নাম : [illegible]

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
	৪	৮	৪	
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৫ম শ্রেণি

শ্রেণি শিক্ষকের নাম : [illegible]

বিদ্যালয়ের নাম	সাবলীলভাবে পড়তে পারে (সংখ্যা)	সাবলীলভাবে পড়তে পারে না (দুর্বল) (সংখ্যা)	একেবারেই পারে না (সংখ্যা)	মন্তব্য
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Seminar Paper
on

A Study on the Nature of Labor Unrest in Ready Made Garments Sector of Bangladesh

Submitted to

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A Study on the Nature of Labor Unrest in Ready Made Garments Sector of Bangladesh

Abstract:

Labor unrest in Ready Made Garment (RMG) sector of Bangladesh has been identified as a serious problem. To discover the nature of unrest in the RMG, it is very much needed to have a study on this aspect. Given emphasis on this aspect, this study has tried to know the causes of labor unrest in garment factories. In the study, the Qualitative Approach has been tried to tackle research question. Data collection has been done from both primary and secondary sources. Primary source is face-to-face interview with randomly selected workers and managers from different RMG factories at Savar area and secondary sources are books, internet articles, newspaper, journals, different websites etc. The research has found out some major causes of labor unrest in garment factories and also suggested how to solve it. Compliance issue has been found more pertinent and significant issue to continue the progression of RMG sector.

Keywords: Bangladesh, RMG, Labor Unrest, Compliance factory, Garment, Worker

Introduction:

Background Bangladesh is the second country in the world when it comes to readymade garments (RMG) export. Bangladesh is known across the world by its RMG. It's like Hollywood which signifies global movie industry, Nepal symbolizes for the Himalayas and Egypt connotes the pyramids (RMG Bangladesh 2018). The readymade garments industry is the backbone of our economy. We take pride for this sector which has been fetching billions of dollars as export earnings and creating jobs for millions in Bangladesh. The "Made in Bangladesh" tag has brought glory for Bangladesh. Once upon a time Bangladesh was termed as a "bottomless basket" (RMG Bangladesh 2018) which has now become a "basket full of wonders." The country is now having more than 8% annual average GDP growth rate and has brought about notable changes in human and social development. It is now a matter of big interest to people that how Bangladesh continues to grow like this. Now we envisage that Bangladesh will achieve middle-income country status by 2021. We strongly believe that our dream will come true and the RMG industry will play a crucial role on this aspect. At present RMG is the biggest earner of foreign currency. With more than five thousand individual factories and almost 4.4 million workforces of which 80 percent are women (BGMEA Trade Information), the RMG sector of Bangladesh seems to be heading towards the right direction.

Despite this notable performance, the RMG industry has many severe problems especially in terms of labor rights. There is a growing concern for labor rights issues which are frequently violated in Bangladesh. Various researches suggest that labor rights have not yet been established in the RMG sector. Labor rights work as the safeguards against any kind of discriminatory labor practices. Labor unrest in the RMG sector has been a matter of great concern. The unrest usually takes shape of violence and vandalism. The agitated workers come down to the street and go storming on vehicles and garment factories. The attacked factories are declared closed; labor leaders are arrested, many workers lose their jobs or suffer from uncertainty. Losing interest in uncertainty and the international buyers cancel their orders and divert to another market. (Elahi et al. 2019) After the occurrence of two large industrial catastrophes, namely, the Tazreen Fashion fire in 2012 and the Rana Plaza disaster in 2013, the ensuring compliance and inspection have become a prerequisite for exporting

RMG products from Bangladesh (Shadat et al. 2017). It is now established fact non-compliance would have a major negative impact on exports. There are several incidents of order cancellations due to non-compliance. It is of paramount importance to address compliance related issues such as improving workplace safety for all, improving health facilities, regularity in payments for those in the RMG industry. The competitiveness of the industry now very much depends on ensuring compliance from the short to medium term perspective. (Shadat et al. 2017) Compliance issue has become more pertinent and significant issue to continue the progression of RMG sector where the labor unrest affair seems to be controlled in great extent.

Problem Statement:

Recently, labor unrest in garment sector has been identified as a serious problem. RMG sector has been a flourishing sector after starting the modest journey at the end of 1970s. The role of the RMG sector in our economy is the major share of our foreign earnings. But, unfortunately, it is infected with lot of problems. Labor unrest is a serious problem. To unearth the nature of labor unrest in garment sector of Bangladesh, it is very much required to have a study on this aspect.

Research Questions:

It is mentionable that there are less research contributions in RMG sector for identifying the nature of labor unrest in Bangladesh. This study will try to minimize this knowledge gap. Proper identification of the causes for which this labor unrest is happening time and again in our country needs to be emphasized a lot. Because, it will help to bring out the solutions to this problem. Given emphasis on this aspect, the following research question is found relevant to this study:

a. What are the causes of labor unrest in Garment factories?

Rationale of the Study:

Bangladesh is well known around the globe for its stunning success in readymade garment industry. It has created employment opportunity for millions, alleviated poverty, attracted foreign direct investment, accelerated industrialization and created a positive reflection of Bangladesh abroad. But these achievements will be shattered due to labor unrest in this sector. If the causes of unrest are not addressed immediately, Bangladesh will have to count a heavy loss and the affected factories will be declared closed. Production will be hampered. The foreign investors will also close their business here. The foreign buyers will cancel orders and they will divert to other countries. Government will lose huge revenue. Many workers will lose their jobs. After all, it will create an unfavorable impact on the socio-economic state of the country. This study aims to know the causes of labor unrest in the RMG sector of Bangladesh.

Literature Review

Labor unrest in ready-made garment industries in Bangladesh has become very common happenings in recent years. This poses a serious threat to the advancement of this sector due to poor working conditions and other related issues between management and workers. But, what is labor unrest? How it is related to working conditions? Labor unrest is an organizing effort which is undertaken by labor unions especially where labor disputes become violent and obstruct the normal process of business. Basically, labor unrest is occurred when the labor force is depressed with not fulfilling their basic needs from the authority. In this aspect few researches were conducted to know the causes of labor unrest in RMG sector which are mentioned below:

The experimental evidence implies that labor law of the country has not been put into practice appropriately in the RMG industry. Proper and satisfactory implementation of labor law can eradicate the disputes and stop the commotions in the industry. An attempt was made to find out the relation between implementation of Bangladesh Labor Act 2006 and labor unrest. Seven major factors were considered which were closely related to labor unrest. The study revealed that employees' wages and payment was the most significantly correlated factor to labor unrest (Kamal et al. 2010).

Another study gave an account of and the reason for the causes of labor unrest in the RMG industry of Bangladesh. The objective of the study was to find out the causes and consequences of labor unrest. The responses of the respondents revealed that long working hour, low wage, irregularities in payment, negligence towards women workers during pregnancy period, lack of congenial working environment, deprivation of residential or transportation facilities, devoid of life insurance, sudden layoff from job, sexual harassment especially towards the women workers and political instability are the major causes of labor unrest. These factors were responsible for labor unrest in garment industry of Bangladesh (Ahmed et al.2013). Another study concluded that if all key players including the workers association, the owners/managers and the Government associated with this industry considered the factors identified in making their policy, the situation might be changed and improved (Choudhury et al. 2017).

Another study explored the reasons for recent unrest in the garment sector. Since managers were mainly responsible for applying human resource practices, the study gave special attention to their views on recent attitude changes of workers. Results showed that common understanding among the workers and managers was absent in the RMG sector. The study also mentioned that high-work load, poor behavior of line managers, low skills and low wage rates were the notable reasons for high job turnover and social unrest. Poor relationship between workers and supervisors was the main source of conflict. The study found that there was rising demand for work life balance among the workers of RMG sector (Hossan et al. 2012).

Another study decisively assessed the cost-benefit feasibility of two interventions, namely better compliance and establishment of separate garments zone. The results signify that both of these interventions would be highly useful for the sector and country. (Shadat et al. 2017)

Methodology:

In this study, we have used the Qualitative Approach to tackle the research question. Data collection has been done from both primary and secondary sources. Primary source is face-to-face interview with randomly selected workers and managers from different RMG factories at

Savar area and secondary sources are books, internet articles, newspaper, journals, different websites etc. In this study 30 workers and 5 managers were interviewed. The interviewees were asked questions about the origin of labor unrest and which generated the interest to share their opinions. In the interviews they shared their problems and experiences related to their work. One of the main reasons for carrying out a qualitative study is investigative and the researcher wants to listen to participants and build a clear picture based on their experiences and perceptions.

Data Analysis

For the last few years, demonstration among the RMG workers flared up in many factories in Bangladesh. Many factories were damaged by the unruly workers. Conflicts between workers and management are gradually increasing. Growing incidents of violence continue to hit the Bangladeshi apparel sector (Bhuiyan 2013). There are many examples of workers being entangled in conflicts; strikes are being called by them in order to meet their demands. Owners face losses and the economy of the country slows down. Foreign buyers think twice before placing the order and add new conditions due to those kinds of strikes. This causes the industry to lose the core competency. The reasons behind those unrests are more than one. There is a long history of grievance of the workers. First one is the long-standing grievance of the workers. The growth of this industry is based on hard works done by the workers. The low cost of labor is the most key competency of this industry. But in reality they are the ones who are deprived of the minimum level of facilities. The growth of RMG sector much depends on hard work of the labor force. Let alone amenities they often don't get their bonuses and salaries and also overtimes. Keeping the significance of the ready-made garment industry in the economy of Bangladesh in mind, this study mainly identified the causes for the continuous labor unrest in Bangladesh (Choudhury et al. 2010).

This paper has tried to project the causes for which labor unrest occur in the RMG sector. Through interview the researcher collected the information from the workers and managers of different garment factories. Out of 30 workers, 25 were female and 5 were male workers. The researcher also interviewed 4 managers and 1 owner to know the situation from the management view point. The Questionnaire for interview is attached as Appendix-A. The workers were asked

about how many hours they work for the factory daily. Most of the workers answered that 10-11 hours on average they work for the factory. In between they get 1 hour break for lunch. They get one day as weekend if it is off peak season or no work remaining. In addition to 8 hours work, the left over part is to be treated as overtime. If they work on weekend, that will be treated as overtime. Another question was asked whether they work for overtime or not. Mostly answered that every day they work 2-3 hours for overtime on average. Some of the workers expressed that they want to work on Friday also as this day will be treated as overtime work which help them to have more money at the end of the month. Some said if it continues on every Friday, then it becomes fatigue for them which most workers don't like. Normally when there is pressure for delivery of goods in large quantity that time management insists to have more working hours to comply with the agreement between buyer and factory. The workers were asked about whether the payment of their salary, bonus and overtime is done on time or not. Many workers showed their dissatisfaction on this issue. Usually they get their monthly salary on 7/8 th of the next month. Management tries to provide the bonus on time before the celebration of the festival. Normally they get the overtime payment with the salary. 50% of the basic they get as bonus on Eid-ul-Fitr and 50% they get on Eid-ul-Azha. It is to be mentioned here that there was labor unrest in last January 2019 in Dhaka and Savar area for anomalies in new wage structure. In new pay structure the monthly wage in the seventh grade has been increased to Tk 8,000 from Tk 5,300 as per the directives of government last year. But, the salary of other grades has not increased at the same rate. The salary increase for the entry-level workers was more than that of their senior operators, who have been working for more than seven to eight years. The new wage has been effective from December 2018. Major disparity in the salary hike was noticed in the third and fourth grades as their salaries were not raised like that of entry-level workers. In most of the grades, other than the seventh, only Tk 500 was raised in the new salary structure, whereas an entry-level worker's salary had increased by Tk 2,700 at one go (The Daily Star, January 08, 2019). After eight days of labour unrest, on 14 January 2019 the government announced a revised salary structure with a slight increase in both basic and gross wages in six of the seven grades. The gross hike ranges from a token Tk. 15 to a modest Tk. 747. In the new pay scale, the annual increment has been fixed at 5 percent. Workers, protesting since January 6, had been demanding pay raise in three grades in particular -- grade 3, 4 and 5. (The Daily Star, January 14, 2019).The new revised pay structure is given below:

Table - 1

REVISED INCREASE IN WAGE (IN TAKA)

GRADE	BASIC WAGE 2018 GAZETTE	REVISED BASIC WAGE	RISE IN BASIC WAGE	GROSS WAGE 2018	REVISED GROSS WAGE	RISE IN GROSS WAGE
7	4,100	4,100	**No rise**	8,000	8,000	**No rise**
6	4,370	4,380	**10**	8,405	8,420	**15**
5	4,670	4,683	**13**	8,855	8,875	**20**
4	4,930	4,998	**68**	9,245	9,347	**102**
3	5,160	5,330	**170**	9,590	9,845	**255**
2	8,520	9,044	**524**	14,630	15,416	**786**
1	10,440	10,938	**498**	17,510	18,257	**747**

Source: The Daily Star, 14 January 2019

If we look at the table below, then we may compare the present wage structure with the previous one in 2013 which was really painful for the workers. In most cases wage was the main issue of labor unrest in garment sector of Bangladesh.

Table - 2

WAGE COMPARISON (2013, 2018, REVISED) in Taka

GRADE	BASIC WAGE 2013	5% RISE IN 5 YRS	BASIC WAGE 2018 GAZETTE	REVISED BASIC WAGE	HOUSE RENT (PROPOSED) 50%	MEDICAL ALLOWANCE	TRANSPORT ALLOWANCE	FOOD ALLOWANCE	GROSS WAGE 2013	GROSS WAGE 2018	REVISED GROSS WAGE
7	3,000	3,829	4,100	4,100	2,050	600	350	900	5,300	8,000	8,000
6	3,270	4,173	4,370	4,380	2,190	600	350	900	5,678	8,405	8,420
5	3,530	4,505	4,670	4,683	2,342	600	350	900	6,042	8,855	8,875
4	3,800	4,850	4,930	4,998	2,499	600	350	900	6,420	9,245	9,347
3	4,075	5,201	5,160	5,330	2,665	600	350	900	6,805	9,590	9,845
2	7,000	8,934	8,520	9,044	4,522	600	350	900	10,900	14,630	15,416
1	8,500	10,848	10,440	10,938	5,469	600	350	900	13,000	17,510	18,257

Source: The Daily Star, 14 January 2019

It is learnt from newspaper that after declaration of new pay structure the workers who are absent for long time in the factory are losing their jobs. Factories are taking new workers in their places and tasked with double production. Most of the factories have now stopped to enroll new workers which ultimately aggravating the unemployment problem in this sector. (RMG Bangladesh, September 26, 2019).

During research a question was asked on working environment of the factory. How do the Line Supervisors behave with them? Do they verbally abuse in case of any little fault with them or not? Most of them replied that some supervisors behave with them very harsh and rude.

On many occasions the Line Supervisor shouts to the workers. Usually one Line Supervisor is looking after 20 workers on average. Sometimes he is assisted by Line Quality Assurance Staff if the number of machine is more than 20. The workers said that the situation has improved a lot. Now, the supervisors are much better than ever before. Exceptions are also there but the number is very meager. The workers were asked about whether they get any medical allowances for sickness or not. They replied that they get medical allowance but it is very less. Actually in the new wage which has been effective from 1st Dec 2018 is Tk. 8,000/- for a new worker which is broken down like this Tk 4,100 is basic wage, Tk 2,050 house rent, Tk 600 medical allowance, Tk 350 conveyance allowance and Tk 900 food expenditure. So, with overtime payment a new worker usually get Tk. 11,000/- per month on average to run his or her family. Though, it is sometime very difficult to meet up the expenditures due to inflation and high prices of necessary commodities in their day to day life. The workers also have insurance policies. The women workers were asked if any woman worker becomes pregnant, does she get any leave for pregnancy period. The women worker replied that usually they don't plan to have baby during the job. But after getting married and becoming solvent financially, a few number of them plan to have baby. In such cases they are to get maternity leave for four months after declaration by the individual woman worker to the management authority. It is always discouraging factor from the management towards women workers who are planning to have baby. It is to be mentioned here that in most cases it is found the pregnant women worker doesn't 'return to her job. Another question was asked about whether he or she was sacked from the previous job or not? What are the reasons responsible for leaving the jobs? Most of the workers answered that they are working for the present factory for more than 3-4 years. Only 4 workers replied that they left the previous jobs due to misbehavior of the line supervisors. The women workers were asked about whether they were sexually harassed by any co-worker or by any man from the supervisory level. Most of them answered negative but they said that some of them are having affairs with their male workers. From the interview it is learnt that the workers are happy with hygienic condition of the factory and they are happy with the sanitation facilities available in the factory. It was asked during research that do they have any comment on safety issues of their factories. Most of the respondents replied that the situation has improved a lot, especially for the last 2-3 years. Sometimes training and fire drills are conducted in the factory to practice how to evacuate from the building, how to use the fire extinguishing appliances at the workplace, how to give the first

aid treatment to the fellow colleagues during emergency. In the same way the managers were also asked about how they are ensuring safety measures for the workers in case of any fire hazard or earthquake. The managers mostly replied that the rules mentioned in Labor Act 2006 (Section 61 to 78) are strictly maintained to ensure the safety for workers in the factory. They were asked about how they ensure the proper adherence to the rules (Section 51-59) of Bangladesh Labor Act 2006 in terms of Health and Hygiene (Bangladesh Labor Act 2006). The managers answered very positively for ensuring the clauses related to health and hygiene. Presently the situation improved a lot. They are now having a doctor in every industry. Some of the factories trying to fulfill the requirement of buyers for establishing Day Care Centre for the children of workers and also establishing 6 Bed Hospital. Hopefully in near future those will also be materialized. But one thing they confessed that still the factory management could not provide the pad to the women worker who are having ministration issue in every month. That needs to be addressed soon with the support of the factory to inculcate the personal hygiene practices of poor women worker. It is to be mentioned here that the law enforcement agencies are responsible to protect the citizen but sometimes they play reverse role which angers the labors. It is seen that the deployed police beating workers brutally and behave inhumanly which causes injuries on both sides. Sometimes it is found that the law enforcing agencies playing a biased role against the workers. It is hardly found that the police has arrested the owners who are rich and influential.

Now-a-days ensuring necessary compliance measures have been a burning issue for RMG sector. The first generation compliance measures include the issue to address the basic labor rights while the second generation compliance measures consist of the Occupational Health & Safety (OHS). The current and third generation compliance measures bring all issues, including the factory structural safety, OHS and ensuring labor rights. The application of compliance in the RMG sector can be ensured by maintaining some strict standards, from factory building to operations and maintenance. This includes factory structures, working condition, electrical and fire safety, various rights of workers, workers' health and environmental health (Shadat et, al 2017)

After the collapse of Rana Plaza factory on 24 April 2013 where 1,133 people were killed and thousands were injured and many more fire incidents occurred in Bangladesh, the Accord was created to enable a working environment in which no worker needs to fear fires, building collapses, or other accidents that could be prevented with reasonable health and safety measures. The Accord is an independent, legally binding agreement between brands and trade unions to work towards a safe and healthy garment and textile industry in Bangladesh. The Accord covers factories producing Ready-Made Garments (RMG), textiles and fabric & knit accessories. All factories producing for Accord signatory companies undergo independent regular fire, electrical and structural safety inspections. Workers and their representatives have a right to refuse unsafe work condition and can raise complaints with the Accord Safety and Health Complaints Mechanism. The Accord monitors remediation progress and facilitates brand support for remediation. Updated Corrective Action Plans (CAPs) are published online. This platform was established to streamline Bangladesh's apparel industry. Now it has turned into "a nightmare from a blessing," putting "excessive" pressure on factories to spend billions of dollars on compliance issues even as apparel prices fall. Many factory owners alleged that the Accord is putting too much pressure on them, sometimes for "negligible" issues. Accord has now become a name of mental torture for many factory owners. It has been putting pressure on owners constantly for further remediation, sometimes when the work is near-complete. Factory owners have been spending money without asking any question as they have to do business with companies who are Accord signatories. After the Rana Plaza disaster, some 1,200 small and medium factories were shut for failing to either achieve factory remediation or meet strong compliance requirements of buyers, according to the BGMEA. For example, in 2012-13, there were 5,876 active garment factories affiliated with the BGMEA. In just one year, it came down to 4,222. It rose to 4,560 in 2017-18 as owners of some big business groups reinvested and opened new complaint factories. (The Daily Star, 28 November 2018)

Another one is Alliance which started its operation in 2013 and completed their 5 year term in Bangladesh on 31 December 2018 for workers safety in RMG sector. Alliance's mission was to create a safer environment for the millions of workers in Bangladesh's ready-made garment industry.

Recently it was published in newspaper that fifty-nine garment factories had been shut and 25,900 workers lost jobs in the last seven months. Most of them were small and medium

enterprises and they failed to maintain compliance strictly and pay their workers under the new wage structure (The Daily Star, 27 October 2019).

So it is now evident from the above discussion that non-compliance is the main reason for shutting down the factories instead of labor unrest.

Findings

In this section we have tried to focus on the nature of labor unrest in garments sector of Bangladesh. The causes which are responsible for the occurrence of labor unrest from the above discussion are summarized here. It is worth mentioning that the situation has improved a lot for last few years and owners of the factories are spending billions of dollars to keep themselves in the list of compliance industries imposed by the buyers which is a prior condition to buy the products from that factory. So, the reasons or causes which were responsible for labor unrest few years back have less relevance presently. Especially after the declaration of new pay structure in last year and subsequently reviewing the pay as a result of labor unrest at the beginning of this year 2019 has a great impact on the stoppage of labor unrest. However, after consulting some related literatures on labor unrest in RMG sector in near past and interviewing some garment workers at Savar area who shared their heart burnings that are responsible for fuelling up the labor unrest are enumerated below:

a. Lower wages.
b. Long working hours.
c. Delay in payment of monthly salary.
d. Termination of workers due to long absence.
e. Harsh behavior by the Line Supervisors.
f. Negligence towards women workers during pregnancy period. Pregnancy is discouraged by the Factory Management.
g. Coercive role of law enforcing agencies.
h. Lack of congenial working environment.
i. Deprivation of residential or transportation facilities.
j. Devoid of life insurance.

k. Sudden layoff from job.
l. Sexual harassment especially towards the women workers.
m. Political instability.
n. Poor relationship exists between workers and supervisors.
o. Adherence to rumor about unfair management practices and influences of peer group among the workers.

Many of the causes stated above are now resolved. The Govt, BGMEA (Bangladesh Garments Manufactures and Exporters Association) and BKMEA (Bangladesh Knitwear Manufactures and Exporters Association) always need to be vigilant to address any issue related to labor dispute which create grievance amongst the workers. The importance of this sector is great to our national economy. We must utilize all the opportunities as RMG has opened up our economy. No way any labor unrest should be escalated or flare up in the country.

Recommendations

All problems of RMG should be resolved amicably without harming the growth of this sector. It is the main source of foreign exchange earnings in Bangladesh and a huge number of people are employed in this sector. So, no way the troubles in RMG should be ignored. We propose the following measures may be adopted to solve the labor unrest in garment sector:

a. The pay structure of RMG workers may be reviewed after a certain interval like 2/3 years to adjust the expenditures due to inflation and price hike of necessary commodities.
b. Factory management needs to be sensible to the issue of workers' fatigue. Long working hours in other way will reduce the workers efficiency level.
c. Management should always try to pay the salary by 5th of next month, so that workers may remain free from the mental anxiety of having no money in hand.
d. Factory management should value the experience of old workers. It is the moral obligation on management side to consider the issue of contribution of that worker who is going to be fired for silly reasons. Of course the violation of discipline and regulations of the factory must be dealt strictly.

e. Management should be more vigilant to the dealings of line supervisors with the workers. Supervisors need to be trained on how to motivate them and how convincing way they can get the things done by the workers.

f. Every woman loves to become mother. Management should have respect to motherhood. Maternity leave should be given without raising any question on it.

g. On different occasions it was found that our law enforcing agencies specially Industrial Police were beating workers brutally and behave inhumanly. This sort of role of our police needs to be changed as soon as possible. The police needs to be more passionate and considerate to the causes of labor unrest.

h. From the humanitarian view it is pertinent to say that Management has to think to arrange accommodation and transportation facilities for the poor workers. It will other way give the dividend to increase the productivity of the workers.

i. No worker should be terminated from the service without circulating any prior notice to him or her.

j. Sexual harassment by the male colleagues or by immediate supervisors needs to be stopped immediately after occurrence of such incidents. Female workers sometimes become traumatized from this sort of incidents.

k. Though presently the political situation is calm and quiet, but political instability was one of the major causes of labor unrest in Bangladesh few days ago even.

l. The relationship between workers and management needs to be improved immediately. On this aspect the Management should take the lead and initiate the process of developing relationship amongst them.

m. The workers should be cautioned not to believe any hearsay or rumor at the working place. They should be provided with true information by the factory management.

In addition to above suggestions it is also recommended that more researches need to be conducted to explore the reasons why good number of factories failed to be compliance factory recently.

Conclusion

The RMG is the backbone of our economy. The "Made in Bangladesh" tag has brought fame for Bangladesh. The RMG industry has many severe problems especially in terms of labor rights. Labor unrest in the garments is now a matter of great concern. To discover the nature of labor unrest in the RMG sector of Bangladesh, it was felt necessary to have a study on this aspect. Accordingly, the research was carried out and found out the causes of labor unrest in garment factories. Some suggestions were placed in this study to solve this unrest problem in RMG sector. It is to be noted here that the situation has improved a lot for last few years and owners of the factories are spending billions of dollars to keep themselves in the list of compliance industries imposed by the buyers which is a prior condition to buy the products from that factory. So, the main reasons or causes which were responsible for labor unrest few years back have less relevance presently. Now-a-days ensuring necessary compliance measures have been a burning issue for RMG sector. After the collapse of Rana Plaza factory, the Accord, Alliance etc were created to enable a working environment in the factories in which no worker needs to fear fires, building collapses or other accidents. Recently it was published in newspaper that fifty-nine garment factories had been shut and 25,900 workers lost their jobs in the last seven months. Most of them were small and medium enterprises and they failed to maintain compliance strictly and pay their workers under the new wage structure. So it is now evident that non-compliance is the main reason for shutting down the factories instead of labor unrest. On this aspect very less number of researches were conducted. We believe more researches should be carried out to find out the reasons why the factories are failing to become compliance factory.

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Appendix - A

CHECK LIST OF INTERVIEW QUESTIONS

The following questions were asked to the workers of the factories:

a. How many hours do you work for the factory regularly?

b. Do you work for overtime? If yes, then how many hours more do you work for overtime?

c. Do you get your salary, bonus and overtime payment in time?

d. How is the working environment in your factory? How do the Line Supervisors behave with you? Do they verbally abuse in case of any little fault with you?

e. Do you get any medical allowance for sickness?

f. If any woman worker becomes pregnant, does she get any leave for pregnancy period?

g. Have you been anytime sacked from the job? If yes, then what was the reason?

h. As a woman worker were you sexually harassed by any co-worker or any man from the supervisory level?

i. How is the hygienic condition of your factory? Are you happy with sanitation facility?

j. Do you have any comment on the safety issues of your factory in case of any emergency?

The following questions were asked to the Owners/Managers of the factories:

a. How do you ensure the proper adherence to the rules (Section 51-59) of Bangladesh Labor Act 2006 in terms of Health and Hygiene issue?

b. What are the safety measures taken in your factory in case of any fire hazard or earthquake?

c. Do the workers get weekly holiday?

d. When do the workers get their monthly salary?

e. How do you address the issue of sexual harassment of women workers in your factory?

f. Do you give the maternity leave to the women worker? If yes, then how many days you usually approve for them?

g. How do you solve the problem of misconduct by the line supervisor with the worker?

Seminar Paper on

Role of Bangladesh Energy Regulatory Commission in Achieving the Energy Related Sustainable Development Goals in Bangladesh

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Acronyms:

Acronyms	Elaboration
ACAD	Advanced Course on Administration and Development
BDT	Bangladeshi Taka
BERC	Bangladesh Energy Regulatory Commission
BPATC	Bangladesh Public Administration Training Centre
BPC	Bangladesh Petroleum Corporation
DoE	Department of Environment
EEBL	Excelarate Energy Bangladesh Limited
EMDF	Electricity Maintenance and Development Fund
ESF	Energy Security Fund
FGD	Focus Group Discussion
FSRU	Floating Storage and Regasification Unit
GDF	Gas Development Fund
GDP	Gross Domestic Product
GOB	Government of Bangladesh
KII	Key Informant Interview
LNG	Liquefied Natural Gas
LPG	Liquefied Petroleum Gas
MDGs	Millennium Development Goals
mmcfd	Million Cubic feet Per Day
MW	Mega Watt
PDB	Power Development Board
RE	Renewable Energy
SDGs	Sustainable Development Goals
SREDA	Sustainable and Renewable Energy Authority
UN	United Nations
USD	United States Dollar

Abstract:

Achieving the Sustainable Development Goals- SDGs is the global commitment of all the nations of the planet earth. Bangladesh's consecutive Five Year Plans are focused on to achieve the targets of SDGs within 2030. Aligning the legitimate functions of organizations with the goals of SDGs is very crucial. This piece of qualitative research work was undertaken to assess and evaluate the relevance of the legitimate functions of Bangladesh Energy Regulatory Commission with the energy related commitments of SDGs in Bangladesh and to make some recommendations identifying most impacting challenges. For data collection, official and academic literature survey, a focus group discussion (FGD) actively participated by eight relevant officials and three unstructured interviews with key informants (KII-1,2&3) of the BERC were conducted. The result showed a consistent relevance between the 13 legitimate functions and the energy related goals of SDGs. Out of these 13 functions BERC is currently engaged with only 3 functions – Licensing, tariff determination and Dispute settlement. Tariff determination is found to have profound impact on SDG 7.Key challenges to implement other functions are lack of manpower with adequate skill, lack of regulations, lack of coordination and synergy with the public sector stakeholders, lack of Enforcement ensuring compliance with Commission's orders and terms and conditions, partial regulatory scope along the energy operators and across the energy components and above all lack of comprehensive energy data. A holistic approach is recommended to address these challenges. A kind of synergy among public sector stakeholders is to be established.

Key Words: Regulatory functions, Access to Energy, Renewable Energy, Energy Efficiency, Sustainable Development Goals

1. Introduction:

'Transforming Our World: the 2030 Agenda for Sustainable Development' was adopted at the UN Summit for Sustainable Development on 25 September 2015. The agenda includes a set of 17 Sustainable Development Goals (SDGs) to end poverty, fight inequality and injustice, and tackle climate change by 2030. With Goal 7, energy is finally being recognized as a key enabler for development. Universal access to energy, a higher share of renewable energy and massive improvements in energy efficiency are now part of the top global priorities for sustainable development in the years to come (Energypedia 2019).

But it is also equally clear that the lack of access to cost□effective and reliable energy sources, services, systems, and technologies impinges on socio□economic growth within and across communities and countries (Cherian 2015).

Our everyday lives depend on reliable and affordable energy services to function smoothly and to develop equitably. A well-established energy system supports all sectors: from businesses,

medicine and education to agriculture, infrastructure, communications and high-technology. Conversely, lack of access to energy supplies and transformation systems is a constraint to human and economic development (UN 2018).

The Sustainable Development Goals (SDGs) came into force on 1 January 2016. The world is making progress towards Goal 7 with encouraging signs that energy is becoming more sustainable and widely available. Access to electricity in poorer countries has begun to accelerate, energy efficiency continues to improve, and renewable energy is making impressive gains in the electricity sector (UN 2019).

Bangladesh is moving steadfastly towards ensuring access of 100 per cent households to electricity well ahead of the target time in 2025; it reached 85.3 per cent in 2017 (91% in 2018 December). The country lags behind in other energy indicators. The combined effect of slow increase in renewable energy and fast increase in non-renewable energy is very slow rise in the share of renewable energy in the total final energy consumption. Energy efficiency in the country appears to have been improving. The Government's ongoing efforts to ensure reliable energy supply to all households has been complemented by yet another effort to achieve SDG 7. Key challenges to implementation of the Action Plan will involve financing, pricing and subsidy, fuel mix, gas exploration and energy efficiency (GOB, 2018).

Bangladesh Energy regulatory Commission (BERC) is the country's apex regulatory body of the energy sector established through the BERC Act 2003 to create an atmosphere conducive to private investment in the generation of electricity, and transmission, transportation and marketing of gas resources and petroleum products, to ensure transparency in the management, operation and tariff determination in these sectors; to protect consumers' interest and to promote the creation of a competitive market (GOB, 2003).

There is no available systematic evaluative information about how BERC is contributing to the achievement of the Energy Goal of SDGs where 2030 has been identified as the development junction towards achieving the vision 2041, Development surprise 2071 and Delta Plan 2100 through the Dream trajectory of Bangladesh. So this piece of research work has been undertaken to achieve the following objectives.

1.1 Research Objectives:

a. To assess the relevance of the legitimate scope of the BERC's role with the issues of SDG 7
b. To evaluate the engagement of BERC to the SDG 7 functions so far;
c. To find out the challenges it is facing and make some recommendations to efficiently carry out legitimate regulatory functions contributing to the achievement of SDG7.

1.2 Justification of the Study:

The rationale of the proposed study is that the findings will be useful for the commission to evaluate the regulatory activities to fine-tune the commission's roles focusing upon the achievement of the energy goal of SDGs.

2. Literature Review:

The Asia-Pacific region comprises 58 economies, ranging from developed to least-developed, with a population of 4.5 billion, about 60 per cent of the world's total. Economies in the region produce approximately one third of the world's gross domestic product (GDP), consume half of the global energy supply, and include important oil and gas producers. As the region is leading the world in rising energy demand, and some of its countries have the largest deficits in energy access, the decisions and actions taken by Asia Pacific countries will have an enormous impact on progress towards achieving global sustainable energy objectives, including SDG 7. In 2016, Asia and the Pacific produced 54.8 per cent of global emissions from fuel combustion, nearly two thirds of which were from coal. Though facing many challenges, Asia-Pacific countries are demonstrating global leadership across the three main pillars of sustainable energy—access, efficiency and renewable—offering strong commitments and innovation in those areas (UN 2019).

Achieving universal access to electricity in the Asia-Pacifc region will require governments to maintain their commitments to sustain the current increase rates. The challenge of reaching the last mile puts a focus on of-grid solutions which require the relevant authorities to put in place adequate regulation. Clean cooking must be better integrated into energy policy frameworks, and greater investment is needed to support the development of options that meet consumer needs and overcome barriers, such as cost and cultural preferences. For renewable energy and energy efficiency, the private and public sectors remain the most important source of finance (UN 2019).

The theoretical framework of the study is based on regulatory role of the governments as seen in the literature review in achieving the energy goal of SDGs. For this, the targets and indicators of the SDG 7 has been placed against the regulatory functions of BERC to find the relevance and evaluate the activities, identify challenges and make some recommendations to best perform afterwards.

2.1 The Goal 7 of SDGs:

The Goal 7 of SDG emphasizes to ensure access to affordable, reliable, sustainable and modern energy for all and is having five targets with their corresponding Indicators (UN 2018). Target 7.1 has the pledge to ensure universal access to affordable, reliable and modern energy services by 2030 and Indicator 7.1.1 is about the proportion of population with access to electricity whereas Indicator 7.1.2 is about proportion of population with primary reliance on clean fuels

and technology. Target 7.2 has the pledge to increase substantially the share of renewable energy in the global energy mix by 2030 and Indicator 7.2.1 is about renewable energy share in the total final energy consumption. Target 7.3 has the pledge to double the global rate of improvement in energy efficiency and Indicator 7.3.1 is about energy intensity measured in terms of primary energy and GDP. Target 7.A tells to enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology. Indicator 7.A.1 under it is about international financial flows to developing countries in support of clean energy research and development and renewable energy production, including in hybrid systems. Target 7.B is about expanding infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, Small Island developing States, and land-locked developing countries, in accordance with their respective programmes of support by 2030. Indicator 7.B.1 tells about investments in energy efficiency as a percentage of GDP and the amount of foreign direct investment in financial transfer for infrastructure and technology to sustainable development services (UN 2018).

2.2 The Functions and Authority BERC:

Under Chapter 4 of the BERC Act, 2003, section 22 elaborates the functions which can be simplified as follows:

Subject to the provisions of this Act, functions of Commission shall be:-

(a) to determine efficiency and standard of the machinery and appliances of the institutions using energy and to ensure through energy audit the verification, monitoring, analysis of the energy and the economy use and enhancement of the efficiency of the use of energy;

(b) To ensure efficient use, quality services, determine tariff and safety enhancement of electricity generation and transmission, marketing, supply, storage and distribution of energy;

(c) To issue, cancel, amend and determine conditions of licenses, exemption of licenses and to determine the conditions to be followed by such exempted persons;

(d) to approve schemes on the basis of overall program of the licensee and to take decision in this regard taking into consideration the load forecast and financial status;

(e) To collect, review, maintain and publish statistics of energy;

(f) to frame codes and standards and make enforcement of those compulsory with a view to ensuring quality of service;

(g) To develop uniform methods of accounting for all licensees;

(h) To encourage to create a congenial atmosphere to promote competition amongst the licensees;

(i) To extend co-operation and advice to the Government, if necessary, regarding electricity generation, transmission, marketing, supply distribution and storage of energy;

(j) To resolve disputes between the licensees, and between licensees and consumers, and refer those to arbitration if considered necessary;

(k) To ensure appropriate remedy for consumer disputes, dishonest business practices or monopoly;

(l) To ensure control of environmental standard of energy under existing laws; and

(m) to perform any incidental functions if considered appropriate by the Commission for the fulfillment of the objectives of this Act for electricity generation and energy transmission, marketing, supply, storage, efficient use, quality of services, tariff fixation and safety improvement (GOB, 2003).

Complying with this section, several regulations have been promulgated and are in practice.

Based on these legal arrangements, relevance with SDG together with its targets and indicators especially with the 3 pillars of Energy Goal of SDG – Access to energy, Efficiency and Renewable have been deliberately worked out to pinpoint the legitimate scope of BERC in achieving the Energy goal of SDGs. Subsequently other aspects of research objectives have also been addressed upon.

3. Methods:

The study was a qualitative research and data was collected following qualitative data collection techniques. Both Secondary and primary data were collected. A review of official and academic literatures was conducted to identify and pinpoint the scope of BERC functions those were having relevance with the Energy goal of SDGs. The review included BERC Acts, Regulations, guidelines, orders, circulars, annual reports, relevant scholarly books journals etc. This review also provided data for evaluation of BERC activities in relation to the energy goal of SDGs. A focus group discussion was conducted the group was composed of 8 relevant officials of BERC those are directly involved with the functionalities of licensing, tariff processing, dispute settlement, consumers' affairs etc. Three unstructured Interviews were also conducted with three Key Informants (KII-1, 2, 3) holding leadership positions of BERC. The collected data were processed and analyzed employing procedure of qualitative data analysis (Kumar 2011).

4. Results:

Bangladesh Energy Regulatory Commission- BERC took its birth in 2003 as a quasi judiciary statutory body, much early than the universal adherence of human being to the global agenda of Sustainable Development Goals- SDGs as successor to the MDGs in 2015. But the current study found a consistent relevance of energy goal of SDGs (goal7) with the legitimate functions of BERC. Including a chairman having the status of a judge of the appellate division, a five member Commission with its executive staffs (76 personnel) is contributing to achieve the energy goal of SDGs in Bangladesh through its legitimate functions by rendering services ensuring justice, good governance, competition in the energy market, energy tariff determination and protecting the consumers' rights upholding the spirit of the preamble of BERC act 2003 (BERC 2018). These regulatory functions are now undergoing a paradigm shift from a kind of 'regulatory' to 'facilitating' to bring a positive impact across the energy operators and consumers as well as along the value chain of electricity generation, energy transmission, distribution, marketing, supply, transport and storage resulting access to affordable reliable modern energy ,the energy goal of SDGs (KII-1)

4.1 Access to Electricity and Energy:

Targets & Indicator-wise, achievement in access to electricity is substantial but access to modern energy, proportion of renewable in energy mix, energy efficiency are the crucial areas where BERC has scope to be more focused. New import of 1000 mmcfd LNG utilizing the Energy Security Fund created by BERC and adding this quantity to National gas grid has kept access to modern energy situation in a comfortable position in the context of declining supply of domestic natural gas (KII-1). Government's initiative to ensure 100% access to electricity has been in the process of success within the stipulated time in 2021. So electricity infrastructure will touch every household soon rendering opportunities to use this secondary energy to fulfill their primary energy needs such as cooking, electric transport etc in an efficient and economic way. This kind of forward linkages can be the potential area to have more attention. Another area of concern is the primary energy mix of electricity generation which is still import based, hence costlier and has risk of uncertainty (KII-2) (Fig- 1).

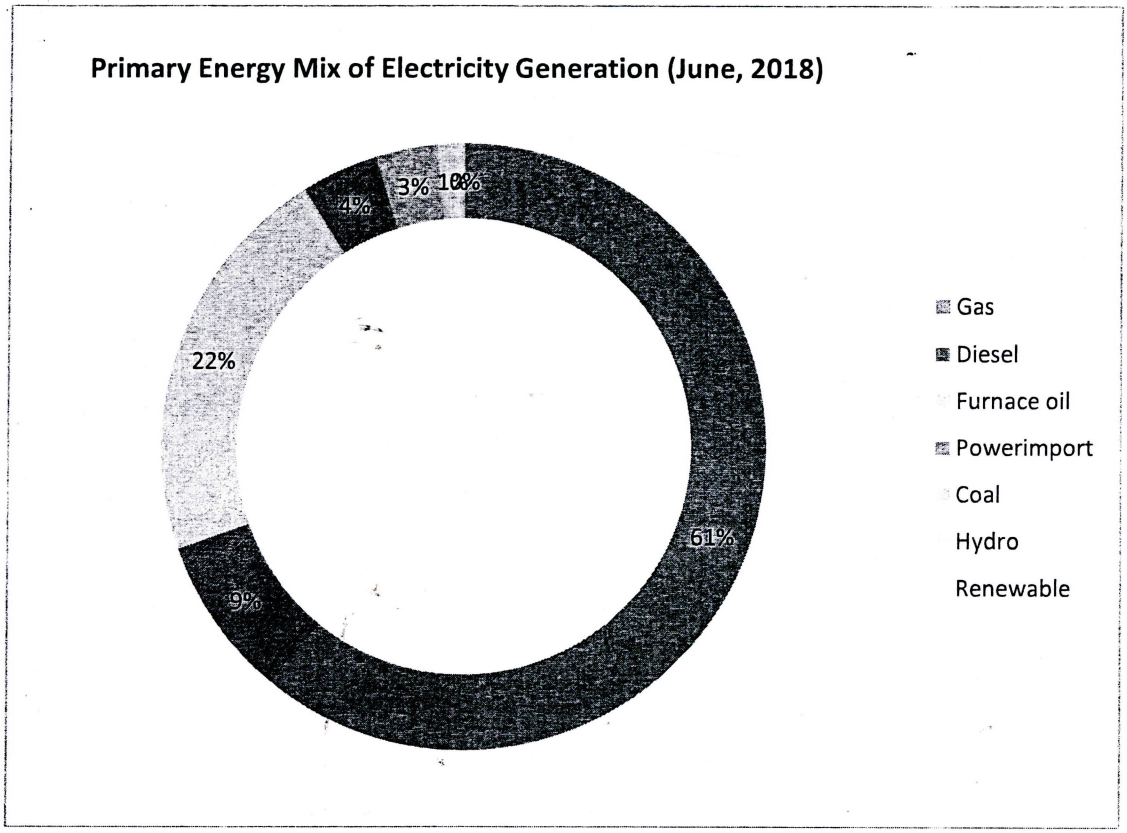


Figure 1: Primary Energy Mix of National Greed Connected Electricity in Bangladesh up to June, 2018 (BERC 2018).

Consumer category wise although the domestic connections are not encouraged to make natural gas available for other priority sectors such as fertilizer and industry complying to government's policy but domestic consumers have now many options to meet their energy demand. BERC issued licenses in favour of at least 33 LPG operators with an annual capacity of 20 lac Metric Ton (FGD- 28 Oct, 2019). LPG now is entering into the energy market as a reliable modern off-grid energy solution for even remote biomass based household destinations (KII-1).

4.2 Proportion of Renewable in Energy Mix:

For renewable, Bangladesh has very limited scope and data in this field is also not adequately available. We have target to ensure share of RE to be 10% in the energy mix by 2021, but the reality is that the figure now is below 2%(BERC 2018). Hydro has no prospect in Bangladesh and hydro electricity remains static at 230 MW (1.44% in energy mix); wind has some prospect but speed stability and cost-effectiveness are still to be further studied. Solar and Waste to Energy are the potential area for Bangladesh is opting for (KII-2) . For encouraging the private investors in Renewable BERC License Regulation 2006 (Amendment 2016) has provision to issue license waiver certificate for up to 5MW through regulation- 8 of BERC License Regulation 2006 (Amendment 2016). Draft version of Feed in Tariff Regulation for electricity generated by renewable for grid connection has been formulated (FGD on 28 October, 2019).

Electricity Maintenance and Development fund is also in place for renewable energy promotion (BERC 2018).

4.3Energy Efficiency:

The demand side energy efficiency is the subject to be looked after by SREDA and BERC has the responsibility to look into the aspects of supply- side energy efficiency. Efficiency is checked during evaluation phase of the application documents submitted by the energy operators for license and during inspection some aspects of energy efficiency is seen before licensing (FGD on 28 October, 2019). Co-generation is being encouraged by the commission and as a result some power plants have shown their success in combined cycle electricity generation where flue gas is redirected through steam turbine to produce electricity and hence increase energy efficiency. But yet BERC is to go long way to ensure energy efficiency (KII- 1). Bench marking and formulation of Codes and Standards, Energy Audit Regulations are yet to be in place for practice by the commission (KII-2 & 3).

4.4 Energy Technology and Energy Financing:

Innovative financing strategy adopted by the government has created a conducive environment in power sector where more than 10 billion USD was invested in the last decade. That is a kind of paradigm shift from a 'donor dependent' to 'investment dependent' innovative energy financing (KII-1). Private sector bidders have built up capacity to finance in technology intensive sophisticated energy sector. Recently two private sector companies established infrastructure of FSRU(Floating Storage and Regasification Unit) for LNG processing at Matarbari area having the capacity of 1000 mmcfd. Excelerate Energy Bangladesh Limited (EEBL) and Summit LNG Terminal Company started their LNG operation since 18 August, 2018 and 30 April, 2019 respectively (BERC Tariff Order No: 2019/02, Date: 30 June 2019). BERC created 3 Energy funds- EMDF (Electricity Maintenance and Development Fund), GDF (Gas Development Fund) and ESF (Energy Security Fund) are playing a vital role in sustainable energy security in Bangladesh. These revolving type of Energy funds with service charge are ever- increasing in size rendering energy sector a kind of comfort and immunity against unwanted eventualities (KII-1, FGD). In the Tariff Order 2019/2, Date: 30 June 2019, the annual size of GDF and ESF was declared to be 14782 and 28417 million taka respectively. In the year 2017 total money deposited in the EMDF is BDT 11626.7 million and cumulative deposit up to 30 June, 2018 is BDT 72564.9 million (BERC 2018).

4.5 Legitimate Functions of BERC and Analysis of Their Relevance with SDGs:

The study found a very consistent relevance prevailing between legitimate functions of BERC and energy goal of SDGs. BERC presently renders only 3 basic functions- Licensing, Tariff determination and Dispute Settlement. These functions indirectly or directly related to other responsibilities of BERC. Subsequent discussion is unfolded with the function- wise relevance,

activities, Challenges and recommendations those are found through the FGD and interview processes.

4.5.1 Energy efficiency and Energy Audit:

Energy efficiency enhancement and verification by energy auditing is number one legitimate responsibility of the commission. It is also in the energy target 7.3 of the SDGs where the global rate of energy efficiency is to be doubled by 2030. Indicator 7.3.1 is about energy intensity measured in terms of primary energy and GDP. Demand side energy auditing and supply side energy auditing are two specialized areas of responsibilities taken mutually by SREDA and BERC respectively. BERC checks efficiency during the evaluation of the application of the energy operators for license, physically during inspection and in the form of terms and condition of the licenses. Auditing is not still conducted with economy and safety aspects. For this Energy Audit Regulations, Bench marking and codes and standard of machineries, Enforcement etc are the necessary instruments to be made available. Capacity building and adequate manpower availability are also important to carry out this function efficiently (Table 1).

Table 1: Energy Efficiency and Energy Audit Function of BERC, Relevance with Energy Goal, Challenges and Recommendations

Legitimate Functions of BERC	Relevance with Energy targets of SDGs	Activities of BERC	Challenges	Recommendations to overcome
Determining efficiency and standard of the machinery and appliances; ensuring these through energy audit	Efficiency is ensured through use of standard machineries and appliances, monitoring, verification and energy auditing; Efficiency can be measured in terms of unit primary energy in terms of GDP complying with indicator 7.3.1.	Efficiency is checked during evaluation of the application; During inspection Discussion in commission meeting, During issuance of licenses or waiver certificates as terms and conditions. There is no Energy audit or economic consideration or analysis so far.	Benchmarking, Operators' reluctance to use costly efficient machine, Energy audit, Economy of use , Enforcement, SREDA in Demand side energy auditing.	Organizational Capacity building, Manpower, Benchmarking and Codes and standard, Energy audit covering both technical safety and economic aspects, Auditing regulations Economic analysis to have efficiency data as energy indicator 7.3.1.

4.5.2 Tariff, Quality Service and Safety:

Tariff determination is one of the core functions of BERC. Through this, energy price is kept justified and hence a competitive energy market results with efficient operators and hence access to energy is enhanced. Tariff determination, quality service, safety and efficient use all are considered through participatory tariff order issued by the commission. BERC determines bulk tariff , Transmission tariff, retail tariff for electricity. It also determines transmission tariff, distribution tariff and retail tariff for gas. Tariff determination for Petroleum oil is still to be brought under the purview of BERC. Three energy funds are created through tariff adjustment which is contributing across the energy goals of SDG and ensures sustainable energy security in Bangladesh. There are many challenges in tariff determination; these are subsidy adjustment, non compliance of tariff orders by the utilities etc. Synergetic functional relation between BERC ,the ministry and utilities is needed. Enforcement regulations and related energy codes and standard should be in place for appropriate tariff activities.

Table 2: Tariff, Quality Service and Safety Function of BERC, Relevance with Energy Goal, Challenges and Recommendations

Functions of BERC	Relevance with Energy targets of SDGs	Activities of BERC	Challenges	Recommendations to overcome
Ensuring efficient use, quality services, determining tariff and safety enhancement of electricity generation and transmission, marketing, supply, storage and distribution of energy	Access to electricity and energy Efficiency Appropriate tariff, quality service, safety and efficient use promote access to electricity and primary energy Gas. It also enhances energy efficiency.	Tariff order, Financial analysis, Price rationalization, Directives to utilities for prepaid meter, quality service , system loss reduction, safety etc; energy funds EMDF, GDF, ESF, Life line tariff, Categorization and customization of tariff, Tariff regulation in place, Subsidy adjustment.	Long term Subsidy strategy and adjustment in the tariff accordingly; Directives not complied, Enforcement to noncompliant utilities, Budget gap with subsidy, Single buyer market monopoly, Petroleum fuel not included in the tariff, Dual role in energy pricing, Demand side efficiency is seen by SREDA and supply side is by BERC.	Coordination and synergetic relations with the ministry and the public sector energy operators, Enforcement regulation, Uniform system of accounts, Introduction of safety code Grid code, Distribution code CNG station code CNG vehicle code LPG codes and standard, Petroleum fuel codes and standard etc.

4.5.3 Licensing:

Another core function of BERC is licensing which is the means to bring all the energy operators under the regulatory service of BERC. BERC issues licenses in favor of entities involved in electricity generation, energy transmission, transportation, storage, marketing and distribution. So in this way more operators join the energy market and a competitive market is created resulting more access of the consumer to the market, and more energy efficiency. For renewable, waiver provision upto 10 MW encourages renewable in the energy mix. A total of 4105 licenses and waiver certificates have been issued for energy operation in Bangladesh up to June, 2018 (BERC 2018). The important challenge is some of the energy components such as coal and many of the energy operators are not yet brought under licensing and hence under the regulatory control of BERC. In the definition of Energy in BERC Act 2003 electricity, Gas and petroleum products are included without mentioning the status of coal. Licensing function is a reactive sort of activity of the commission. Commission only considers licenses for those who apply for this and has nothing to do with the illegal energy operators. It is a kind of injustice for the legal operators and a hindrance for establishing a competitive energy market. So enforcement regulations are crucial to be formulated and implement it accordingly. In the way to digitalization of licensing activities E- licensing has been introduced for ease in doing business since October 2019.

Table 3: Licensing Function of BERC, Relevance with Energy Goal, Challenges and Recommendations

Functions of BERC	Relevance with Energy targets of SDGs	Activities of BERC	Challenges	Recommendations to overcome
Issuing, cancelling, amending and Determining conditions of licenses; exemption of licenses and determining the conditions to be followed by such exempted persons	Access to electricity and energy, Renewable and efficiency More operators in the market through licensing, more competition, quality enhancement, safe operations, terms and conditions for efficiency in licenses, License waiver for the electricity generation from renewable up to 5 MW	License regulation 2006 amendment in 2011 and 2016 E licensing Soft ware is in place for quicker service 33 LPG operators were given licenses with total annual storage and distribution capacity 20 Lakh MT	Coal are not included in the definition of energy in BERC Act 2003, All operators cannot be brought under licensing, No enforcement regulations, Monitoring and supervision Inadequate manpower Inadequate capacity, Finalization of feed in tariff for RE	All energy operators are to be brought under licensing, Enforcement regulation is to be finalized and in action, Steps to be taken for adequate manpower and capacity building, Use of ICT

4.5.4 Approval of Energy Scheme:

BERC is having legitimate mandate to approve schemes on the basis of overall program of the licensees and to take decision considering the load forecast and financial status of the scheme. In this approval process BERC can check the energy aspects of SDGs. But this function is still to be in practice (Table- 4).

Table 4: Approval of Energy Scheme, Relevance with Energy Goal, Challenges and Recommendations

Functions of BERC	Relevance with Energy targets of SDGs	Activities of BERC	Challenges	Recommendations to overcome
Approving schemes on the basis of overall program of the licensee and taking decision in this regard considering the load forecast and financial status;	Access to electricity, energy, Renewable and efficiency New project on energy in the market, addition of energy, energy efficiency is checked, Integration of renewable as per government policy is encouraged.	Not all operators are submitting, some submit after the approval and contract signing.	PDB, Petrobangla and BPC and Government utilities are not complying to this requirement.	Appropriate coordination and synergetic relation between Ministry ,BERC and energy operators for the efficient management of the energy sector; enforcement regulation is needed.

4.5.5 Energy Statistics:

BERC is having responsibility of collecting, reviewing, maintaining and publishing statistics of energy. This function is not appropriately done due to some practical impediments. Establishment of a comprehensive energy data centre was very highly recommended in FGD and KIIs. The findings in this regards are shown in Table- 5.

Table 5: Management of Energy Data, Relevance with Energy Goal, Challenges and Recommendations

Functions of BERC	Relevance with Energy targets of SDGs	Activities of BERC	Challenges	Recommendations to overcome
Collecting, reviewing, maintaining and publishing statistics of energy	Access, renewable and efficiency Statistics for planning implementing and monitoring of access to energy, Proportion renewable in the energy mix and energy efficiency	Annual Report is the legal compulsion; Some data / report are sent to the ministry, Cabinet and parliament. Not encompassing whole energy sector, only the data of licensees.	Incomplete and incomprehensive statistical data of energy which is not adequately useful because all the energy operators are yet to brought under the regulatory control of BERC	Bringing all energy operators to the BERC licensing functions, Energy auditing, Data sharing and establishing a comprehensive energy data centre

4.5.6 Energy Codes, Standard and Enforcement:

BERC has another function to frame codes and standards make enforcement of those compulsory with a view to ensuring **quality of service**. It formulated several Codes and standard but almost all are in the bureaucratic approval complications. Recommendations were found in the study to apply the power of promulgating regulations following section- 59 of BERC Act- 2003 (Table-6).

Table- 6: Energy Codes, Standard and Enforcement, Relevance with Energy Goal, Challenges and Recommendations

Functions of BERC	Relevance with Energy targets of SDGs	Activities of BERC	Challenges	Recommendations to overcome
Framing codes and standards and make those compulsory to ensure quality of service	Energy Access and energy efficiency Codes and standard improve the efficiency and quality service resulting optimum cost of energy affordable to the consumers; enforcement further ensures quality and afterwards confidence in consumers and competitive operators.	Several codes and standards have been formulated awaiting approval from the ministry and vetting from the law ministry.	Coordination and synergy, Enforcement regulation, Legal authority to formulate and implement regulation independently under section 59 of BERC Act 2003.	Coordination and synergy, Enforcement regulation, Benchmarking Codes and standard, Legal authority to formulate and implement regulations independently under section 59 of BERC Act 2003.

4.5.7 Uniform Methods of Accounting:

BERC has recently taken steps to develop uniform methods of accounting for all licensees and it is at the final stage to be in place for the utilities. Uniform methods of accounting will enhance the process of tariff determination and in this way justice can be ensured and proper competition in the energy market will prevail resulting efficiency and reasonable price of energy for the consumers. The relevance and other aspects those were found in the study are shown in the table 7.

Table 7: Uniform Methods of Accounting, Relevance with Energy Goal, Challenges and Recommendations

Functions of BERC	Relevance with Energy targets of SDGs	Activities of BERC	Challenges	Recommendations to overcome
Developing uniform methods of accounting for all licensees;	Access to energy Uniform methods of accounting enhances Efficient tariff determination reduces cost of energy operation resulting affordable price for the consumers.	Steps have been taken awaiting finalization.	Non cooperative attitude of the utilities, Change phobia Resistant to new system	Awareness building, Enforcement of legal provision

4.5.8 Competitive Energy Market:

Licensing, tariff determination and dispute settlement etc are the instruments in hands of BERC to encourage creating a conducive atmosphere to promote competition amongst the licensees. It was found to be difficult to establish competitive energy market due to the public sector monopoly in energy sector. The detail is shown in table- 8.

Table 8: Competitive Energy Market, Relevance with Energy Goal, Challenges and Recommendations

Functions of BERC	Relevance with Energy targets of SDGs	Activities of BERC	Challenges	Recommendations to overcome
Taking appropriate measures to create a conducive atmosphere to promote competition amongst the licensees;	Access to energy Enhancing efficiency More competition more quality service and efficiency resulting more access to energy	Tariff orders, Terms and conditions to be followed in license, Dispute settlement to ensure justice	Synergy among regulator, operators and ministry; Primary fuel Petroleum not included in tariff, Monopolistic nature of energy sector	Bench marking Codes and Standard etc should be worked out Synergy for better function

4.5.9 Cooperation and Advisory Role:

BERC's very important legitimate role is to render co-operation and advice to the Government in respect of electricity generation, transmission, marketing, supply distribution and storage of energy. Any contemporary energy issue can be brought under this and hence could contribute along the whole areas of energy goal of SDGs. A kind of synergy is highly recommended from the study (Table- 9).

Table 9: Cooperation and Advisory Role, Relevance with Energy Goal, Challenges and Recommendations

Functions of BERC	Relevance with Energy targets of SDGs	Activities of BERC	Challenges	Recommendations to overcome
Co-operation and advisory role of BERC regarding electricity generation, transmission, marketing, supply distribution and storage of energy;	Across all energy targets Any contemporary issues regarding SDG7	Non formal type, Not up to the level	Synergy	Cooperation and synergetic relation have to be enhanced by mutual interactions and trust; How best energy fund can be utilized , The policy suggestions etc can be very effectively coordinated. Capacity building initiatives are important.

4.5.10 Dispute Settlement:

Dispute Settlement Regulation is in place to resolve disputes between the licensees, and between licensees and consumers. This is judicial function and one of the three functions, commission is performing with a regular basis. The relevance of this function with SDGs and other aspects are shown in table 10. Ensuring justice in energy sector to have a competitive market is number one precondition having access of the consumers to electricity and energy. The challenge prevails here is the non-compliance of the awards given by the commission. So formulation of enforcement regulation is necessary.

Table 10: Dispute Settlement, Relevance with Energy Goal, Challenges and Recommendations

Functions of BERC	Relevance with Energy targets of SDGs	Activities of BERC	Challenges	Recommendations to overcome
Resolving disputes between the licensees, and between licensees and consumers, and refer those to arbitration if considered necessary;	Access to electricity and energy; Justice will create confidence in consumers and operators and access to electricity and energy is facilitated.	Commission sits once in every week to settle the disputes. Dispute settlement regulation is in place. Appellate authority is defined. High court sends cases to the commission.	Manpower shortage, Non compliance of the parties with the award given by commission	Manpower, Enforcement regulation

4.5.11 Protection of Consumers' Interests:

To ensure appropriate remedy for consumer disputes, dishonest business practices or monopoly, BERC has a dedicated section of Consumers' Affairs. The function is not adequately responsive due to absence of 'Code of Practice' in place to handle consumers' Complaints. The detail is shown in table 11.

Table 11: Protection of Consumers' Interests, Relevance with Energy Goal, Challenges and Recommendations

Functions of BERC	Relevance with Energy targets of SDGs	Activities of BERC	Challenges	Recommendations to overcome
Ensuring appropriate remedy for consumer disputes, dishonest business practices or monopoly	Access to electricity and energy; Appropriate remedy encourages the consumer to avail access to energy and maintain that	Out- reach program to aware the consumers and utilities and other stakeholders, Consumers' complaint management following Section 54 of BERC Act 2003	Dishonest business practice, Monopoly, Enforcement , Syndicated energy market, Non regulated BPC, Code of practice is still to be formulated	Enforcement, Surveillance, Code of practice, Justice and good governance as in the preamble of BERC Act 2003

4.5.12 Control of Environmental Standard of Energy:

Environmental standard of energy under existing laws are passively looked after. BERC has the main instrument of licensing. It is mandatory for the licensees to collect and submit environmental clearance from the respective authorities with their application for license. For environment friend renewable energy promotion, BERC has provision to issue waiver certificate up to 10 MW. The details are shown in table 12.

Table 12: Control of Environmental Standard of Energy and its Relevance with Energy Goal of SDGs, Challenges and Recommendations

Functions of BERC	Corresponding targets of Energy goal	Activities of BERC	Challenges	Recommendations to overcome
Ensuring control of environmental standard of energy under existing laws;	Access to energy, Renewable energy; Pollution free energy, Renewable energy Enhance excess	Application evaluation, Inspection, Commission meeting, Terms and conditions in license, License waiver for RE up to 5 MW	Belated clearance by DoE Non compliance, monitoring	Post license auditing, Enforcement

4.5.13 Incidental Function:

BERC is given responsibility to perform any incidental functions if considered appropriate by the Commission for the fulfillment of the objectives of this Act for electricity generation and energy transmission, marketing, supply, storage, efficient use, quality of services, tariff fixation and safety improvement. But no such function was seen to be in the activities of BERC. Formulation of Energy related Accidents and Compensation Regulation is to there in place to perform this function. The relevant aspects with this function are shown in table- 13.

Table 13: Incidental Function and its Relevance with Energy Goal of SDGs, Challenges and Recommendations

Functions of BERC	Relevance with Energy targets of SDGs	Activities of BERC	Challenges	Recommendations to overcome
Performing any incidental functions if considered appropriate by the Commission for the fulfillment of the objectives of this Act for electricity generation and energy transmission, marketing, supply, storage, efficient use, quality of services, tariff fixation and safety improvement	Overall energy goal Watch dog of Energy sector, Building confidence, Enhance safe and sustainable energy	No such function	Formulation of Energy related accident and compensation Regulations	Manpower for emergency response And related regulations

5. Recommendations:

To what name BERC is called, symbolizing its functions whether 'regulatory' or 'facilitating', it is the legitimate watchdog of energy sector where the interests of energy consumers, energy operators, the government and above all the entire nation are served ensuring justice and good governance along the value chain of electricity generation, energy transmission, storage, transportation and distribution, complying to the spirit of the preamble of BERC Act 2003. This is really a big challenge for the commission to earn trust at least at the perceivable extent from all these parties mentioned here. A kind of synergy is to be established proactively to better perform and do justice to the responsibilities entrusted to the commission by the state.

Organizational capacity building in terms of rightsizing the manpower and initiatives are recommended to develop human resources in a very planned and result oriented manner. Out of as many as 13 functions only 3 are being served and identified challenges are lack of manpower with adequate skill, lack of regulations, lack of coordination and synergy with the public sector stakeholders, lack of enforcement ensuring compliance with Commission's orders and terms and conditions, Partial or non-inclusive scope of regulatory control along the energy operators and across the energy components or sources and above all lack of comprehensive energy data. So, a holistic approach is recommended to address these challenges adopting a well articulated priority scale. Establishment of an energy data centre is crucial to have the energy statistics updated and well managed to take any regulatory or facilitating decisions for energy sector. Better performance in BERC will ultimately lead to better achievement of energy related SDGs in Bangladesh.

6. Conclusions:

The ongoing efforts of the Government of Bangladesh to ensure reliable energy supply to all households has been complemented by yet another effort to achieve SDG 7. Key challenges to implementation of the Action Plan will involve financing, pricing and subsidy, fuel mix, gas exploration and energy efficiency (GOB, 2018). The study found only tariff setting function of BERC singly is contributing to solve almost the whole range of the key challenges mentioned here. Energy funds are contributing to finance in the crucial parts of energy operations in gas and power sectors, Pricing of electricity and gas is determined in a participatory way where the subsidy issue is addressed, a number of gas exploration projects are being financed by energy funds and energy efficiency is also considered in the mechanism of tariff setting. Energy mix is government's policy issue which BERC is mandated to bring into the regulatory activities. To talk about the relevance of BERC functions with the energy related goals of SDGs, 13 legitimate functions were challenged against the Energy targets of SDG 7 through a serious FGD screening and Key informant interviews. All were found relevant directly or indirectly. Out of these 13

functions only 3 functions- licensing, tariff setting for gas and Power and Dispute settlement are being practiced. In the process of these three functions, several other functions are being passively touched upon. To implement the remaining functions, some challenges have been identified. These are- lack of manpower with adequate skills, lack of regulations, lack of coordination and synergy with the public sector stakeholders, lack of enforcement ensuring compliance with commission's orders and terms and conditions, partial or non-inclusive scope of regulatory control along the energy operators and across the energy components or sources and above all lack of comprehensive energy data. Appropriate steps is required to address this challenges to make BERC more effective to perform its legitimate functions which in term will be contributive to the achievement of SDG7 in Bangladesh.

The creation of three revolving energy funds having provision for investment in the crucial areas of energy sector is the innovative decision of the BERC to have a sustainable energy security in Bangladesh. Researcher found a prospect of establishing an ever-increasing sovereign energy fund (as Norway having a sovereign wealth fund of 1 trillion USD) (Wikipedia 2019) by adopting good governance in the management of EMDF, GDF and ESF.

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Seminar Paper

On

Effectiveness of Women House Keeping Training of Prospective Migrants for Safe, Orderly and Regular Migration: A Study on Sheikh Fazilatunnesa Mujib Women Technical Training Centre

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Effectiveness of Women House Keeping Training of Prospective Migrants for Safe, Orderly and Regular Migration: A Study on Sheikh Fazilatunnesa Mujib Women Technical Training Centre

Abstract:

This study was conducted to identify the factors and recommendations for policy implication of effective training for prospective women migrants for safe, orderly and regular migration. The objectives of this study are :i). to identify the factors of effective women housekeeping training of prospective migrants, and ii). to recommend the policy implication for effective women housekeeping training. The study was quantitative in nature and random sampling method was used for data collection through interview by using semi structure questionnaire. The factors are preparation on migration like pre migration preparedness, essential activities for migration, working place like know the destination country, social environment, official matters, risk management, personal health and hygiene, housekeeping like cleanliness, uses of household appliances, cooking and serve, care of child, adult, disable, flower and ornamental plants, language and communication skill like number, day and month, pronoun and dialoguing in airport, food and fruits, cookeries, household goods and dress, different parts of body and first aid treatment, essential words and sentence, formalities during travel like preparation on pre departure, formalities on airport, home and destination country, livelihood of abroad like reporting to the Bangladesh embassy, right of migrants, cheating and breaching of right of migrants, remedies against complaint, expatriates' employment and migrants act 2013, and sending money from abroad and return to home. The main recommendation is the training should be strengthen on official matters, risk management of working place, language and communication skills, rights and breaching of rights of migrants, and expatriates' employment and migrants act 2013.

Key words: Effectiveness, training, prospective migrants, women, safe, order and regular migration.

1. Introduction

1.1 Background Information

Bangladesh is a labor intensive country. About 20 lacs new labor forces are added every year but about one to one and half lac new labors are employed in domestic market. Every year about eight to ten lacks labors go to abroad for job. But in 1991, Bangladesh has begun to send women migrants. In 2017 year 1,008,525 labors went to abroad for overseas employment of which 121,925 were female workers. But, total 101,659 women have been migrated from Bangladesh which was about 14% of total migration in 2018. The top destination for female migrants is Kingdom of Saudi Arabia (KSA) since 2016. Total 73,713 females were migrated from Bangladesh to Kingdom of Saudi Arabia in 2018 and the next preferences were Oman, Jordan, Qatar and UAE respectively. At present, the popular destination of women workers are also Korea, Hong Kong and Japan which are highly paid and also safe migration. About forty percent of migrant labors of Bangladesh are less-skilled worker's category **(MoEWOE 2017, BMET 2018).**

The Sheikh Fazilatunnesa Mujib woman technical training center in Dhaka is the first woman technical training center in Bangladesh which provides technical training only for women to prepare them as a skilled workforce in job market both in domestic and abroad. At present, this institution offers housekeeping training for prospective women for one month duration which is a non-residential in nature. The housekeeping training is very important for the prospective women migrants for overseas employment, earning foreign currency, sending remittance, their socio-economic development by safe, orderly and regular migration **(GOB 2016).**

Training is a very important tool in order to assist government officers, policy makers etc. to know the specific purpose and plans. In order to know the level of training effectiveness, formal evaluation should be conducted at the end of the training **(Wentlinge et al 1993)**. In any workplace training is necessary. Training for worker is a program which deals the worker new skill, development opportunities related to profession and information. Effective training program deals with the improvement of performance of worker. Training deals with fulfilling gap between the present performance & expected standard performance and the main aim of any training is what the trainees learn at last of training course **(Elnaga and Imran 2013).**All prospective women migrants who are intended to go overseas for domestic work must have to take training on housekeeping which includes working condition of the destination country, safety as well as security measures, culture, food, language, rules, regulations of destination country and also the uses of household utensils etc. so that they can manage housekeeping efficiently. In 2018, total 44,352 women are trained on housekeeping training which was very helpful for safe, order and regular migration for prospective women migrants and their socio-economic development by earning foreign currencies **(BMET 2018).**

Female workers also fall in less skilled category and as result they are less paid by the employer. Most of the migrants of housekeeping are low educated and less skilled, as result their salary also low. If it is possible to provide effective training of prospective women migrants as the demand of receiving or destination country then they become able to treat as semi-skilled or skilled workers and are possible to get higher salary than less skilled workers. So, effective training for prospective women migrants is essential for safe, orderly and regular migration to earn more foreign currency and also to improve the socio economic standard of women workers in Bangladesh. Effective training for prospective migrant women is conducted in Bangladesh as demand of sending country to prepare them as skilled worker then these migrant women will be able to earn more foreign currency and Bangladesh will be able to get more remittance which is very helpful for our socioeconomic development and also helpful for safe, orderly and regular migration.

1.2 Objectives of the Study

The objectives of this study are as follows:

i. To identify the factors of effective women housekeeping training of prospective migrants; and

ii. To recommend the policy implication for effective women housekeeping training of prospective migrants.

1.3 Justification of the Study

Training is the method for increasing the knowledge, skill and also improving the attitudes of trainees to fulfill the specific aim and objectives. It is impossible to know the level of skill acquired by the trainees without any evaluation after the training course. Most of the prospective women migrants of housekeeping of Bangladesh are low educated and fall in the less–skilled category. So, they get low pay from the employer. As a result, they cannot develop their socio-economic standard by their low earnings. If it would be possible to send them after effective training as per demand of employer then it is possible to get higher salary than before. Effective training of prospective women migrants can be helpful to increase their knowledge, skill and also to improve their attitudes for foreign job with higher pay. The first woman technical training centre in Bangladesh is the Sheikh Fazilatunnesa Mujib woman technical training centre in Dhaka which provides technical training only for women to prepare them as a skilled workforce in job market both in domestic and abroad, and this housekeeping training is one of the important training courses for prospective women migrants. There is limited study related to the effectiveness of prospective women migrants for safe, orderly and regular migration in Bangladesh. In Bangladesh, technical training center provide training for prospective women

migrants under Bangladesh Bureau of Employment & Training which is under the guidance and monitoring of Ministry of Expatriates' Welfare & Overseas Employment. But, they hardly conducted any study related to effectiveness training of prospective women housekeeping of different technical training center. Remittance is one of the important source of GDP after the garment sector and our migrants are sending this remittances and women migrants also play an important role for sending remittance. Therefore, effective training for prospective women migrants is needed for safe, orderly & regular migration to fulfill the Sustainable Development Goal which is also very important for more remittance and socio-economic development of Bangladesh.

2. Review of Literature

2.1Theoretical Frame Work

The theoretical frame work is effectiveness of training increases the trainee's skill and performances **(Elnaga and Imran 2013).**

Effectiveness of training of prospective women migrant was reviewed from different publications which were used as review of literature of this research. Previous researches on effectiveness of training of migrants in order to safe, orderly and regular migration deal in this chapter. Literature of review was collected from various published resources such as training manual for prospective women migrants, training calendar of Sheikh Fazilatunnesa Mujib women technical training center, Annual report of Bureau of Manpower Employment and Training (BMET), Annual report and different publications of Ministry of Expatriates' Welfare and Overseas Employment (MoEWOE) such as leaflets, booklets, souvenir, reports, books etc. Bangladesh Public Administration Training Centre's e-library, repository, different journals, websites etc. also searched for review.

Training acts as a crucial role in gaining the competencies updated ideas and conduct their duties and responsibilities effectively. In order to improve the efficiency as like as performance effective training plays a crucial role. It fills up the gap of desired skill and their previous skill. Deficit of performance in workplace is treated as training need which may be overcome by effective training. Productivity of organization and performance of workers may be improved by training. In order to overcome the deficiency of trainees effective may play a vital role to improve their efficiency as well as performance. It was found that a positive effect on trainees' performance was gained by the effective training program **(Elnaga and Imran 2013).**Effective training is necessary to increase the trainee's skill. Effective training and trainees productivity has positive correlation **(Bartel1994 cited in Elnaga and Imran 2013).** In order to make it happen, it is the responsibilities of training course coordinator to identify the factors which act as barriers of effectiveness of training and necessary action must be taken to neutral their effect on

trainee's skill**(Swart et al.2005 cite in Elnaga and Imran 2013).**Effective process of training helps to create human resources. As a result, any individuals become able to use the knowledge - skills for managing the organization effectively. Training also helps the employee to work in any organization effectively and efficiently. To improve effectiveness of worker training & development is necessary. Training makes the worker more effective for their duties **(Okoye and Ezejiofor 2013).**It was conducted a study of an institution in Nigeria and found that training has increased trainees knowledge, skills, efficiency as well as their capabilities in case of both old & new. Training is a method of sharpening the trainee's knowledge and skills in order to strengthen effective as well as efficient performance. Effectiveness as well as sustainability was increase by effective training. Training is also necessary for trainee's morale and institutional output **(Nwokocha 2015).** In order to improve the individual, group and also the effectiveness of any organization training acts as a systematic method which effects of personal knowledge, skills as well as their attitude **(Herman and Kurt cited in Nwokocha 2015).**It was found from a research in Ethiopia and found that there was positive correlation of training as well as development activities & also reported significant relation with worker effectiveness and their performance. Due to the intervention of training & involvement of development higher level efficiency was found. A positive output as well as outcome was found due to the activities of training and development. In order to total quality management training acts in any process as a integral part **(Asfaw et al. 2015).**

In order to conduct housekeeping training the fundamental topics should be incorporated in training program such as legal migration medium, health checkup, examine the contact paper, manners & etiquette of destination country, uses of household utensils, weather and climate, food, culture of receiving country, handling of household electrical machine and tools, cleaning by using of electrical machine, communication with the embassy, missions of Bangladesh in receiving country, hygiene as well as health related matters, process of sending money by legal method, investment and financial management, hotline telephone and mobile number and very import address, frequently uses of important Arabic words and sentences and security as well as safety measures **(BMET 2018).**In order to get the desired performance from the prospective women migrants the training curriculum should be updated comprising the current technology and culture of destination country. If there is any cultural gap of the housekeeping training then it may be impossible to get the expected skill of trainees. So, it is necessary to design he factors with different items in the training course which will fulfill the needs of employer.

3. Methodology

3.1 Method of Research and Sampling

This study was based on the quantitative method. For quantitative method, semi structured questionnaire tool was used for collection of data from the prospective women migrants. Systematic random sampling method was used for collection of data during interview for this study. Data was collected from the prospective women migrant participants of Sheikh Fazilatunnesa Mujib women technical training center in Dhaka. The total number of trainees of prospective women training was 100 and 35 percent of the trainees of prospective women migrants were selected randomly for this study. The sampling sizes of this study were 35. After completion of data collection through interview by using semi structured questionnaires to get the answer yes or no, the data were analyzed as frequency and percentage due to time constraints. There was very limited time for this research.

3.2 Variables Measurement

The variables of measurement which are the factors of this research are given below:

1. **Preparation on migration:** This training module is measured with the following items which are as follows :
   i). Pre migration preparedness.
   ii). Essential things to be done before migration.

2. **Working place in abroad:** The training module is measured with the following items which are as follows:
   i). Know the destination country.
   ii). Know the foreign social environment.
   iii). Know about official matters.
   iv). Means of risk management of work place.
   v). Personal health and hygiene.

3. **Basic housekeeping:** The training module is measured with the following items which are as follows:
   i). Cleanliness of residence.
   ii). Use of household appliance.

4. **Housekeeping**: The training module is measured with the following items which are as follows:
   i). Cooking and serve.
   ii). Care of child, adult and disable.
   iii). Care of flower and ornamental plants.

5. **Language and communication skill:** The training module is measured with the following items which are as follows:
   i). Number, day and month.
   ii). Pronoun and dialoguing in airport.
   iii). Food and fruits, cookeries.
   iv). Household goods and dress.
   v). Different parts of body and first aid treatment.
   vi). Essential words and sentence.

6. **Formalities during travel:** The training module is measured with the following items which are as follows:
   i). Preparation on pre departure.
   ii). Formalities on airport.
   iii). Do's in the airport and transit.
   iv). Formalities of at the airport of destination country.

7. **Livelihood in abroad:** The training module is measured with the following items which are as follows:
   i).Reporting to the Bangladesh embassy of destination country.
   ii). Right of migrants.
   iii). Types of cheating and breaching of rights of migrants.
   iv). Remedies against complaint.
   v). Expatriates' employment and migrants act 2013.
   vi). Sending money from abroad and return to home.

4. Data Analysis and Discussions:

Based on the variables measurement which are factors collected during data collection are analyzed as frequency and percentage are presented in the following table:

Preparation on migration: This training module has two items such as pre migration preparedness and essential things to be done for migration in order to inform the prospective women migrants about the preparation of migration. This module is very important for the prospective migrants women to know about the preparedness of migration such as preparation on mental and financial, collecting information related to destination country, information about the migration related institution, taking skill training and collection of passport, doing health checkup, employment contact, payments, opening of bank account, registration at BMET, approval of immigration from BMET, taking pre departure briefing , buying air ticket and collection of necessary documents for migration which are very essential for them in order to safe, orderly and regular migration.

Table 4.1 the factors of preparation on migration with items:

Serial number	Items of factors	Number of respondents (f)	Yes (%)	No(%)
i.	Pre migration preparedness	35	100	-
ii.	Essential things to be done before migration	35	100	-

All the respondents were given positive answers like yes on the effectiveness on pre migration preparedness and essential things to be done before migration. It may be they consider these items were very important and these items were trained effectively.

Working place in abroad: This training module has five items such as know the destination country, know the foreign social environment, know about official matters, means of risk management of work place and personal health and hygiene to inform about the working place like job environment with various problems and ways to be safe in abroad, environment and culture of destination country like culture, general norms and values, food, dresses, adaptation, accommodation, low and order and planning of family works, communication way related to office such as work permit or residential permit or akama permit, contact paper, leave of absence and overtime and other necessary aspects, risk management process of working place like do,s during firing, earth quack, hit stroke and accident, and personal health and hygienic matters like knowledge on home sickness and frustration and the way of mitigation, various diseases, sexual transmitted diseases and their precaution in abroad for safe, orderly and regular migration.

Table 4.2 the factors of working place in abroad with items:

Serial number	Items of factors	Number of respondents (f)	Yes (%)	No(%)
i.	Know the destination country	35	100	-
ii.	Know the foreign social environment	35	100	-
iii.	Know about official matters	35	80	20
iv.	Means of risk management of work place	35	80	20
v.	Personal health and hygiene	35	100	-

The items like know the destination country, know the foreign social environment and personal health and hygiene were answered yes. It may be due to effective training and their interest on learning. But, about one- fifth respondents were answered negatively on official matters and risk management of work place. Perhaps, official matters and risk management are somewhat difficult to understand for low educated and less skilled categories migrant women.

Basic housekeeping: This training module has two items such as cleanliness of residence and use of household appliance in order to inform about the basic housekeeping such as cleaning activities of hone, carpet, dining and kitchen, wash room etc. and electronic equipment and their uses like uses of washing machine, gas burner, dish washer and deep fryer, different utensils used in households which will be helpful to work effectively and efficiently that is pre requisites for safe, orderly and regular migration.

Table 4.3 the factors of basic housekeeping with items:

Serial number	Items of factors	Number of respondents (f)	Yes (%)	No(%)
i.	Cleanliness of residence	35	100	-
ii.	Use of household appliance	35	100	-

All the respondents answered the items positively like yes which means the basic housekeeping training was effective for them and it is the main task in the residence of employer which motivate them for learning.

Housekeeping: This training module has three items such as cooking and serve, care of child, adult and disable, and care of flower and ornamental plants to inform the trainees about housekeeping activities like cooking foods as desires of employer, care giving their kids, old and disabled, caring of ornamental plants and flower plants effectively and efficiently which will be helpful for safe, orderly and regular migration.

Table 4.4 the factors housekeeping with items:

Serial number	*Items of factors*	*Number of respondents (f)*	*Yes (%)*	*No(%)*
i.	Cooking and serve	35	100	-
ii.	Care of child, adult and disable	35	100	-
iii.	Care of flower and ornamental plants	35	100	-

All the respondents were given their answers yes which may be this type of activities are habituated early in their home and the trainer also delivered the lessons in easy way by using demonstration methods.

Language and communication skill: This training module has six items such as number, day and month, pronoun and dialoguing in airport, food and fruits, cookeries, household goods and dresses, different parts of body and first aid treatment, and essential words and sentence in order to train them on language and communication skill of receiving country effectively. It is most important of prospective migrant women for safe, orderly and regular migration.

Table 4.5 the factors language and communication skill with items:

Serial number	Items of factors	Number of respondents (f)	Yes (%)	No(%)
i.	Number, day and month	35	100	-
ii.	Pronoun and dialoguing in airport	35	100	-
iii.	Food and fruits, cookeries	35	100	-
iv.	Household goods and dresses	35	100	-
v.	Different parts of body and first aid treatment	35	80	20
vi.	Essential words and sentence	35	60	40

The items of this module like number, day and month, pronoun and dialoguing in airport, food and fruits, cookeries and household goods and dresses were answered positively which may be due to effective training and also given emphasis of learning. But, about one – fifth to two – fifth respondents were answered negatively on different parts of body and first aid treatment, and

essential words and sentence. It may be the topics were relatively hard to understand and the time of that train class duration may not be enough for them to understand the topics.

Formalities during travel: This training module has four items such as preparation on pre departure, formalities on airport, do's in the airport and transit and formalities of at the airport of destination country to acquaint them about the formalities during travel to abroad which are very helpful for the prospective migrants women in order to safe, orderly and regular migration.

Table 4.6 the factors of formalities during travel with items:

Serial number	Items of factors	Number of respondents (f)	Yes (%)	No(%)
i.	Preparation on pre departure	35	100	-
ii.	Formalities on airport	35	100	-
iii.	Do's in the airport and transit	35	100	-
iv.	Formalities of at the airport of destination country	35	100	-

All the participants given their opinion of all items of this module yes which means the training of this module was effective. It may be easily understandable the course topics due to effective training session which is very urgent for safe, orderly and regular migration.

Livelihood in abroad: This module has six items such as reporting to the Bangladesh embassy of destination country, right of migrants, types of cheating and breaching of rights of migrants, remedies against complaint, expatriates' employment and migrants act 2013, and sending money from abroad and return to home for informing the women migrants on livelihood in overseas. This module is very helpful for the prospective women migrants for safe, orderly and regular migration.

Table 4.7 the factors of livelihood in abroad with items:

Serial number	Items of factors	Number of respondents (f)	Yes (%)	No(%)
i.	\Reporting to the Bangladesh embassy of destination country	35	100	-
ii.	Right of migrants	35	80	20
iii.	Types of cheating and breaching of right of migrants	35	80	20
iv.	Remedies of complain against complaint	35	100	-
v.	Expatriates' employment and migrants act 2013	35	60	40
vi.	Sending money from abroad and return to home	35	100	-

The respondents were answered the items like reporting to the Bangladesh embassy of destination country, remedies of complain against complaint and sending money from abroad and return to home positively because these topics may be easy to learn for them. But, one- fifth respondent was responded negatively on right on migrants and types of cheating and breaching of right of migrants. Further, two–fifths respondents were answered the topics negatively on expatriates' employment and migrants act 2013 because rights and law related topics may be hard to understand for them.

The above factors with items are analyzed according to the answers of responded and though some items were partial answer negatively but it was found that most of the items were answered positively which means the training of prospective women migrants for safe, orderly and regular migration was effective. Effective training is very important for prospective migrant women in order to strengthen their desired knowledge, skills and also improve their attitudes for overseas employment with descent work and also safe, orderly and regular migration. It is necessary of effective training for prospective women migrants on housekeeping profession as the demand of receiving country in order to prepare them semi-skilled or skilled worker for the profession to perform their duties effectively and efficiently in their work place which helps the migrants women to get higher salaries by descents work and also safe, orderly and regular migration. Effectiveness of training of prospective migrant women is very important to get more remittance and to improve the socio-economic developments of migrant women and also increase our per capita income to acquire our SDG goals within 2030 and to be prosperous country within 2041.

5. Recommendations:

Though the training of prospective women migrants for safe, orderly and regular migration conducted by sheikh Fazilztunnessa Mujib women technical training center was effective but in case of some items of factors the trainees were responded negatively to some extent like official matters and means of risk management of working place, language and communication skills like name of different parts of body and first aid treatment, essential words and sentence, right of migrants and breaching of right of migrants, and expatriates' employment and migrants act 2013. So, the following recommendations are given for policy implication such as:

i. It is recommended that the training should be strengthen on official matters and means of risk management of working place, language and communication skills like name of different parts of body and first aid treatment, essential words and sentences, rights of migrants and breaching of rights of migrants, and expatriates' employment and migrants act 2013 so that the prospective migrants women can be able to show their skills on that matters which will be helpful for safe, orderly and regular migration with higher pay.

ii. The training course should be residential and the training course duration should be increased 03 months from the present duration 01 month to increase their knowledge, skills and also to improve attitudes of their working place which will be helpful for safe, orderly and regular migration.

iii. The selection of prospective women migrants as trainees should be done carefully from the age not less than 25 and above 35 years. To verify the age, their national identification (NID) and birth certificate should be cross checked carefully so that the passport is prepared showing the original age. This is very necessary to select the appropriate age of prospective migrants women for safe, orderly and regular migration.

iv. The prospective women migrants should be selected from the educational level at least passed of Primary Education Certificate (PEC) so that they caneasily read and write both English and Arabic the language of destination country which will be very helpful for safe, orderly and regular migration.

v. Bilateral agreements and Memorandum of Understanding (MoU) should be signed or renewed with countries of destination for more women employment for descents work with higher salaries and protecting the rights of workers which will be conducive for safe, orderly and regular migration.

vi. Training curriculum for prospective women migrants should be updated as per demand of receiving country including the right and welfare issues and language and communication skills of women migrants to increase their skill and also their protection which are very necessary for their safe, orderly and regular migration.

vii. Services related migration issues of prospective women migrants should be decentralized at union Digital centre so that the prospective women migrants could be able to get the expected services related to migration with minimum time, cost and visit.

viii. In order to effective training for prospective women migrants adequate budget and logistics like training materials and electrical equipment should be supplied so that the trainees are able to learn practically which will be conducive for safe migration.

ix. Proper monitoring and supervision of the training course by the top management of Bureau of Manpower Employment & Training (BMET), and Ministry of Expatriates' Welfare & Overseas Employment should be made so that the training course runs more effectively. At the end of training session, the trainees should be evaluated to measure their performance in order to know the effectiveness of training course which will be conducive for safe, orderly and regular migration.

x. It is recommended that all women migrants should be kept in a dormitory to live and they will go for housekeeping job from the dormitory during their duty hours and after finishing the duty they will come back to dormitory which will be more helpful for safe, orderly & regular migration. It is also necessary to allow the mobile phone all times with migrant women workers so that they can be communicated with families and officials during emergency.

6. Conclusion:

This study was undertaken to identify the factors of effective training of prospective women migrants for safe, orderly and regular migration. The main objectives of this research are: i). to identify the factors of effective women housekeeping training of prospective migrants, and ii). to recommend the policy implication for effective women housekeeping training of prospective migrants. The study was quantitative in nature and random sampling method was used for collection of data. Data were collected through interview by using semi structure questionnaire.

The factors of effective training of prospective migrants women are preparation on migration like pre migration preparedness and essential things to be done for migration, working place in abroad such as know the destination country, the foreign social environment, know about official matters, means of risk management of work place, personal health and hygiene, basic housekeeping and housekeeping like cleanliness of residence, use of household appliance, cooking and serve, care of child, adult and disable, care of flower and ornamental plants. The factors related to language and communication skill like number, day and month, pronoun and dialoguing in airport, food and fruits, cookeries, household goods and dress, different parts of body and first aid treatment, and essential words and sentence, and formalities during travel related such as preparation on pre departure, formalities on airport and transit, and formalities of at the airport of destination country. The factors of livelihood related to abroad like reporting to the Bangladesh embassy of destination country, right of migrants, types of cheating and breaching of right of migrants, remedies against complaint, expatriates' employment and migrants act 2013, and sending money from abroad and return to home.The main recommendation is the training should be strengthen on official matters and means of risk management of working place, language and communication skills, rights of migrants and breaching of rights of migrants, and expatriates' employment and migrants act 2013 so that the migrant women can be able to show their skills on that matters which will be helpful for safe, orderly and regular migration with higher pay. Effective training for prospective women migrants is very important for their safe, orderly as well as regular migration. It is also needed to increase the knowledge; skill and improving their attitudes which is necessary to get higher pay from the employer. Effectiveness of training is helpful to increase the women migrant's performances which is conducive to get more remittance.

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Seminar Paper

on

Gang Violence as an Aspect of Juvenile Delinquency in Bangladesh: A Case Profile Based Analysis

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Abstract

This paper has explored four basic aspects of teenage gang violence in Bangladesh based on a model introduced by Australian Institute of Criminology, which cover the context, risk, event and response. Carrying out a content analysis from ten cases of gang violence, this research has worked out how all these four aspects function in this country. It has found three interconnected factors in context; subcultural socialization, political-economic interest and institutional anarchy. The teenagers find themselves in these gangs mostly for socialization purpose but the unique subculture distant themselves from mainstream norms and lead them to occasionally engage in serious crimes. In some cases, political-economic interests play some role, whereas, in most cases the criminal offenses like killing and assault are just some outputs of their unique kind of subcultural socialization. However, still they could avoid the incidents like killing but an absence of any mafia mechanism of sorting out contentions; they can hardly find a non-violent solution. Looking into the geographical and age-related risks, this study has found mostly the teenagers of urban areas, especially Dhaka, at the highest risk of both gang involvement and victimization. The assessment of events has shown a pattern of group-based perpetration and the use of locally made sharp weapons in violent incidents. Response analysis shows the fear lying in the minds of people that make them hold back inactive when the gang fights take place. Long-term comprehensive response is also not evident in concerned government bodies.

Key words: Juvenile delinquency, Gang violence and Teenager.

Introduction

As a developing country positioned in global south, Bangladesh has a long list of problems ranging from natural disaster to poverty as well as socio-political fragility (Riaz, 2005; Hasnat, 2018; Huq, 2001). Though this country has recently been outgrowing some of its socioeconomic problem (e.g., poverty, child mortality), newer problems are appearing to plague it. Heightening magnitude and changing pattern of crime is such a phenomenon (Awal et al, 2016). Increasing juvenile delinquency is an aspect of this phenomenon which has introduced the spread of teenage gangs, especially in the urban areas of this country (Atkinson-Sheppard, 2015).

Gangs of young people and their violence are quite familiar all around the world (Duffy, Gillig and Gillig, 2004). Teenage gang violence is a concern for law enforcing agencies and a subject for sociological investigations (Morash, 1983; Thompson and Bynum, 2016; Hagedorn, 1998; Duffy, Gillig and Gillig, 2004). People studied their behavior and factors to uphold law and order as well as ensure proper development of young people. For Bangladesh, this is even bigger concern since young people are this country's principal force of economic upliftment from poverty to prosperity with the prospect of demographic dividend (Matin, 2012). Any interruption in their development as human resource is too costlier to afford for this nation.

Statement of the problem

Teenage gang violence is already evident as a fact in the urban crime profile of Bangladesh. There are instances of gangs, entirely comprised with youth members (Das, 2019). The rising trend of urban gang culture is regularly reported, sometimes to cover single incident and sometimes to feature the bigger scenario. According to police and locals, at least 50 groups are operating in the capital city. The gang members are involved in several types of crimes, ranging from mugging, stalking, hijacking, extortion, drug trading, abuse, and so on. Sometimes, they engage in killing, being hired by other criminals. In this context, drug abuse plays the role of triggering factor. Department of Narcotics Control, nearly 550,000 children are addicted to drugs and around 30% are engaged in criminal activities to fuel their addiction (Khan and Tipu, 2016).

Brought up in an unwholesome environment, some teenagers develop deviant norms and values. Such deviance is a major concern because studies on criminal behavior has shown that a good percentage of adult criminal committed first offence in their childhood long before their first conviction (Araand Mahjabeen, 2010). Teenage engagement in serious crime not only raises the

question to society's moral trajectory, but also challenges the policing system on how to deal with this phenomenon. The criminality of juvenile simultaneously deteriorates country's law and order situation and obstruct the development of young people in transition towards adulthood. This shows how juvenile delinquency is cutting through the society as a double-edged knife. Hence, addressing this problem require a comprehensive understanding of juvenile delinquency from a criminological perspective.

Research question

This research seeks to explore the answer to the following questions-

1. What are the contextual factors related to teenage gang violence in Bangladeshi society?
2. What are the risk factors associated with teenage gang violence in this country?
3. What are the repeated features in the incidents of teenage gang violence in Bangladesh?

Research Objective

The aim of this study is to make a crime analysis of teenage gang violence in Bangladesh. In this context this research will address following three (3) specific objectives:

1. To analyze the context of youth gang violence;
2. To assess risk of youth gang violence; and
3. To examine the characteristics of the violent event

Significance of the study

Teenage gang violence in Bangladesh is becoming an important concern for the society as well as the criminal justice system. The rising trend of this kind of violence provides strong evidence of the lack of teenagers' integration with society. Identifying the risks and associated factors, this study will offer some insights to relevant policy making bodies to draw some effective policies for preventing the risk of future crime. Answering some specific questions here, this study is likely to create new questions for further in-depth research in this area.

Literature review

Teenagers and Violence

Teenage and violence can be related in two ways; either it is youth violence or youth becoming victims of violence. Teenage violence may be defined as any intentional physical, sexual or psychological assault on another person (or persons) by one or more young people aged 12 to 24

years (Çetin, 2008). Definitions of teenage violence include verbal threats, physical contact, and often the use of a weapon. Several common reasons for violence were found among both boys and girls; romantic relationships, respect, idle time, gangs/cliques, and witnessing violence (Yonas, O'Campo, Burke, Peak &Gielen, 2005). Teenage violence is a significant problem that negatively impacts all young people in all communities whether they experience it as perpetrators, victims, or witnesses. The rates and types of teenage violence, however, vary across communities and across subgroups of youth (David-Ferdon & Simon, 2014). Rubinetti (1996) investigated the relationship between exposure to aggression among urban teenagers and the following variables: empathy, hopelessness, self-esteem, and belief in the legitimacy of aggression. He found combinations of these factors predicted a significant proportion of the variance in the other factors, supporting the relationship between self-esteem and violence. O'Keefe (1998) investigated protective and vulnerability factors for adolescents who had been exposed to inter-parental violence. Results revealed low self-esteem differentiated those who experienced and/or inflicted dating violence from those who had not. The combination of low self-esteem and an inability to cope effectively has been found particularly important. In a study on American youth Kelley (2003) asserts that youth violence is primarily a function of the generally poor mental health of youth. The phenomenon of teenage involvement in crime and terrorism is understudied.

According to Shelley (2008) youth commit crimes many facilitating activities for terrorism because juvenile arouse less suspicion and have diminished responsibility if arrested. She shows that youth under 25 are involved in many of the criminal activities that facilitate terrorism including participating in the drug trade, acting as couriers and developing the websites that facilitate youth recruitment to terrorism. Thus, the links between youth criminal involvement and terrorism deserves more attention that presently exists. Owen (2008) focuses on one of the most blatant examples of how youth are touched by political violence which is the continued recruitment and use of child soldiers. The practice of recruiting children has waxed and waned over the past millennium, but it has never played so large a role in warfare as it does today. Children are small, inconspicuous, expendable and easily indoctrinated and terrorized into performing extreme acts. the prevalence of gun violence in the United States and age-related risks for violence. Bushman et al. (2016) delineate important differences between violence in the context of rare rampage school shootings, and much more common urban street violence. Acts of

violence are influenced by multiple factors, often acting together. They summarize evidence on some major risk factors and protective factors for youth violence, highlighting individual and contextual factors, which often interact.

Teenage Gang Violence

The criminal tendency of the teenagers is higher when they are with gangs. Gangs in over a dozen countries reveal a wide pattern of violent behaviour and levels of violence that are far greater than among non-gang youth (Klein, Weerman& Thornberry, 2006).Teenage gangs have received considerable attention for many decades. According to Taylor & Vecchio (2014) their disproportionate involvement in violence is one main reason for this attention. While gang members spend most of their lives engaging in the same types of behaviors as other youth (sleeping, eating, playing video games, going to school), they are also much more likely than non-gang members to be involved in violence and other criminal activity. Indeed, scholars have often highlighted the functional nature of violence as it pertains to gangs. Gangs come in a variety of forms: prison gangs, outlaw motorcycle gangs, extremist groups, and drug trafficking organizations, among others.

Teenage gangs are similar to other social groups. One widely used benchmark for assessing whether a given social group is a 'teenage gang' is the engagement by group members in delinquent or criminal behaviour, some of which may involve violence (as well as fear and intimidation), on a regular basis (Wortley, 2010). In its most basic form, it is a group of young people who act out in antisocial or delinquent ways and/or is based on involvement in some form of criminal activity usually in an effort to gain from it as a group, whether financially, socially or territorially (Centre for Forensic Behavioural Science and Justice Studies, 2015).

The composition of teenage gangs is changing as smaller, less structured gangs are emerging, and drug gangs are becoming more prominent. Gang violence has increased, and most of it seems to be associated with conflicts with other gangs, rather than gang-related drug sales. A key issue in combating teenage gangs is providing a uniform definition for them. Teenage gangs and adult criminal organizations have different origins and they serve different purposes. Efforts to develop long-term interventions must take these differences into account (Howel,1998). Low future orientation, low empathy, educational difficulty, school expulsion, delinquent peers, gang

membership, and low social support were found to be significant risk factors for violence and delinquency (Olate, Salas-Wright & Vaughn, 2012).

While gangs are more likely to be found in inner cities experiencing economic disadvantage, this supports neither the accuracy nor the validity of the commonly articulated beliefs that gangs are found only in such disadvantaged areas and that all youths in such areas are involved with gangs. Contrary to these stereotypes, gangs can be found in a wide range of communities, and only a small minority of youths, regardless of community characteristics, joins gangs. Youths who join gangs also tend to resemble the youths from the communities in which they live. Gang members are male and female, reside in single- parent as well as two-parent households, and are not exclusively racial/ ethnic minorities. Nonetheless, personal and family demographic characteristics are associated with elevated risks for gang affiliation (Esbensen, Peterson, Taylor & Freng, 2011). Although youth violence is quite complex, it can be understood and potentially prevented through several approaches based on theoretical concepts and principles. Policies can reduce access to guns. Violence against children and youth can be prevented by improving education, employment opportunities, and the quality of life and by enhancing relations among different ethnic groups. The consequences of violent behavior should be modified through changes in law enforcement and the judicial system. School and community-level communication and parenting education can change attitudes and skills in violence prevention among young people and adults. (Weaver &Maddaleno, 1999).

Youth Violence in Bangladesh

In Bangladesh, different forms of youth violence can be observed including SGBV, violent extremism, different types of street crimes etc. Juvenile delinquency becomes a major concern in Bangladesh where the number of youths involved in anti-social activities appears to be on the rise. Ara and Mahjabeen (2010) argue that with the advancement of industrialization and urbanization, juvenile delinquency is gradually rearing its ugly head and making the problem more acute day by day. The new manifestations of juvenile delinquency take such characteristic forms as gang activities, purposeless offences, acts of vandalism, joyriding, terrorism, eve-teasing and the like which can be serious from the point of public order without necessarily being an indication of serious anti-social behavior. In recent years, violent extremism as a result of Islamist radicalization is one of the major concerns in Bangladesh. According to BIPSS (2017),

the rise of religious radicalisation leading to terrorism has increased in Bangladesh in recent times. It has become a major concern in Bangladesh since the incidence of nationwide serial bomb blasts in 2005. Bangladesh has seen random acts of terrorism perpetrated by young people after regular interval. On the other hand, youth are the main perpetrators in all form of violence in the context of SGBV. In a report of Bangladesh MahilaParishad (2018) shows that, in the case of rape incidents, about 72% of the perpetrators are belong to the 11 to 35 age range. On the other hand, in the context of gang rape incidents, about 70% of the perpetrators are belong to the 11 to 35 age group.

In her research, Atkinson-Sheppard (2010) shows some finding about the street violence conducted by youth and children in Bangladesh. She finds that street children work for 'mastaans', Bangladeshi organized crime bosses. She argues that these children are neither victims nor offenders; they are instead 'illicit labourers', doing what they can to survive on the streets. This paper discusses about the widening of gap between culture and youth culture of Bangladesh. The increasing deviance between the norms of the adult and the young generation is a point of analysis in that matter. These factors may act catalysts in increasing gang violence in Bangladesh. It is necessary for the police to understand the gang violence in order to prevent it. After reviewing these literatures, it is evident that there is a considerable knowledge gap in the context of teenage gang violence in Bangladesh. Thus, this study attempts to add some new knowledge in the field.

Methodology

This research has applied qualitative research method. To be more specific, the researcher has conducted a qualitative content analysis on the news stories of ten cases from renowned media, both print media and esteemed online portal. CRER model has guided the whole content analysist process as the qualitative data were organized as per the components of this framework. An assessment of similar and divergent data helped the study to find patterns of teenage gang behavior in conducting crime.

Theoretical Framework

This research will make use of a crime analysis model developed by the Australian Institute of Criminology (AIC) (Bricknelland Renshaw, 2015). Instead of borrowing the exact model, the researcher has adapted it to the context of teenage gang violence in Bangladesh.



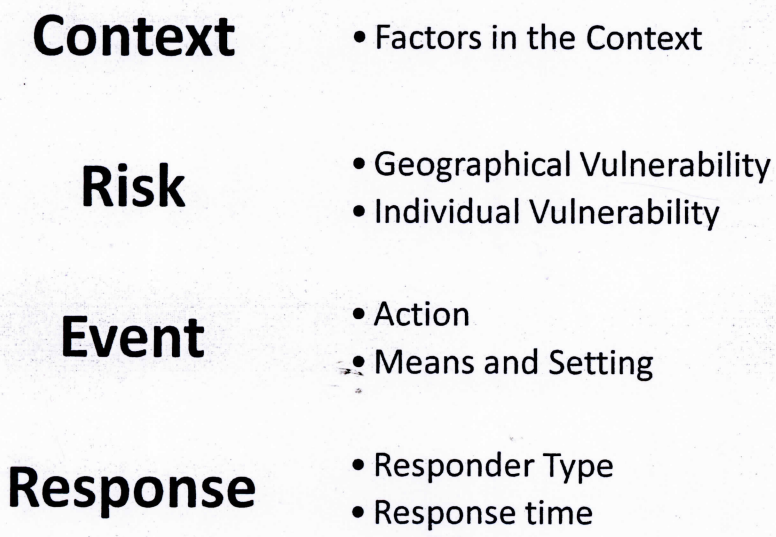


Figure 1.1: CRER Model (Adapted from AIC, 2015)

Source: Bricknell, S. and Renshaw, L., 2015. Exploring the feasibility of an enhanced monitoring program on human trafficking and slavery

Discussion and Analysis

Context

Frequent reports of teenage gang violence in recent years signify a heightening and intensifying trend of teenage gang criminality in Bangladesh. The cases of teenage gang violence reveal that their conflict with law is mostly disconnected from overall context of criminality in the society. This study has identified three dimensions of the context; cultural, political-economic and institutional. More specifically, this study has identified three contextual factors in three dimensions; subcultural socialization, political-economic interest and institutional anarchy.

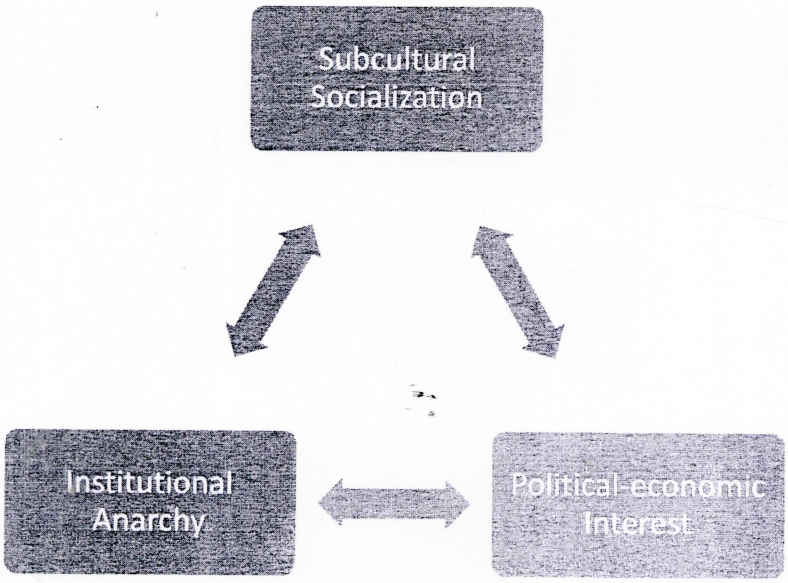


Figure 1.2: Factors in context: Teenage gang violence in Bangladesh

The gangs organize with an urge of subcultural socialization but often end up in violent acts of crime. Though they draw the attention of media occasionally with the incidents of serious offense, especially murder, the criminal acts are not in their to do list every day. The gangsters, at the onset, generally are school and college friends of urban areas, who move, eat, travel, gossip and smoke together, and gradually engage in partying, fast bike riding (frightening inhabitants) with sharp-horn, eve-teasing (being Romeo), addiction, etc. They employ force, network with big brothers (mutual), and become violent for controlling playground, motorcycle race, social resources, and supremacy. Gang-members (age of 12-25, from all strata of society- low, medium and high) wear a same colored dress (blue T-shirt of Uttara Disco-Boys); use online groups, and apps; employ signs/ codes for communication etc. Joyriding is common to almost all the gangs.

Case 1: Adnan Kabir Murder

The young victim Adnan Kabir, an eighth grader from Trust School and College, was a member of the 'Nine Star Group' (9MM Boys), who were rivals with another gang named 'Disco Boys'. Both these groups are based in Uttara. The enmity began when a member of the 'Nine Star Group', was stabbed by members of the Disco Boys. Adnan was chased by 10 to 15 youths to Road 17 of Uttara's Sector 13. There, the killers hacked him with sharp weapons. Adnan died within an hour of being taken to a hospital. The case started with West Uttara Police Station by the victim's father, Md Kabir Hossain, named nine and accused at least 12 more unidentified attackers who are between the age of 16 and 22. Around 20 to 25 youths from Uttara are members of the Disco Group and Nine Star Group on Facebook. Locals said the youths who form the two 'gangs' have no political affiliation. They would party and make noise while driving motorcycles with reckless speed. They would reportedly take drugs in the playgrounds and taunt schoolgirls. (Source: bdnews24.com, 2017; Dhruba, 2017)

Some of these gangs also graffiti in the walls around. When police arrested some gang members after Adnan Murder incident at Uttara, they found paint cans which they use for their graffiti(bdnews24.com, 2017). The gang members who killed Yasin Arafat at Hazaribag mostly work in shops, tea-stalls, and marketplaces, and join in group at night when their work places are closed(Alif, 2019). These are the common activities of almost all the gangs studied in this research, though they were selected for their involvement in serious crime.

Socialization in gangs gradually alienates teenagers from the mainstream culture of the society and pushes them to deviate from norms. Drugs come to play a big role in this process. Selling drug is not common to all these groups but taking drugs is. A gang provides its members with a psychological as well as physical support system to take drugs. Unlike the bands of organized crime, the teenage gang members identify themselves in a relation of fraternity and strong social bondage. The more they hang around together, the more they develop the pride of in-group identity. Most of the murders (6 of 9) studied in this research had inter-group rivalry in the background. These rivalries often grow from insignificant incidents or a perceived competition of dominance. They start enjoying the feelings of power being in the gang. Nilay, a gang leader of about 100 peers from Kishoreganj, expressed they became elated and inspired seeing people terrified and went to commit coldblooded violence taking drugs without any reason(Mojumder & Panday, 2019).This is how the innocent beginning of subcultural socialization turns to corrupt the young and emotional mind and make them commit crimes like murder and assault.

Mojumder & Panday (2019) made an analysis of cases to

Case 2: Yasin Arafat Murder

Yasin Arafat a 16-year-old boy was stabbed to death when he was returning home after work in Dhaka's Rayer Bazar. Yasin was a member of Love Lane gang. Teenagers who stabbed him to death were the members of Bangla Group gang. Both these groups were in conflict after Love Lane group members beat Shaikat, the leader of Bangla Group. These violent teenage gang groups are based in Mohammadpur, Beribadh, Rayer Bazar, Nimtoli, Rana BekarirGoli, Hazaribagh, etc. The Bangla Group has more than 50 members. (Source: Alif, 2019; Alif & Babu, 2019)

Case 3: Mohsin Ali Murder

On September 4, 2019, a group of teenagers hacked Mohsin Ali, 14, to death. Mohsin was a ninth-grade student from the Mohammadpur area. The attack also left three of his friends seriously injured. Earlier that day, Mohsin and his friend Rubel visited nearby park with a girl, when some teenagers, including Pervez who led that attack later, made some offensive comments.

identify the dominant reasons of violence by teenage gangs. Following table assembles those casuses with the relevant cases.

Table 1: Causes of violence operated by teenage gangs

Sl.	Dominant Cause	Relevant Cases
1.	Territorial rivalry	Adnan (15) of Uttara, Dhaka, Abdullah khan (13) and Ferdous (20) of Jashore, Miron (14) and Adil (11) of Cumilla
2.	Love affairs	Imroz (32) and Sunny (28) of Jahsore, Hridoy (15) of Barishal
3.	Factionalism and domination in gang	Aziz (18) Dhaka
4.	Intolerance	Nurul Islam (15), and Shuvo (16) of Gazipur], politics [Ispar (15) of Chaottogram
5.	Kidnap and ransom	Rupok (16) of Kishoreganj

Source: Mojumder & Panday, 2019, available at https://www.daily-sun.com/post/423625/2019/09/15/Youth-Gangsterism-and-Imminent-Challenges

Teenage gangs are neither truly political nor truly economic units. Some gangs grow to be a band of organized crime over the time, e.g., 'Bond 007' of Barguna, but most of the gangs do not do so. 'Bond 007' is also unique for its strong political affiliation unlike the other teenage groups studied here(Rahman & Sikder, 2019). The killers of Adnan Ispar in Chattogram are also politically driven and supported, but they did not create any teenage gang by name. Rather, they operated as per the command of certain political leader(Jugantor, 2018). However, direct political interest did not play strong role in other cases. But some groups showed the prevalence of economic interest in their operations. For instance, the leader of 'Big Boss' group is a BBA student who is involved in hawker business along with his brother. He kept his sibling in the gang, which explains the business interest of siblings in maintaining the gang(bdnews24.com, 2017).

Another factor in the context identified by this study is the institutional anarchy among the gangs of teenagers. Hundreds of such gangs operate in urban areas who encounter each other over many issues of contention (Bosu, 2019). In some areas multiple gangs strive to uphold their dominance in small areas. This is an outlaw phenomenon that has been taking shape for a few years only. Therefore, they lack some universal code of conduct or any other institutional mechanisms to avoid unnecessary violence or mitigate the issues of contention. Therefore, insignificant incidents like silly altercations between two rival members often end up in murder.

Risk Factors

This study has identified 15 organized gangs of teenagers involved in 10 cases of murder and abduction reviewed for the research. 13 of these gangs operate under distinct name while the other two do not. These two exceptions are the gangs involved in Adnan Ispar's murder case in Chattogram and a teenager girl's abduction case in Kishoreganj. Locating the areas of operations for these gangs and the characteristics of teenagers engaged with these gangs, this research has made a few conclusions regarding the risk factors.

Firstly, geographical risk clearly indicates to all urban areas of the country with the capital city, Dhaka, at the worst edge of the rank. Each of the 15 gangs is found to operate somewhere in the urban setting of the country. The following table shows a geographical distribution.

That led to an altercation and a later attack. Pervezwas one of the members of teen-gang *Voyankar*, and Mohsin was a member of *Film JhirJhir* group. Mohsinand his friends were chatting at the Chan Miah Housing area in the evening, when a group of 10-12 youths attacked them and stabbed Mohsin to death. (Source:Rabbi, 2019, September 5)

Case 4: Rifat Sharif Murder

Rifat Sharif, 22, was hacked to death by criminals in front of his wife Minny, in broad daylight, at Barguna town on June 26. Several allegations, including the involvement of political influential quarters and drug trade, were pointed as the reasons behind the murder, bringing a different dimension to it. The main perpetrator named Nayon, a James Bond fan aged 25, is the leader of a gang like group named 'Bond 007'.Nayon led 'Bond 007' gang was involved different types of crimes in the town. Another claim was Nayon's frustration of not being able to marry Minny.Nayon led the attack while Rifat Farazi and Rishan

Table 2: Graphical representation

Sl.	Group Name	Based in	Cases	Type of case
1	Disco Group	Uttara	Case 1	Murder
2	Nine Star Group	Uttara	Case 1	Murder
3	Big boss	Uttara	Case 1 and 7	Murder
4	Bangla Group	Mohammadpur	Case 2	Murder
5	Love Lane	Mohammadpur	Case 2	Murder
6	Film JhirJhir	Mohammadpur	Case 3	Murder
7	Voyankar	Mohammadpur	Case 3	Murder
8	Bond 007	Barguna	Case 4	Murder
9	Bhai-Brothers Group	Gazipur	Case 5	Murder
10	Dighirpar Group	Gazipur	Case 5	Murder
11	Eagle Bahini	Cumilla	Case 6	Murder
12	Kashmiri Group	Uttarkhan	Case 7	Murder
13	Mafia	Ramna	Case 8	Murder
14	Gang of Case 9	Chattogram	Case 9	Murder
15	Gang of Case 10	Rangpur	Case 10	Abduction

9 out of 15 gangs in the list are from Dhaka whereas 2 from Gazipur, the rest are from Barguna, Cumilla, Chattogram and Rangpur. When ten selected cases find 15 gangs from 6 cities, the concern must rise about the spread of this phenomena across the

The 'Bond 007' group planned the attack throught their messenger group. However, several other allegations, including the involvement of political influential quarters and drug trade, were pointed as the reasons behind the murder. Locals said the patrons of this gang were politically influential. The local MP's son Sunam is said to have been backing Nayon, the key suspect – an accusation the MP's son denies. Around a week after the murder, a prime accused, Sabbir Hossain Nayan, also known as Nayan Bond, was killed in a gunfight with police.(Source: Kamal, 2019; Rahman & Sikder, 2019)

Case 5: Nur Islam Murder

A gang named 'Bhai-Brothers Group' had been at loggerheads with another teenage gang 'Dighirpar Group' over establishing supremacy at Joydevpur, Gazipur.As a sequel of the enmity, a brawl took place between the two groups.At one stage, 10-12 members of 'Bhai-Brothers Group' swooped on Nur Islam, a member of 'Dighirpar Group', and hacked him to death.

urban settings of the country. Reports have already raised this concern about hundreds of teenage gangs operating in different cities(Rabbi, 2019, July 22; Bosu, 2019). RAB estimated 50 to 60 teen-gangs active in Dhaka that are believed to have around 8,000 to 10,000 active members(Rabbi, 2019, August 29). The same report reveals RAB's estimate that around 3,500 teen gang members had been active with different gangs in the periodbetween 1990 to 2000,and the number increased up to4,882 in the following decade.Whereas all the cities besides Dhaka are nowaffected by teenage gangs, Chattogram, Sylhet, Cumilla, Kishoreganj are speciallyat higher risk. News reports cite about 20-25 teenage gangs in Chattogramand 7-8 gangs in Sylhet(Bosu, 2019)

Almost all the victims of these gang violence incidents are literally teenagers. All the murdered individuals identified from the reviewed cases are aged between 13 and 22. If Rifat Sharif of case 4 is considered as an exception, the range of victims' age is 13-17.

Table: 3

Sl.	Victims	Age
1.	Adnan	16
2.	Yasin Arafat	16
3.	Mohsin Ali	17
4.	Rifat Sharif	22
5.	Nur Islam	17
6.	KamrulHasanHridoy	14
7.	AzmainAdil	17
8.	ArifHossain	15
9.	Adnan Ispar	13

On the other hand, gang membership has shown comparatively a larger age range, though most of them are teenagers as well. Out of twenty-four gang members identified with age, this study has found only eight above twenty and only one above twenty-five. The urban teenagers are at risk of joining gangs as well as leading those in such an early age. A gang leader is not necessarily the oldest of the gang. For instance, police identified six members of 'Big Boss' gang with their leader who is only 19 while three of the rests are elder than him. This research has identified the age of five gang leaders ranging between 19 and 25.

Characteristics of Events

The incidents of ten cases reviewed in this study include nine murders and abduction. The major characteristics of these events are-

1. Group based operation instead of lone attack
2. Online based mobilization
3. Use of sharp weapons

Criminal offenses of teenage gangs always see group perpetrators; not a lone attacker. In each of the ten incidents reviewed here, there was a group in chase. This is significant because killing doesn't need multiple perpetrators in all the cases. Whenever they decide to chase a target, they want to do it together. Both the motive of crime and brotherhood of gang members function behind this. In most cases, the motive of attack is related to some sort of group interest. Here, group interest is not necessarily economic or political. Two rivaling group consider any act of animosity against each other to serve their pride.

Case 7: HridoyMurder

Kamrul Hassan Hridoy, an eighth grader, was assassinated over a dispute between two teenage groups in Uttarkhan area on March 21, 2019. After the incident, Rapid Action Battalion (RAB) arrested a person in this connection from Gazipur. The arrestee admitted to killing Hridoy after the members of his gang 'Big Boss' exchanged heated words with the members of rival 'Kashmiri Group'. At one stage, Hridoy was hacked indiscriminately, leading to his death. (Source: Rabbi, 2019, July 22; Bosu, 2019)

Case 8: ArifMurder

On March 15, fifteen-year-old Arif Hossain was stabbed to death on the footpath near Dhaka University's Curzon Hall. In the evening, Arif was returning home to Nazimuddin Road.

The sense of pride and sentiment of brotherhood, sometimes, turn an individual cause into a cause for the gang. If any of the gang members fall for some girl or want to take revenge for an insult, his fellow gang members take the issue seriously and make it their own cause. Case 10 shows that the gang members tried to abduct a girl after she rejected the marriage proposal of one of them.

Social networking apps now help the gang members to stay connected all the time and organize the gang members any time for attack. 'Bond 007' group mobilized the attack on Rifat Sharif through their messenger group with the similar name. 'Disco Boys' of Uttara did the same before their attack on Adnan. In these chat groups, they decide about the time and place of attack, collection of weapons, and specific roles of different members to make the mission a success.



Image 1: Members of 'Bond 007' group planning the attack over messenger chatgroup

While leaving the sidewalk in front of Curzon Hall,Arif had an altercation with a member of 'Mafia' gang when he threw lemon peas at Arif. The leader of the gang, then, hit a knife on Arif's back. After the bloody condition, Arif was taken to Dhaka Medical College Hospital where he died at 10pm on that day. About six persons, aged between 12 to 15, brutally stabbed him.'Mafia' gang has 12 members who are active in Ramna Park, Suhrawardy Udyan, High Court shrine, DoyelChattar, and Chankharpul areas. (Source: Rabbi, 2019, July 22)

Case 9: Adnan Ispar Murder

Adnan, a ninth-grade student of Chittagong Collegiate School, was publicly assassinated in front of the Khastagir School of Kotwali Police Station on January 5. During the incident, Arman and Saeed beat him with a stick. When Adnan ran for life, he hit to an auto-rickshaw and fell on the road.Adnan's t-shirt was pulled from the back by Muntasir. Then, Moin came from the front and stabbed Adnan's abdomen on one side.Adnan ran in front of the Khastagir school in a bloody state and plunged into the street.The killers then fled.



Image 2: Gang members of 'Disco Boys' posted their action in Facebook before killing Adnan.

Sharp weapons like knife and *'ramda'* are almost universally used by the teenage gangs in their deadly attacks. All of the nine murder incidents were reported in news media as either stabbed to death or hacked to death. Even, some gang members used sharp weapons to silence the auto driver while abducting a girl in Rangpur. Interestingly, they prefer using these weapons evernwhen they possess firearms. The killers of Adnan Ispar hacked the victim to death with sharp weapons and kept themselves from using the gun they collected for the killing. Therefore, sharp weapons seem to be a default weapon of choice.

Status of Response

The viral footage of Rifat Sharif murder has recently shocked the country not only by the heinous acts of attackers but also by the passive and escaping role of bystanders. Some young boys held Rifat in an openly crowded place and started hacking with sharp weapons where some people just quickly bypassed them,

The knife that Moin killed Adnan with was taken from a store in front of the Ideal School. Although the killers had firearms, they were not used. It was supplied by a Chhatra League leader named Enam Hossain, the leader of a section of the Mohsin College BCL. (Source: Daily Jugantor, 2018)

Case 10: Teenager Girl Abduction

Police have arrested seven members of a juvenile crime gang for abducting a college student after returning marriage proposal. On that day, after completing her private tution, the college student was returning home by an autobike. At that time, the kidnappers stopped the auto driver and threatened him with sharp weapons. When they were forcing the girl into the micro bus, the auto driver screamed, and locals rushed in an instant. A love affair between the college student and the gang member Shuvo broke up two years ago.Shuvo got angry when the family of the college student did not accept his marriage proposal and tried this abduction. (Source: Daily Ittefaq, 2019)

and some others created a circle of curious individuals at a closer distance letting the miscreants a free space to kill the victim.The whole scenario seems to be some show of street performer.This is not an exception but normal phenomenon in cases of violent crimes in this country. When a group of teenagers were stabbing Adnan, people were watching this without interruption. Some of these bystanders were also taking picture of the attack(Dhruba, 2017). Therefore, the first learning of this research regarding teenage gang violence is non-response.

However, local people are the first to respond in most cases of violence. The common response in case of murder is to take the victim to hospital after the attackers are gone. Local people did this in cases of Adnan Kabir, Yasin Arafat, and Mohsin Ali. In all these cases, they waited until the perpetrators are gone(Alif, 2019; Dhruba, 2017; The Daily Star, 2019). In Adnan's case, people did not dare to recover the corpse even after it happened. It was a pie seller woman who herself took the task. Case no. 10 is an exception in this regard. When the gang members abducted the girl from an autobike, auto driver shouted, and the people rushed and rescued the girl in an instant.

Most disappointing is the status of long-term response from the government. Arresting and bailing out the gang members are a regular phenomenon in Bangladesh. RAB revealed that theyarrested around 190 gang members from January to August 2019(Rabbi, 2019, August 29).Some of them are sent to correction centers when they come in conflict with law by committing serious criminal offenses. But a comprehensive mechanism to address this odd is absent. It's truly distressing to know that one of the killers of Adnan Kabir was bailed out just a few days before he took part in that killing (Dhruba, 2017).

Conclusion

This study has sketched the context, risk factors, characteristics of incidents and the status of response regarding the violence of teenage gangs in Bangladesh. It has found cultural, political-economic and institutional factors creating a three-dimensional context that has been contributing to the teenage gang violence in the country. Youngsters living in urban areas are at risk of joining these gangs, leading them and turning out to be either the victim or perpetrators of crime. The capital city, Dhaka, is at the highest risk while all other cities follow. Almost all the gangs have similar weapon of choice, locally made sharp weapons. These weapons are easy to collect and reasonable in price.

The gang violence is not only deteriorating law and order situation of this society, but also shattering the development of a lot of teenagers. Non-response of people has evidenced a culture of fear and isolationist individualism of urban life. The government as well as non-government actors have to come up with comprehensive measures to address this problem. Existing knowledge gap is a real barrier in this regard. This study has made some contribution of mapping it out, but more in-depth works are required from psycho-social and criminological perspectives.

Sociologists have already argued that a number of factors like absence of moral education in family and school, little space for sports and recreational activities, easy access to internet and undue academic stresses are responsible for an invitation to gang-culture. Erosion of social values coupled with political degradation also plays a critical role in this regard. Politically backed criminal activities including spread of drugs make the situation worse. Many of the local political leaders and cadres are directly involved in growing criminalisation of society now. Most of the time their crimes go unpunished or unreported as law enforcing agency doesn't exercise their legal authority properly. These political leaders and cadres are patronising juvenile gang culture in a different manner. They are exploiting teenagers especially from careless, disturbed and low-income families by providing them money, mobile phone and support for small crimes.

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Prospects and Problems of Good Aquaculture Practices in Bangladesh: A case of Mymensingh District

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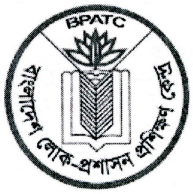
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List of Abbreviation

Word	Full Meaning
BBS	Bangladesh Bureau of Statistics
BFRI	Bangladesh Fisheries Research Institute
FRSS	Fisheries Resource Survey System
MT	Metric Ton
Ha	Hector
GAP	Good Aquaculture Practice
DOF	Department of Fisheries
FAO	Food and Agricultural Organization

Abstract

This study was conducted mainly based on the present issues of good aquaculture practices (GAP) in Bangladesh, especially in Mymensingh district. Mymensingh contributed ten percent of total fish production within a increasing trend but fish farmers didn't get any subsidies from the government, nor getting marketing facilities. For the current studied thirty eight fish farmers were randomly interviewed through a prepared checklist in ten upazila's of mentioned district; secondary data were collected from the department of Fisheries (DOF), Mymensingh and also from Fisheries Resources Survey System (FRSS, Department of Fisheries, and Bangladesh). It was observed that twenty four percent fish farmer's practices mono culture on the contrary seventy six percent practices polyculture in the studied areas. Eighty four percent (84%) farmers mentioned that they always used commercial feed in their farm and only sixteen percent (16%) farmers used homemade feed. Sixty eight percent fish farmers mentioned that they used aqua medicine in their ponds incase of appearing diseases with the prescription of Senior / Upazila Fiheries officer and thirty two percent told they never used medicine in their ponds. Fish production were found 6.0±1.5 to 9.0±3.5 MT /ha and income were 8.25±2.7 to 14.00±5.0 lacs /ha respectively in the studied areas. Sixty nine percent of them told that they are known about good aquaculture practices but they did not practice it in their fish farm and thirty one percent fish farmers expressed their opinion as they yet unknown about good aquaculture practices. There is not yet any regulation for maintaining good practices and no doubt, introduction of Good Aquaculture Practices can create many benefits to the farmers. For sustainable aquaculture establish of good practices is a must.

Key Words: Mymensingh, Sustainable, Fish farmers, Good practices, Aqua medicine.

Prospects and Problems of Good Aquaculture Practices in Bangladesh:A case of Mymensingh District

Introduction

Bangladesh is known to be the land of inland-waters, in the forms of rivers, beel, khal, floodplains, canals and thousands of small wetlands and ponds. Majority of those water bodies are suitable for freshwater aquaculture. Total fish production of Bangladesh in 2017-18 was 42.77 lakh MT where aquaculture contributes 56.44% (DOF, 2019). Bangladesh is now ranked 3rd in harvest from open water and 5th in aquaculture production (FAOSTAT, 2018). Fisheries sector contributes 3.57% of total GDP and 25.30% of the agricultural GDP (DOF, 2019). About 20 million people directly or indirectly are involved in this sector in which numbers of fish farmers are around 13.86 million. Total pond area of Bangladesh in 2018-19 are 1.83 million ha and annual production is 4.77 MT/ha (DOF, 2019). At present aquaculture as profession is very attractive and profitable business with compare with rice or other agricultural products. As a result, in country many land owners has been converted their lands into ponds (Islam *et al.*, 2017). Remarkable change regarding livelihood as well as socioeconomic improvement has been occurred among many of fish farmers by culturing fish and related work (Ara, 2005). To attain self-sufficient of food production and also job creations may be a best way of aquaculture in Bangladesh (Al-Amin *et. Al.*, 2012). For successful implementation it is essential to make proper planning, measurement of current status and identified the challenges to achieve the desired goals of the implementing projects (Ellis, 2000; Hasan et al., 2012).

Bangladeshi people is known to be as "Macha bhate bangali", means without fish and rice people never thought passing their daily life (Ghose, 2014).

At present, a large number unemployed educated youth has adopted/engaged in fish culture and showed remarkable success. Many of them are successfully practices in this sector, not only that they created employment opportunities and a good number of labours are working in their farms permanent or daily basis (Islam, 2010).

At present inland pond culture represents the most important part of aquaculture in Bangladesh contributing to around 86% of total production with an increasing trend (DOF, 2019). The

contribution of cultured ponds also increased substantially from 52% in 1999 to 68% in 2019 (DOF). Though increasing trend in pond aquaculture there is still no legal frame for the fish farmer even they do not bother to maintain good practices for safety food, they think only how to grow more fish and grow more money. Farmers think that government have some responsibility to institutionalized the fish farming as agrobased industry, government should negotiation with the importing countries to easy entrance and government also provide the sufficient fish processing plant (Need based) throughout the countries

According to Food and Agricultural Organization (FAO, 2013), fisheries production contributed about 40.1 percent world food supply creating a huge numbers of employment opportunities. The organization)(FAO, 2012) also mentioned that near 600 aquatic species are adopted or raised in captive environment among 190 countries.

In terms of inland aquaculture in Bangladesh, as there is no legislation in place for land use, consequences could be the same as the shrimp farming in coastal areas (Primavera, 2006). Therefore, the overall environmental impact due to land use for fish farming became an important issue deserves to be addressed thoroughly.

Mymensingh is blessed with fresh water aquaculture contributing about one tenth (1/10) of total fish production of Bangladesh (DOF, 2019). The area of Mymensingh district is 4363 sq.km., Number of ponds are 179319, covering area of 30054.25 hectors. Countries total fish production is 42.77 lac MT in 2017-18, where the production of Mymensingh district is 4.57 lac MT in 2017-18, total demand of fish is 11635MT and surplus of fish is 340596 MT (DOF, Mymensingh. Annual report 2017-18). But with the increasing of fish production, the farmers are facing so many prolems that are difficult for their existing in this sector. The high price of fish feed on the other hand price of fish is very low. In compare to fish production, marketing system don't develop in such way, as a result farmers are bound to sell their fish with low prices, even like agriculture sector there is no scope of subsides for the fish farmers. In Mymensingh there is no fish processing plant like shrimp processing plant in the coastal belt (Khulna, Satkhira), even no initiative for white fish exporting is taken by the government. So it high time to concentrate attention or take initiative regarding fish farmers welbeing as well as the benefit of the country.

In this regards a study will be conducted in some upazila of Mymensingh district with the following **objectives:**

1. To determined the major problems facing by the fish farmers and
2. To identify the Initiatives and constraints in case of white fish export for sustainable aquaculture

Research Questions

1. What are the problems faced by the fish farmers of Bangladesh?
2. What are the constraints to export of white fish in Bangladesh?

Justification

Aquaculture sector has emerged as the 3rd most important contributor in export earnings of Bangladesh. It is the second largest export industry in Bangladesh and produces 2.5 % of the global production of shrimp. But its reality that in case of white fishes (carps & cat fishes) there might be given little attention, as there is no prescribe rules for the fish farmer; they think that they are not accountable to the DOF officials. Though average fish production is 5.5 MT per Ha but in some areas, such as greater Mymensingh, Gazipur, Jessore, Bogura, Rajshahi, Pabna and some other districts the production is so high 10.5 MT per Ha (DOF, 2019). At present the country is surplus with fish production (Present production-42.77 lacs mt and demand is 40.35lacs mt) and increasing day by day. So it is high time to grow attention regarding sustainable aquaculture providing quality fish seed and feed to preserve the farmer's benefit. Though the fish production is increasing, farmers are facing so many obstacles and difficulties to sustain in this sector. Shrimps farming and export are now in well established in Bangladesh but in case of white fish there might be given a little attention. In some region of Bangladesh fish culture are growing rapidly, with having a risk of marketing as well as out breaking of disease, high prices of fish feed , but protein percentage is not up to the mark, lack of government subsides to fish farmer like agriculture, no export processing zone like shrimp. So if government do not take a action plan regarding sustainable fish farming this agrobased business definatly will breakdown.

Literature Review

There are a lot of socioeconomic studies on fisheries sector, because growth of fisheries sector day by day in Bangladesh. But there is no work yet been done regarding good aquaculture practices in Bangladesh. An attempt has been made in this section to review some of slightly related studies.

Ghose (2014) describes the opportunities and challenges of fisheries and aquaculture in Bangladesh. He also cited that fisheries sector plays a vital role in the national macroeconomic and food nutrition security. Ghose also has given his suggestions for more efficient as well as sustainable management of aquatic resources which will contribute to fulfill the nutrition of health and also economy of the country. To sustainable development of fisheries sector policy makers should be given more attention to develop policies regarding environmental, infrastructures, storage and marketing issues.

Kamaruddin and Baharuddin (2015) designed an experiment on the importance of good aquaculture practices in improving fish farmer's income in Malaysia. They found that based on the hypothetical model there are five types of assets which are human, financial, physical, natural and social that affects the level of GAqP (Good Aquaculture Practice) practices among fish farmers and their total income.

According to Boyd and Tucker (1998), though there is a great contribution of aquaculture in supplying of food in the world, now it is important to give attentions improves environmental and social issues.

Though aquaculture has played a significant role regarding world food supply, a large numbers of scientists and environmental workers have given their concern regarding conservation of environment and natural resources (Dierberg and Kiattisimukul, 1996; Goldburg and Triplett, 1997; Naylor *et al.*, 1998, 2000). The Food and Agriculture Organization (FAO) of the United Nations (1997) had developed a Code of Conduct for responsible Fisheries and Aquaculture. The Code of Conduct consists of a series of general statements on how aquaculture should be conducted and the statements are addressed to the governments of world.

An aquaculture association or an individual aquaculturist can adopt a modified verson of the FAO Code of Conduct for Aquaculture (Boyd, 1999). Recent commitments by major buyers in developed countries to buy only certified seafood, indicate that significant portions of global industrial aquaculture production may soon come under the certification umbrella (Vandergeest, 2007).

Most of the developing countries give a little attention to comply with quality standards as they contributed a small amount number of aquaculture products in the world market (FAO, 2011). At present, Asian countries produced more than sixty percent of fishes in terms of quantity and more than half of supply in the world (FAO, 2012), and where aquaculture facilities are characterised by the heavy use of many chemical and biological agents, including antibiotics, metal-based compounds, pesticides, other agrochemicals, and animal and human excreta (Sapkota *et al.*, 2008).

Rahman (1986) conducted an experiment to identified the main constrain to development of aquaculture in Bangladesh. He identified the major constraints as multiple ownership of ponds, land use and land-lease conflicts, insufficient credit facilities, short duration lease of ponds, marketing problems and inadequate extension services etc.

Bangladesh Fisheries Research Institute (BFRI 1992) conducted a "Research on Benchmark Survey of Aquaculture Practices Potentials and Constrain in Bangladesh". The study showed that the level and species of fishes in uncultured ponds. They also observed current practices, pond conditions and constrain on adoption of improved practices by pond owners.

Rahman (2003) conducted an experiment to identify the major challenges for sustainable aquaculture. He stated that multiple ownership, lack of technical knowledge, inadequate quality seed, high feed price, inadequate fund etc. were the challenges of aquaculture of studied area.

Islam and Rashid (2004) conducted an experiment on aquaculture extension project in Bangladesh assessing their sustainability and socio-economic impact on livelihoods of fish farmers. The authors reported that most of the fish farmers adopted semi-intensive farming and their average yield and return were 3445 kg/ha, and Tk.90569/ha. The result also showed that aquaculture had created employment opportunities for farm household because of increases in fish production through improved technology resulting in the involvement of more labour in different activities.

Methodology

The research was qualitative in nature. Qualitative study gives a clear understanding regarding reality of society, peoples culture etc.

Qualitative research following a qualitative approach is exploratory and seeks to explain 'how' and 'why' a particular phenomenon, or behavior, operates as it does in a particular context.

Methods (used to obtain qualitative data) Qualitative researchers use a variety of methods to develop deep understandings of how people perceive their social realities and in consequence, how they act within the social world.

Study area

Present investigation were conducted in ten selected Upazila's of Mymensingh district, they are namely, Mymensingh sadar, Trishal, Bhaluka, Muktaghasa, Gouripur, Ishwerganj, Tarakanda, Phulpur, Haluaghat and Fulbaria.

Data Collection

The investigation was conducted by collecting some primary and secondary data. Primary data were collected through checklist from fish farmers. A set of preplanned checklist have been prepared to address several issues of fish farms, fish culture, production, farmer's socioeconomic conditions and problems related to fish culture. Checklists were provided Senior /Upazila Fisheries Officers to collect data from the fish farmers. Then, Sennior/Upazila Fisheries Officers randomly selected the fish farmers and collected data from 2 to 5 fish farmers from each upazila. In addition secondary data of fisheries resources, fish production and related others information were collected mainly from Department of Fisheries (DOF), Mymensingh and others from Department of Fisheries, Matshyabhaban, Ramna, Dhaka.

Data analysis

Collected data are carefully scrutinized, recorded and presented in both graphical and tabular form for ease of understanding.

Result and Discussion

The result showed the 50% of fish farmers aged between 25-35 years old, 42% of fish farmers aged between 36-45 years old and 08% of fish farmers above 45 years old (Table-1). In this study it is observed that all the fish farmers in the middle age group and all they are successfully doing their business. More or less similar result (31-45 years) also found by Reza *et. al* (2015). It is thought that age factor is an important phenomena in modern aquaculture and its seems that for older it's difficult to adopt with the changes, on the contrary older are more comfortable to adopt with the traditional ways form of activities. (Malaysian Institute of Economic Research (MIER), 1999).

Table 1. Farmers basic informations

Sl.no	Name of Upazila	No. of Farmers survey	Average no.of ponds / farmer	Pond Area (Acre)	Age (Year)			Educational Qualifications of farmers			
					25-35	36-45	Above 46	None/ Illeterate	Upto Primary	Upto High School	Above SSC
01	Sadar	03	04	0.60	2	1	-	-	-	01	02
02	Trishal	05	04	0.75	2	2	1	01	01	01	02
03	Fulbaria	04	03	0.70	2	1	1	-	-	01	03
04	Phulpur	05	04	0.80	3	1	1	-	01	01	03
05	Bhaluka	04	04	0.70	2	2	-	-	-	01	03
06	Tarakanda	05	04	0.75	2	3	-	-	01	01	03
07	Gouripur	04	03	0.60	2	2	-	-	01	01	02
08	Ishwerganj	02	04	0.65	1	1	-	-	-	-	02
09	Haluaghat	03	02	0.55	2	1	-	-	-	01	02
10	Muktaghasa	03	03	0.70	1	2	-	-	-	01	02
		38			19	16	03	01	04	09	24
					50%	42%	08%	2%	11%	24%	63%

Education level of fish farmers can also accelerate the adoption process of latest technology in aquaculture. In this study fish farmers were categorized into 4 categories on the basis of the level of education. Out of 38 fish farmers only 2% were illiterate, 11% primary level, 24% up to high school level and 63% were above S.S.C (Table-1). Kamaruddin *et. al* (2015) conducted the more or less similar experiment and found that majority of the freshwater fish farmers were made up

of those with primary and lower secondary school (74.54%). They also found that the education level of brackish water fish farmers however, were quite high with the majority (78%) of them attained at least primary/secondary/LCE certificates. This is coinciding with shrimp aquaculture system in particular, which requires the farmers who are capable in absorbing highly technical knowledge.

Table 2. Culture related Culture related information's of surveyed farmers

Sl.no	Name of Upazila	No. of Farmer survey	Culture Type		Product -ion MT/ha	Income BDT Lac/ha	Feed Used		Medicine used		Subsidies From Govt.		IF Farm Registra-tion
			Mono culture	Poly culture			Home made	Commer - Cial	Prescrip-tion of S/UFO	Never used	Yes	No	
01	Sadar	03	-	03	7.0±2.0	8.75±1.5	-	03	02	01	-	No	No
02	Trishal	05	-	05	7.5±2.0	12.75±3.5	01	04	03	02	-	No	No
03	Fulbaria	04	-	04	6.0±2.0	9.60±3.5	01	03	02	02	-	No	No
04	Phulpur	05	01	04	7.0±2.0	11.50±4.5	02	03	03	02	-	No	No
05	Bhaluka	04	01	03	9.0±3.5	14.00±5.0	-	04	03	01	-	No	No
06	Tarakanda	05	02	03	8.7±2.5	13.50±4.5	01	04	04	01	-	No	No
07	Gouripur	04	01	03	6.5±2.0	8.90±2.5	-	04	03	01	-	No	No
08	Ishwerganj	02	01	01	6.0±1.5	8.25±2.7	-	02	02	-	-	No	No
09	Haluaghat	03	02	01	6.5±1.5	8.0±2.0	01	02	02	01	-	No	No
10	Muktaghasa	03	01	02	8.5±2.0	11.5±3.5	-	03	02	01	-	No	No
			09	29			06	32	26	12			
			24%	76%			16%	84%	68%	32%			

In this study area it is observed that only 24% fish farmer's practices mono culture on the contrary 76% practices polyculture (Table-2). They mentioned that there might be less risk in polyculture, because if one of the fish species yield hampered due to disease or any other causes then other species mitigate the expenditures. Eighty four percent (84%) farmers mentioned that they always used commercial feed in their farm and only sixteen percent (16%) farmers used home made feed. All of the farmers in study area mentioned that they never got any subsides from the government regarding fish farming. No any farmers known about the farm registration, they mentioned that there might be no initiative yet been taken regarding farm registration.

In this study area 68% of fish farmers mentioned that they used aqua medicine in their ponds incase of appearing diseases with the prescription of Senior / Upazila Fiheries officer and 32%

told they never used medicine in their ponds (Table-2). Ahmed *et. al* (2017) studied present status of pond fish farming: Evaluation from small scale fish farmer under Saidpur Upazila, Nilphamari, Bangladesh, and found that 33% people mentioned , they never faced diseases, 55% of the people mentioned that diseases occurred occasionally and 15% of people found outbreaks of diseases in every year.

In this studied it was observed that fish production were 6.0±1.5 to 9.0±3.5 MT /ha and income were 8.25±2.7 to 14.00±5.0 lacs /ha respectively. This production is higher than most of the other districts of the country.

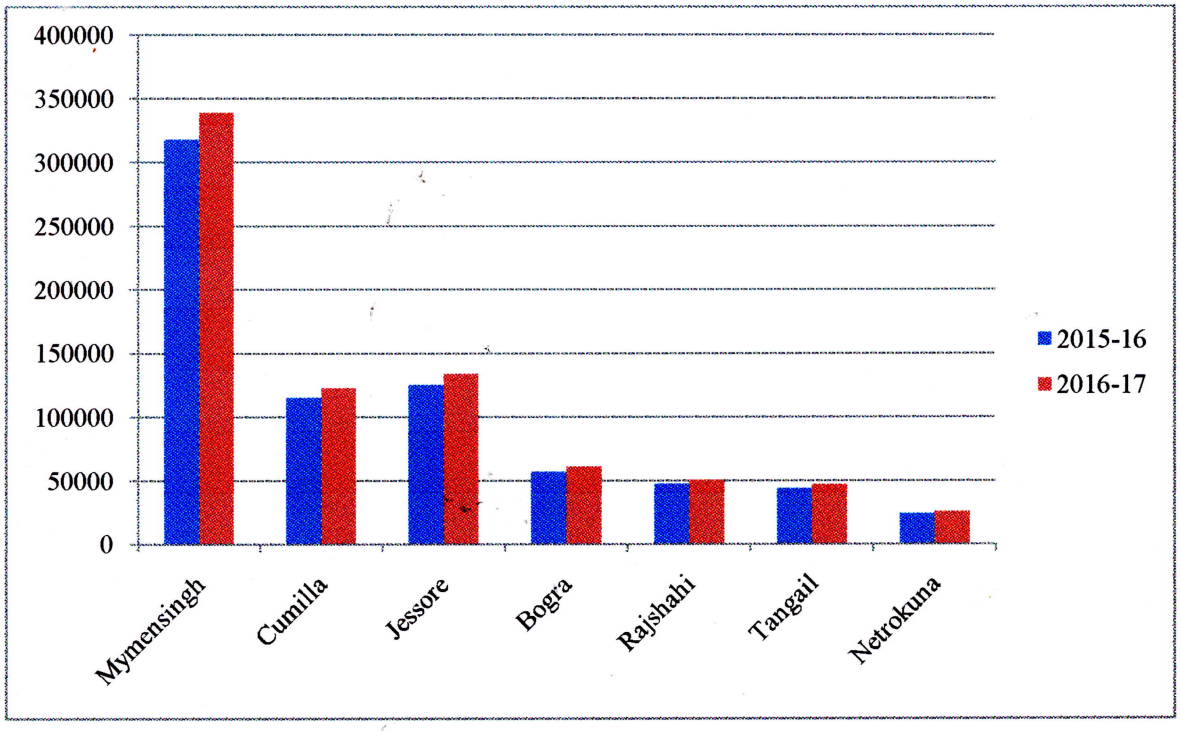


Figure 1. Fish production of some districts in the year 2015-16 and 2016-17

(Source: Yearbook of Fisheries Statistics of Bangladesh, 2015-16, 2016-17)

Figure-1 indicates that fish production of Mymensingh district increased gradually comparatively higher with other districts. In the year 2015-16, fish production were about 3.25 lacs MT in Mymensingh district where 2nd highest in Jessore were about 1.25lacs MT and in the year 2016-17, the production were about 3.40 lacs MT and about 1.40 lacs MT in the same districts respectively.

Table 3. Informations regarding Good Aquaculture Practice of surveyed farmer.

Sl.no	Name of Upazila	No. of Farmer survey	GAP		Export of Fish		Subsides Need		Cooperation From S/UFO office		GAP maintained	
			Not yet Known	Known	Yes	No	Cash	GAP Training	Fish marketing	Advice for Fish culture	Yes	No
01	Sadar	03	01	02	No	No	03	02	02	01	-	No
02	Trishal	05	02	03	No	No	05	03	03	02	-	No
03	Fulbaria	04	02	02	No	No	04	02	02	02	-	No
04	Phulpur	05	01	04	No	No	05	03	03	02	-	No
05	Bhaluka	04	02	02	No	No	04	01	03	01	-	No
06	Tarakanda	05	03	02	No	No	05	03	04	01	-	No
07	Gouripur	04	02	02	No	No	04	02	03	01	-	No
08	Ishwerganj	02	0	02	No	No	02	00	02	-	-	No
09	Haluaghat	03	01	02	No	No	03	01	02	01	-	No
10	Muktaghasa	03	01	02	No	No	03	02	02	01	-	No
			15	23			38	19	26	12		
			39%	61%			100%	50%	68%	32%		

In the study area all of the fish farmers told that they sold their fish in the local market as well as in Dhaka and others district. They also mentioned that it is known to them shrimp is export in mainly in European countries. The fish farmers desired to get subsides regarding fish farming as the agriculture farmers getting subsides from the government. They also highly expected that government will give keen attention to this sector, especially regarding white fish export as they were struggling to survive in this sector. Sixty eight percent farmers in the study area expressed their opinion that they are getting help regarding fish marketing from the local Upazila Fisheries office and 32% fish farmers expressed their opinion that they were getting advice regarding fish farming from the same office. Bangladesh exported mainly frozen shrimps, crabs, value added shrimp food and now kuchia (Live) in a small scale (Figure-2). It is observed from figure-2 that though Bangladesh playing a vital role in exporting shrimp and shrimp related value added food but is now in declining day by day. It might be due to the severe shrimp diseases occurred during subsequent years as well as inadequate good PL (Post Larvae) of shrimp.

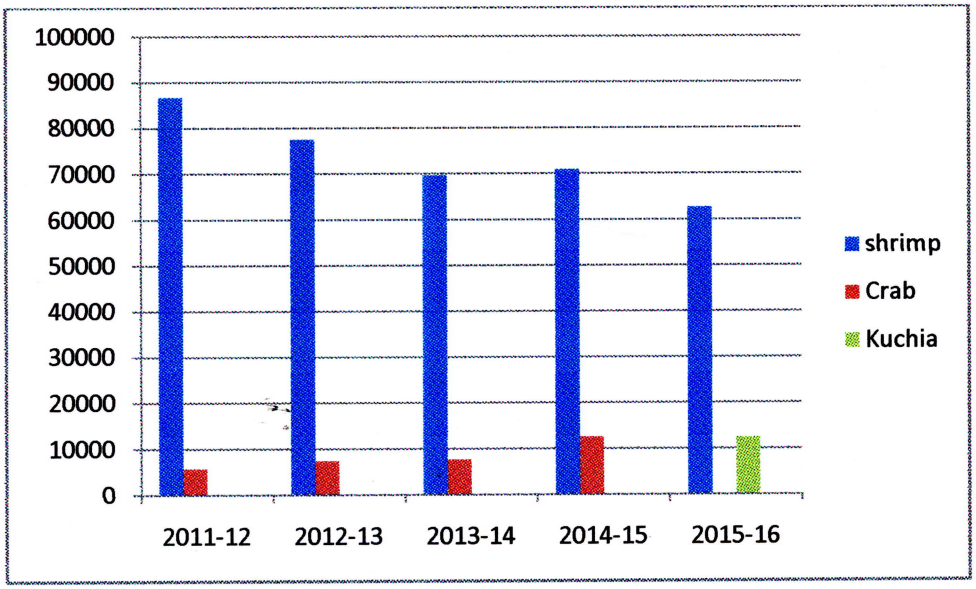


Figure 2. Shrimp and fish exported in some financial years

(Source: Yearbook of Fisheries Statistics of Bangladesh, 2015-16)

At present there are 133 fish/shrimp processing plants in Bangladesh, of which 74 plants are under surveillance on a regular basis by EU member state and USA and in these plants only shrimp are processed for export (FRSS 2016). As the figure-2 shows that shrimp export is decreasing day by day on the contrary white fish production increasing significantly though the everage fish production still about 5 MT/ha (FRSS 2016) and it can be increased above 10 MT/ha. In Mymensingh and nearer districts there are many fish farmers produced 30 to 50 MT/ha fish (Pangus) and the productions of native fishes average above 10 MT/ha (Annual report, DOF, Mymensingh 2018). Now, its very crucial time to identify the obstacles of white fish export and ways of regarding good aquaculture practices which might be opened the door for white fish export.

This study was conducted mainly based on present issue of good aquaculture practices (GAP) Bangladesh especially in Mymensingh district. Sixty nine percent fish farmers told that known about good aquaculture practices but they did not practice in their fish farming and thirty one percent fish farmers expressed their opinion as they yet unknown about good aquaculture practice. There is no doubt that the introduction of GAP can give many benefits to farmers, but the survey data showed that the practice of GAP among operates is low. Kamaruddin *et. al*

(2015) conducted an experiment regarding the importance of good aquaculture practices in improving fish farmers income, a case of Malaysia and found that the practices of GAqP among freshwater fish farmers is very insignificant compare to the brackish water fish farmers. They also mentioned that enhancing knowledge to producers, knowledge of GAqP also could be extended to consumers, to attract them to buy aquaculture products that produced by those who practice GAqP. They also expressed that GAqP is one of the important factors that can increase the income of aquaculture farmers.

Conclusion

This study was conducted to know the level of good aquaculture practices among fish farmers of Mymensingh district as they contribute a vital amount of fish (10% of country production) production and as they are struggling to sustain in this sector. But the result which is found is not up to the mark.

The government may take initiatives to adopt the FAO Code of conduct for aquaculture or prepare a code of conduct for fish farmers which will create an opportunity to export the produced fish. The government also may take initiatives such as giving incentives, subsides or set a higher price for fish that are produced by those who practice GAP. This is because production costs for farmers who will fully adopt GAP will be higher than those who do not practice GAP.

As aquaculture expanding day by day in the country so it is very important government should give attention in this sector. For sustainable aquaculture it is important not only produced large amount number of fishes or fisheries products, it is more important safe food and security fish productions. So government should take initiatives to make polices regarding sustainable aquaculture and also give attention to the farmers benefits.

Recommendation

1. An indepth research may be conducetd to find out the problems and opportunities of good aquacuture practices.
2. Fish farmers should be in registered as recognized fish producer.
3. Government should prepare a code of conduct regarding white fish producers as like shrimp producers.
4. Government should take initiatives to export white fish as like shrimp export.
5. Good Aquaculture Practice should be maintained strictly.

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SEMINAR PAPER

ON

TECHNIQUES TO DIMINISH TRAFFIC CONGESTION IN THE DHAKA CITY : A PROPOSED MODEL

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Abstract :

One of the biggest problems we are facing is traffic congestion in Dhaka city. We are losing our money and time due to traffic congestion. We are living in such cities where traffic congestion is drastic and unbearable . Our most challenging and complicated issue is the traffic problem. So, we want to work on this vital issue to find out the causes and suggest some realistic possible concept and technique to diminish traffic congestion of Dhaka city. We believe that if government can implement this model to all the intersections , there will be no crossing . No vehicle will wait for signal. No electricity bill will be required for signaling. Even very few traffic police will be needed on the roads to control the system. We would like to do semi structure Questionnaire for the drivers who are involved in the traffic congestion. It would be based on qualitative method for finding the causes of traffic jams.

Our objectives were to identify the techniques to diminish traffic congestions and to develop a model of a traffic intersections by which vehicles can pass through. We have conducted a semi structure questionnaire survey among 50 drivers. We have surveyed in the areas of Gulshan 2, Banani intersections, Secretariat and mohakhali bus stoppage. We did our survey with the drivers only. From the survey, Out of 50 drivers, 48 drivers (96 percent) mentioned that they are not happy with the present traffic signal system. 100 percent drivers noticed that our traffic congestion is in the intersections. 100 percent drivers want to cross the intersections without waiting and also they don't have any problem to travel a little bit more distance to avoid traffic jams in the intersections. Taking consideration of all, we also proposed two models for the intersections. As a part of our research work, we considered the intersections of Banani-Kakoli, and proposed two models . Both the models would be suitable for the Banani-Kakoli intersections. Considering all other intersections , we developed two models. Anyone of the two models, would be suitable for any intersections at Dhaka city depending upon the lane space available . In our models we also showed how vehicles will move through the intersections. We believe that if this model is introduced in the intersections, there will be no traffic jams. Because no vehicle will wait for other vehicles. We can make the proposed model where space is a available. Model shows that vehicle will be always on the movement. No interruption will be on the roads. It will save huge fuel cost and men-hour of our country.

Title :

Techniques to Diminish Traffic Congestion in Dhaka city : A proposed Model.

Introduction

We are living in such cities where traffic congestion is drastic and unbearable . If we like to go Uttara to Motijheel , it may take more than 2 hours. Total distance is around 22 kilometers. It should not require more than 25 minutes. But it takes five times of actual time needed. Day by day traffic jams are increasing. If we can't take any immediate action, after few years the city will be dead city. To diminish traffic congestion, government should take immediate actions. Now Our most challenging and complicated issue is the traffic problem. Similarly the distance from BPATC to Secretariat is around 30 kilometers and time required to travel this distance should be near about 30 minutes. But in reality it takes more than 2 hours or 120 minutes. That means actual time needed 4 times of basic time. Basic time is the time that should be needed to travel a distance at normal situation. More than fifteen million people live in Dhaka city. Everyday huge people are coming to the city for employment. Within very short time people will be around 20 million in the city. But we don't have any accommodation and facilities for them. These people also create traffic jams on the road. When too many people in a city, nothing can go on the right way. Government must thing of it and create all facilities to other cities so that people need not to come in a city for employment or education or treatment. Everyday we are facing huge traffic jams on the roads. We don't have any integrated traffic controlling system in our country. People don't have enough foot over bridges to cross the roads and they are not cautious also about crossing the roads. Another problem is nobody obey the rules. Our traffic police are failed to install the electronic or auto traffic signaling system. Most of the intersections , there are hand made signaling system is on operations. Drivers of our country are also reluctant to maintain the law and rules of the country. That's why they don't hesitate to park the vehicles on the roads. Rickshaws are also creating traffic jams on the roads. Because they don/t have any patience to wait. Whenever they get little space , they don't waste time to enter. Sometimes hawkers are also blocking the roads. Footpaths are captured by them. In our country , we don't maintain the lane where different vehicles should be on the roads. We see that slow moving

vehicles are on the right lane. But they should be on the left lane. In the developed countries, we see there are different lanes for different speed of the vehicles. But unfortunately we don't have different lanes for different speed driven vehicles. If we blame only one group for traffic jams that would be wrong. All of us are liable for traffic jams. Because we never respect the rules and regulations properly. If we maintain the discipline , fifty percent traffic congestion will be reduced automatically. We must have change our nature . We should obey our rules and our rules should be compact one. At the same time we must have enough foot over bridges to cross the roads for the people. Again Government should have enough parking spaces in all the areas so that people can park their vehicles easily on payment. Every area there must be some parking space like big building for rental basis parking place. Developed countries in the world also have this sort of facilities. This give the space to the vehicle drivers to park in a certain place not on the roads. When everything will be in right place then government can implement the law enforcement when needed. Our traffic rules also should be maintain strictly by the law enforcement authority. In present situation, every vehicle has to wait to give other vehicles to pass through in the intersections. We have to overcome this problem by introducing no crossing concept. If we make delay to take necessary actions, the congestion situation will be horrible. It will be very difficult to live in the Dhaka city. We have to stop the people to come to Dhaka city by providing and creating all the facilities in the other cities. Otherwise once upon a time the Dhaka city will be the worst city in the world to live.

Objectives :

(a)To identify the techniques to diminish traffic congestion. (b) To develop a model of a traffic intersections by which vehicles can pass through.

Justification :

Why we choose this topic as a seminar paper – because of horrible condition of our roads due to traffic congestion. We are suffering physically and mentally due to huge traffic jams in our country. Even Our economic growth also affected by traffic jams. If we can reduce traffic jams, a

huge quantity of fuel will be saved every year..At the same time it will help us to save man hour also. Everyday we are losing our valuable time and wasting fuels due to traffic congestion. The man-hour we are wasting due to traffic congestion is unimaginable .If we can get rid of this congestion and we can save huge man-hours , this will booster up our economical growth. Thus we will be able to save thousands of crores taka in a year. So, we want to work on this vital issue to find out the causes and suggest some realistic possible concept and technique to diminish traffic congestion in Dhaka city. We believe that if government can implement this model to all the intersections , there will be no crossing . No vehicle has to wait for signal. No electricity bill will be required for signaling. Even very few traffic police will be needed on the roads to control the system. There are many reasons for traffic jams. We don't have any concern obeying our traffic rules. Most of the cases when vehicles are moving, people also crossing the busy roads and intersections. So congestion become more complicated. Often Drivers park the vehicle on roads which also causes traffic jams. We have to find a solution considering all the above problems. If we make delay to take necessary actions, the congestion situation will be horrible. It will be very difficult to live in the Dhaka city. We have to stop the people to come to Dhaka city by providing and creating all the facilities in the other cities. Otherwise Dhaka city will be the worst city in the world to live.

As a part of our research, we would like to develop a model at Banani-Kakoli intersections. That model would be applicable to any of the intersections at Dhaka city. We did our survey at Banani intersection also. The problems regarding traffic jams we found at the intersections, tried to solve the situation with the proposed models. We believe that proposed models will indicate how to diminish our horrible traffic jams. Thus we will be able not only mitigate our traffic jams but also we can save our money and time which will have a positive impact on our economy and GDP. It is already delayed to take actions on this regard.

Literature Review :

Many researchers have done different research on different issues to find out the cause of traffic jams. Gave their suggestions and planning . But we can not see more actions on the research plans. Government is building express way, metro rail etc. But We believe no crossing concept can be one of the best possible solution to diminish the traffic congestion.

Chowdhury, Raihan, Fahim, and Afrahim Bhuiyan presented a case study on Reduction of Traffic Congestion of Dhaka City: Banani Intersection at International Conference on Agricultural, Civil and Environmental Engineering (ACEE-16) April 18-19, 2016 Istanbul, Turkey. They found that in Dhaka city the size of the transportation increased drastically. They mentioned that intersections are the most hazardous areas in the city .They have selected Banani-Kakoli intersection for the research work. This intersection is one of the most busiest road in the city. More over this road connected with the VIP roads The problem arise when some vehicles are willing to go right side or U turn. Then traffic police has to stop the vehicle on side and allow other vehicles to go. It creates the traffic congestion. They suggested that road capacity should be increased to reduce the traffic jams.

In another article Khan has described the scenario of traffic jam in Dhaka city in Daily Star with the title "When shall we get rid of Dhaka city traffic jam?"published on October 20, 2007 (Khan 2007). He mentioned that there is a huge traffic congestion in the intersections and in front of rail gate. It take a long time to cross a intersections. He also warned as a alarming situation of traffic jams in the Dhaka city. People feel bored while they have to go out to travel vehicles. Because it takes a long time to go anywhere to Dhaka city. It means we are losing our working hours on the roads due to traffic congestion. It has a negative impact on our national GDP. In all the intersections we have huge traffic congestions. He also mentioned that due to rickshaws , traffic jams become more complicated in the city . Rickshaws try to occupy the whole road and make the situation more complex. That's why fast moving vehicles can't move faster as it should do.

Haider A A 2018, He pointed out that most of megacities also face some sort of traffic congestions. But it is not like Dhaka. Dhaka is all most in dead traffic congestion situation. It is

also related with mismanagement. Nobody obeys the law and rules. They don't have the respect regarding the issues. We don't have auto traffic signaling system. Traffic police use hand as a signal. He also mentioned that the problem is due to our attitude and behavior. Our tendency is to break the rules. Our morality and ethics should forbid us to do so. Government must think of it how to address. Awareness should have create to all. Auto traffic signaling system must be implemented in the city. Long term planning should be there from the government side. Proper management can rectify 40 % traffic congestion in the Dhaka city.

Karim M.M (1997) found that traffic congestion is due to insufficient transport facilities for the public. Ricksaws are also another reason of traffic jams. We should not allow non motorized vehicles on the roads. They create problems to the fast moving vehicles. We also don't have enough infrastructure for the vehicles. With our limited resources we should have planning to overcome the situation. We should consider the rapid rise of vehicles quantity on the roads. He also expect extensive research work to solve the traffic congestion.

According to Khandoker N and Rouse J (2004), Congestion in Dhaka has been a growing problem during the last 15 years. He mentioned that long back we should make a long term strategy plan to mitigate traffic congestion in the Dhaka city. With the assistance of World Bank , Government started a project called Dhaka Urban.Transport project. But in the long run it has few impact on the traffic congestion. They identified that the traffic congestion is horrible in the rush hours or office and school hours. People are bound to go out side for their offices, schools and working places etc. They mentioned that immediate long term action plan should be implemented to diminish the traffic congestion on the roads. Our traffic system is unplanned. That's why we are not able to reduce the traffic jams. They also mentioned that if someone like to see how horrible is our road system , they can go to the Farmgate area and can seen from the top of any place or foot over bridge.

Shovan S.S.A (2008) has shown interesting findings on fuel consumption and environmental impact of rickshaw banning in Dhaka City. He said that Rickshaws are environment friendly and suitable for short distances.More over we need less money to ride on Rickshaws. He also mentioned that it is a safe journey. Thus we can save huge fuels. Ultimately we can save money. He also argued that it takes less space on the roads. On the contrary the private cars are capturing 34 % of the roads but transporting only 9 % population. He claimed that Rickshaws

are not liable for the traffic congestion. When government banned Rickshaws on some roads but still it has no impact on the roads.

Methodology

We would like to do semi structure Questionnaire for the drivers who are involved in the traffic congestion. It would be based on qualitative method for finding the causes of traffic jams. Our intension is to find out the views of the sufferers. Their thinking will help us to sort out the causes and ways how can we overcome the problems. Moreover they know the realistic picture of the current situations. Their ideas will be more important and significant to set up a guide line. According to the findings based on majority's view, we can trace a guide line how we can mitigate the traffic congestion. Our targeted areas are parking places of vehicles and bus stoppages to talk with the drivers easily. Nowadays drivers are very concern about traffic congestion. They have more clear concept than any others. Taking consideration of their views, we will develop a Model of intersections how we can the vehicles travel the roads without interruption. We have collected the data from (a). Primary Sources and (b). Secondary Sources.

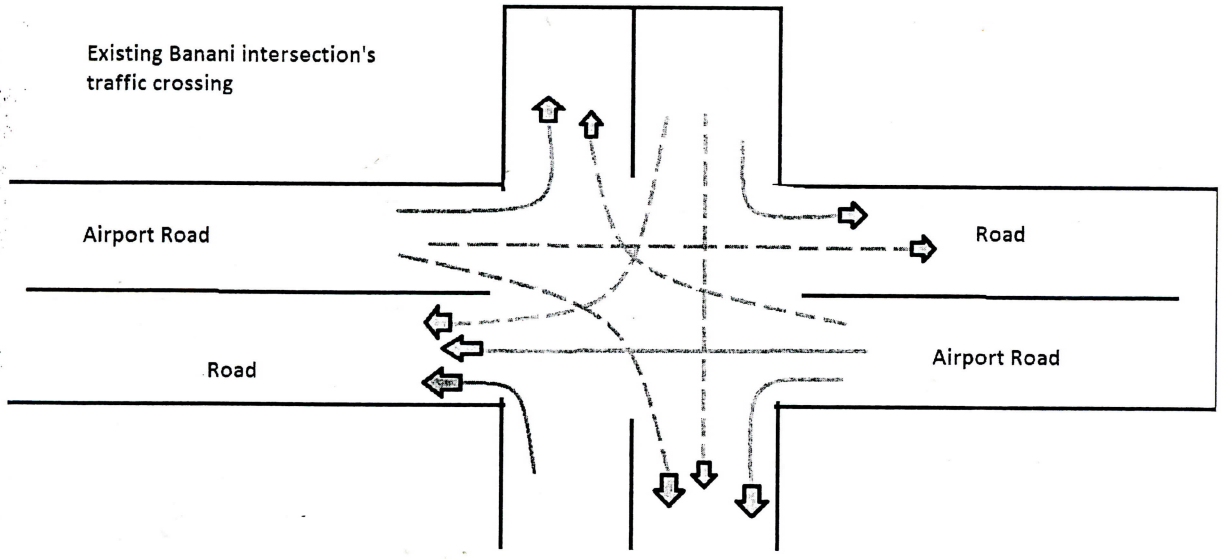
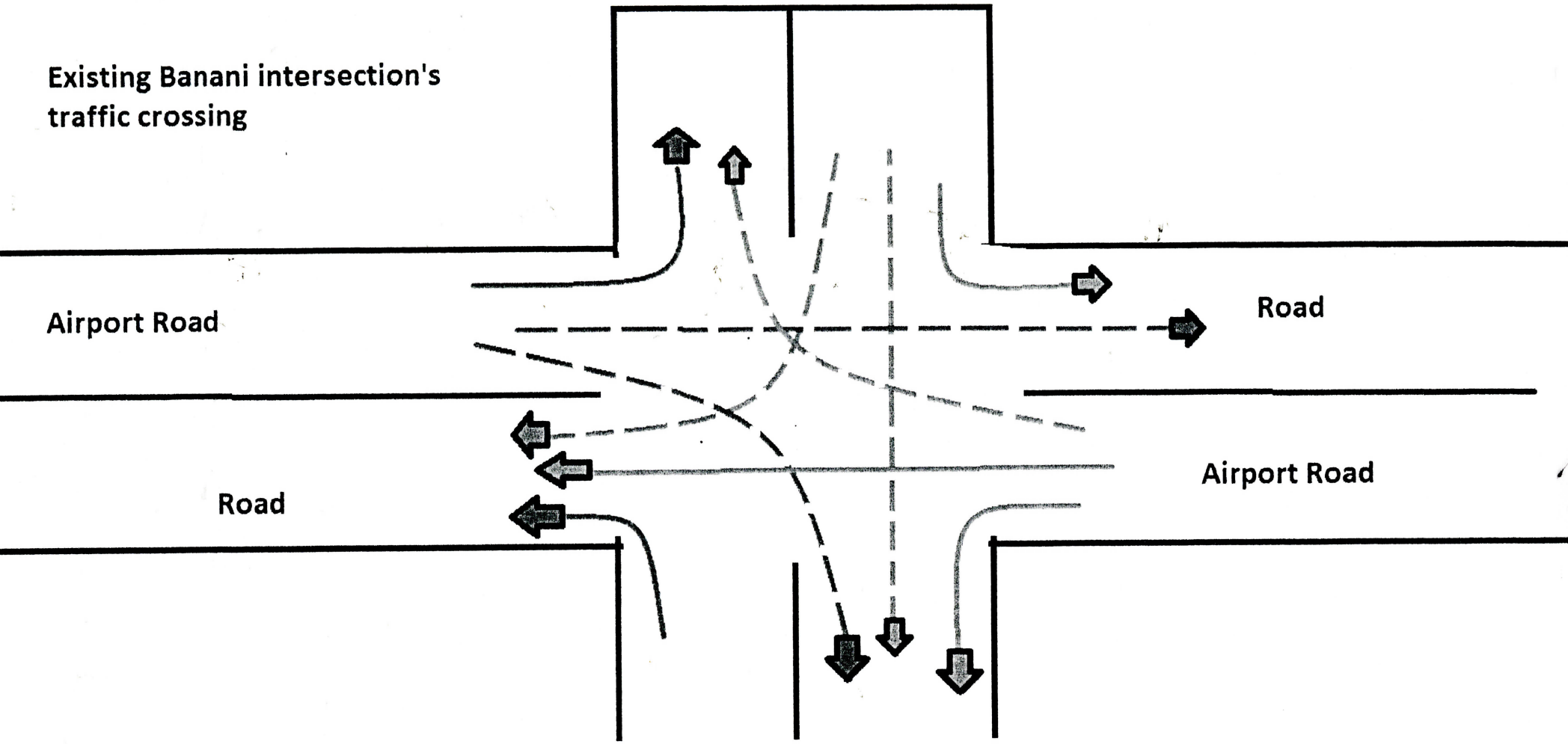


Fig : Present vehicles movement Situation in the intersections

Present situation:



Results :

- Our objectives were to identify the techniques to diminish traffic congestions and to develop a model of a traffic intersections by which vehicles can pass through. Our survey portrayed that views of different drivers of the vehicles. We found that all most all the drivers want to get relief from this horrible traffic congestions. They expressed their great concern and ideas through questionnaire survey. They mentioned the reasons of traffic jams. They are due to :

  (1)Vehicles have to wait in the intersections for long time. (2)Indiscipline vehicle driving

  (3) Bad condition of traffic signaling system (4) Improper vehicle parking (5) Nobody cares about the traffic rules (6) Bad condition of the roads (7) lack of awareness of general public (8) Lack of patience (9) No facility for passengers to cross the roads.

All the drivers are facing traffic jams everyday. They are against of present traffic signaling system. They have clear ideas what to do. They mentioned that most of the traffic jams are in the intersections. They proposed for U-loop facilities in the intersections. Some of them also proposed for flyover/overpass to reduce the traffic jams. Our objectives were to find the techniques to diminish traffic congestion. So from the survey we already observed that our research work is on the right track and also fruitful. Considering all the factors we found in the survey, we developed one model to diminish traffic congestion. That is U-loop concept with no crossing in between the roads. We also proposed another alternative model with flyover/overpass concept. In our models we also showed how vehicles will move through the intersections. We believe that if this model is introduced in the intersections, there will be no traffic jams. Because no vehicle will wait for other vehicles. We may have to make the proposed model where space is a available. If we have to make it after 5-7 kilometers or more than that , it won't be problem. Because vehicle will be on the movement. No interruption will be on the roads. At the same time we must have enough foot over bridges to cross the roads for the people. Again Government should have enough parking spaces in all the areas so that people can park their vehicles easily on payment. Every area there must be some parking space like big building for rental basis parking place. Developed countries in the world also have this sort of facilities. This

give the space to the vehicle drivers to park in a certain place not on the roads. When everything will be in right place then government can implement the law enforcement when needed. Our traffic rules also should be maintain strictly by the law enforcement authority. In our models we also showed how vehicles will move through the intersections. We believe that if this model is introduced in the intersections, there will be no traffic jams. Because no vehicle will wait for other vehicles. We can make the proposed model where space is a available. Model shows that vehicle will be always on the movement. No interruption will be on the roads. It will save huge fuel cost and men-hour of our country.

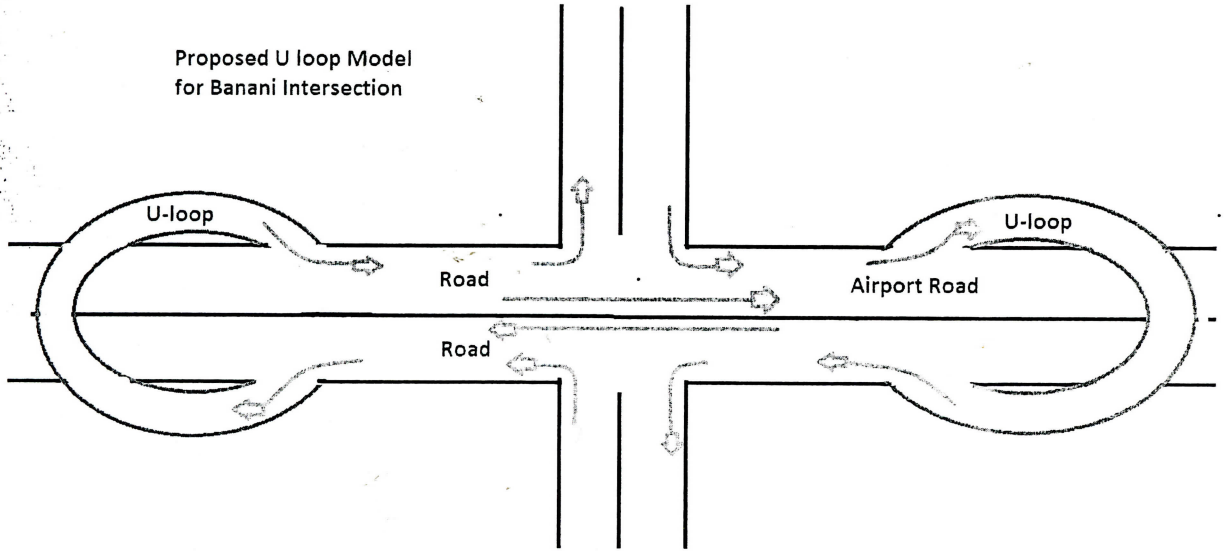
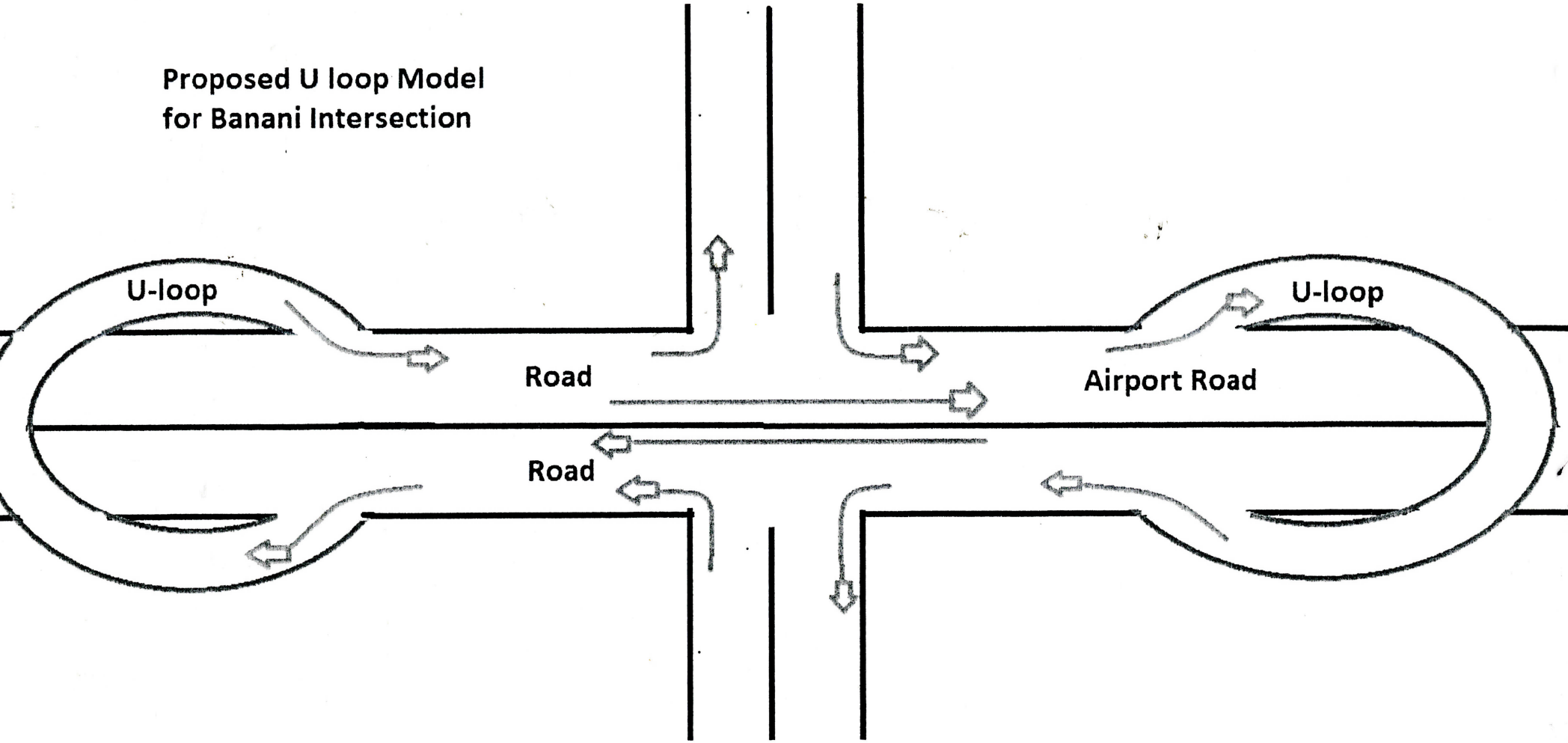


Fig : Proposed Model for intersections

Discussion :

We have conducted a semi structure questionnaire survey among 50 drivers. We have surveyed in the areas of Gulshan 2, Banani intersections, Secretariat and mohakhali bus stoppage. We did our survey with the drivers only. Different vehicle drivers took part in the survey. After the survey we

Proposed Model



also interviewed them to find out their logics and their perception regarding the objectives. They spontaneously participated in the survey program. Everybody expressed their own views and ideas freely. All of them are very upset regarding present traffic congestion at the intersections. At the same time they were expected from us to find a solution to reduce traffic jams. Drivers are very much concern about the dead log situation of vehicles at the crossings. Most of them have clear ideas regarding the traffic congestions. All of them mentioned the reasons of traffic jams and bad conditions of of our present traffic signaling system. They are also very disappointed about waiting time at the intersections. In the survey we found that all the drivers have the same views. They pointed out also in the survey that solution lies on making flyover and u loop according to suitableness in the intersections. They also mentioned that they don't mind if they have to travel a little bit long road to avoid the traffic congestion. They feel boring stopping the vehicle for a long time without doing nothing in the intersections.

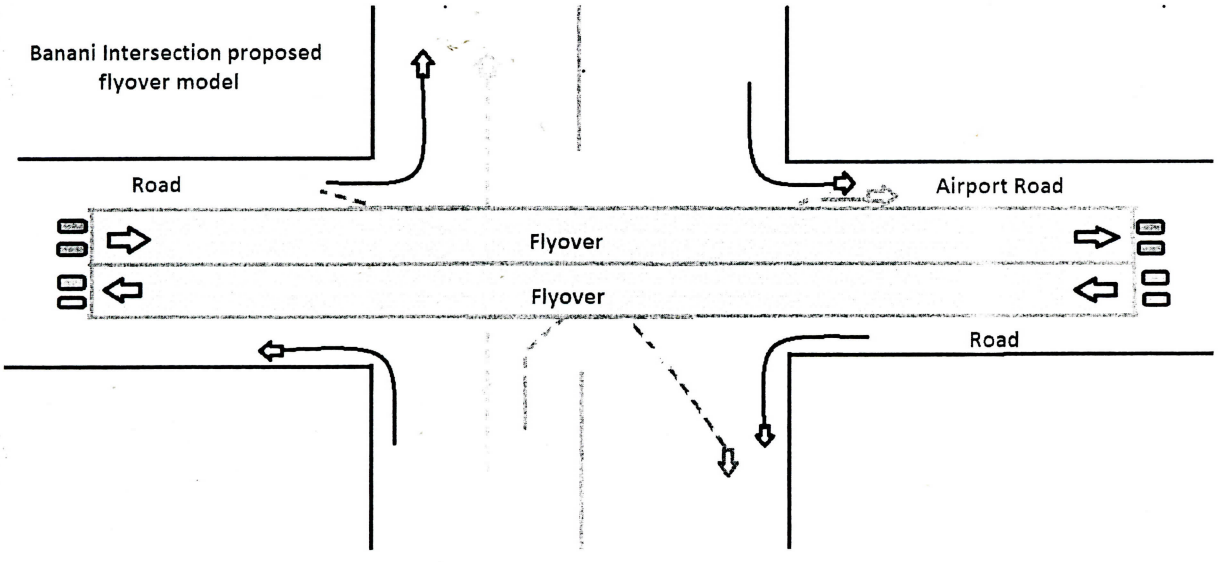
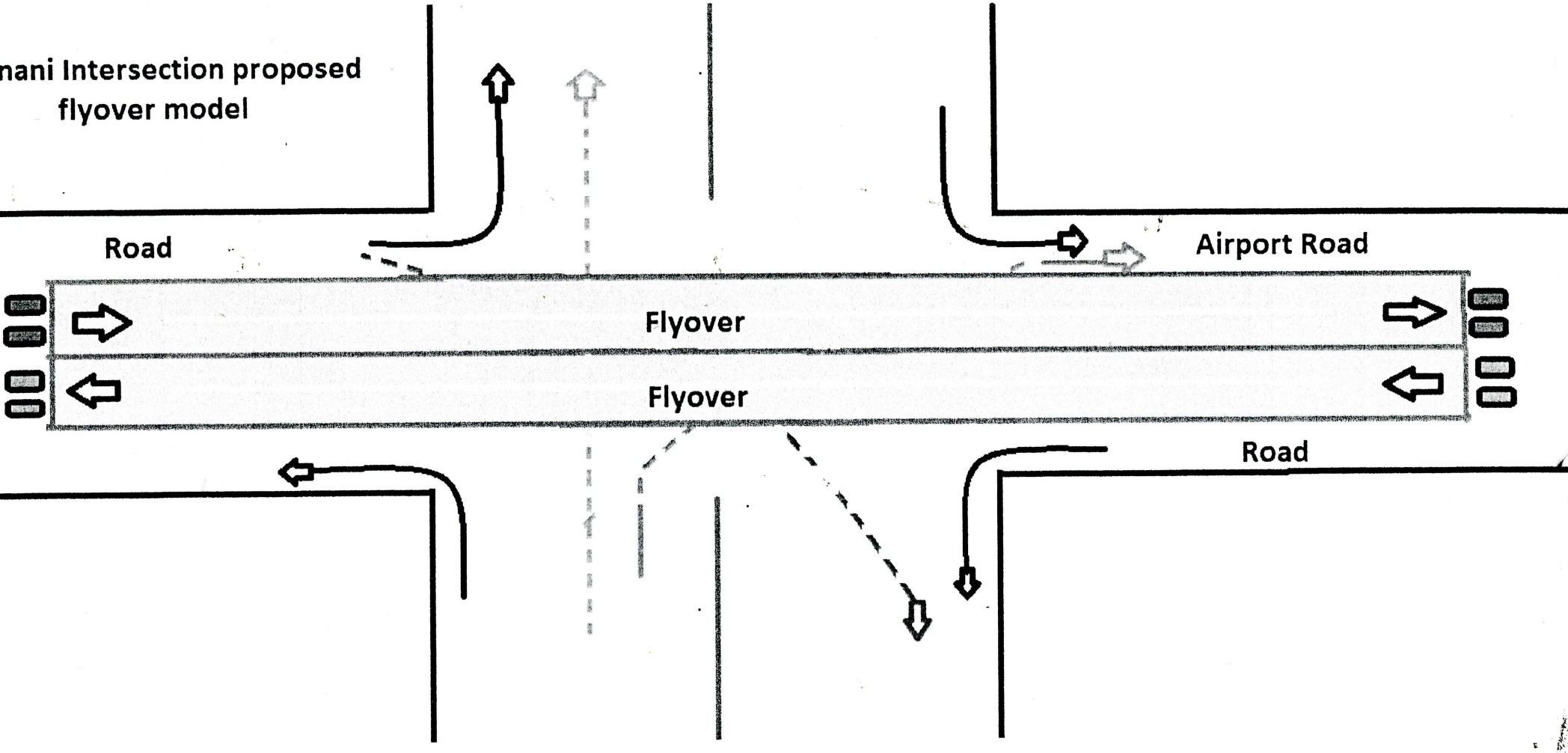


Fig : Another proposed Model (Flyover / overpass)

Proposed Model (Alternative)



From the survey, Out of 50 drivers, 48 drivers (96 percent) mentioned that they are not happy with the present traffic signal system. 100 percent drivers noticed that our traffic congestion is in the intersections. !00 percent drivers want u loop or flyover to cross the intersections and also they don't have any problem to travel a little bit more distance to avoid traffic jams in the intersections. They also appreciated that if there is way to pass the intersections without any traffic signal. Taking consideration of all, we also proposed a model for the intersection. As a part of research work, we considered the intersection of Banani-Kakoli, and proposed a model .The model would be suitable for the Banani-Kakoli intersections. Considering all other intersections , we developed another model. Anyone of the two models, would be suitable for any intersections at Dhaka city. As a part of our research work, we considered the intersections of Banani-Kakoli, and proposed the model .But Both the models would be suitable for the Banani-Kakoli intersections. In our models we also showed how vehicles will move through the intersections. We believe that if this model is introduced in the intersections, there will be no traffic jams. Because no vehicle will wait for other vehicles. We can make the proposed model where space is a available. If there is no space is available to construct the U loop , then we can go 5-7 kilometers where space is available and U loop can be made. The Model shows that vehicles will be always on the movement. No interruption will be on the roads. It will save huge fuel cost and men-hour of our country.

Limitations :

Time constraint is the main limitation of this seminar paper. If we could get more time, it could be more precise. If we could talk with different type of people, we may have more ideas and thinking of the people.

Recommendations:

All the crossing in the intersections should be closed. There will be no u turn facility on the road . All the vehicles will move without interruption. Within 5-7 kilometres, there will be U loop for crossing the road or to go opposite side .If no space is available for making the U loop near by intersections, U loop can be made where space is available. Sometimes overpass or flyover can be

made if the road having 4 lane in each side. In all the main roads, no rickshaw will be allowed to enter. Their should be foot over bridge for the passengers and general public in the convenient locations.

Conclusion:

We worked taking consideration of Banani-Kakoli intersections and proposed one model for the intersections. At the same time we proposed another model which also can be applicable if the road is 4 lane . It means if the road have enough space to make the flyover in the half portion of the road. Our intension was to pass the vehicle without any interruption whether at intersection or on the middle of roads. Sometime enough space for U loop will not be available there at the intersections or in the middle of the roads but within few kilometers where space will be available we can make U loop. If we have to go 5/6 kilometers to get space , we believe it won't be problem to travel 5/6 kilometers. It will take 5/6 minutes, Our research showed that drivers won't mind to travel few kilometers more for uninterrupted road movement. The advantages of proposed model is that we don't need any traffic signal or lighting. In fact we don't need the traffic police also. Thus every year we can save huge money. Our fuel consumption will be decreased due to less traffic congestion.

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প্রশ্নাবলী

প্রশ্ন ১ঃ ঢাকা শহরে যানজটের কারণ কি কি ?

প্রশ্ন ২ঃ আমাদের ট্র্যাফিক সিগনাল সম্পর্কে আপনার মতামত কি ?

প্রশ্ন ৩ঃ রাস্তায় কোন অংশে যানজট বেশী হয় ?

প্রশ্ন ৪ঃ চৌরাস্তায় ট্র্যাফিক জ্যাম বেশী হবার কারণ কি ?

প্রশ্ন ৫ঃ চৌরাস্তায় ট্র্যাফিক জ্যাম দূর করার জন্য কি করা যেতে পারে ?

প্রশ্ন ৬ঃ ট্র্যাফিক জ্যামে দীর্ঘক্ষণ অপেক্ষার পরিবর্তে যদি গাড়ি চলমান থাকে এবং একটু বেশী রাস্তা অতিক্রম করতে হয়, তবে সেক্ষেত্রে আপনার বক্তব্য কি ?

প্রশ্ন ৭ঃ ট্র্যাফিক জ্যাম দুর করতে আপনার পরামর্শ কি ?

প্রশ্ন ৮ঃ চৌরাস্তায় যদি আপনাকে থামতে না হয়, সেই ব্যবস্থাপনাকে আপনি কিভাবে দেখেন ?

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প্রশ্ন ১ঃ ঢাকা শহরে যানজটের কারণ কি কি ?

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প্রশ্ন ২ঃ আমাদের ট্র্যাফিক সিগনাল সম্পর্কে আপনার মতামত কি ?

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প্রশ্ন ৩ঃ রাস্তায় কোন অংশে যানজট বেশী হয় ?

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Seminar Paper

on

The Prospects of Blue Economy of Bangladesh in Achieving the Sustainable Development Goals

Submitted by

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Abstract

In recent years, the 'Blue Economy' has emerged as an alternative source of economic development that equilibriums economic use of oceans with environmental sustainability. Following the settlement of maritime territory, Bangladesh has started exploring marine resources to become a developed country. The recent focus on blue economy unlocks both opportunities and risks to country's marine ecosystems. In order to maintain balance between the conservation and use of marine resources, attaining the Sustainable Development Goals (SDGs) is a pressing need. In this backdrop, this study explores the untapped prospects of blue economy of Bangladesh. It also assesses the progress towards realization of the SDG 14 and the challenges remain therein. Based on literature review and informant consultation, this study reveals Bangladesh's slow progress in the achievement of SDG 14. However, the recent initiatives such as declaration of vast marine areas as Marine Protected Area (MPA), development of new seaports at Sonadia and Payra indicate government's commitment towards implementing the SDGs. Finally, this study offers certain recommendations like creation of blue economy friendly investment climate, investment in stock assessment, marine research, innovation and technology, and improvement of monitoring mechanism for encountering the challenges in effective use of blue economy potentials and approaching toward attainment of the SDGs and Bangladesh's development destinations.

Keywords: Blue economy, SDGs, Vision 2021, Vision 2041 and Bangladesh

1.0 Introduction

The ocean is now being recognized as a new 'economic frontier' for searching for food security, alternative sources of energy, and seaborne trade, as a response to the increasing demand of growing population (OECD 2016; UN 2016). With the rising needs and technological advances to commercialize the oceans, there is a concern that oceanic resources will deplete soon if not managed properly (Islam and Mostaque 2018). Thus, a necessity to reinterpret how oceans can be measured, managed and monitored more efficiently is widely felt. In this backdrop, the 'Blue economy' emerged to respond to the new economic demands, ecological needs and the dynamics of climate change (Spalding 2016). In contrast to previous practices which focused on resource exploitation and economic benefits, blue economy tries to maintain a balance between ocean-based development and environmental protection.

With the implementation of United Nations Convention on the Law of the Sea (UN 1982), the littoral states are striving to gain more economic benefits through sustainable use of coastal and marine resources. Some of the fastest growing economies such as China, India and South Africa are actively pursuing blue economy, while small littoral states are

embracing the concept as well. Global governing bodies like the United Nations and the World Bank are also promoting blue economy with policy and financial support. Tthe blue economy is relatively a new concept in Bangladesh. After the settlement of maritime boundary dispute, Bangladesh has started exploring marine resources beneath the blue water of the Bay of Bengal over 118,813 square kilometers of territorial sea and 200 nautical mile of Exclusive Economic Zone (EEZ) with an extended 354 nautical mile Continental Self from the Chattogram coast to becoming a developed country (MoFA 2014). The recent focus on blue economy unlocks both opportunities and risks to country's marine ecosystems.

Several studies such as Hasan et al 2018; Hussain et al 2018; Islam et al 2018; Patil et al 2018; Sarker et al 2018 found immense potentials of Bangladesh's blue economy sectors which can be a building block for achieving country's rapid economic growth. In contrast, some literatures such as Islam and Shamsuddoha 2018; Rahman 2017; Sarker et al 2019 pointed out concerns about the sustainability of marine environment due to massive extraction of oceanic resources. A sharp disagreement in the prospects of blue economy and the challenges reminiscent to the sustainability of blue economy resources is evident in available literature. Maintaining equilibrium between the conservation and use of marine resources, as set forth in the SDG 14, is integral to securing the blue economy growth of Bangladesh and to achieving the SDGs.

1.1 Research Objectives

This study aims at achieving the SDGs utilizing the prospects of blue economy of Bangladesh. In order to attain such aim, three objectives have been selected in this study. These are as follows:

1. to explore the prospects of blue economy in Bangladesh;
2. to examine the status of progress in implementation and achievement of SDG 14; and
3. to identify the challenges that obstruct to achieving the SDGs, particularly the SDG 14 targets through conservation and sustainable use of coastal and marine resources.

1.2 Justifications of the Study

There is paucity of literature regarding the contribution of blue economy to achieving the targets of SDGs in Bangladesh. This study has generated some innovative ideas for the policy

makers and the academics to rethink their stances regarding the conservation and use of Bangladesh's blue economy potentials much needed for achieving the SDGs and making the country's economic growth uninterrupted.

2.0 Literature Review

The web of blue economy has unlocked substantial potentials for food, nutrition and energy security, poverty alleviation, better health and wellbeing, generating jobs, uplifting industrial and trade profiles – which have strong influences in improving the overall standard of life for the coastal people of Bangladesh (MoFA 2014). Around 30 million people living in coastal belt are involved in sea-related activities (Failler and Hussain 2017). According to Patil et al (2018), the blue economy contributes US$6.2 billion in gross value addition or 3.0 per cent of GDP to Bangladesh economy. This economy mainly comprises of tourism and recreation (25 per cent), marine fisheries and aquaculture (22 per cent), marine transport (22 per cent), and offshore oil/gas (19 per cent). Employment in capture fisheries and aquaculture is estimated to 1.3 million (Meisner et al 2016) while around 6.0 million are involved in sea-salt production and ship recycling sectors (Ahmed 2018). Considering these trends, Ministry of Foreign Affairs (2018) recognizes that the country's future economic growth largely depends on expansion of blue economy sectors.

Blue economy's prospect in the socio-economic development of Bangladesh is envisaged in the voice of Honorable Prime Minister Sheikh Hasina in an International Workshop on Blue Economy held in Dhaka on 31 August 2014 as "marine resources' role in poverty alleviation, acquiring autarky in food production, protecting environmental balance, facing climate change and other economic activities is unlimited." Experts also believe that Bangladesh would be a middle-income country before long, if it can use marine resources efficiently (Hasan et al 2018). But, the recent trend to explore massive blue economy benefits poses huge threats to marine ecosystems (Abdullah et al 2013; Alam 2014; Sarraf et al 2010). To maintain a balance between the growth of blue economy and securing marine ecosystems, Bangladesh needs to achieve the SDG 14. Based on this stance, some perspectives have been defined below that can influence on achieving the objectives of this study.

The term 'Blue Economy' though first coined by Professor Gunter Pauli in 1994 (Pauli 2010), it received wide attention in the 2012 United Nations Conference on Sustainable

Development (UNGA 2012). Its emergence was part of a global transition from traditional economic path to human-centric development, which focused harmony with nature (Islam and Mostaque 2018). Initially, there is a division of socio-economic development from environmental deterioration (Smith-Godfrey 2016). In the lens of economic and conservation, blue economy alludes to the sustainable use of marine resources for balanced economic growth, better livelihoods and secured ocean health (Gamage 2016). Koya-Vaka'uta (2019) views that the trend to demonstrating ocean as economic resources by the larger economies may lead to the Small Island Developing States (SIDS) forfeiting ocean health for economic wealth. Chung (2019) criticizes this market-based conservationism that price-tags nature exemplifying the discordant use of MPA to validate mineral extraction in one area against the protection of a marine space in another. Despite divergence among the scholars regarding its nature, the blue economy as a development model central to poverty alleviation, securing social equity and human well-being with reduction of environmental risks are favoured by the UN (UNCTAD 2014). Considering the said views, blue economy, in this study, is defined as seas, oceans and coasts based sustainable and productive activities that contribute to inclusive economic growth and achieving sustainable development.

The Sustainable Development Goals, known as 'Transforming our World: the 2030 Agenda for Sustainable Development', is a new candidate in the policy space contributing to the objectives of sustainable development such as, ending poverty and hunger, improving health and well-being, tackling climate change, and protecting forests and oceans (UN 2015). Among the 17 SDGs, SDG 14 directly links to the conservation and use of coastal and marine resources. Some targets of other goals (i.e. SDG 1, SDG 2, SDG 6, SDG 7, SDG 8, SDG 10, SDG 12, SDG 13, and SDG 15) have implications on the blue economy growth and human wellbeing. In view of the blue economy's interconnectedness to a nation's overall development, if the marine resources are properly utilized, Bangladesh can be able to achieve the SDGs and exponential economic growth. Thus, this study explored the blue economy's untapped potentials in promoting sustainable development.

For achieving the SDG 14: conserve and sustainable use of oceans, seas and marine resources, several targets have been set by the UN, which is summarized in Table 1.

Table 1: SDG 14 Targets: Life below Water

Targets	Targeted actions	Deadline
14.1	prevent and significantly reduce marine pollution of all kinds	2025
14.2	sustainably manage marine and coastal ecosystems	2020
14.3	address the impact of ocean acidification with scientific cooperation	2030
14.4	end Illegal, Unreported and Unregulated fishing (IUU) fishing and destructive fishing practices	2020
14.5	conserve at least 10 per cent of coastal and marine areas by declaring Marine Protected Areas (MPAs)	2020
14.6	prohibit certain forms of fisheries subsidies that contributes to overfishing and encourage to IUU fishing	2020
14.7	introduce sustainable management of fisheries, aquaculture and tourism	2030
14.A	increase scientific knowledge, research and transfer marine technology	2030
14.B	provide access for small-scale artisanal fishers to marine resources and markets	2030
14.C	develop legal framework for the conservation and sustainable use of coastal and marine resources	2030

Source: UN 2015

Meeting these targets within the set timeline is a key to ensuring the sustainability of Bangladesh's blue economy. Hence, this study explored the blue economy related initiatives taken by the government (particularly in policy and institutional framework) in achieving the SDG 14 targets and the challenges remain therein. The government has also prefixed few development visions aiming to make Bangladesh a middle-income country by 2021 and a developed country by 2041 (Bhuiyan 2019). In order to achieve the SDGs and to materialize country's development visions, coastal and marine resources appear as a building block which is reflected in Hasan et al's study (2018). This study further examined the blue economy's prospect towards materializing Bangladesh's development visions.

3.0 Methodology

An inductive qualitative approach has been be used to carry out the study. According to Cresswell (2013), the qualitative approach is best suited for complex analysis of a given issue that cannot be easily quantified. To attain the research objectives, the study consulted both primary and secondary sources. Primary data was collected through document analysis and

in-depth interview from the key informants. A purposive sampling technique has been used in selection of eight key informants i.e. persons of different institutions working in the management and development of coastal and marine resources. Secondary data has been extracted from government documents (statistics, progress reports, national policy and legislation), academic research (journal articles and books), conference papers, research reports and websites. A checklist was developed for interviewing key informants. It is difficult to realize the challenges in a real-world scenario from desktop analysis. Thus, the empirical data acquisition procedure (via interviews) was selected for reality check. This dual-tracked data examination process has helped to maintain the reliability of the data.

4.0 Data Analysis and Results

In order to achieve the set objectives, documents have been collected from the Blue Economy Cell at the Ministry of Power, Energy and Mineral Resources, Maritime Affairs Unit at the Ministry of Foreign Affairs, Ministry of Environment, Forest and Climate Change (MoEFCC), Ministry of Fisheries and Livestock and Principal Coordinator (SDGs Affair) of Prime Minister's Office. Likewise, to unearth the real picture lay behind the implementation of SDG 14, eight key informants of different state departments involved in SDGs monitoring and implementation were interviewed. The collected data has been critically analysed in accordance with the research objectives and the findings are presented sequentially below.

4.1 Prospects of Blue Economy in Bangladesh

Bangladesh's economy is slowing transforming from the status of LDCs to developing country. To become a developed nation by 2041, the country set targets to accelerate its GDP growth of 10 per cent for the next consecutive years. Sourcing of alternative resources from blue economy sectors is vital for getting an economic breakthrough and minimizing reliance on land-based resources. According to Patil et al (2018), the gross value added to Bangladesh in 2014-2015 from blue economy was US$6192.98 million contributing to 3.33 per cent of the economy. But the blue sectors have the prospects of adding more to the economy. Several studies such as Hasan et al 2018; Hussain et al 2018; Islam et al 2018; Sarker et al 2018 identified vast potentials of blue economy. The major policy document like the 7th FYP (FY2016-2020) calls for endorsing twelve actions for sustaining a prosperous blue economy including, fisheries and aquaculture; marine trade; marine biotechnology; marine minerals (i.e. oil, gas); renewable energy; and marine tourism (GED 2015). The MoFA identifies

twenty-six potential blue economy sectors (MoFA 2018a). Analyzing the previous research findings, documents and key informants' opinions, this study focuses on three productive sectors (Table 2) of blue economy i.e. living resources, non-living resources and other economic activities in order to harness and utilise the coastal and marine resources within the blue economic zone of Bangladesh (Figure 1).

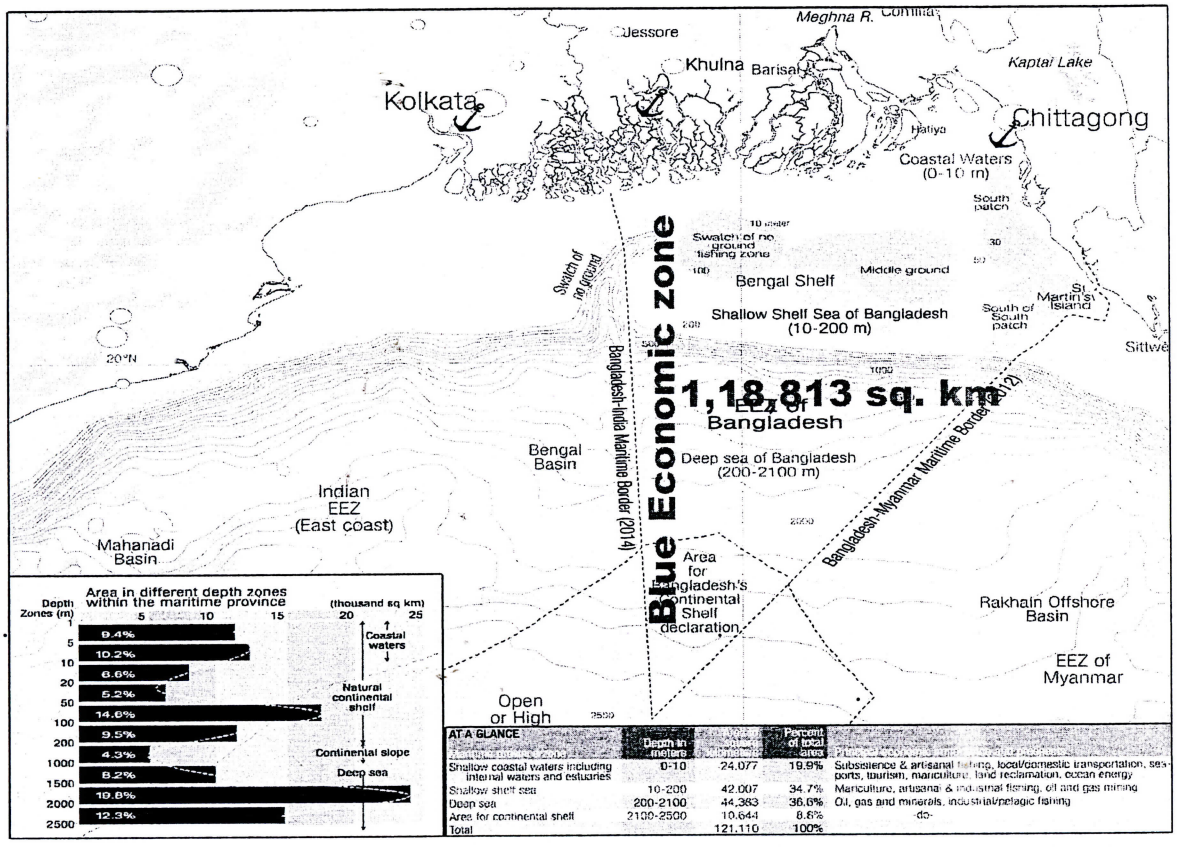


Figure 1: Blue Economic Zone of Bangladesh

Bangladesh's coastal and marine ecosystems, which comprises 475 types of living aquatic species (i.e. fishes, crab, shrimp, turtle, dolphins) (BBS 2016) and several non-conventional fishery items such as mollusks (i.e. seaweed) (Quader 2010) are important sources of food and nutrition, income, jobs, and revenue (Patil et al 2018). Among the living resources, marine fisheries and aquaculture are the major components of blue growth. There are 475 species of fish found in Bangladesh's EEZ (Roy 2017). Hilsa fishery generates income for 2.5 million people with an annual value of US$1.3 billion (BOBLME 2012). Non-conventional fishery items such as oyster, seaweed and squid also hold promise (Islam and Shamsuddoha 2018). The coastal mangrove ecosystems provide important provisioning services like Hilsa, shrimp, crab, honey, and fodder (Islam and Hossain 2017). Due to the presence of various phytoplankton groups, the coastal waters are supportive for aquaculture

and mariculture of seaweeds, oysters (Sarker et al 2018). The yield of marine capture fishery is skimpy as it is mainly carried out in shallow water. The country is estimated to catch only 0.70 million tons of fish per year out of 8 million tons of fish available in the Bay of Bengal (Harun-ur-Rashid 2018). There is immense scope of harvesting large pelagic species like tuna that can add huge foreign exchange (Hossain et al 2014). It is learnt from the informants that the government has taken a US$240 million project for the development of marine fishery.

Table 2: Potential Sectors of Blue Economy in Bangladesh and their SDGs Connection

Type of Activity	Blue Economy Sectors	Blue Economy Services	Prospects	SDG Connection
Harvesting of Living Resources	Marine fisheries, aquaculture	Food, revenue, employment	Capture fishery, aquaculture and seafood processing	SDG 1; SDG 2; SDG 8;SDG 12
	Marine biotechnology	Human health	Pharmaceuticals and other marine derived bio-products	SDG 2; SDG 3
Extraction of non-living resources	Oil, gas and minerals	Energy, revenue, employment	Exploration of oil, gas and minerals	SDG 7
	Renewable marine energy	Energy, employment	Solar, wave and wind energy production	SDG 7; SDG 12
	Desalination	Food, employment	Fresh-water generation	SDG 2; SDG 6; SDG 8;SDG 12
	Seawater		Salt production	
Harnessing other economic benefits	Marine trade, transport and port management	Revenue, employment	Container handling, port services, ship building, ship recycling	SDG 8; SDG 12
	Coastal and marine tourism	Recreation, revenue, employment	Sunbath, surfing, scuba diving; eco-tourism	SDG 3; SDG 8; SDG 12
	Blue carbon	Protection of marine habitats	Carbon trading	SDG 13; SDG 14; SDG 15

Source: Compiled from various sources

The prospect for the use of blue biotechnology is promising. The rich marine living organisms can be used for creating new products for health care (antibiotics, anti-cancer, and nutritional supplements) (Thakur and Thakur 2006). It can contribute to the development of specific biopolymers which can improve the desalination process and provide bio-sourced products for maritime transport (Hussain et al 2018; Islam and Shamsuddoha 2018).

Among the non-living marine resources, oil, gas and minerals are the most promising blue economy sector in Bangladesh. As the scarcity of land-based gas reserve is evident, there is

no option other than exploring gas in maritime zone. Bangladesh Petroleum Exploration and Production Company Limited and the US Geological Survey led survey indicated huge gas reserve in the Bay of Bengal. The discovery of gas fields in Myanmar adjacent to Bangladeshi blocks further intensified this possibility (Alam 2014). However, the exploration near the Myanmar and India border has not yet started (Roy 2017). Around 17 deposits of minerals (i.e. zircon, garnet, magnetite) have been identified in the coastal belt (Islam and Shamsuddoha 2018) while huge deposits of marine minerals (polymetallic sulfurs, Yttrium) are expected at the seabed, which can add billions dollar to the economy (Harun-ur-Rashid 2018). Expert viewed that these resources can be used for developing jobs, infrastructure, and growth of private sector, if those are properly exploited and managed.

Marine-based renewable energy such as wind, wave, and biomass offer huge potential to the generation of low-carbon energy. Bangladesh can use blue energy for various purposes to strengthen its economy. The water of Bay of Bengal can ensure food security by building sea salt production industries. The onshore areas like Cox's Bazar, Chakaria, Bashkhali, Technaf and offshore islands like Moheshkhali, Kutubdia are the potential areas of salt production. Average production of crude salt is 7000–10,000 kilogram/ha which extends up to 20,000 kilogram/ha during dry season (Alam 2014). The introduction of advanced technologies can help not only the salt farmers to maximize economic return, but in reduction of environmental effects (Kamal 2019). The depletion of groundwater used for agriculture production is gradually being evident in Bangladesh (Islam and Mostaque 2018). Desalinated sea water can be an important source for supply of fresh water for drink and irrigation.

Marine trade, shipping and port facilities, the backbone of blue economy, support ninety per cent of Bangladesh's external freight trade. In accordance with the last ten years average import growth rate of 15.79 per cent and export growth rate of 15.43 per cent, the projected freight value for the next ten years would be around US$435 billion (Alam 2014). Besides, around 600 ships yearly anchor in the Chattogram and Mongla ports (Roy 2017). Experts viewed that Bangladesh can earn more port tax by enhancing ports handling capacity and developing deep seaports. The shipbuilding and ship recycling industries' contribution to rolling the economy are noteworthy. The shipbuilding industry fulfills 100 per cent of inland water vessels (MoFA 2018a). Bangladesh's ship recycling industry along with those of India and Pakistan represent seventy per cent of the global ship recycling industry (Bari 2017).

However, the industry is criticized for environmental violations (Islam and Mostaque 2018), which can be impressive through rectification of its recycling process.

Coastal and marine tourism is another promising sector of blue economy. The Cox's Bazar and Kuakata sea beaches, the Sundarbans mangrove forest and the St. Martins coral island have great tourism potential. Evidence suggests that country's marine tourism is local tourists dependent. Following the examples of Maldives, Malaysia, Sri Lanka and Thailand, if Bangladesh can introduce luxury cruise, develop spectacular sea aquariums and establish separate tourist zones for the foreigners, marine tourism can create multiple opportunities (i.e. creating jobs, sourcing local products, adding revenue) for the country (Hussain et al 2018).

The coastal habitats (i.e. mangroves, salt marsh) have huge carbon sink capacity. Chowdhury et al (2015) estimated an annual storage of around three million tons of CO_2 in the mangroves and salt marshes. Though blue carbon has not been inserted into policy discussions for climate mitigation (Islam and Mostaque 2018), the reserve of blue carbon can help Bangladesh in future climate negotiations (Hussain et al 2018).

4.2 Bangladesh's Progress towards achieving SDG 14: Life below Water

This section examines Bangladesh's progress towards implementation and achievement of the SDG 14 targets (shown in Table 1). Due to paucity of data, assessment of Bangladesh's status appears as a challenge during desktop study. The similar view is recorded from the informants interviewed.

4.2.1 Integration of Blue Economy Dynamics in Policy Framework

Sustainable use of blue economy prospects largely depends on integration of its dynamics into the macro development policies. During content analysis, it is observed that the notion of 'blue economy' features conspicuously as a policy objective in the 7th FYP (GED 2015). All the 17 SDGs are integrated into the plan – 14 SDGs (82 per cent) are thematically fully aligned while three SDGs (SDG 14, SDG 16 and SDG 17) (18 per cent) are partly aligned with the 7th FYP (GED 2018). The 7th FYP lays out a reform agenda of policies, laws and institutions to guide the activities for achieving nation's blue economy goals. To create a prosperous blue economy, the Plan calls for warranting twelve actions. These are — extending fishing areas beyond the EEZ; building an ocean-based renewable energy sector;

establishing new maritime industries; developing a strong human resource base; increasing revenue from maritime trade, improved aquaculture and mariculture; creating a competitive tourism industry; and building a solid science, research and education base (GED 2015).

The government has followed "whole of society" approach in carrying out the implementation of SDGs. Accordingly, several documents are developed which includes mapping of Ministries by targets in the implementation of SDGs and preparation of action plan for the Ministry/Division to achieve SDGs (GED 2018). The government prepared Blue Economy Development Action Plan by which the 7th FYP recommended task relating to revising sectoral policies and laws have been delegated to ministries/departments (Blue Economy Cell 2019). The National Sustainable Development Strategy prescribes various actions to support sustainable development, including the use of coastal and marine spaces (MoEFCC 2008). Bangladesh Climate Change Strategy and Action Plan 2009 emphasises developing medium to long-term program for enhancing resilience to climatic shocks and sustainable growth, including blue growth as linked to coastal ecosystems (MoEFCC 2009).

Besides, dozens of sectoral policies are currently under revision to support the blue economy aspirations. These include Water Policy 1999, Renewable Energy Policy 2008, Energy Policy 2004, Marine Fisheries Policy, Aquaculture Development Strategy and Action Plan, Shrimp Policy 2014, Tourism Policy 2009, Maritime and Shipping Strategy, and Sea Salt Policy 2011 (Patil el 2018). Following the policy commitments, the important legislation so far drafted is the Maritime Zones Act 2018. The draft Act redefines the maritime zones in line with the verdicts of maritime boundary disputes. To increase economic benefits and human well-being, it entails several measures like sustainable management of fisheries and ensuring access for small-scale artisanal fishers to marine resources (MoFA 2018b). This indicates government's effort to integrate the dynamics of blue economy as common policy objective.

4.2.2 Institutional Frameworks for Utilization of Blue Economy Potentials

Coordination and monitoring of SDGs implementation are critical task. The government has established an Inter-Ministerial Committee on SDGs Implementation and Review headed by the Principal Coordinator (SDGs Affairs) in the Prime Minister's office for monitoring the progress of SDGs implementation at the national level (GED 2018). A Blue Economy Cell has been established in the Ministry of Power, Energy and Mineral Resources in 2017 to

coordinate the activities of different agencies involved in utilising blue economy resources. The Maritime Affairs Unit at the Ministry of Foreign Affairs is working for framing/updating blue economy linked legal framework and networking with regional and international entities for the promotion of blue economy. It is revealed from the informants' interviews that the Blue Economy Cell is in critical condition in terms of trained manpower, logistic and budget. The informants also emphasized to revitalize the Cell's organizational portfolio (transforming to Authority or Wing) for making it a vibrant national blue economy coordination unit.

4.2.3 Institutional Actions for reaching the SDG 14 Targets

Bangladesh achieved mentionable progress in extending the coverage of protected areas in marine territory (SDG 14.5) with the declaration of three MPAs. The 'Swatch of No Ground' (1,738 square kilometres) was declared as the 1st MPA in 2014, the 'Middle Ground and South Patches' of the Bay of Bengal was the 2nd MPA while the 'Nijhum Island Marine Reserve' (3,188 square kilometres) has recently (23 June 2019) been declared as the 3rd MPA (GED 2018; Ministry of Fisheries and Livestock 2019). Total protected area now stands at around 5 per cent (5,624 square kilometres) of the total marine areas of Bangladesh (118,813 square kilometres). Declaration of another 1,743 square kilometres around the St. Martins Island as an MPA is under consideration in the MoEFCC (Blue Economy Cell 2019). If the St. Martins Island periphery is declared as an MPA and area protected during the spawning season of Hilsa is included, then the marine protected area rises to around 10 per cent (GED 2018).

Following the targets of SDG 14.4, the government regulates harvesting of Hilsa fish in the sea, coast and rivers for twenty-two days (12 October – 02 November) for safe migration and better spawning of Hilsa. Due to such ban, major success has been marked in Hilsa production almost doubling in last 15 years (GED 2018). An acoustic survey was conducted by the Norwegian survey ship 'R.V. Dr Fridtjof Nansen' to assess the stock of marine living resources. The survey identified 430 aquatic species in the maritime zone. 'R.V. Mean Swandhani', a state survey ship completed 24 survey cruises until February 2019 to assess the fish stock there. Bangladesh Fisheries Research Institute has started identifying the commercial viability of previously recognized 117 species of seaweeds and 320 species of bony fish (SDG Affairs Unit 2019). As per the informants, less focus has been given on

simplification process for licensing of fishing vessels; fixation of appropriate nets; establishing marine check posts for restraining IUU fishing and destructive fishing practices.

Marine ecosystems are under threat due to flinging of various land-based pollutants to the Bay of Bengal i.e. construction materials like concrete; textiles materials; hazardous materials like medical waste; rivers-led inland pollutants like pesticides; ship recycling industry discharged toxic materials like heavy metals, hydrocarbons; and untreated sewage induced nitrogen and phosphorus input (Abdullah et al 2013; Amin et al 2017; Hossain et al 2016; Islam and Tanaka 2004; Sarraf et al 2010). All these inland pollutants are mingled with coastal water which leads to creation of 'dead zones' in coastal area. The plastic waste also contributes to marine pollution (787,327 metric tons of plastic is entering in ocean per year) (Jambeck et al 2015). Following the SDG 14.1 targets, to control marine pollution from the land-based sources, the Department of Environment has agreed to formulate Marine Pollution Control Act, Sea Dumping Control Act, and Land-based Pollution Control Act pursuant to the Blue Economy Action Plan. A National Oil Spills Contingency Plan (NOSCOP) is under examination (Blue Economy Cell 2019). Except drafting the NOSCOP, no mentionable progress has been documented for controlling marine pollution.

Exploration of oil and gas in the offshore is a thrust for securing energy security and economic growth. Under the Production Sharing Contract (PSC) 2012, most of the drilling operations are conducted in the offshore area. For example, Santos and Cris Energy is working in Block SS-11, Santos in Block 16, ONGC in Block SS-04 and SS-09, Conoco Philips in DS-10 and DS-11 (SDG Affairs Unit 2019). The shallow offshore blocks close to Myanmar are considered an area of interest because of the discovery of several gas fields in the Arakan offshore (GED 2018). However, drilling in the shallow offshore may pose severe threat to marine resources. Any oil spill near the coast may have a far-reaching impact on fishery, marine ecosystems, marine tourism and coastal livelihood (FAO 2014). Sustainable management of this sector is thus emphasized in research documents and by the experts.

In order to manage the coastal and marine ecosystems in line with the SDG 14.2, the government has taken several initiatives such as promotion of ecosystem-based management in fisheries, aquaculture and tourism sectors (SDG 14.7) and developing programs for the restoration of charland across the coastal belt (Blue Economy Cell 2019). A World Bank

assisted project named 'Sustainable Forest and Livelihoods is underway for maintaining the integrity of coastal environment. To develop suitable platforms for marine tourism, a Standard Operating Procedure (SOP) was signed between India and Bangladesh in 2018. Following the SOP, India-Bangladesh cruise service has started in 2019. Bangladesh is also working with the Maldives and Sri Lanka for establishing coastal tourism network. The Sundarbans centric tourism development project is under examination. Bangladesh Tourism Board is persuading the private sector operators for linking Bangladesh to the international sea-based cruise route (SDG Affairs Unit 2019).

Following SDG 14.C in relation to developing strategic framework for the conservation and sustainable use of coastal and marine resources, the Blue Economy Cell and the Maritime Affairs Unit have developed separate action plans. Under the Blue Economy Development Action Plan, specific activities have been delegated to different ministries/departments which are being monitored by the Blue Economy Cell and the SDG Affairs Unit. During informant consultations, it is realized that the Blue Economy Development Action Plan developed by the Maritime Affairs Unit has not yet outfitted. Three of the interviewees apprehended complexity in coordination among ministries/divisions implementing programs targeting SDG 14, once the Maritime Affairs Unit framed action plan becomes operational.

Compliance of SDG 14.B is crucial for ensuring equitable access for small artisanal fishers to marine resources and markets. During interviewing informants, it is observed that very few steps are taken (i.e. skill development programs for creating alternative income sources) for lessening the vulnerability of small artisanal fishers. Thus, prohibiting fisheries subsidies to control overfishing and IUU fishing as mentioned in the SDG 14.6 has less application in the context of vulnerability prone fishers of Bangladesh.

Improved knowledge and appropriate technology (SDG 14.A) are central to optimum use of marine resources. Recently, the government has focused on oceanic research for enhancing scientific knowhow and improving the capacity of individuals and institutions. Efforts are on to introduce new technologies by increasing scientific cooperation with littoral states (SDG 14.3). For example, Vessel Monitoring System has been installed in 133 trawlers to control IUU fishing (SDG Affairs Unit 2019). Loosing of huge revenue from the aircraft companies that uses Bangladesh's marine air route is an example of technological backwardness. The

informants, however hailed the government's current initiatives such as producing maps of maritime air territory for extending Flight Information Region (FIR), setting up RADAR in the Chattogram Shah Amanat International Airport to utilize this prospect.

In addition to achieving the SDG 14 targets, the government is advancing with some development visions (i.e. Vision 2021 and Vision 2041). In this development pathway, the blue economy sectors are considered as important contributor. The blue economy yearly contributes US$966.6 billion to the Philippine's economy (Azanza et al 2017), US$2.5 billion to Kenya's economy (Obura 2017), while the marine tourism accounts for more than fifty per cent of the Seychelles' GDP (Lau 2018) and 14.85 per cent of the Indonesia's GDP (Suparmoko 2016). Blue economy contributes US$6.2 billion or 3.0 per cent of GDP to Bangladesh's economy over the last five years (Patil el 2018). In Alam's assessment (2014), five per cent of the GDP could be acquired from marine resources by 2030, if Bangladesh can manage its blue economy resources efficiently following the examples of other littoral states.

Eighty per cent of the US$78 billion annual overseas trade is handled by Chattogram Sea port alone (Parvez 2018). To expand marine trade, the government has invested in several seaports i.e. Sonadia and Payra. The marine trade is projected to increase significantly once those seaports become operational (Barua 2018). Many private parties like Concord Group (taken projects like Heritage Park at Chattogram) and foreign investors like Ras Al Khaimah royal family (planned to invest US$2 billion for developing tourist resort at Sonadia) and China (attracted to build a China Town near Cox's Bazar) are interested to invest in coastal tourism (Parveen and Rajon 2008). In order to attract more investments in blue economy sectors, an investment friendly climate is crucial for Bangladesh.

After analysing the research document, progress reports and opinions of informants, it is realized that with the utilization of blue economy potentials, Bangladesh is slowly advancing toward the UN set SDG 14 targets and towards achieving the Vision 2021 (a middle income country) and the Vision 2041 (a developed country) addressing myriad challenges.

4.3 Challenges to Blue Economy Growth and Achieving SDG 14 Targets

During the document analysis, several challenges are identified that slows down the progress of achieving SDG 14 targets. The key informants also mentioned a series of factors which

hinders to quick implementation of the Blue Economy Development Action Plan that has been produced for accelerating blue economy growth and achieving the SDG 14 targets. The summarized version of the challenges is mentioned below.

Gaps in scientific knowledge, expertise and maritime research

The investment in maritime research is scarce in Bangladesh. Few public and private universities offer marine science and oceanography. International support is required to make the National Oceanographic Research Institute and Bangabandhu Sheikh Mujibur Rahman Maritime University unique platforms for oceanic research (Hussain et al 2018). Due to lack of technical capacity in offshore drilling, the deep-sea mining is fully foreign experts and foreign technologies dependent, and by which the offshore mining rights are being leased out to foreign companies in return for payment of adequate resources (Bhuiyan et al 2015). For example, Petrobangla signed two production sharing contracts (PSC) with Conoco Phillips for exploration of oil and gas in the deep-sea blocks 10 and 11 under the Model PSC 2008. After finishing the 2D seismic surveys, Conoco Philips claimed almost double (US$9.5 per thousand cubic feet or unit) than that of the quoted price (US$6.5 per million cubic feet) it agreed in 2011, which is irrational as per the signed PSC (The Dhaka Tribune 2019). Thus, addressing the gaps in expertise on marine law and technology for resource extraction is a challenge for efficient use of seabed resources.

Lack of appropriate technology

Lack of modern technologies and technical knowhow becomes a major obstacle for effective exploration and extraction of marine resources. The sea-based resource extraction activities (i.e. marine fishing, salt production) are mostly carried out with traditional methods. Due to absence of FIR and RADAR network, every year Bangladesh loses huge air route tax from the maritime air route users. Impossibility to harvesting large pelagic species such as tuna also reminds country's technological backwardness.

Insufficient skilled workforce

Blue economy is an emerging development sector in Bangladesh. To grasp maximum economic benefits from this sector, innovative and multifarious uses of its prospects are essential. Success of implementing innovative projects/programs depends on the capacity of

the workforce involved in the implementation of Blue Economy Development Action Plan. Here, scarcity of skilled manpower is common concern.

Inadequate assessment of coastal and marine resources

Explanatory survey to the stock assessment of major marine species is vital for determining Maximum Sustainable Yield and Maximum Economic Yield and adopting strategic plan for resource management. Some piecemeal efforts have recently initiated such as 2D non-exclusive multi-client seismic survey for exploration of gas reserves in offshore areas, aquatic survey, fish stock assessment, DNA-based cataloging of marine resources for multiple uses of blue economy resources. But these efforts are not adequate.

Non-compliance of conservation regulations

Maintaining a balance between the conservation of marine ecosystem and industrial activities around the coast is a key to sustainable growth of blue economy. To protect aquatic resources, the government has taken initiatives such as two months fishing ban in the Bay of Bengal during breeding season, prohibit harvesting of marine resources in the MPAs. In absence of strong surveillance mechanism, compliance of state regulations becomes futile to some extent, which undermines the strategy of conservation and use of marine resources.

Creating blue economy friendly investment climate

Reaching the target of doubling the contribution of blue economy to GDP demands congenial investment climate. Huge private sector and foreign investment is required for the expansion of aquaculture and seafood processing industries, development of deep seaports, exploration of gas and oil in deep seas, production of offshore wind energy and development of marine tourism. Thus, developing a blue economy focused investment strategy is an urgent need.

Strengthening pollution control mechanism

Marine ecosystems of Bangladesh are under threat due to dumping of land-based pollutants to the Bay of Bengal. Such toxic materials are altering the physiochemical properties of coastal waters and degrading the food chain resulting considerable harms to marine species. Drilling in shallow shelf by the oil companies without extensive environmental and socioeconomic impact analysis can be harmful. Application of regulatory measures to curb intrusion of land-based pollutants in marine water is dismal.

Ensuring maritime security

Maritime security is a matter of great concern for Bangladesh. Bangladesh Coast Guard is yet to establish its control over the maritime territory. Besides, there are some common issues that require trans-boundary cooperation such as operating large-scale industrial fisheries in EEZs and Areas beyond National Jurisdiction. Strengthening maritime surveillance and trans-boundary cooperation are critical to the protection of marine resources.

Strengthening the Blue Economy Cell

The Blue Economy Cell was established to monitor the implementation of Blue Economy Development Action Plan and the SDG 14. As a new institutional set up, the Cell faces myriad of obstacles in terms of skilled workforce, logistics and budget. Enhancing the institutional strength is eminent to make the Blue Economy Cell as a vibrant platform for coordination, implementation and achievement of country's blue economy aspirations.

Policy renovation

Marine spatial plan has not yet been designed in Bangladesh. The current practice of disjointed 'sector-by-sector' or 'use-by-use' planning, managed by discrete regulations and implemented by disconnected agencies results in rising conflict among multiple users. The blue economy sectors are guiding by dozens of sectoral policies; many of those were developed before aligning the concept as a policy goal in the Vision 2021, 7th FYP and SDGs. Several sectoral policies are under revision to support the blue economy aspirations. However, since implementation of the SDG 14 is proceeding with a timeframe (i.e. by 2020, 2025 and 2030), upgrading the blue economy linked policies is important.

5.0 Recommendations

Based on the empirical data analyzed in Section 4, this study has prescribed few recommendations that could assist in achieving the SDG 14 targets and progressing towards Bangladesh's development destination.

- Upgrading the blue economy linked sectoral policies in line with the Vision 2021, 7th FYP and the UN SDGs for grasping maximum opportunities of blue economy.

- Invest more on oceanic research, acquisition of modern technology and technical knowhow of blue economy handling entities. For example, skill development of the Department of Fisheries in stock assessment at regular interval, monitor catch and generate research-based information to manage fishery resources in a sustainable way.
- Introduce monitoring system at landing centers to enforce conservation rules and establish marine check posts to prevent/control intrusion of foreign fishing trawlers, destructive fishing practice, over-exploitation, IUU fishing, and marine pollution.
- Undertake measures to harvest large pelagic species such as tuna in the EEZ and high seas and promote mariculture of non-conventional marine species such as sea weeds.
- Introduce social safety net measures for the small artisanal fishers to avoid harvesting marine species during ban period.
- Launch lucrative package for attracting private and foreign investment in blue economy sectors, particularly in the development of deep seaports, marine-based tourism, offshore oil and gas exploration.
- Enhance the institutional strength of Blue Economy Cell to make it a vibrant platform for coordination of projects/programs.
- Accelerate the installing process of FIR, RADAR to earn air route tax from the maritime air route user aircraft companies.

6.0 Conclusion

The exploration of marine resources has received lower priority in Bangladesh until 2014. With the settlement of maritime boundary disputes with Myanmar and India, the potentials of blue economy over the expanded maritime areas has been unlocked for boosting economic growth, ensuring citizen wellbeing, achieving the SDGs and Bangladesh's development visions. In order to grasp the blue economy generated benefits so far, the country has explored a few sectors including marine fishery and aquaculture, shipbuilding, ship recycling, and seaborne trade. There are other sectors with incredible economic potentials, such as seafood processing; marine biotechnology; oil, gas and other minerals, where Bangladesh's exposure is meager. The data shows that Bangladesh advances slowly towards achieving the SDG 14. The mentionable progress so far identified is the declaration of a significant portion of marine areas as MPA. Regarding fulfillment of other targets of SDG 14, the government's 'whole of society' approach is documented by way of launching diverse initiatives. The study identifies several factors that obstruct to achieving the SDG 14 targets. These includes –

inadequate scientific knowledge, research and technology for the exploration and assessment of seabed resources, scarcity of skilled workforce for optimizing blue economy sectors, indistinct investment climate for attracting private and foreign investment. Some policy and institutional issue such as weak mechanism in controlling marine pollution and activating conservation regulations, backdated sectoral polices are restraining the state agencies from rapid implementation of the Blue Economy Development Action Plan. Quick addressing the mentioned challenges pertaining to effective use of blue economy resources can expedite Bangladesh's journey towards the SDG junction and its self-sketched development destination (i.e. a middle-income country by 2021 and a developed country by 2041).

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Annexure: 1

Checklist for Key Informants Interview

1. Explain the prospects of blue economy in boosting Bangladesh's sustainable economic development and citizen wellbeing.

2. Please tell me the state of Bangladesh's efforts to unlocking the prospects of its coastal and marine resources.

3. The SDG 14 relates to the conservation and sustainable use of coastal and marine resources and set some targets to achieve sustainable development – could you tell me the status of Bangladesh in meeting the targets set forth in SDG 14?

4. Among the 17 SDGs, the SDG 14 directly links to the conservation and sustainable use of coastal and marine environment and associated resources. However, some of the targets of other goals have direct and indirect implications on the conservation and use of blue economy resources and wellbeing of the coastal and marine resource dependent people. Please explain how Bangladesh can utilize the prospects of blue economy in achieving the SDGs in general.

5. The Government of Bangladesh has prefixed a development division i.e. to be a middle-income country by 2021, to be a developed nation by 2041. Please tell me – how and to what extent the blue economy sectors can contribute to making this dream trajectory a reality?

6. Please tell me the major challenges for achieving the SDGs in light of the targets set in SDG 14 regarding the conservation and sustainable use of coastal and marine resources.

7. Do you suggest any innovative idea for effective utilization of blue economy potentials that can accelerate to achieving the SDGs and making the country's economic growth uninterrupted?

Annexure: 2

List of Key Informants consulted

Sl	Name	Designation	Office	Date
1	Real Admiral Md. Kurshed Alam	Secretary, Maritime Affairs Unit	Ministry of Foreign Affairs	27-10-2019
2	Md. Lutfor Rahman	Deputy Secretary	Ministry of Environment Forest and Climate Change	27-10-2019
3	Harekrishna Adihikari	Assistant Secretary	Ministry of Fisheries and Livestock	27-10-2019
4	Dr Md. Shamsuzzaman	Deputy Director	Blue Economy Cell, Ministry of Power, Energy and Mineral Resources	28-10-2019
5	Dr Golam Shafiuddin	Additional Secretary	Blue Economy Cell, Ministry of Power, Energy and Mineral Resources	28-10-2019
6	Md. Habibur Rahman	Deputy General Manager	Blue Economy Cell, Ministry of Power, Energy and Mineral Resources	28-10-2019
7	Hamida Iddris	Deputy Secretary	Blue Economy Cell, Ministry of Power, Energy and Mineral Resources	28-10-2019
8	Shahnewaz Parvez	General Manager	Bangladesh Oil, Gas, Mineral Corporation	29-10-2019