



Perception of the Regional Political Leaders on Climate Change: A Study in Sylhet District in Bangladesh

Md. Shahabul Haque^{[a],*}; Mohammed Gulzar Hussain^[b]

^[a]Associate Professor, Department of Political Studies, Shahjalal University of Science & Technology, Sylhet, Bangladesh.

^[b]Ex-Graduate Student, Department of Political Studies, Shahjalal University of Science & Technology, Sylhet, Bangladesh.

*Corresponding author.

Received 2 January 2017; accepted 16 March 2017

Published online 26 March 2017

Abstract

The paper has been designed to explore the perception of the regional political leaders on climate change. It explains the perception of the political leaders about general information, causes, and impacts of climate change. Therefore, the research design of the study was explorative and mostly descriptive. Probability sampling was used for sample selection. From the population of 367.58 respondents were selected by using Cochran's formula. This study incorporated both primary and secondary sources of data. Data was collected through social survey and in-depth interview method from the study area. These pertinent data were analysed by different statistical method like percentage analysis, weighted mean index, chi-square method etc. It was found that most of the respondents' perception about the climate change is satisfactory comparatively where perception about causes of climate change was better than the perception about impacts of climate change. Here, year of schooling was significantly associated with the respondents' perception on climate change. On the other hand, involvement with voluntary organization is significantly associated with respondents' perception about impacts of climate change. On the contrary, duration of the involvement with political party has no significant relation regarding to the perception of the political leaders on various aspects of climate change.

Key words: Climate change; Perception; Regional political leaders

Haque, M. S., & Hussain, M. G. (2017). Perception of the Regional Political Leaders on Climate Change: A Study in Sylhet District in Bangladesh. *Cross-Cultural Communication*, 13(3), 1-11. Available from: <http://www.cscanada.net/index.php/cc/article/view/9555>. DOI: <http://dx.doi.org/10.3968/9555>

INTRODUCTION

Climate change has become one of the most discussed issues among the scholars, scientists, political leaders and development organizations. Temperature has been increasing gradually for the last few decades. For an example, over the last hundred years, the average temperature of the world has risen to 0.74°C (Steinfeld, 2001) and it is projected that at the end of this current century it would be increased by 1.1°C to 6.4°C (IPCC, 2007). Natural variabilities and human activities, like the gigantic rate of the emission of greenhouse gasses by highly industrialized countries; deforestation and acquisition of agricultural lands to meet the basic needs of the citizens in an unplanned way by developing countries intensify the climate change more rapidly. Climate change produces severe problems such as drought, flood and flash flood, rising of sea level, salinity intrusion, and natural disaster (UNEP, 2009) which have a diversified effects on the environment, and on socio-economic and related sectors, including water resources, agriculture and food security, human health, terrestrial ecosystems and biodiversity and coastal zones (UNFCCC, 2007). Climate change will invariably affect all countries to some degrees, but its impacts are predicted to fall largely and disproportionately on the developing world because they have fewer resources to adapt socially, technologically and financially (Doung, 2010). The four critical regions¹ which will be affected harshly by the impacts of climate

¹ Northwest Africa, India and Bangladesh, the Andean region, and China.

change within the near future Bangladesh is located in one of them (Werz & Conley, 2012). A most densely populated country comprising to its small size, position of land just above the sea level except few hilly areas, pervasive poverty rate, lack of access specifically to the extraction of natural resources, and an agrarian based economy mostly reliant on nature push Bangladesh in a critical situation to face the challenges of climate change.

Bangladesh is recognized as one of the most vulnerable countries to the impacts of climate change around the world. Assessing a number of variables to calculate the vulnerability of countries to the impacts of climate change, Maplecroft, a British global risks analysis firm, in its fourth CCVI report (2011) recognized Bangladesh as second top most vulnerable country out of 193 nations, and labeled it as a extremely risk country (Maplecroft, 2011). According to the existing research studies, the recent and forthcoming climatic hazards will make Bangladesh too vulnerable in the near future. To mitigate these problems different types of initiatives are taken, policies are formulated by government organizations and NGO's. In Bangladesh, policies are taken by the elected political leaders who are the representative of various political parties. In this regard, perception of the decision makers who formulate the policies is decisively important i.e. what is the awareness of political leaders' about nature of climate change? What is their view about causes of climate change? How much they aware about impacts of climatic problem? How much they know about climate change risks for Bangladesh? What is their perception about climate changes mitigation measures? – To know the answers to these questions are very much important to fight against the worst affects of climate change. In this research, perceptions of the political leaders' about climate change were analysed. The broad and general objective of this study is to know the perception of regional political leaders on climate change. This broad objective has been split into several specific objectives. These are: (i) to know the perception of political leaders' about the general information of climate change; (ii) to know the perception of political leaders' about the causes of climate change; (iii) to know the perception of political leaders, about impacts of climate change; and (iv) to find out determinants which influenced the perception of political leaders' about climate change. The following hypotheses were examined in this study: **H#1:** Perception of the political leaders on climate change increased with their more year of schooling. **H#2:** Duration of the party membership is positively associated with their perception about climate change.

1. METHODOLOGY

In this study exploratory-descriptive research design has been followed. Here, perception of political leaders' related to climate change has been explored. Sylhet district has been selected purposively as research area. Since, this

area is less affected by climate change induced problems compare to the other parts of the country. Among the various parties political leaders' affiliation with major four parties of Sylhet district who are the member of district committee and metropolitan (*mahanagar*) committee were the population of this study, as these four parties generally hold most of the parliamentary seats from the election of 1991. The number of total population is 230. Each political leader of district committee and metropolitan committee among the four parties was considered as a unit of analysis. Reason of choosing district committee and metropolitan committee was both elected people's representative (Member of Parliament) and non elected political leaders, as respondents were ensured. The technique which was used for sampling is simple random sampling because the amount of population is known ($N=367$). To determine the specific sample size following formula was applied (Islam, 2008):

$$n = \frac{z^2 \cdot p \cdot q \cdot N}{e^2 \cdot (N - 1) + z^2 p q} = 57.45 = 58$$

Where, N = Sample size

Size of population, $N = 367$

z = The value of the standard variate at a given confidence level and so be worked out from the table showing area under normal curve. In the present study it will considered standard normal deviation at 90% confident level= 1.65

p = Sample proportion, which may either be based on personal judgment, experience or may be result of a pilot study. In absence of such estimation, the value of $p = 0.50$
 $q = 1 - p = 0.5$

e = Acceptable margin of error (the precision) = 0.1

Data and information were collected from both primary and secondary sources. Secondary sources of data were books, journals, research articles, government reports, etc. Primary data were collected from the field through questionnaire and in-depth interview. Methodological triangulation (Social Survey and Interview) has been used to collect appropriate data relating to the problem. For social survey, questionnaire was used to get specific data to know the perception of the respondents. Both open ended and close ended question were used. For collecting qualitative in-depth interview was conducted for covering four political parties. Both descriptive and inferential statistics were used to describe the study's sample and to draw inferences about the wider population it represented. Descriptive statistics including frequencies and percentages, chart, mode, standard deviations and correlation coefficient were calculated depending on the characteristics of the variables. For testing hypotheses chi-square test was used. The analysis including descriptive statistics, correlation coefficients, and chi-square were carried out by using SPSS. To understand the perception of the political leaders regarding climate change "Likert scale²" was developed.

² A rating scale highly used to measure the attitude, perception, and belief of the respondents.

Description about Likert scale and Likert items are given below. A five point Likert scale was used to quantify the

perception of political leaders' values ranging from 1 to 5.

| | | | | | |
|----------------|-------------------|----------|----------|-------|----------------|
| Opinion | Very low | Low | Medium | High | Very high |
| Opinion | Strongly disagree | Disagree | Not sure | Agree | Strongly agree |
| Value | 1 | 2 | 3 | 4 | 5 |

To measure the perception of the respondents to every given statement, weighted mean index of perception was computed by using following equation (Chavan et al., 2009):

$$WI = \frac{\sum(Xi.Ni)}{Ni}$$

Where,

WI = Weighted mean index of perception

Xi = Rank of perception

Ni = Number of respondents that have perception ranked as Xi respectively

2. FINDINGS AND DISCUSSION

Table 1 shows respondents' opinion regarding causes of climate change. Almost all of the respondents (about 98%) said that emission of smokes from industrial plant is linked with climate change. On the other side, only about 2% respondents said there is no relation exists between climate change and emission of gasses from industrial plants (see Table 1). Against the statement 'deforestation is related to climate change', nearly all of the respondents (about 97%) have the same opinion. In contrary, only 1.7% respondents said that deforestation is not responsible for the change of climate. Similarly, 1.7% respondents said that, they are uncertain about the relation between deforestation and change of climate (see Table 1).

In this study, nearly three quarter respondents (about 74%) believed that, climate change has a significant relation with population growth. Simultaneously, about

10% respondents assumed that population growth has no substantial relation with change of climate. On the other hand, about 16% respondents are not sure that, there is a relation exists between the two components (see Table 1). From the Table 1, we can see almost all of the respondents (about 97%) said that carbon emission from vehicles is responsible for change of climate. On the other hand, only 1.7% respondents thought that emission of carbon from vehicles is responsible for change of climate (see Table 1).

In this study, more than three quarter of the respondents (about 86%) said that, burning of fossil fuel is linked with climate change; meanwhile about 12% respondents have uncertain view about the statement (see Table 1). Majority of the respondents (about 93%) agreed with the statement that, emissions of smokes from the brickfields are responsible for change of climate. In the mean time, about 7% respondents said emissions of smokes from the brickfields are too much responsible for climate change (see Table 1).

The study showed that, more than two third of the respondents (nearly 71%) said that climate change is resulted by the use of air conditioner. On the other hand, 5.2% respondents disagreed with the statement and about 24% respondents were uncertain about the impact of air conditioner on climate change (see Table 1). In this study, majority of the respondents (about 59%) stated that use of refrigerator is one of the responsible causes for change of climate. Alternatively, nearly 7% respondents said that use of refrigerator is not responsible for climate change. A big amount of respondents (34.5%) were uncertain about the statement (see Table 1).

Table 1
Perception of the Respondents About Causes of Climate Change

| Perception of the respondents about causes of climate change | | | | | |
|--|-----------------------|--------------|--------------|-----------|--------------------|
| Statement | Strongly disagree (%) | disagree (%) | Not sure (%) | Agree (%) | Strongly agree (%) |
| Emission of gasses from industrial plant is linked with climate change | 0 | 0 | 1 (1.7) | 43 (74.1) | 14 (24.1) |
| Deforestation is related to climate change | 0 | 1 (1.7) | 1 (1.7) | 45 (77.6) | 11 (19) |
| Population growth has a relation with climate change | 0 | 6 (10.3) | 9 (15.5) | 41 (70.7) | 2 (3.4) |
| Carbon emission from vehicles is responsible for climate change | 0 | 1 (1.7) | 1 (1.7) | 50 (86.2) | 6 (10.3) |
| Burning of fossil fuel is linked with climate change | 0 | 1 (1.7) | 7 (12.1) | 48 (82.8) | 2 (3.4) |
| Emissions of smokes from the brick fields are responsible for climate change | 0 | 0 | 0 | 54 (93.1) | 4 (6.9) |
| Use of air conditioner is responsible for change of climate | 0 | 3 (5.2) | 14 (24.1) | 40 (69) | 1 (1.7) |
| Use of refrigerator is responsible for climate change | 0 | 4 (6.9) | 20 (34.5) | 33 (56.9) | 1(1.7) |

To know the respondents' perception regarding causes of climate change above stated eight statements have been used. About causes of climate change, responses were coded from 1 for "strongly disagree" to 5 for "strongly agree" for each statement. Thus the scores

for each respondent on the eight statements range from 8 to 40. Figure 1 showed that most of the respondents' perception score lies on the range 30-35. Distribution of respondents' overall score of perception is shown in Figure 1.

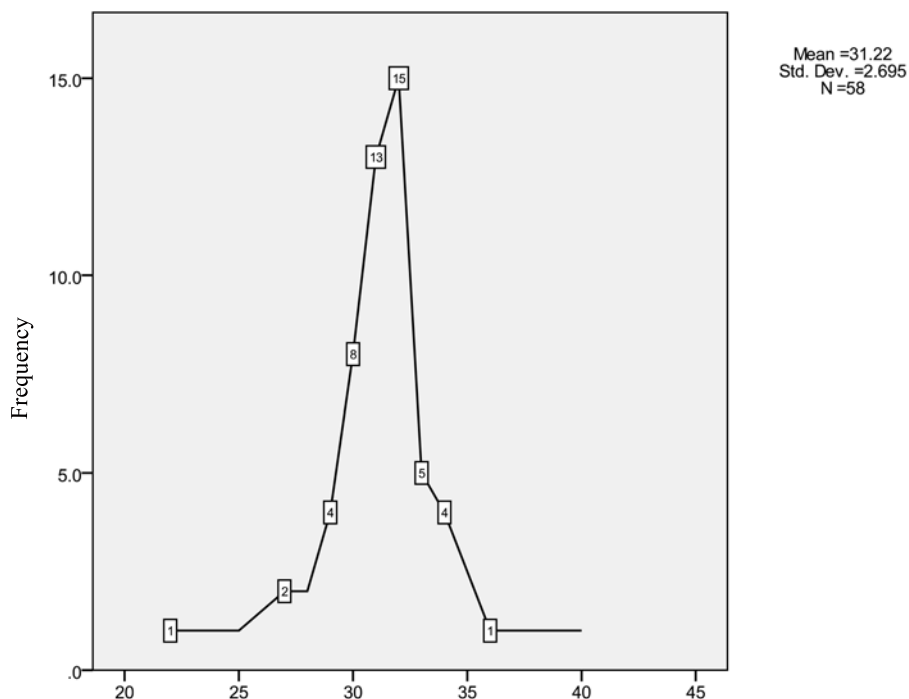


Figure 1
Score of the Respondents About Causes of Climate Change

Climate change is a threat multiplier. As a result of climate change frequency of many extreme events such as drought and heat waves, intense rainfall, flood, cyclones and storm surges, salinity intrusion, etc. happened which causes losses of livestock, increase food scarcity and health risks, decreased production, increased management costs etc.

Table 2 shows the perception of the respondents about impacts of climate change. In this study, maximum number of the respondents (about 95%) said that unseasonal rainfall increased as a result of climate change while 3.4% respondents disagreed with the statement. On the other hand, 1.7% respondents were uncertain about the statement. Table 2 depicts that lion share of the respondents (about 86%) stated at the time of rainy season the number of rainy days reduced as a result of change of climate. On the other hand, 5.2% respondents disagreed with the statement. Simultaneously, 8.6% of the respondents were not sure about the impact of climate change to reduce the number of rainy days (see Table 2).

Table 1 shows more than four-fifth of the respondents (about 93%) said that length of cold period is decreased as a result of climate change while only 5.2% respondents were disagreed with the statement. According to Table

2, majority of the respondents (about 59%) stated that incidents of drought are increased as a result of climate change. On the other side, 15.5% respondents said that incidents of drought are not increased as change of climate. About one fourth of the respondents (26%) opined that they were not sure about the statement. Against the statement- storms are more frequently happened, more than three quarter (81%) respondents and 5.2% respondents said that were agreed and strongly agreed respectively. In contrast with them 3.4% respondents sated that they were disagreed with the statement and the percentage of respondents who were not sure is 10.3% (see Table 2).

Table 1 showed that, almost 95% respondents said that climate change is responsible for the increase of flood occurrence while about 5% respondents states that Occurrence of flood is increased due to the change of climate. Respondents had to ask, flash flood is more frequently occurred as a result of climate change. Nearly two third of the respondents (about 64%) were affirmative to the statement. In contrast with them, 10.3% respondents were disagreed with the statement. On the other hand, a substantial amount of respondents (about 26%) said they were uncertain about the given statement (see Table 1).

Among the respondents majority (about 60%) said that rising of sea level is resulted by climate change. Besides that, 36.2% of the respondents said that, they are not sure about the impact of climate change on sea level rise. Alternatively, 3.4% respondents said that, climate change is not responsible for rising of sea level (see Table 2). Exactly three quarter respondents (about 75%) agreed and 3.4% respondents strongly agreed with the statement that salinity intrusion is the outcome of sea level rising while 20.7% respondents were not sure about the impact of sea level rising resulted to salinity intrusion (see Table 2).

In this study maximum number of respondents (about 90%) said that salinity intrusion decreased the availability of fresh water. On the other hand, about 10% respondents said they were not sure about the statement availability of fresh water is decreased as a result of salinity intrusion (see Table 2). About 93% of the respondents said that agricultural land losses its fertility as a result of salinity intrusion. Similarly, nearly 7% respondents are not sure about the impacts of salinity on agricultural land fertility (see Table 2).

Table 2 indicates that, 91% respondents said that

climate change increased the health risks; in contrast with them about 9% of the respondents said that climate change highly increased the health risks. Almost 95% respondents said that, climate change threatened the food security of all people. Besides that, only 1.7% respondents opined that food security is threatened by climate change. In the mean time 3.4% respondents were uncertain about the impacts of climate change on food security (see Table 2).

According to Table 2, more than half of the respondents (about 57%) believed that indigenous people will be affected more than general people. Alternatively, about 19% respondents said that indigenous people will not be more affected than general people. Additionally, a quarter of the respondents (24.1%) don't sure about the fact that who will be the worst sufferer. In this study, majority of the respondents (nearly 61%) said that, climate change forces people to move from one place to another. About 7% respondents differ with the statement by saying that climate change did not force people to move; while a significant amount of respondents (29.3%) was uncertain about this impact of climate change (see Table 2).

Table 2
Perception of the Respondents About Impacts of Climate Change

| Perception of the respondents about causes of climate change | | | | | |
|--|-----------------------|--------------|--------------|-----------|--------------------|
| Statement | Strongly disagree (%) | Disagree (%) | Not sure (%) | Agree (%) | Strongly agree (%) |
| Unseasonal rainfall increased | 0 | 2 (3.4) | 1 (1.7) | 48 (82.8) | 7 (12.1) |
| Reduced number of rainy days during the rainy season | 0 | 3 (5.2) | 5 (8.6) | 48 (82.8) | 2 (3.4) |
| Length of cold period decreased | 0 | 3 (5.2) | 1 (1.7) | 45 (77.6) | 9 (15.5) |
| Incidents of drought are increased | 0 | 9 (15.5) | 15 (25.9) | 32 (55.2) | 2 (3.4) |
| Storms are more frequently happened | 0 | 2 (3.4) | 6 (10.3) | 47 (81) | 3 (5.2) |
| Occurrence of flood is increased due to the change of climate | 0 | 3 (5.2) | 0 | 52 (89.7) | 3 (5.2) |
| Flash flood is more frequently occurred as a result of climate change | 0 | 6 (10.3) | 15 (25.9) | 36 (62.1) | 1 (1.7) |
| Rising of sea level is resulted by climate change | 0 | 2 (3.4) | 21 (36.2) | 29 (50) | 6 (10.3) |
| Salinity intrusion is the outcome of sea level rising | 0 | 0 | 12 (20.7) | 44 (75.9) | 2 (3.4) |
| Availability of fresh water is decreased as a result of salinity intrusion | 0 | 0 | 6 (10.3) | 49 (84.5) | 3 (5.2) |
| Agricultural land losses its fertility due to the salinity intrusion | 0 | 0 | 4 (6.9) | 52 (89.7) | 2 (3.4) |
| Climate change increased health risks | 0 | 0 | 0 | 53 (91.4) | 5 (8.6) |
| Climate change threatened the food security of the all people | 0 | 1 (1.7) | 2 (3.4) | 51 (87.9) | 4 (6.9) |
| Indigenous people will be affected disproportionately by climate change | 2 (3.4) | 9 (15.5) | 14 (24.1) | 30 (51.7) | 3 (5.2) |
| Climate change forces people to move from one place to another | 0 | 4 (6.9) | 17 (29.3) | 34 (58.6) | 3 (5.2) |

To know the respondents' perception regarding impacts of climate change above stated fifteen statements have been used. For each statement the responses were coded from 1 for "strongly disagree" to 5 for "strongly agree". Thus the scores for each

respondent on the fifteen statements range from 15 to 75. Figure 2 showed that most of the respondents' perception score lies "between" 53-60. Distribution of respondents' overall score of perception is shown in Figure 2.

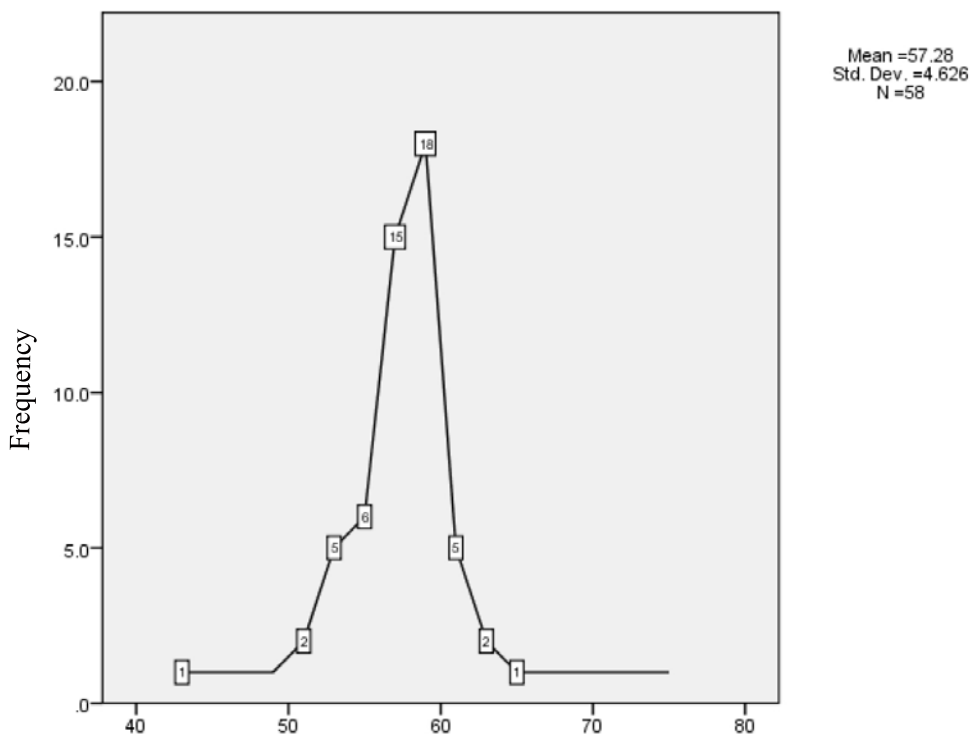


Figure 2
Score of the Respondents About Impacts of Climate Change

This study attempts to explore the perception of regional political leaders on climate change. It highlights their perception score and weighted mean score through three different segments: general information of climate change, causes, and impacts of climate change. In this study, it was found that, most of the political leaders' age is more than 50 years and most of them have more than or equal to 16 years of schooling. The study also reveals that, age of the respondents below 51 have more years of schooling than the respondents' age above 50 years. Majority of the respondents' occupation is business and greater parts of the respondents have nuclear family. A good number of respondents have more than 16 years of political involvement with party. It shows that, they are most senior leaders of the different political parties. The study also shows that, mentionable number of respondents heard the name of environmental organization like BAPA, BELA and BAN. Again, all of the respondents said that they are not involved with voluntary organization which deals with climate change and environmental issues. However, a good number of political leaders were participated in the various seminars titled with climate change and environmental problems.

About general information of climate change this study expose that, more than three-fourth of the respondents (about 85%) said that they know climate change means variation in temperature over a period of time. Again, maximum numbers of political leaders (about 91%) think that Bangladesh is one of

the worst victims of climate change and greater part of the respondents (93%) believe that, Bangladesh will be suffered greatly from climate change for its geographical location. Additionally, weighted mean of the statement indicates that regarding the statement all of the respondents have relatively better score among the items of general information. In this study, majority of them (about 91%) also believed that human activities are more responsible for the change of climate which is supported by IPCC Report 2007 (IPCC, 2007). Nearly three quarters of the respondents (about 72%) said that, developed countries are more responsible for the change of climate. On the other hand, a substantial amount of respondents (about 22%) do not know about the responsibility of developed countries for the causes of climate change and they believe that developing countries are responsible for the change of climate. From the result, it is found that weighted mean of the respondents perception about general information of climate change is 4.07 which give us a clear view that their mean score is at a satisfactory level. The weighted mean value also indicates that respondents have agreed view about general information of climate change. Although respondents' perception about general information of climate change is on better level, Figure 3 depicts that nearly one-fifth of the respondents perception score exceeded 22 out of 25 which indicates that most of the respondents have the average perception score and a small fraction of the respondents scored 25.

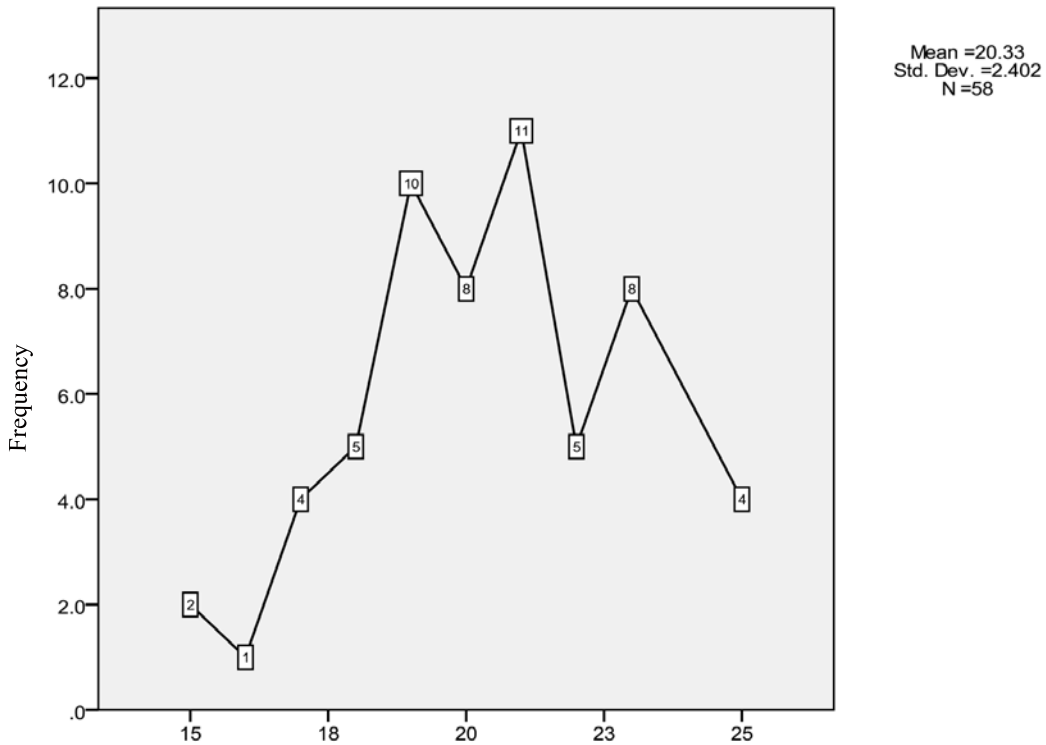


Figure 3
Score of the Respondents About General Information of Climate Change

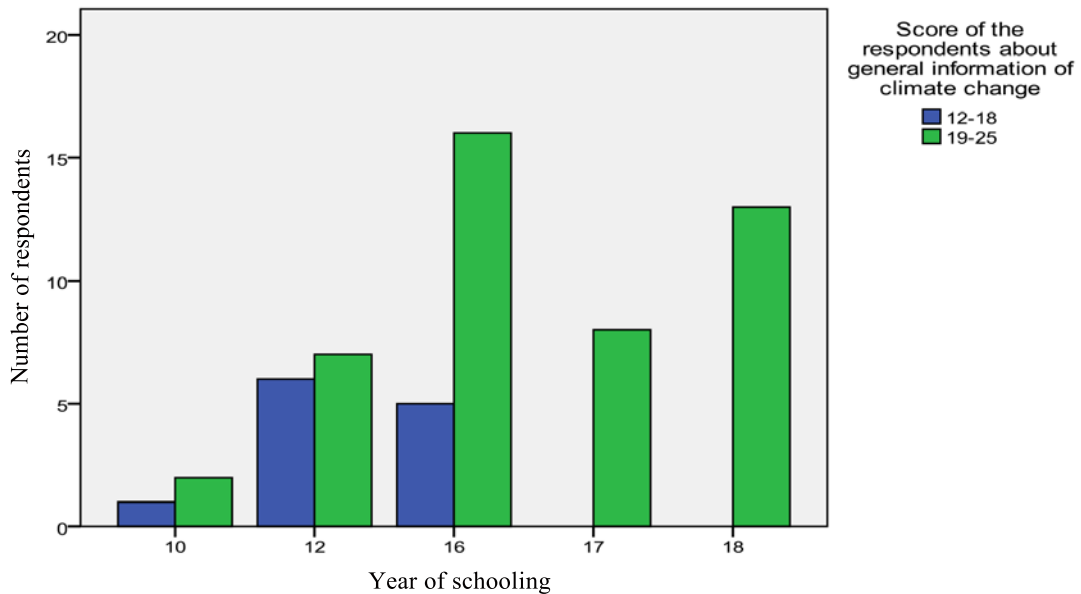


Figure 4
Cross Table of Year of Schooling and Score of the Respondents About General Information of Climate Change

From Figure 4, it is found that political leaders' perception about general information of climate change is influenced by their year of schooling ($p < .05$). Figure 5 and Figure 6 respectively for duration of the party involvement and involvement with voluntary organization showed that both of these have no significant influence ($p > .05$) on perception about general information of climate change. However, involvement with voluntary organization has

positive direction towards influencing the perception of the respondents compared to party membership. In aspect of impacts of climate change, nearly all of the respondents (about 98%) know that emission of gasses from industrial plants is linked with climate change. Maximum of them (about 97%) also think that climate change is resulted by deforestation. Nearly three quarter of the respondents (about 74%) said that, population growth is highly related

to the change of climate. Furthermore, greater part of the respondents opined that emission of smokes from brickfields, carbon emission from vehicles is caused for climate change. In addition, more than three quarter of the respondents (about 86%) think that burning of fossil fuels is responsible for climate change. Moreover, negotiable numbers of respondents said that use of refrigerator and air conditioner are linked with climate change. According

to the respondents view emission of gasses from industrial plants, population growth and deforestation are main causes of climate change. Weighted mean of the respondents' perception about causes of climate change is 3.90 which illustrates that their mean score is nearly close to the agreed view. The weighted mean value also points out that respondents have lower perception about causes of climate change than the general information of climate change.

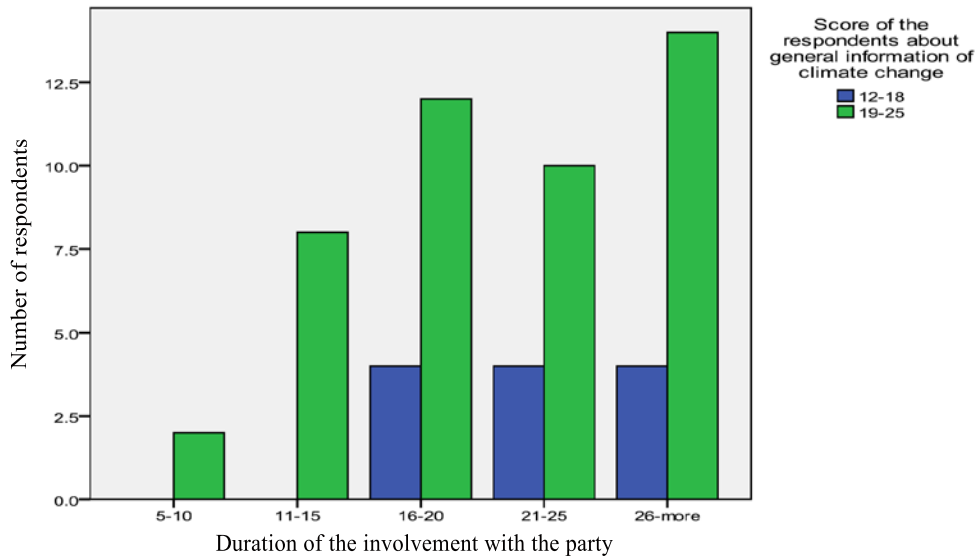


Figure 5
Cross Table of Duration of the Involvement With the Party and Score of the Respondents About General Information of Climate Change

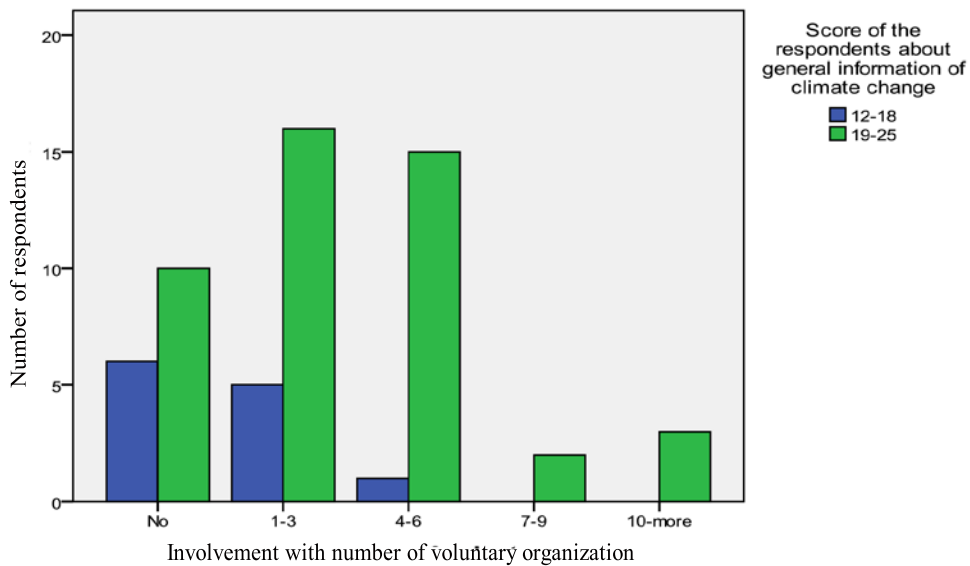


Figure 6
Cross Table of Involvement With Number of Voluntary Organization and Score of the Respondents About General Information of Climate Change

Figure 7 shows that most of the respondents perception score is less than 33 which indicates that respondents have average perception score about causes of climate. From Table 3, it is found that year of schooling of the respondents influenced their perception about the causes

of climate change. The study also reveals that duration of the party involvement and involvement with voluntary organization has no significant influence on the perception about causes of climate change. About impacts of climate change, maximum number of respondents (about 95%)

said that unseasonal rainfall is increased as a result of climate change. Similarly, more than three quarter of the respondents (about 86%) opined that as a result of climate change numbers of rainy days are reduced. Additionally, greater part of the respondents (about 93%) said that, length of cold period is decreased for the change of climate. Most of the respondents also believe that, as a result of climate change droughts, storms, floods and flash floods are more frequently happened than the past. In this study, large number of respondents (about 60%) said that sea level rising is resulted by climate change and as a result, exactly three quarter of the respondents (about 75%) said, salinity intrusion happened. Furthermore, maximum number of respondents (about 93%) said that for salinity intrusion agricultural land losses its fertility. Additionally, most of the respondents (about 90%) said availability of fresh

water is decreased for salinity intrusion. Besides that, most of the respondents said food insecurity, health risk etc are increased for the change of climate. Moreover, nearly two third of the respondents (about 61%) believe that climate change forces people to move from one place to another. Majority of the respondents (about 57%) believe that, indigenous people will be affected by climate change more than the general people and nearly a quarter of respondents (about 24%) said they are uncertain regarding who will be affected more by climate change. On the other hand, mentionable part of the respondents (about 19%) said indigenous people will be less affected by climate change than the general people. The study also reveals that, weighted mean of the statements about impacts of climate change is 3.81 out of 5 which represent that political leaders are not more aware about the impacts of climate change.

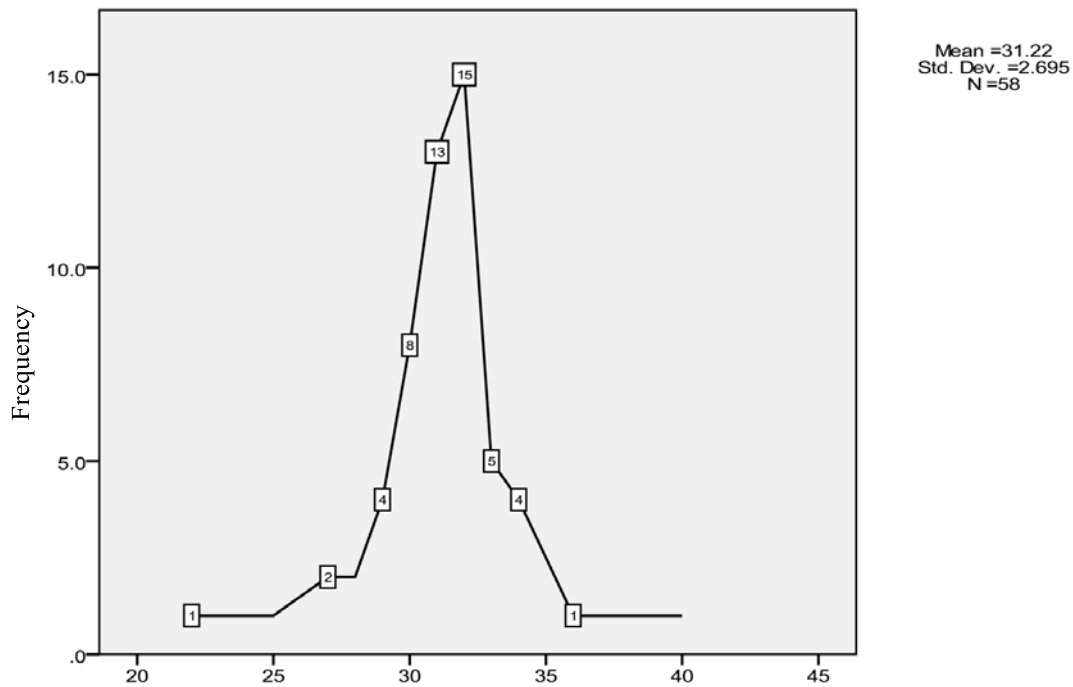


Figure 7
Score of the Respondents About Causes of Climate Change

Table 3
Cross Table of Year of Schooling and Perception Score of the Respondents About Causes of Climate Change

| | | Perception score of the respondents about causes of climate change | | |
|-------------------|-------|--|-------|-------|
| | | 19-29 | 30-40 | Total |
| Year of schooling | 10 | 2 | 1 | 3 |
| | 12 | 4 | 9 | 13 |
| | 16 | 3 | 18 | 21 |
| | 17 | 1 | 7 | 8 |
| | 18 | 0 | 13 | 13 |
| | Total | 10 | 48 | 58 |

From Figure 8, we can see that, year of schooling is significantly associated with the perception score regarding impacts of climate change. Unlike the perception score of general information of climate change and causes of climate change, involvement

with voluntary organization has correlation with the perception score regarding impacts of climate change but duration of party involvement has no significant relation with perception score about impacts of climate change.

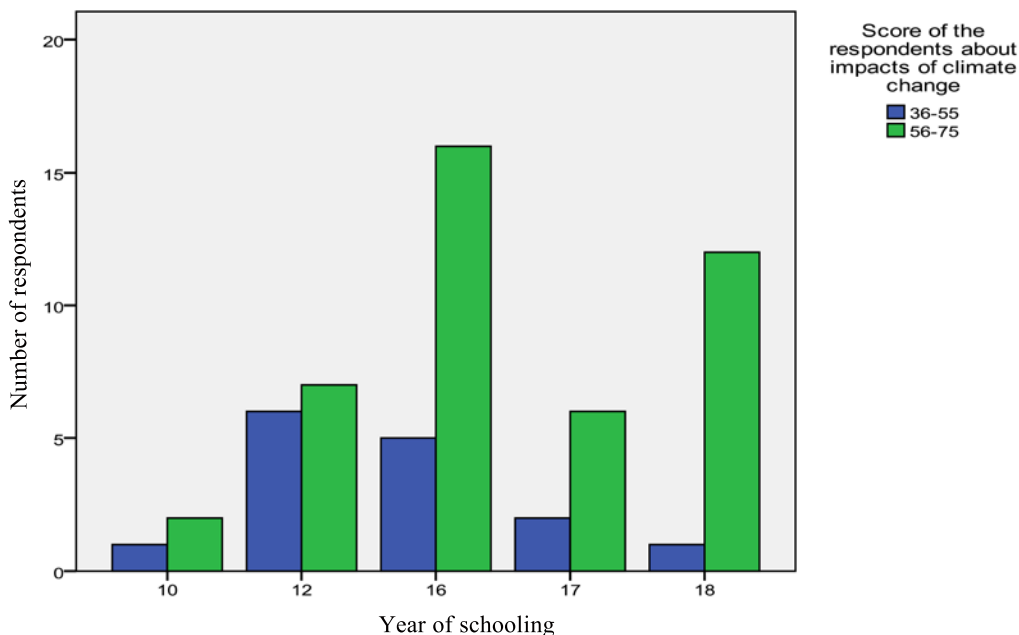


Figure 8
Cross Table of Year of Schooling and Score of the Respondents About Impacts of Climate Change

The study findings expose that, year of schooling is the main factor which significantly associated with the respondents' perception about causes, impacts, and general information of climate change. On the other hand, duration of party involvement has no significant relation with perception score regarding causes, impacts, and general information of climate change. From the study it was found that, these respondents have more years of party membership but they have less year of schooling. Involvement of the respondents with voluntary organization(s) is significantly associated with the perception score of impacts of climate change. From the in-depth interview, it is found that, political leaders who are involved with various voluntary organizations can easily interact with people from diversified professions at the time of organization meetings and programmes. Furthermore, as a member of various voluntary organizations they are invited organizationally (sometimes personally also) by NGOs and GOs which are dealt with climate change and environmental problems. Political leaders who are involved with more organizations have more opportunity to interact with people. The findings also expose that, respondents weighted mean score about causes of climate change is more than the impacts of climate change which means political leaders are comparatively unaware about the impacts of climate change. From the results of Chi-square test, for the first hypothesis, we

rejected the null hypothesis and concluded that year of schooling and perception on climate change are associated. On the other hand, for the second hypothesis we accepted the null hypothesis and can conclude that there has no significant association exists between duration of the involvement with party and perception on climate change.

CONCLUSION AND RECOMMENDATION

Climate change is a burning issue for the world and to the events of climate change impacts a developing country like Bangladesh is considerably vulnerable. The study has presented climate change on the perspectives of political leaders of Sylhet region. This study reveals that political leaders are conscious about general information, causes, and impacts of climate change. They perceived that climate change is a threat for the country. Although their weighted mean perception about climate change is in a moderate level but total perception score indicates that few of the political leaders were well known about general information of climate change, causes and impacts of climate change. From the perception score it is exposed that they have to know more about the causes of climate change than the impacts of climate change. As Bangladesh is in a vulnerable situation to the impacts of climate change so they have to know more about the impacts of climate change and how it can be minimise. To make political

leaders more conscious about climate changes following recommendations are made:

Political leaders should be involved with the initiatives of the organizations which are dealing with climate change and environmental problems.

Climate change related issues should be given priority in the party meeting of political parties.

Election manifesto of the political parties should cover climate change issues and its adverse consequences in the context of Bangladesh.

Conference, seminar, symposium, campaign etc should be organised by government bodies, NGOs and development organizations to aware political leaders.

REFERENCES

- Chavan, B. R., et al. (2009). Socio-economic analysis of fishermen at coastal fishery management in Maharashtra, India. *Asia-Pacific Journal of Rural Development*, 19(2), 31-45.
- Duong, T. (2010). When islands drown: The plight of "climate change refugees" and recourse to international human rights law. *University of Pennsylvania Journal of International Law*, 31(4), 1239-1266.

- IPCC. (2007). *Climate change: The physical science basis. Summary for the Policy Makers.*
- Islam, M. S. (2008). Development of physical capital through CVDP of BARD. *Asia-Pacific Journal of Rural Development*, 18(1), 23-40.
- Mapplecroft. (2011). *Climate change and environmental risk atlas 2012*. Retrieved 2012, August 6 from http://maplecroft.com/about/news/ccvi_2012.html
- Steinfeld, J. I. (2001). Climate change and energy options: Decision making in the midst of uncertainty. *Fuel Processing Technology*, 71(1), 121-129.
- UNEP. (2009). *IEA training manual volume two: Vulnerability and impact assessments for adaptation to climate change (VIA Module)*. Retrieved from <http://wedocs.unep.org>
- UNFCCC. (1992). *UNFCCC convention, article 1, section 2*, Retrieved 2012, July 28 from http://unfccc.int/essential_background/convention/background/items/2536.php
- Werz, M., & Conley, L. (2012). *Climate change, migration, and conflict: Addressing complex crisis scenarios in the 21st century*. Center for American Progress, Washington D.C.