

## **ENVIRONMENTAL EDUCATION AT SCHOOL LEVEL: A COMPARATIVE STUDY BETWEEN BHUTAN AND INDIA.**

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### **Abstract**

Bhutan is a neighboring country of India. According to the Geographic Phenomena, India covers Southern, Eastern and Western border of Bhutan and also having a peaceful social and Political friendship between both of them. Though, both countries are belonging in the same geographical background, but there are also many differences in Environmental condition. India is a country, famous for its natural variety, where low land, hilly place, mangrove, desert etc. all are present. But, Bhutan is famous for its hilly beauty and also known as 'place of thunder'. Not only this, economic condition, political background, population density, cultural integrity etc. also very different from India. But, researchers found various similarities in the educational aspect of both countries. The educational structure, format of curriculum content, curriculum transaction mode, evaluation policy, emphasis on Environmental issues etc. are found similar in both countries. In this connection Researcher reviewed many related literature and select their aim to investigate the nature of Environmental Education at school level in both countries. This paper mainly emphasizes on the curriculum objective, curriculum content, curriculum transaction and curriculum evaluation of Environmental Education as a school subject. To fulfill the aim, researchers have collected reliable data from authentic sources and also taken documentary data analysis method. And after a qualitative data analysis they have found some similarities and some differences between two countries on their Environmental Educational issues.

Key Words: Environmental Education;Curriculum Transaction;Curriculum Evaluation;

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## **1.Introduction:**

“Environmental Education is a learning process that increases people’s knowledge and awareness about the environment and associated challenges, develops the necessary skills and expertise to address the challenges, and fosters attitudes, motivations and commitments to make informed decisions and take responsible action”.

**(UNESCO, Tbilisi Declaration,1978)**

According this statement of UNESCO, Environmental Education is concern about to development and increase the Environment related knowledge, attitude, skills, awareness and pro-environmental behavior. Most of the countries of the world, now understand about the importance of Environmental Education for their future protection from present Environmental degradation. India and Bhutan also aware about their Environmental condition. So, both of countries are actively working on Environment related issues. Researchers reviewed many related study and found various environment related activity (Governmental and Nongovernmental) of both countries. Bhandari,B.B. &Abe,O. (2000) studies on ‘Environmental Education in the Asia-Pacific Region: Some problems and prospects’ and found different environment related activity of 36 countrieslike- India, Nepal, Bhutan, Sri Lanka, Maldives, Pakistan, Bangladesh etc. Such as- Bangladesh emphasizes on Environmental issues and develops ‘National Environment Policy’, Maldives emphasize on ‘Green Club’ and Nepal emphasize on Environmental conservation, Sri Lanka has established ‘ Environmental Pioneer Brigades’ and ‘Environmental Club’ etc. for developing Environmental knowledge, attitude, skills, awareness and pro-environmental behavior. All countries have included Environmental Education on their school level curriculum.India and Bhutan also emphasize on Environmental Education and concern about conservation and sustainable uses. Researchers found different similarities and differences in respect of Environmental issues. And in this connection, they have selected this study-

**“Environmental Education at School Level: A Comparative Study between Bhutan and India.”**

## **2.Objectives of the Study:**

Researchers have selected the following objectives for this study-

- To identify the place of environmental education in school level curriculum in Bhutan and India.
- To compare the curriculum objectives of environmental education in primary and secondary level in Bhutan and India.
- To compare the environmental Education Curriculum contents of primary and secondary level in Bhutan and India.
- To compare the environmental Education Curriculum transaction of primary and secondary level in Bhutan and India.
- To compare the environmental Education Curriculum evaluation of primary and secondary level in Bhutan and India.

### **3.Research Question:**

According to the research objectives, following are the research questions-

- What are the present status of Environmental Education at school level curriculum in Bhutan and India?
- Are there any similarities and differences in EE curriculum objectives at primary and secondary level in both countries?
- Are there any differences in environmental education curriculum contents at school level in Bhutan and India?
- Are there any similarities and differences in EE curriculum transaction mode at primary and secondary level in both countries?
- Are there any similarities and differences in EE curriculum evaluation at primary and secondary level in both countries?

### **4.Methodology of the Study:**

Present study is a documentary analysis, which approach is qualitative. For this study researchers have followed the following method-

- Data collection for research documents from different reliable & valid sources
- Depth & detailed study of all collected documents

- Synthesizing and analyzing the documentary data in qualitative approach.
- Making generalization for findings.

## **5.Data analysis and Interpretation:**

To find the research findings, researchers have analyzed data in qualitative approach. They have found some differences and similarities in educational policy of both countries. Here, Educational policy indicates the educational objectives, content or subject matter, transaction mode and evaluation policy etc. Following are the results of data analysis and interpretation-

### **5.1 Educational Condition at present:**

#### **5.1.1 In Bhutan-**

At present, the Education system is running with three main stream like- General Education system, Monastic Education system & Non-formal Education system. General education system is maintained by Government. For the research limitation, researchers here consider only general education system of both countries. The present education system of Bhutan has running since 1961. 11 years basic and school based education system has comprises in Bhutan from pre-primary to class ten. This structure has followed (VII+IV+II) model. This structure indicates that, primary education for seven years (PP-VI), Secondary education for four years (VII-X), and Higher Secondary education for two years (XI-XII).

Bhutan has incorporated Environmental Education in school curriculum from the beginning of the present curriculum. Here, Environmental Education has taught as a separate subject from Pre-primary to Class III. And also taught as an integrated subject from Class IV to Class XII. Environmental Education is incorporated in the curriculum of Science, Geography and Social Studies.

#### **5.1.2 In India-**

The central education system is mostly follow the 10+2+3 pattern of education, where school level education indicates 10+2 grade. This structure originated from the recommendation of Kothari commission of 1964-66. In this structure Environmental education curriculum is more structured and systematic. Environmental Education situated as a core subject in main

curriculum. Here, NCERT (National Council of Educational Research and Training) is the apex body of school education, deals with curriculum transaction. The main emphasis of EE curriculum transaction is to gather knowledge, attitude, skill, awareness, participation in environment.

In 1930s, India has incorporated certain aspects of environmental education in school curriculum, through it incorporate perfectly after the recommendation of Kothari commission (1964-66) for the life needs and aspirations of Indian population and nation. Indian government takes a strong step after the conference at Tibilisi in 1977, by considering environmental education as a compulsory school subject. Normally, Indian education system has followed (10+2+3) structure of formal education, where the primary education indicates [I-VIII (i-v as primary and vi-viii as elementary)] grade, Secondary indicates [IX- X] grade, and higher secondary indicates [XI-XII] grade perspectively. In this study, researcher consider only Central Board of Secondary Education ( CBSE ), where environmental education curriculum are integrated with science and social science subject in grade I and II, in III-V grade with science subject and in VI-XII as compulsory subject.

## **5.2 Curriculum Objectives:**

### **5.2.1 EE curriculum objectives in Bhutan**

The Royal Government of Education has fixed some specific objectives for all level of Education. In Primary Education (Pre-primary to Class VI)- The major objectives of Environmental Education is to ‘Upgrade the quality of primary education through improvements in curriculum, learning Environment, teacher qualifications and didactic method’. It can be said from this goal that, Bhutanese Govt. is more aware about Environmental Education learning and wants to implement Environment related knowledge among young generation. According to ‘Royal Society for Protection of Nature’ (RSPN), some specific objectives towards Environmental Education are to raise Environment related awareness among the young generation, develop positive attitude towards Environment, to understand about natural environment, to bring behavioral change among young generation towards Environment and enhance school greening. These objectives are selected at the aim of empowering young generation with right attitudes, skills and tools to address Environmental problems. For Class

Pre-primary to Class III, The selected objectives are to promote interest and knowledge about Environment, to develop the understanding about Environmental issues. For Class IV to Class VI, The selected objectives are – to promote curiosity about science and care for the Environment, to help students for understanding life and the care of living things and to appreciate Environmental Concern. In Secondary level (Class VII to Class X), Environment Education is involved among different subject like- Science, Agriculture, Geography, Socially Useful Productive Work (SUPW) etc. For Class VII& VIII, The selected objectives towards Environmental Education are to – understand the relationship between Physical and natural Environment, to develop scientific attitude towards nature, to develop positive attitude and values towards Environment, to develop scientific skills relevant the peoples’ daily life. The selected objectives for Class IX & X, are to understand about the impact of development on the natural Environment, to relate the scientific concepts to their immediate Environment, to appreciate the causal relationships of the natural phenomena, to develop respect, care and appreciation for diverse cultures and Environment and to make awareness of social, personal and Environmental issues.

### **5.2.2 EE curriculum objectives in India-**

Central Board of Secondary Education identifies some objectives of Environmental Education for primary and secondary education on the basis of Agenda-21. Such as- According to CBSE Board, for the construction of primary curriculum, board has taken some general and some specific objectives of Environmental Education, which are helpful for providing opportunity of student to achieve the five major objectives - (Knowledge, awareness, skill, attitude and participation) of E.E. Some selected objectives are- 1) They have selected their objectives to locate and comprehend relationship between the physical, natural, social and cultural environment. 2) They wants to develop an understanding based on observation and illustration, drawn from live experiences and physical, biological, social and cultural aspects of life, rather than abstractions. This objective follows the aims of Environmental Education which selected in agenda 21. 3) The next objective has selected for creating cognitive capacity and resourcefulness to make the child curious about social phenomena, starting with the family and moving on to wider spaces. 4) They wants to nurture the curiosity and creativity of the child particularly in relation to the natural environment. 5) Another objective is to making awareness about

environmental issues- like globalization, green house effect etc. 6) They have selected the aims at engaging students to exploratory and practical activities to acquire basic cognitive and psychomotor skills through observation, classification, inference, etc. 7) They want to emphasize, design and fabricate, estimate and measure as a prelude to the development of technological and quantitative skills at later stages. 8) And the last objective has selected for addressing gender concerns and issues of marginalization and oppression with values of equality and justice, and respect for human dignity and rights. In secondary level of education, Environmental Education is included with social science for lower secondary (ix-x) and also included with home science for higher secondary (xi-xii). Ministry of education (MoE) have selected some objectives, researcher sort out only environment related issues like- 1<sup>st</sup>, to investigating and using a variety of sources to analyze and interpret historical, environmental, political and geographical issues for the students. 2<sup>nd</sup>, to analyzing and interpreting recent global developments in the light of knowledge gained in economics and environment subject. 3<sup>rd</sup>, to developing an outlook of students for the future and to facing future situation. 4<sup>th</sup>, to acquainting learners with the basics of human development with specific reference to self and child. 5<sup>th</sup>, to making aware and alert about environment. 6<sup>th</sup>, to imparting knowledge of nutrition and life style to enable prevention and management of diseases. 7<sup>th</sup>, to inculcating the awareness about healthy food habits.

### **5.3 Curriculum Content:**

#### **5.3.1 EE curriculum Content in Bhutan**

In Bhutan, the curriculum content has reflected the National need and aspiration in every aspect of education system. The adaptation of curriculum is controlled by the centre Government and they have a national curriculum. The Curriculum and Professional Support Division carry out curriculum related function. There have different Governmental bodies like- The Curriculum and Professional Support Section (CAPSS), Educational and Monitoring Support Section (EMSS), Bhutan Board of Examination (BBE), Non-formal Education Section (NFES) and Youth Guidance and Counseling Section (YGCS) etc. who are also helping key organizing body of adapting curriculum. They are also responsible for selecting curriculum content. Theoretical and practical both are integrated in the curriculum content. According their recommendation-

The student learns about –In Pre-primary; ‘Myself and my family’, ‘Food we eat’, ‘All around us’. In class I: ‘Home’, ‘What do people do’, ‘Plants’, ‘Wild and domestic animals’, ‘Staple food’, ‘Water’. In class II: ‘The Body’, ‘My village’, ‘Vegetables’, ‘School live stock’, ‘Tools and Weather’. In class III: ‘The School’, ‘Festivals’, ‘Fruits’, ‘Birds in your area’, ‘Building’, ‘Transport’. In class IV: ‘Water and soil’, ‘Food and Health’, ‘Sight and Sound’, ‘Trees and Wood’. In class V: ‘Farm’, ‘River and Mountains’, ‘Sickness and accident’, ‘Insects’, ‘Fire’, ‘Communication’ ‘Keeping Healthy’. In class VI: ‘Living and Growing’, ‘Trees and Orchids’, ‘Planet and Earth’. In class VII& VIII: Agriculture, Animal Husbandry, Forest Life, Light, Food and Nutrition’. For IX & X: In Biology- ‘Animal Study’, ‘Health & Hygiene’; In Geography- Atmosphere, Lithosphere, Natural System, Equatorial Forests, Tropical Grasslands, Mediterian Lands, Hot deserts, Temperate grasslands, Coniferous forest, People and Environment. In SUPW- School Campus Beautification, Horticulture, Nature Conservation, Animal Husbandry etc.

### **5.3.2 EE curriculum Content in India**

In India, EE has formed as structural way by the direct observation of Central Board of Secondary Education. Curriculum content has also formed by their recommendation. According to curriculum objectives, the curriculum content has selected for the knowing about-

In Pre-primary level; student learns about – ‘Myself and my family’, ‘Food we eat’, ‘All around us’ etc. in their books “KutumKatam” and “Majaru”. In class I: The name of book is “My Book” where they learn about ‘Home’, ‘What do people do’, ‘Plants’, ‘Wild and domestic animals’, ‘Staple food’, ‘Water’ etc. In class II: The selected environment related topic are ‘The Body’, ‘My village’, ‘Vegetables’, ‘School live stock’, ‘Tools and Weather’ in their book “My Book”. In class III, teacher taught the book “Our Environment” and students learn about ‘different animals around them, Animals food habits, description of different trees and plants and their product (Fruits, Flowers Vegetables), Uses of natural resources, Process of ploughing, conservation of animals, natural disasters, Atmosphere, climate and its change, concept of Lithosphere, description of water, air, soil and sky, awareness about their conservation, reservation of green resources of environment, consciousness about environment. In class IV, the name of the Environment book is as same as class III and student learns about: ‘Different

animals around them, their foods and works, different animals according their taxonomy, different type of plants, identification of animals, birds, missing animals, pollution on the environment, sources of food, food of animals, concept of medicinal plant, different domestic animal, consciousness about environment and environment friendly behavior, different pollution like- water, air, soil etc. In class V: they learns about-different animal, pollution in air, water, soil, divergent plant, purification of water, conservation of water, nature of birds, different plants, behavior of animals, missing animals, life of mountain and plain land, agricultural resources, different fish, conservation of wild animal, pollution, natural disaster. In class VI: 'Environmental education is integrated with science and student learns about the relationship between environment and wild life, biodiversity and their classification, home of some specific animal and their behavior'. In class VII, student also learn environment related knowledge as the integrated subject and learns about – role of physics on environment, food of human being, structural and functional process at living element of environment, problems of environment, conservation of plant and forest, Environment and health etc. In class VIII: they learns about-problems of environment,Agriculture, Animal Husbandry, Forest Life, Light, Food and Nutrition'etc. For IX & X: Student learns about Environment in Biology book where the environment related issues are- 'Environmental and Natural resources in Global politics, environmental norms, environmental movements, impacts of globalization on environment, population and its distribution , population change and growth, population composition, globalization, sustainable development and planning concept etc.

#### **5.4 Curriculum Transaction mode:**

##### **5.4.1 EE curriculum Transaction in Bhutan**

In Bhutan, Direct method is used as transaction mode of Environmental Education. In Pre-primary level, Environmental studies have taught 12 classes in per week. For class I & II, they allotted 6 classes per week and for class III to VI, 11 classes time allotted in per week. Here, one class teacher have selected for each class, who taught all subject including Environmental Education and except Dzongkha language. For the teaching of Environmental studies, class teacher have made different groups in the classroom and given different task for different groups. Such as, one group learns about the 'plant around them' from reference book, another group has

done any project related Environmental issues in the same classroom. All group activity are guided and controlled directly by the class teacher.

#### **5.4.2 EE curriculum Transaction in India**

In India, the transaction mode of Environmental Education is also followed direct method. In pre-primary level, Environmental Studies have taught 6 classes in per week. Class teacher also taught Environmental Studies. Students have to done one project work. Class teacher is responsible for this activity based work.

### **5.5 Curriculum Evaluation:**

#### **5.5.1 EE curriculum evaluation in Bhutan-**

Summative and Formative both assessment modes are applied in the student assessment in Bhutan. Out of 100 marks, the percentage of summative evaluation is 80% & formative evaluation is 20%. In formative evaluation (20%), the considerable area are-Practical work-50%, Home works and Class work-25%+25%. And in Summative Evaluation (80%), the considerable area is Midyear 40% and Year end 60%. In Midyear assessment (40%), they have consider – Class participation 5%, Assignment 5%, Unit assessment 10% and Midyear written exam 20%. In yearend assessment (60%), they have consider – Class participation 5%, Assignment 5%, Unit assessment 10% and yearend written exam 40%. The summative written exam has two part-A section (40%) & B section (40%). 1<sup>1/2</sup> hour allotted for per section. Pass marks has considered 35, out of 100.

#### **5.5.2 EE curriculum evaluation in India-**

The student assessment has formulated on the basis of knowledge related topic of environment and skill based practical work. Curriculum evaluation scheme is CCE (Continuous and Comprehensive Evaluation) in nature. Formative and summative both approach are used in EE curriculum assessment. In primary level, the weightage of EE curriculum is 10% in formative evaluation and full marks of assessment is 90, and for summative evaluation, the full marks is also 90 but weightage is 30%, time duration 3 hr per week. In secondary education, the weightage of EE curriculum is 20% in formative evaluation and full marks of assessment is 90, and for summative evaluation, the full marks is also 90 but weightage is 40%, time duration 2:45

hr per week. Some guidelines are followed according to CBSE board for EE curriculum assessment, like-Student assessment must be in scholastic and co-scholastic; Assessment must be summative and formative approach; Assessment policy must be followed the governmental rules; The qualifying grade marks must be at least minimum grade D.

### **5.6 Comparative Discussion:**

After a reasonable discussion, it can be concluded that, India and Bhutan are both separate country but there have some similarities in the education system. Because, In 1988, Bhutan had adopted curriculum from India. But, after 1990s, they have generated their own curriculum, where have some differences also.

In the aspect of curriculum objectives-Indian Government has followed the rules and instruction of Agenda 21. It is based on five basic objectives-Knowledge, Skill, Awareness, Participation and Awareness. But, Bhutan has followed the rules of their National happiness. They have selected their curriculum objectives according to their own curriculum centre. They emphasize on Environmental conservation and sustainable uses.

In the aspect of curriculum content, India covers maximum area of Environment and the curriculum content is more systematic because they followed specific rules of Earth summit. But, in Bhutan, the content area is not as broad as India. And they emphasize mainly the environmental disaster specially thunder.

In the aspect of curriculum transaction, Environmental education has taught as integrated form in pre-primary level in India. And in primary and secondary education, Environmental education is treated as compulsory subject. In Bhutan, they have taught Environmental education as compulsory from pre-primary to class III. After class III, they have taught Environmental education as integrated subject with Science, Geography, Social studies and SUPW from class-IV to X.

In the aspect of curriculum evaluation, Curriculum evaluation scheme is CCE (Continuous and Comprehensive Evaluation) in India. In Bhutan, the assessment modes are Summative and Formative both applied for student.

### **5.7 Conclusion:**

Environmental education has now gained a vital position for eradicate the challenges of Environmental. It can be said that, India and Bhutan both countries are conscious about the implementation of Environmental Education. But, the implementation and evaluation policy of Environmental Education is not more structured. Environmental Education is treated as compulsory in pre-primary to class-III in Bhutan and In India, Environmental Education is treated as compulsory from class III to class X. For, enhancing the Environmental Knowledge, Skill, Awareness, Participation and Behavior towards student, both countries can implement Environmental Education as compulsory from pre-primary to secondary level(class-X).

### **References**

- *A Geography of Bhutan: Our Man-made Environment, Course Book for class VIII.* (2014). Curriculum and Professional Support Division (CAPSD). Royal Government of Bhutan, Paro, Bhutan. ISBN-99936-0-038-5.
- *A Geography of Bhutan: Our Natural Environment, Course Book for class VII.* (2014). Curriculum and Professional Support Division (CAPSD). Royal Government of Bhutan, Paro, Bhutan. ISBN-99936-0-036-9.
- Bhandari, B.B, & Abe, O. (2000). Environmental Education in the Asia-Pacific Region: Some problems and prospects. *International Review for Environmental Strategies*. IGES. Vol-1(1). pp-57-77.
- *Blessed Rainy Day, Class II, Book 2* (2014). Department of Curriculum Research and Development. Royal Government of Bhutan, Paro, Bhutan. ISBN-99936-0-134-9.
- C.P.R Environmental Education Centre, (2007), “ *Environmental Education*” A centre of excellence of the ministry of Environment and Forests, Government of India.
- Cokl, U. & Ugyen. (2010). *The Education system in Bhutan & Austro-Bhutanese Development and Research Co-operation*. Commission for Development Studies. KEF Fact Sheet 1/10. Wilhelmstrasse 11. 1160 Vienna. Retrieve by: [www.ket-online.at](http://www.ket-online.at).

- Johnson,D.; Childs,A. &Ramachandra,K. (2008). *A Needs Assessment of Science Education in Bhutan*. UNESCO.
- Kaur.K.(2012). “*Promoting Environmental Education: Role of NGOs and Government*”. Development alternatives group. Retrieved from [http:// www.devalt.org](http://www.devalt.org).
- *Memo and the Mirror, class II, Book 7*. (2014). Department of Curriculum Research and Development. Royal Government of Bhutan, Paro, Bhutan. ISBN-99936-0-135-7.
- Parikh.J.K.(2009). “*Environmental problems of India and their possible trends in future*”. Environmental conservation, Cambridge University Press.
- Report of CAPSD. (2014). *Syllabus for classes IV-VI*. Ministry of Education. Royal Government of Bhutan. Paro. Bhutan. ISBN-99936-0-203-5.
- Report of CAPSD. (2014). *Syllabus for classes VII-VIII*. Ministry of Education. Royal Government of Bhutan. Paro. Bhutan. ISBN-99936-0-204-3.
- Report of Policy and Planning Division.(2015). *Annual Education Statistics 2015*. Ministry of Education. Royal Government of Bhutan. Thimpu. Bhutan.
- Sarabhai.K.V.(2000), “ *Strategies in Environmental Education*”Xunta de Galicia in collaboration with UNESCO, Santiago de compostela, Spain.
- *School, class PP, Book 1*. (2014). Department of Curriculum Research and Development. Royal Government of Bhutan, Paro, Bhutan. ISBN-99936-0-288-4.
- *Science, class V*. (2014). Department of Curriculum Research and Development. Royal Government of Bhutan, Paro, Bhutan. ISBN-978-99936-0-370-2.
- *Science, class VI*. (2014). Department of Curriculum Research and Development. Royal Government of Bhutan, Paro, Bhutan. ISBN-978-99936-0-370-3.
- *Science, class VII*. (2014). Department of Curriculum Research and Development. Royal Government of Bhutan, Paro, Bhutan. ISBN-978-99936-0-416-7.
- *Science, class VIII*. (2014). Department of Curriculum Research and Development. Royal Government of Bhutan, Paro, Bhutan. ISBN-978-99936-0-417-4.
- Sengupta.J.(2013). “ *India, Bangladesh and Nepal; Learning lesson, Facing challenges*”. ORF Issue Brief, Kolkata. Retrieval from <https://www.onforline.org>.
- Spiegeleer.J.D. (1986). *Primary School Building Standards, norms and design*. UNESCO. The Department of Education, Royal Government of Bhutan. Architect. Thimpu.

- Suvedi,M.(2012). *Curriculum used in Bhutanese refuged education programme*. BREP Curriculum. Retrieve by: [www.bryes.org](http://www.bryes.org).
- Taylor,N.; Littledyke,M.&Coll,R.K.(2009). *Environmental Education in context: An International Perspective on the Development of Environmental Education*. Sense Publishers, Rotterdam, Netherlands.ISBN-978-90-8790-961-1.(Paperback)
- *Teacher's manual, class V*. (2014). Department of Curriculum Research and Development. Royal Government of Bhutan, Paro, Bhutan. ISBN-978-99936-0-374-0.
- *Teacher's manual, class VI*. (2014). Department of Curriculum Research and Development. Royal Government of Bhutan, Paro, Bhutan. ISBN-978-99936-0-375-7.
- Thinley,K. (2009). *Higher Education in the Kingdom of Bhutan: Cherishing Dreams and confronting challenges*. A Country report of Tertiary Education Division. Royal Government of Bhutan. Thimpu.
- Thinley,K.(2009). *A country report: Higher education in the kingdom of Bhutan*. Department of Adult & Higher Education. Royal Government of Bhutan. Thimpu.
- *Weather, class II, Book-6*. (2014). Department of Curriculum Research and Development. Royal Government of Bhutan, Paro, Bhutan. ISBN-99936-0-133-0.
- *Work. Class I, Book 4*, (2014). Department of Curriculum Research and Development. Royal Government of Bhutan, Paro, Bhutan. ISBN-99936-0-122-5.
- *Yaks, class II, Book 8*. (2014). Department of Curriculum Research and Development. Royal Government of Bhutan, Paro, Bhutan. ISBN-99936-0-138-1.