

# **Climate Change Discourse in National Curriculum of Primary Education in Bangladesh**

By

Ananda Kumar Biswas

Student ID: 18357026

A thesis submitted to the BRAC Institute of Educational Development in partial  
fulfillment of the requirements for the degree of  
Master of Education in Educational Leadership & School Improvement

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## **Declaration**

It is hereby declared that

1. The thesis I presented for graduation from BRAC University is my own original work.
2. The thesis does not include any already published or authored by a third party content, unless it is properly referenced in the references.
3. The thesis must not include any content that has been approved or submitted for consideration for any other degree or certificate from a university or other institution.
4. I have given credit to all major sources of assistance.

**Student's Full Name & Signature:**



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**Ananda Kumar Biswas**  
Student ID: 18357026

## Approval

The thesis titled “Climate Change Discourse in National Curriculum of Primary Education in Bangladesh” Submitted by Ananda Kumar Biswas; Student ID: 18357026 of Spring, 2020 has been accepted as satisfactory in partial fulfillment of the requirement for the degree of Master of Education in Educational Leadership & School Improvement on 2<sup>nd</sup> May 2023.

### Examining Committee:

Supervisor:  
(Member)

---

Mamunur Rashid  
Senior Lecturer, BRAC Institute of Educational Development,  
BRAC University

Program Coordinator:  
(Member)

---

Dr. Manjuma Akhtar Mousumi  
Assistant Professor, BRAC Institute of Educational Development,  
BRAC University

External Expert Examiner:  
(Member)

---

Dr. Dilruba Sultana  
Senior Lecturer, BRAC Institute of Educational Development,  
BRAC University

Head of the Institute:

---

Dr. Erum Mariam  
Executive Director, BRAC Institute of Educational Development,  
BRAC University

## **Ethics Statement**

Hereby, I Ananda Kumar Biswas consciously assure that for the manuscript “Climate Change Discourse in National Curriculum of Primary Education in Bangladesh” the following is fulfilled.

1. I created this Content entirely on my own and it has never been published before.
2. This article correctly identifies and cites all of its sources. Text that has been verbatim copied must be marked as such with quotation marks and an appropriate citation.
3. Every participant in this study gave their consent to take part.
4. At no time will the names of the study's participants be made public.
5. The results are appropriately contextualized in light of prior and ongoing research.

## **Abstract**

Bangladesh is one of the most climate-vulnerable countries in the universe based on its location. For minimizing the loss and damages of the negative effect of Climate change could be reduced by involving different stakeholders and educational institutes. Bangladesh adopted the first educational policy in 2010 where Environmental education including climate change is one of the objectives. To attain the objective of promoting awareness and knowledge, climate change education is the most demanding for the educational landscape in Bangladesh. National Curriculum of Primary Education has been setting some terminal competencies which are focused on climate change and environmental education or knowledge through textbooks. The aim of this research is to investigate the climate change discourses in the national curriculum, textbooks, and teacher views on climate change. The major findings of the research are, climate change content is very limited in the curriculum and textbooks, presentation is not logically well-organized, the same class with overlapped discourses, the teacher expressed the Content need to be regionalized, graphical presentation are not well-format or designed. This research also reflected the current scenario of climate change discourse in the national curriculum of Primary education.

**Key Words:** Climate Change, National Curriculum, Discourse, Textbooks, Climate Change Discourse, Content Analysis

## **Dedication**

I dedicate my thesis to my devoted parents in appreciation of their love and guidance.

## **Acknowledgment**

I really appreciate the study participants' time and cooperation during these demanding times. I will always be grateful to the BRAC IED faculty for helping to lay the groundwork for my career in teaching over the last 2.5 years. I was able to lay a solid foundation because of their invaluable assistance and direction. My supervisor, Mamunur Rashid, Senior Lecturer, BRAC IED, BRAC University deserves a special note of appreciation for his unwavering encouragement and insightful counsel, which inspired me to put in more effort and strive for excellence.

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## **List of Acronyms**

CCE- Climate Change Education

CC- Climate Change

CCD- Climate Change Discourse

CDA- Critical Discourse Analysis

EE- Environmental Education

NEP- National Education Policy

NCTB- National Curriculum and Textbook Board

UNICEF- United Nations International Children's Emergency Fund

## **Chapter 1 Introduction**

### **1.1 Research Topic & Title:**

The topic of my study is climate change discourse in the national curriculum of primary education in Bangladesh. This research will be investigating the Content of climate change discourse in curriculum and Textbook is fit for the Bangladeshi context. This study will also explore the expert opinion & School teacher perception regarding climate change content. My research title is “**Climate Change Discourse in National Curriculum of Primary Education in Bangladesh**”. Through this study, I will not only analyze the climate change-related content but also see the expert & Teacher perceptions. I choose this topic because of how climate change content is fit for the Bangladesh context as well as different representations of climate change discourse. Climate Change discourse perception among teachers is another part of this research. Finally, to critical analysis the content representation & expert opinion about climate change discourse in Bangladeshi primary school curriculum and Textbook representation.

### **1.2 Problem Statement:**

Bangladesh is recognized as a climate change hotspot in the world (Alam, *et al* 2008). Climate change has been one of the most concerning issues for Bangladesh because of its location. For mitigating the losses from climate change effects, different stakeholders working on this issue. Environmental Studies are now popular in Bangladesh at Higher studies levels (Salequzzaman & Stocker, 2003). This initiative is also ongoing from primary to higher studies. In the primary textbooks generally, Climate change-related topics have been reflected. But the discourse of climate

change in the primary textbook has been presented differently in different grades and textbooks. Climate Change Education is needed to mitigate climate change losses but unfortunately in our Primary Textbooks don't cover a lot (Chowdhuray, 2014). In a Sathee Class, Student's get different types of climate change discourses. In the Science books, Flood is a natural factor through some environmental disorder. Lack of Climate Change Education in our textbooks as well as how course teachers perception the climate change discourse in different books. Religions and their adherents are actually saying or doing about climate change. Religion includes beliefs, worldviews, practices, and institutions that cross borders, time, and scale from the level of individuals all the way to transnational and trained historical movements.

### **1.3 Research Questions:**

This study is focused on the climate change discourse in different textbooks. The objectives of this studies are "To see the climate change representation of different textbooks in primary education and also find out the different illustration of climate change discourse in different textbooks. And Finally

- What is the representation of Climate Change Discourse in National Curriculum of Primary Education in Bangladesh?
- What is the climate change discourse in textbook fit for Bangladeshi context?
- How do the subject teachers view on climate change discourse of National Curriculum in Primary Education?

### **1.4 Purpose of the study:**

The aim of this study is to see present scenario representation of climate change discourse in National Curriculum & Textbook in Primary education. This study will also explore the climate change discourse are fit for Bangladeshi locality or not. This

Study will cover the teacher's view of climate change discourse in National Curriculum & Textbook in Primary education.

### **1.5 Significance of the Study:**

This study will help to know how Textbook is focused or not in climate change. To help the understanding of the different discourse in same class which has related with climate change. This study will assist to rethink about the present climate change discourse in Text Books. This research will support to take any steps on climate change discourse in one way in text books.

## **Chapter 2 Literature Review and Conceptual Framework:**

The literature review has been conducted for understanding the scenario, context, and relevancy of the research. For this study, there are different sources like books, journals, articles, periodic, blog posts, and newspaper write-ups of existing works of literature reviewed and developed of the conceptual framework. The focus of the study is to analyze the content of climate change discourse in different books in Primary education and Teacher's opinion on climate change discourse content of textbooks. This study has divided into some of the themes which Climate Change Discourse, Textbooks (Social Science, Science, and Religion Books) of Primary Education. Critical discourse analysis will be considered in this research and also focused on in this literature part.

### **2.1 Climate Change Discourse and Content Analysis:**

According to Colston and Thomas (2019) a critical discourse analysis on literature that denies climate change, specifically targeting books aimed at children and parents. These materials are considered to be pseudo-educational and are frequently reproduced within the conservative echo chamber in the United States. Drawing upon prior excavations in discourses surrounding climate change denial, we have identified distinct categories of skepticism, policy frameworks, disputed scientific knowledge, and appeals to uncertainty. The research uncovers that children's textbooks instituted a outlook that exposed environmental crises as not challenging, which was upheld by opposing climate change skepticism and social-conflict frames that created division. The outcomes presented in this study present significant challenges for educators, environmental activists, and communication specialists who aim to promote

comprehension and mobilization in reply to the swift progression of climate change issues. According to Study International Staff (2019), The focus on school-level climate change education (CCE) is required to raise students' awareness of the issue and nurturing the children to protect their future life also. Climate change education is now a hot topic. This article focused on how to integrate CCE at the secondary school level and provided the movement of young activist Greta Thunberg as an example. Discourse about climate change teaches pupils about their role in combating it. Thematic analysis also plays a significant role in this study's qualitative research, which includes content analysis. The focus of this study is on the function of topic and content analysis in qualitative research. They highlighted their research and claimed that it was based on the substance of climate change. Climate change included any discourse analysis (Vaismoradi et al, 2013). The present research was centered on the examination of current practices of discourse surrounding climate change within educational programs. The primary focus of this study was the content analysis of ongoing educational programs. This study's results pertained to the discourse surrounding climate change at various educational levels (Bangay and Blum, 2010). According to Delay (2014) Religion and climate change education has focused on his research. This research aimed to see the different views of religion perspectives on climate change education. Societal factors, and religious factors were influenced climate change education on textbooks as well as community people's thinking process.

## **2.2 Environmental Education (EE) in Bangladesh Landscape:**

Bangladesh is one of the disaster-prone areas in the global south. People here are adversely affected by the frequent changes in the climate and weather of Bangladesh.



Children are especially vulnerable to the adverse consequences of climate change because of their increased receptivity to environmental changes and their crucial exposure to them. To cope with changes in environment and climate, Environmental education (EE) in formal education in Bangladesh which are dramatically shifted in 2003 in the NCTB Books (Sarker, 2011). Environmental education (EE) refers to systematic attempts to educate people about how ecosystems and the natural world work, with a focus on how people may regulate their behavior and ecosystems to live sustainably (Chowdhury, 2014). Environmental education is in its initial stage in Bangladesh, with illiteracy and school dropout creating barriers. Development organization and Civil society organizations have initiated to change policies and opinions, such as a ban on polythene bags (Salequzzaman & Stocker (2001). Changing Climate The promotion of climate awareness among students includes education. Climate change policy recommended that Singapore spend more profitably in climate change education at the secondary school level. This research focused on content analysis and pinpointing areas of the ongoing Singaporean school-based climate change discourse project. The curriculum, climate change policy, educational discourse, and economic and social studies were all reflected in this research (Chang and Pascua, 2017).

### **2.3 Climate Change Education at School Level**

This study aims to investigate the impact of climate change on the educational experiences of secondary school students residing in disaster-prone regions of Bangladesh. The study shows that children contain sufficient understanding of climate change, yet they face a dearth of opportunities for hands-on learning experiences. The recommendation includes the formulation of policies that consider the rights of children and the provision of practical learning opportunities in educational

institutions (Alam et al 2008). According to (Sarker, 2011) Secondary students' environmental attitudes: This study examines the circumstances of environmental education in Bangladesh and the scenario of learners' perspectives on current climate change challenges. According to Jahan and Alam (2017), The present research conducted an evaluation of the knowledge level and environmental attitude of children by reviewing the National Education Policy, Primary level curriculum, and textbooks (Grade III-V) with a focus on environmental education. The findings indicate that the level of knowledge among urban students was superior to that of semi-urban students. However, the performance of both groups was deemed unsatisfactory. The need to revise the national education policy and incorporate targeted goals pertaining to environmental education within the primary level curriculum has become imperative. The current state of Environmental Education (EE) within the Bangladeshi National Curriculum reveals that the content analysis of EE is not adequately structured to meet the needs of primary and secondary level students. The content analysis had the tools for qualitative analysis of his study (Chowdhury, 2014). Greek high school students were the research subjects for this study on climate change beliefs. This research was quantitative with a student opinion emphasis. For this study, a semi-structured questionnaire was employed to gather data. This study demonstrates the depth of understanding, the logic of the presentation, and the research's perspective on climate change. This study's only weakness is its absolute reliance on quantitative data and lack of in-depth understanding of climate change (Liarakou, 2011). According to Ho and Seow (2013), Six geography instructors were interviewed for this research in Singaporean schools to get their perspectives. In-depth interviews with the instructors were performed as part of this research to get their opinions on including climate change education in the

curricula. This study's findings caused disagreement among the participants. They didn't present the information on climate change in the same manner since they just considered their own opinions. This research was related to the current research. According to Stapleton (2018) Climate change education, climate change justice education was achieving an intergeneration way.

#### **2.4 Text Book Climate Change or Environmental Content:**

According to UNICEF, (2012), The Curriculum and Textbook Board (NCTB) has incorporated themes pertaining to disasters and climate change, including hazards, vulnerability, and preparedness, in various chapters of several textbooks, including Bangla, English, Social Science, and General Science. According to Hussein (2007) The shortage of water in Jordan has been shown in this essay as a tool for strengthening environmental education more sustainably at the secondary school level. This research used discourse analysis and was based on the environmental-related material in the students' textbooks. The construction of people's understanding of problems, in this example, water shortage, depends heavily on discourse. Through discourse analysis, this study demonstrates the impact of textbooks on people's environmental awareness and how to address environmental issues like water scarcity. According to Roman and Busch (2015), In America, this research was carried out at the high school level. This study's analytical methodologies included systemic functional analysis. This study looked at the information in high school textbooks regarding climate change. The research's conclusions showed that many discourses, including political discourse, economic discourse, and scientific discourse, were utilized to frame the issue of climate change discourse. In primary school textbooks, there is a denial of climate change issues. The critical discourses analysis of the climate change discourses in textbooks and how they are communicated to society, as

well as the function of mass media in promoting CCE in primary schools, were the main foci of this research. The study enabled the researcher to infer that these children's books facilitated a perception of environmental issues as being devoid of problems, which was substantiated by irrational expressions of skepticism towards climate change and counteractive social conflict paradigms. This research focused on the analysis's findings rather than on the perceptions or opinions of the instructors or students. There is a research gap since this study has not yet been mentioned in any particular country's curriculum (Colston and Thomas, 2019). According to Bromley et al (2011) This article has shown the chronology of environmental studies over 50 years in the world. Primarily, this study examined the content of environmental studies in social science, History, and civics books. The findings of this research were now that environmental studies have changed and represented in different subjects wise. The researcher recommended that the global environmental study culture has been changed. The Nigerian Educational Research and Development Council (NERDC) released a new structure of Basic Education in 2012, which includes climate change and disaster risk reduction education. This paper examines the potential of basic education curricula to advance global social causes but faces opposition and doubt at the local level. It suggests culturally responsive pedagogies and resources to teach climate change in basic education settings in Nigeria (Baba et al, 2013).

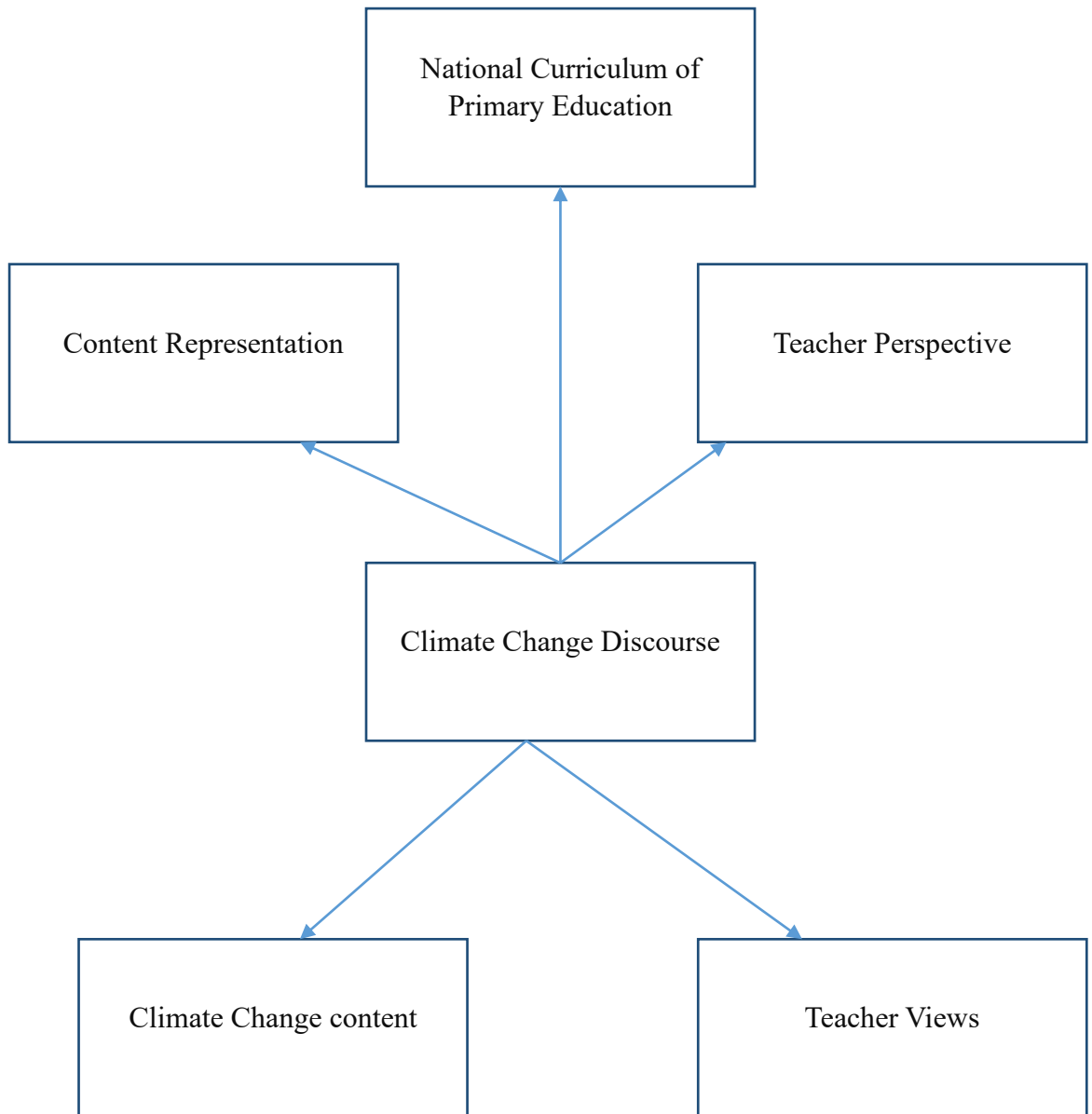
## **2.5 Conceptual Framework:**

Currently, there are two prevailing types of curricula, namely content-based and capacities-based. The approach of content-based curricula is centered on disciplinary subjects, whereas capacities-based curricula are structured around

particular capacities that are considered essential by the society or economy. The strength of subject boundaries is often diminished as the focus is not primarily on the academic value of the subjects, but rather on their ability to impart skills and competencies that are deemed valuable. The curriculum that prioritizes the development of personal capacity for the purpose of producing work-ready citizens is commonly linked to the neo-liberal individualistic perspective and capitalist economy. The Cognitive Load Theory is a significant theoretical construct that aids in the identification of the relative ease of teaching different skills. Skills pertaining to biologically primary knowledge are of a broad nature and can be acquired irrespective of the particular field, whereas the skills linked to biologically secondary knowledge are highly specialized to the discipline. The acquisition of knowledge generally involves the integration of primary and secondary sources, with primary knowledge being an essential element. Nonetheless, it is frequently observed that fundamental knowledge, which is essential for the educational experience, cannot be efficiently imparted. The findings of this research suggest that it would be advantageous for curriculum developers in community colleges to give precedence to the development of a curriculum that is focused on discipline-specific knowledge and skills, rather than generic skills that are primarily beyond the purview of teachers with respect to acquisition. The significance of acknowledging that skills are not self-contained entities and are instead contingent on knowledge.

This principle can be applied to cognitive abilities that are commonly referred to as "thinking skills." In addition, the development of an exceptional CC curriculum that is intellectually engaging and captivating will naturally involve the incorporation of diverse supplementary generic competencies, affective states, physical responses, and

behavioral tendencies throughout the instructional and learning phases. The curriculum has minimal impact on the secondary affective and physiological aspects. The curriculum is a crucial factor in creating a favorable environment and possibilities for the successful development of individuals. The findings of the researcher's study indicate that the children's literature examined in the research promotes a mode of thinking that fails to recognize environmental concerns as significant. This line of reasoning was bolstered by the presence of irrational expressions of skepticism towards climate change and the rejection of social-conflict frameworks (Eilam, 2023)



## **Chapter 3 Methodology**

**Information and Methodology of the field research:** The following points describe the process of field research is going to take place.

### **3.1 Research Approach:**

Qualitative Research Approach would be followed in this research. Research title and objectives have been easily connected with Qualitative Research Approach. Because documents or content analysis and in depth interviews of teacher are directly connected qualitative research approaches. This research : Contents analysis and how teachers' perception of focused on two contents (National Curriculum and Textbooks) and how teachers perceive content. To get the details and the depth of the contents how many discourses and what's type of discourses are written on present curriculum and books. Quantitative Research approach has not fulfilled and reflected this research objective. Creswell (2009) defines qualitative research as the examination of research issues that seeks to understand the significance of social or human processes affecting a particular person or group. My justification for this strategy is to comprehend the significance the participants have given to this particular occurrence of the pandemic, social estrangement, and school closure. For my research, it was crucial that I have extensive experience with the activities they were developed for as well as the manufactured meaning of the new normal (Atkinson, 2017).

### **3.2 Research Site:**

The aim of this research is to find out the perception of teachers about climate change. The site is to primary school where teacher perception will analysis on climate change discourse. This study conducted at Shyamnagar Upazila of Satkhira Districts among Primary school teacher. Because of Shyamnagar Upazila, has faced diverse



effects of climate change. As a coastal belt district in Bangladesh which is highly climate affected upazila, Shyamnagar. Geographically, Shyamnagar located in the last part of Bangladesh and very close to the Sundarban as well as adverse effects of climate change of this area. The researcher chose this area to consider the climatic effect and to see the teachers views as well as how their knowledge is if they are staying most vulnerable in Bangladesh. Another reason for choosing this area is the teachers' experience regarding the adverse effect of climate change. Researcher also understand and explore their perceptions, views and experiences based on the geographical reasons, day to day experiences and their content knowledge.

### **3.3 Research Participants/Sampling:**

In this study, 20 primary school teachers who teaches class 1 to 5 in government primary school of Shaymnagor Upazail in Bangladesh, was participated from 1100 teachers. Convenient, non-probability sampling procedure used as a sampling procedure of this study. Teacher those who conduct Science, Bangladesh & Global Studies and Religion studies are the primary categories for the sampling procedure. Another criteria those who are staying in Shaymnagor Upazaila also considered as a research participants.

### **3.4 Research Methods:**

Document (Content) Analysis and In-Depth Interview will be used in this research for achieving research objectives. Based on the previous literature ((Sarker, 2011, (Chowdhury, 2014), (Salequzzaman & Stocker (2001) aided that this study would be qualitative research approach where Content analysis and in-depth interview would the perfect methods. If we are considering the climate change content and discourses in Primary curriculum, Content analysis is the more suitable methods. As the

perspective of Discourse analysis teacher's perception and views are also supplemented that for in-depth-interview. This research is focused on different types of discourse of climate change on different books. Text book content is matter for society and their understanding about climate change. So, this research explored the different types of discourse that included in the national curriculum and Text books of primary educations. Teacher interview conducted for knowing the reality of that discourse on their classroom and students understandings about climate change. How the discourse of climate change has described in the national curriculum, textbooks and teacher's way to delivery.

### **3.5 Research Tools:**

This research has been divided into two major themes one is Climate change Discourse and Anther this is present Textbooks Representation of different discourse of Climate changes in Bangladesh and Global Studies , Science and Religion Textbooks. For Content or document analysis of textbooks has followed by 3 different concepts how climate change discourse representation. One is social Science perspective of climate change discourse another is science perspective and finally Religion perspective. To thematic analysis tools used for content analysis part and Interview has also based on different course teacher views on climate change would be reflected through in-depth- interviews of the teachers perspective. For In-depth Interview, This research followed by different discourses basis. For In-depth Interview interview will be conducted in this research. And the question of the interview will be thematic way.

### **3.6 Data Collection Process:**

Data collection process is important for Research. In this research, Text books have been one source of data collection process. To read and find out some notes for content analysis are one part of data collection. For In-depth Interview conducted one to one by using a semi-structural questionnaire through Phone call. Because the teachers are more comfortable in cell-phone or mobile call than online zoom or google meets . .Due to COVID-19, the more convenient ways was cell phone call.

### **3.7 Data Analysis Process:**

Thematic content analysis were used in the data analysis part. From the textbook, found some data that firstly categories based on the theme or perspectives' of climate discourse. Then followed the discourse analysis model and analyzed the data and write out the finding of the research. During this study will also analysis the interview of teacher.

### **3.8 Field Plan:**

Researcher was conducted primarily July mid-August to collect data form the content of different textbooks then July mid-August for phone call in 100 primary school teacher participated Shaymgnagor areas. Then Data gathering and management was done by September Started to analysis and ended by October . Then start to write the findings and discussion part by October Mid.

### **3.9 Role as researcher:**

Sutton & Austin (2015) assert that the researcher's task in qualitative investigations is to make an effort to ascertain the participants' thoughts and emotions. Protecting the participant's data is yet another duty of the researcher. I have attentively listened to

the participants' experiences, emotions, and views in my capacity as a researcher for this study. Instead of attempting to sway the participants' cognitive processes, I encouraged them to do so in response to the researcher's queries. I made sure they understood why they were being questioned and the goal of the research before beginning the interview. 20 conducted their interview sessions with clear objectives in mind before beginning the data collecting process.

I conducted a pilot study with one group of families to determine the research tool's applicability. I had lengthy conversations with them on the pupils' learning and the learning process itself. The first results from the piloting were useful for my study since they helped me organize the tools and get a greater grasp of the relationships between the research topics and the instruments. This study based on the climate change discourse in different textbooks in Primary education. The researcher will maintain the ethics of the research and bias free during the interpretation or opinion during the content analysis because some of the part related with religion and social factors that deeply connect with climate change discourse in textbooks. Proper references and follow the discourse analysis theory to establish this research.

### **3.10 Trustworthiness and Rigor:**

The research was ensuring the transferability, credibility, ethics of research, conformability as well as dependability are evident in their research. To check with other scholar was done for testing the rigor level of this study. To verify with the expert for the trustworthiness was considered in this research.

### **3.11 Limitations of the Study:**

In the discourse analysis, the research was reacted as much as focused on their research no way to look for others option. Climate change discourse in primary levels

hasn't enough literature for shaping the research or getting different ideas that works. However, this research is concentrated only primary education so we will not cover see Ebtedayee or English medium of primary levels because of time constraint. This study also focuses only the subject teachers opinions about Content not consider to the students perspective also. The research was able to interview the textbooks editors or writer or curriculum experts who design that climate change discourse in the primary levels

## **CHAPTER 4 RESULTS**

This Chapter revealed and presented the major findings which collected from Content analysis both in National Curriculum of Primary Education, & Textbooks and in-depth interviews with 20 school teachers of Government primary schools in Shyamnagor, and Satkhira districts in Bangladesh. Based on the content analysis and teachers' perceptions & views regarding climate change education in the National Curriculum of Primary Education is represented in the main themes and sub-themes. In the beginning, the researcher presents the content analysis of the National Curriculum, NCTB textbooks, and finally, an analysis of the teacher's perceptions & views and what they think about climate change education needed for their students.

### **4.1 Curriculum and Terminal Competency on Climate Change**

In the part of content analysis of different subjects' curriculum in Primary education in Bangladesh. Researcher would critically explore the contents which relate to climate change and broadly environment-related issues. It also shows how the presentation of climate change or environmental contents. The analysis of the Content of the national curriculum in Primary education which give the researcher interesting insights in national curriculum presenting different information sometimes might be overlapped in the same class. It's a high possibility to distract the learners' mindset or thinking regarding climate change.

#### **4.1.1 How many terminal competencies Cover in Climate Change Discourse and Content**

In National Primary Curriculum, class one to five has different Content based on the rigor level of the learners. Classes one & two showed only basic numeracy and

literacy, where the competency on Climate Change and the environment was just basic level. Only just showed the “What is Environment”. However, in class 3 to 5 where the different subject has different contents on the environment, elements of the environment, and climate change effect & process. In Bangladesh and Global Studies where terminal competencies 3 out of 16 covered Basic environment, disaster, and Environment pollution. In Science Curriculum, 7 terminal competencies related to the environment, the environmental elements like water, soil and air, natural environment, weather, and climate connection and Climate Change effects out of 18 terminal competencies. Interestingly, through the curriculum, only 2 terminal competencies has been covered Weather& Climate, and climate change which are only staying in classes 4 to 5 and 5 grade only. In Religion Books (Buddhist, Cristian, Hinduism and Islam), where only one competency has stayed out of 15, 18, & 5 (Buddhist, Cristian, and Islam) No direct or indirect competency focused in Hinduism Religion curriculum. All the Religion Curriculum expect Hinduism reflected the Basic environment and natural Disaster based on their religion discourse.

#### **4.1.2 Similarities of the Curriculum in Climate Change Discourse or Contents**

Researcher critically investigated the Content of climate change and the environment in the National Curriculum of Primary Education for matching the similarity of discourses. The Science Curriculum and Bangladesh & Global Studies curriculum are near to similarities of the terminal competency-1 both of the curriculum. There is a high possibility to distract the learners to understand the basics of the Environment in both curriculum in the class like 3 & 4 grades. Another quite similarity presented is Environmental Elements and Pollution which are in the same class of 2 and 3 grades. However, the Bangladesh and Global studies represented the social issues in the basic environment-related Content, in General Science curriculum are more connected in

the Life and animals perspective. Some contents are similarly represented in the curriculum by showing a similar example.

#### **4.1.3 Same Class Different Climate Change Discourse and Content**

Based on the Content analysis of Climate Change Discourse in Bangladesh & Global Studies and Science National Primary Curriculum of Bangladesh are showing some differences with Religion Curriculum. Natural Disaster has been differently presented in the different curriculum such as including Religion, Science and Bangladesh & Global Studies in the same class. Other interesting facts are noticeable in Religion Curriculum (Buddhist Religion) focused on the Environment based on Buddhism philosophy similarly Christianity and Islam also equally presented. These issues are directly impacted the learner's educational process. Because the Science Curriculum's objectives are more dedicated to the scientific way a learner learn about the natural environment and disaster. In Environmental Pollution has been presented differently in the curriculum of Science and Bangladesh & Global Studies. One interesting fact, the objectives of Bangladesh & Global Studies are focused on Climate Change and pollution impact on society as well as how society is responsible for environmental pollution. But the Science curriculum has not focused on the social impact they are more based on the way to protect the environment. Learners in grades 3 to 5 would be confused based on the differently presented Content. It could be easier to present similarly in the same context, situation as well as example.

#### **4.1.4 Depth of the Discourses or Content in Science, Bangladesh & Global Studies and Religion Curriculum**

There are 12 curriculum followed for the National Primary Education in Bangladesh. In the part on Climate Change, the Environment only the curriculum of Science,



Bangladesh & Global Studies and Religion represented the Content. The topics on Climate change, natural disasters, environment and environmental pollution are presented in the different curriculum. After a critical analysis of the Content, there was no presentation on Earthquakes except in the curriculum Religion of Christianity in grades 3 to 5. This Content could be made a difference in the learning on disasters like an earthquake than other religious students. Very unintentionally missed the Earthquake in the other curriculums in the National Primary Curriculum. In this context, depth is higher than in other curriculums.

#### **4.1.5 Lack of Chronology in the Curriculum on Environment, Climate Change, and Natural Disaster**

The presentation of Environment, disaster, weather, and climate change are not well chronologically presented in the National Curriculum of Primary Education in Bangladesh. Terminal competencies are not well documented, chronologically presented, differently presented, meaning and contents are very in the same classes like basic environment differently presented in Science, and Bangladesh & Global Studies. These showed the lackings of terminal competencies. Learners from different backgrounds might be confused and sometimes a burden for them because of repeated Content lose their motivation to learn new topics.

#### **4.2 Curriculum reflects on the National Textbooks on Climate Change, Environment and Natural Disaster discourse**

The analysis of the Curriculum reflected in the NCTB textbooks would be presented in this theme. Here, the researcher tried to reveal the Climate Change discourse presentation on NCTB Text Books in different classes as well as the Graphical presentation in the textbooks also. Another important part of this theme is: How the

context fit or non-fit of the contextualization in the NCTB and National Primary Curriculum in Bangladesh.

#### **4.2.1 Similar Content Presentation in the same class with different discourse**

Early-stage learners like Primary school-going children are knowing about the Basic environment, Natural disasters, Weather, climate and Climate change effects on society or country. Researcher very closely analyzed the Content of the two different textbooks one is Bangladesh & Global Studies, and Elementary Science (Science). Interestingly, some content Natural Environment is kept in Science and Bangladesh & Global Studies both Books in grade-3 or class-3. A learner two times learnt similar Contents. The definition is in Bangladesh and Global Studies “ *Our Environment belongs to our Surroundings*” whereas in Science Textbooks “*There are many things around us such as friends, trees, animals, soil, water, air, sunlight, and houses. All the things surrounding us make our Environment*”. These two books have reflected similar meanings without any background meaning or any other issues. A learner learns something in two books differently which can forget or overload his or her learning process. “*Climate*” has been represented in class-4 & 5 both in science and Bangladesh & Global Studies books. In Bangladesh & Global Studies books, there is no direct definition of “*Climate*” However, in the Science textbook there is a clear definition with the scientific explanation “*What is Climate Change*”. Interestingly in science book definition is: “*Climate is the average weather Condition on an area for many years*”; in Bangladesh and Global Studies Book only presented the seasons of Bangladesh as “*Climate*”. Which is confusing in the same class with different discourses. In Grade or Class-5 in Bangladesh & Global Studies book presented firstly the definition of Climate Change, “ *is average weather over a long period, like*

30-40 years”. In Science Book in Class-5, Climate Change “*is the average weather pattern for a long period of time, a significant and persistent change in the climate and its variability is called Climate Change*”. These two definitions created confusion for the children because, in the same class, the discourse of Climate change is different. From the analysis of both books, the researcher might have stated that a long period is not a specific term for defining the climate for children whereas 30-40 years are more acceptable internationally by the climate change experts.

#### **4.2.2 Graphical Presentation of Different Climate Change Content**

Graphical Presentation is a much more powerful representation of any content. Children or learners from different backgrounds are enjoying the Graphical presentation. It could have helped them to easily understand the Content of hard things very simply. Global or infographic or diagram presentations of Climate Change are more complicated whereas country-focused pictures can easily be understandable for early-stage learners. After critical analysis of the pictures of Climate Change Related Content is fully presented differently in the textbooks. Interestingly, Climate Change contents are duplicated as well as disagreements in the Science and Bangladesh & Global Studies textbooks. Also limited presentation of the Bangladeshi context than the illustration of the climate change issues. Graphical or Illustrations in the textbooks on climate change context are much needed for easily understandable and relevant for any learners. Represents of climate change in the Maps are not clear enough for children to identify the more vulnerable area. It could be presented with the district or divisional labels on the map, easily understandable in the class-5 Science textbook.

### **4.2.3 Climate Change Contents or Discourses Fit with Context**

Bangladesh has geographically situated in most climate-vulnerable areas in the global south. Mostly the southern part (coastal belt) is facing the negative impacts of climate change. After critically analyzed of the Textbooks content, there is not any mentioned areas where directly affected by climate change. Bangladesh & Global Studies, and Elementary Science textbooks have not presented the district or division, or region-wise Content in the National Textbooks. The nature of Climate change is different from one place to another place. Like, in the southern part, of Tornado, salinity-induced, sea level increases are frequently happening in people's life. As well as in the Northern part, drought and flood regularly occur which makes people's lives more vulnerable. Through the textbook content analysis, there is no specific content that represented the climate change content based on the regional context. In the textbooks, they have presented the climate change discourses holistically or aggregately.

### **4.2.4 Different Textbooks Different Climate Change Discourses**

Climate Change Discourses are differently presented in the textbooks with different subjects. Science, Bangladesh & Global Studies, and Religion books are represented climate change, disaster, and environmental issues based on the national Primary Curriculum. Analyzing the climate change discourses in different textbooks are diversified and scattered presented which could be slower the learner's learning or made it tough to understand. The same contents are differently presented in the different textbooks. The rigor level of the contents in religion books especially Christian is huge Content than general textbooks (Science and Bangladesh & Global Studies). A very interesting fact is that no combination is reflected in the religion

books climate change discourses. In Hinduism, no direct relevant content on climate change or environment, or disaster exists. “*Earthquake*” in the class-3 Christian religion textbook is tough because there is no previous knowledge or relevant competencies connected with this one. Climate Change Contents are differently presented in different textbooks with a natural disaster or environmental pollution. Learners would be confused when they see one class with different discourses presented in two different books such as Bangladesh & Global Studies and Elementary Science Books. In Bangladesh & Global Studies showed that Climate Changes Causes different impacts in Bangladesh whereas In Science Book showed in Climate change migration and Adaptation. Both contents are very connected based on analysis of different kinds of literature. Combination and pathway systems could be better to present the climate change discourses in National Primary Textbooks.

#### **4.2.5 Depth of Climate Change Discourses in Textbooks**

Climate Change Discourses among different subject textbooks are represented in different ways. The content depth is different textbooks based on the National Curriculum are varies. “Earthquakes” in Christianity religion textbooks only illustrated other religion textbooks or general textbooks (Bangladesh & Global Studies, and Science), not presented in a quality way.

#### **4.3 Teachers’ Knowledge, Views, and Practices on Climate Change Content in the Textbooks**

In this theme, Researcher has collected in-depth interviews with 20 teachers who are staying at Shaymgnor Upazila in Satkhira District over the phone. Through these interviews, their knowledge & views about climate change content, as well as how

they practice or conduct in their classroom on climate change issues would be illustrated and presented as findings of the research.

#### **4.3.1 Understanding about Climate Change**

The teachers expressed their knowledge of climate change when they asked do you understand Climate Change. Most of the Teachers (18 out of 20) said that climate change is the process of changing the weather for a long term like 30-40 years changes of weather. They also proclaimed that they learn from climate changes topics from National Textbooks, however, some topics are duplicated in the same class with differently presented. 2) teachers said differently based on their knowledge, they said, change the seasons, a decrease of Trees, and global warming. One teacher said, *“Climate change is the average of weather changes which could be happened a long term like 30-40 years changes of weather, For climate changes there are lots of pull and push factors that are connected. The southern part like our Upazila are mostly venerable of the negative effects of climate change”* ( Interview #5, 22/09/2020). National Curriculum and NCTB textbooks also presented the climate change process if the depth of the Content is very limited based on other environments or natural disaster related Content.

#### **4.3.2 Climate Change Education Metter**

Climate Change is a burning issue for Bangladesh because frequently Bangladesh faces difficulties with Climate change. Teacher knowledge of Climate change is very crucial for promoting climate change education along with or incorporated with the National Curriculum of Primary Education in Bangladesh. All teachers asked, do you

think climate change education is necessary for all Bangladeshis. 20 out of 20 teachers gave emphasized climate change education mandatory for all learners and parents and community people to mitigate the negative effects of climate change. One Teacher explicitly mentioned that “*Climate change education could be a pathway to minimize the loss and damages of climate changes effect, it also aided to learners become an environmentally friendly or sensitive behavior towards nature*” (Interview#17, 29/09/2020).

#### **4.3.3 Climate Change Content in NCTB Textbooks**

Climate change content in the NCTB textbooks is presented very limited way based on the content analysis of the National Curriculum, and different textbooks content. The illustration and graphic presentation based on the climate change content are not well organized which was answered by most teachers (16 out of 20). When the researcher asked about climate change content is enough for presenting Bangladesh-focused Content as well as a graphical presentation. One teacher added that “*Climate change contents are not directly published in the textbooks only in class 4 & 5 both in Bangladesh & Global Studies and Science Textbooks. If the contents are overlapped which might be a possibility distract the learner's attention and information could not well except*” Interview#20,29/09/2020). Science teacher said that “*Content must be chronologically presented in the textbooks with the terminal competencies and regional level of the learners*” Interview#13, 25/09/2020.

#### **4.3.4 Lack of Climate Change Content**

Limited Content with different climate change discourses is still existing in the current textbooks at the primary level. Researcher asked the Teachers, would you find

any gaps or c Change content in the same class with different discourses as well as in different classes with scattered discourses. Most of the teachers disclosed that Content was not rationally presented based on the terminal competencies on climate change or subject objectives. One teacher said, *“Need more organized and logically presented for little learner to become a climate aware future generation; still some of the content overlap and disconnected each other, we need a clear competencies for climate change education”* (Interview#16, 28/09/2020).

#### **4.3.5 Capacity Building Initiative on Climate Change Education for Teachers**

Climate Change Education is much needed for early-stage learners to enhance their resilience capacity. To incorporate and modify the climate change content in the existing curriculum and the National Textbooks is the demand for creating and meeting with the remarkable changes among the learner community and Sustainable Development Goals. After quality and modification of the content, teacher’s capacity building by the government authority is needed for quality teaching and learning. *“We don’t take any training or workshop regarding climate change education for my capacity building; I expect when the content modified and newly set competency, training must be organized by the Thana Education office or NCTB team. It could be aided us for quality teaching.”* (Interview#15, 27/09/2020)



## **Chapter-5 Discussion and Conclusion**

### **5.1 Discussion**

In this section, the researcher would like to share and discuss the experiences he has gathered and learnt from this research. Researcher has acquired knowledge based on the data; he has presented it in the result sections. He would like to compare the findings with the chapter 2 literature review. In this study, the researcher tried to explore the National Primary Curriculum, Textbooks content, and most importantly teacher understanding based on the Content or discourse they believed. Also, findings revealed some of the recommendations which is completely evidence-based. Researcher in here talked about the data-driven findings and discussion of the existing climate change content in the textbooks and teachers' perspectives. The findings of this study would be significant because, this data directed the content developer to be more aware during the creation of the Content based on Climate Change.

The development of ideas and principles for environmental education was the main focus of conferences held in Belgrade and Tbilisi in the 1970s. According to the Belgrade Charter,

"[t]he goal of environmental education is to develop a world population that is aware of the environment and its associated problems, and that is concerned about them, and that has the knowledge, skills, attitudes, motivations, and commitment to work both individually and collectively toward solutions of current problems and the prevention of new ones" (UNESCO, 1976, p. 3; emphasis added).

Despite the fact that Bangladesh does not have a specific policy document on environmental education (Salequzzaman & Stocker, 2001), environmental education is often introduced in Grade III at the elementary level (NCTB, 2003). Two textbooks

at this level, "Introduction to Environment: Science" and "Introduction to Environment: Social Science," deal with environmental education. After the elementary level, children are given environmental education using a multidisciplinary approach (Sarker M,2011). The major objectives of Educational Policy 2010 are geared toward the development of moral principles. According to Bangladesh's education policy, there are thirty clauses in the country's educational goals. The environment-related goal (objective no. 18) is:

To develop in students a social awareness of the environment and to prepare them as trained human resources to combat the problems of the globe endangered by climate change and other natural catastrophes (National Education Policy, 2010).

"Policy-specific subjects, such as Bangla, English, Moral Science, Bangladesh Studies, Mathematics, Social Environment, Natural Environment, with emphasis on topics like climate change, Science and Information Technology are to be there in the syllabus as compulsory subjects for all students of various streams of primary education," states the syllabus. (NEP,2010)

Climate Change education is the currently demanding subject matter for minimizing the loss and damages of a country like Bangladesh. Climate change is the continuous or average weather changes in a certain area. Bangladesh is staying one of the climate adverse affected countries in the universe.

National Education Policy-2010, mostly directed that environmental education (climate change, global affairs, and science & Information Technology) is focused. In this study revealed the current situation of climate change discourses in the national curriculum of Bangladesh, different representations of textbooks on climate change issues, and the important teachers' perspectives on climate change.

Chowdhary (2014) explores that Environmental education is limited in the National Curriculum in primary and Secondary schools by analyzing the content depth. In this current study, the researcher found similar experiences after critical analysis of the National Curriculum and Textbooks as well as teacher perception regarding the climate change issues at the Primary school level.

Early-stage learners like Primary school-going children are learning about the Basic environment, Natural disasters, Weather, climate, and Climate change effects on society or country. Researcher analyzed the Content of two different textbooks: Bangladesh & Global Studies and Elementary Science (Science). In Bangladesh & Global Studies books, there is no direct definition of “*Climate*”, while in Science books there is a clear definition with the scientific explanation “*What is Climate Change*”. These two definitions created confusion for the children because, in the same class, the discourse of Climate change is different. “*Climate change is the average of weather changes which could be happened a long term like 30-40 years changes of weather*” ( Interview #5, 22/09/2020). Few Teachers (5) answered that climate change is the decrease of Trees or seasonal change. Unfortunately, this discourse is carried from the textbook Bangladesh & Global Studies. Climate change discourses are reflected among the teacher community also, in social science climate means the seasonal session like Bangladesh is 6 seasons, and in other nations, 4 or only 3 or 2 seasons based on their geographical locations. “*Climate change education could be a pathway to minimize the loss and damages of climate changes effect, it also aided to learners become an environmentally friendly or sensitive behavior towards nature*” (Interview#17, 23/09/2020). Findings show that Climate change education is much needed for current Bangladesh to meet the objectives of the National Education Policy 2010.

Same class as class-4, the climate change content varied based on subjects like Elementary Science and Bangladesh & Global Studies. Which created an overlap the Content and distract the learners. In the result section, climate change discourse is varied from class to class as well as the same class with different discourses. Bangladesh is geographically situated in climate-vulnerable areas in the global south, with the southern part of Bangladesh facing the negative impacts of climate change. The textbooks have presented climate change discourses holistically or aggregately, ignoring the regional context. *“We need clear competencies for climate change education”* (Interview#16, 28/09/2020).

Graphical Presentation is a more powerful representation of Content, and country-focused pictures are easier to understand for early-stage learners. Climate Change contents are duplicated and limited in textbooks, and maps are not clear enough for children to identify vulnerable areas.

Climate Change Discourses are differently presented in different textbooks with different subjects. Religion books have huge Content, but no combination is reflected. Climate Change Contents are connected based on analysis of different kinds of literature. Combination and pathway systems could be better to present the discourses. The National Primary Education in Bangladesh has 12 curricula, but only Science, Bangladesh & Global Studies and Religion present the Content on Climate Change, natural disasters, environment and environmental pollution.

It's high time to incorporate the climate change curriculum based on terminal competency is important for the children who are staying in the primary level. In this section or part researcher discussed the finding and reflected the teachers perspectives and overview also.

Teacher professional development courses need for providing a holistic education both in the urban or coastal belt of Bangladesh. Regionally focused Content is also important for the learner to easily adapt and relate to the Content. Their knowledge and skills and attitudes toward climate change issues or any environmental issues are highly appreciated for attaining the NEP-2010 objectives.

## **5.2 Conclusion**

The researcher conducted this study for understanding the climate change discourses reflected in the National Curriculum, NCTB books, and Teachers' knowledge and perspectives. To attain Sustainable Development Goals, Learners need to be more conscious of climate changes issue, the environment, and natural disasters. Children, women, and elder people are more vulnerable during a natural disaster. Climate change contents are not well-presented in the national curriculum of Bangladesh. Different discourses are presented in the same class or different classes, and these discourses have negatively guided the teacher's thinking process.

The researcher also observed the teachers' knowledge is fit for their learners except a few of them have a limited understanding of climate change. Teachers' also suggested to the Researcher, the Content should be reorganized and a regional chapter could be included. Despite of the time-being participants would directly answer all the questions what researcher asked.

Researcher feel that there are needed more research on climate change education in the Primary school level. If the learner in their early-stage learns about

climate change and environmental issues they can easily be related in their upcoming days. Because day by day Bangladesh is going to become climate vulnerable country.

Research observes the Content must be reorganized and trained to the teacher for getting better outcomes from the learners. He also noticed different class or the same class with different climate change discourses have manipulated the learners, they might be confused to learn climate change. Holistic climate change content could be incorporated in the religious books. Currently, only Christian Religious textbook regior level is higher than the class-3 science and Bangladesh & Global Studies books Content.

### **5.3 Recommendation:**

In order to confirm the effectiveness of my research's conclusions and discussions, I would like to provide the following recommendations:

- Climate change-focused terminal competencies could be included in the National Curriculum;
- Promoting Climate change education for achieving Sustainable Development Goals;
- Avoiding duplicate of the Content like same class different discourses on climate change.
- Content of Climate Change in the National Curriculum & Textbooks could be reorganized;
- Religion Books could be holistic climate change content;
- Removing the different discourses in the climate change field;

- Teacher Training on Climate change could be started after revising the Content of the NCTB;
- Graphical presentation could be contextualization;
- An example of climate change could be regionally focused.

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## Appendix

### A) Consent letter

Informed Consent Form: \_\_\_\_\_

Profession \_\_\_\_\_

School Name \_\_\_\_\_ Teaching Subject: .....

**Name of the Researcher:** Ananda Kumar Biswas

**Organization/University:** BRAC University

**Research Title:** “Climate Change Discourse in National Curriculum of Primary Education in Bangladesh”

#### **Information about research:**

I am Ananda Kumar Biswas, going to accomplish my Post graduation/Med on Educational Leadership and School Improvement from BRAC Institute of Educational Development. As the fulfillment of my Med Degree, I have to conduct a research which under the academic purpose. I want to conduct a research on “Climate Change Discourse in National Curriculum of Primary Education in Bangladesh”. Form this study, I will explore the present scenario of climate change education in Bangladeshi primary school levels. I would like to consider you as my research respondent. You can decide now or you can decide within one week whether you wish to participate in this research.

**Purpose of the study:** The aim of this study is to see present scenario representation of climate change discourse in Textbooks. This study will also explore chronological evolve and how the representation of same classes with different discourse in Textbooks. This Study will cover the teacher’s view of climate change discourse that they delivered the lessons and Content.

**Voluntary Participation:** It will be fully your voluntary participation and you won't be economically compensated. You can stop this interview at any stage; even you can refuse to answer any question. But, I cordially desire your full participation and accomplishment. I expect your highest level of integrity and caution.

**Confidentiality:** The data collected through this interview schedule will be kept confidential and only be used for research purpose without any personal reference

**Benefits:** You will not be monetarily benefited from this research.

**Certificate of Consent:**

I have read and understood the above information and I had the opportunity to ask further questions the answers of which were satisfactory to me. I agree voluntarily to be part of this study.

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

I confirm the reading of the consent and information form by the participant and the individual had the opportunity for more clarification. The participant has given the consent willfully.

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## Part-B Content Analysis Framework:

Curriculum & Books	Chapter Name	Graphical Presentation of climate change discourse	Same class Different Discourse	Fit for Bangladeshi Society	Meaning of The text
Bangla English Bangladesh & World Affair's General Science Religions & Moral Education					

## Part-C In-depth-Interview Guideline (সাক্ষাৎকারের নিয়মাবলি):

Name (নাম):

Sex (লিঙ্গ):

School Name (স্কুলের নাম):

Subject Teaching (বিষয়ভিত্তিক

শিক্ষকতা):

বয়স:

১। জলবায়ু পরিবর্তন বলতে আপনি কি বোঝেন?

.....

২। আপনি কি মনে করেন জলবায়ু পরিবর্তন বিষয়টি সকলের জন্য প্রয়োজন? হ্যাঁ

না

যদি হ্যাঁ .....

যদি না .....

৩। শিক্ষক হিসাবে আপনি কি কখনো জলবায়ু পরিবর্তন শিক্ষা র উপর কোন দক্ষতা উন্নয়নের প্রশিক্ষন পেয়েছেন সরকার থেকে ? হ্যাঁ না

যদি হ্যাঁ, উল্লেখ করেন .....

৪। পাঠ্যবইয়ে জলবায়ু পরিবর্তন বিষয়ক কোন অধ্যায় আছে কি না সেটা কি কখনো আপনি খেয়াল করেছেন? .....

৫। পাঠ্যবইয়ে বর্ণিত জলবায়ু পরিবর্তনের বিষয়গুলোকে কি আপনার বাংলাদেশের সাথে সম্পর্কিত? হ্যাঁ না

যদি হ্যাঁ

যদি না

৬। আপনার এলাকা জলবায়ু পরিবর্তনের মারাত্মক শিকার, সেগুলো কি বইয়ে বর্ণিত আছে অথবা আপনি কি পাঠ্যবইয়ের বর্ণিত বিষয়ের সাথে চলমান ঘটনার কোন মিল বা সাদৃশ্য খুজে পান? হ্যাঁ না

যদি হ্যাঁ

যদি না

৭। জাতিসংঘ বলছে, জলবায়ু পরিবর্তনের ফলে শিশু, নারী ও বৃদ্ধরা সব থেকে বেশি ঝুঁকি তে থাকে। সেক্ষেত্রে জলবায়ু পরিবর্তনের বিষয় , প্রাথমিক শিক্ষাক্ষেত্রে অন্তর্ভুক্তিকে আপনি কিভাবে দেখেন ? হ্যাঁ না

৮। আপনি কি মনে করেন জলবায়ু পরিবর্তন বিষয়ক শিক্ষা শিক্ষার্থীদের মাঝে জীবন দক্ষতা (এডাপটেশন ক্ষমতা) বৃদ্ধিতে সাহায্য করবে? হ্যাঁ না

যদি হ্যাঁ

যদি না .....

৯। জলবায়ু পরিবর্তন বিষয়ক বিষয়াবলি পাঠ্যবইয়ে অন্তর্ভুক্তিকরণ খুবই জরুরী শিক্ষার্থীদের জন্য ? হ্যাঁ না

যদি হ্যাঁ

যদি না .....

১০। যখন আপনি শ্রেণী কক্ষে জলবায়ু পরিবর্তন বিষয়ক শিক্ষা প্রদান করেন তখন কি আপনি কোন অসামঞ্জস্যতা খেয়াল (লক্ষ্য) করেছেন? হ্যাঁ না

যদি হ্যাঁ

যদি না .....

১১। আপনি কি খেয়াল করেছেন বিভিন্ন শ্রেণীতে বিভিন্ন ধরনের জলবায়ু পরিবর্তন বিষয়ক বিষয়াবলি শিক্ষার্থীদের মনে প্রশ্নের জন্ম দিয়েছে? হ্যাঁ না

যদি হ্যাঁ .....

১২। আপনি কি মনে করেন, আরো বেশি বেশি জলবায়ু পরিবর্তন বিষয়াবলি প্রাথমিক শিক্ষাক্ষেত্রে পাঠ্যবইয়ে অন্তর্ভুক্তি খুবই কার্যকরী ভূমিকা রাখবে? হ্যাঁ না

যদি হ্যাঁ .....

১৩। আপনার কোন পরামর্শ যদি, পাঠ্যবইয়ে জলবায়ু বিষয়ক শিক্ষা নিয়ে?

.....

(বিজয়)

১। জলবায়ু পরিবর্তন বলতে আপনি কি বোঝেন?

২। আপনি কি মনে করেন জলবায়ু পরিবর্তন বিষয়টি সকলের জানা প্রয়োজন? হ্যাঁ না

যদি হ্যাঁ

যদি না

৩। শিক্ষক হিসাবে আপনি কি কখনো জলবায়ু পরিবর্তন শিক্ষা র উপর কোন দক্ষতা উন্নয়নের প্রশিক্ষণ পেয়েছেন সরকার থেকে? হ্যাঁ না

যদি হ্যাঁ, উলে-খ করেন

৪। পাঠ্যবইয়ে জলবায়ু পরিবর্তন বিষয়ক কোন অধ্যায় আছে কি না সেটা কি কখনো আপনি খেয়াল করেছেন?

৫। পাঠ্যবইয়ে বর্ণিত জলবায়ু পরিবর্তনের বিষয়গুলোকে কি আপনার বাংলাদেশের সাথে সম্পর্কিত?

হ্যাঁ না

যদি হ্যাঁ

যদি না

৬। আপনার এলাকা জলবায়ু পরিবর্তনের মারাত্মক শিকার, সেগুলো কি বইয়ে বর্ণিত আছে অথবা আপনি কি পাঠ্যবইয়ের বর্ণিত বিষয়ের সাথে চলমান ঘটনার কোন মিল বা সাদৃশ্য খুজে পান? হ্যাঁ

না

যদি হ্যাঁ

যদি না

৭। জাতিসংঘ বলছে, জলবায়ু পরিবর্তনের ফলে শিশু, নারী ও বৃদ্ধরা সব থেকে বেশি ঝুঁকি তে থাকে। সেক্ষেত্রে জলবায়ু পরিবর্তনের বিষয়, প্রাথমিক শিক্ষাক্ষেত্রে অন্তর্ভুক্তিকে আপনি কিভাবে দেখেন?

হ্যাঁ

না

৮। আপনি কি মনে করেন জলবায়ু পরিবর্তন বিষয়ক শিক্ষা শিক্ষার্থীদের মাঝে জীবন দক্ষতা

(এডাপটেশন ক্ষমতা) বৃদ্ধিতে সাহায্য করবে? হ্যাঁ

না



যদি হ্যাঁ

যদি না

৯। জলবায়ু পরিবর্তন বিষয়ক বিষয়াবলি পাঠ্যবইয়ে অন্তর্ভুক্তিকরণ খুবই জরুরী শিক্ষার্থীদের জন্য ?

হ্যাঁ না

যদি হ্যাঁ

যদি না

১০। যখন আপনি শ্রেণী কক্ষে জলবায়ু পরিবর্তন বিষয়ক শিক্ষা প্রদান করেন তখন কি আপনি কোন অসামঞ্জস্যতা খেয়াল (লক্ষ্য) করেছেন? হ্যাঁ না

যদি হ্যাঁ

যদি না

১১। আপনি কি খেয়াল করেছেন বিভিন্ন শ্রেণীতে বিভিন্ন ধরনের জলবায়ু পরিবর্তন বিষয়ক বিষয়াবলি শিক্ষার্থীদের মনে প্রশ্নের জন্ম দিয়েছে? হ্যাঁ না

যদি হ্যাঁ

১২। আপনি কি মনে করেন, আরো বেশি বেশি জলবায়ু পরিবর্তন বিষয়াবলি প্রাথমিক শিক্ষাক্ষেত্রে পাঠ্যবইয়ে অন্তর্ভুক্তি খুবই কার্যকরী ভূমিকা রাখবে? হ্যাঁ না

যদি হ্যাঁ

১৩। আপনার কোন পরামর্শ যদি, পাঠ্যবইয়ে জলবায়ু বিষয়ক শিক্ষা নিয়ে?