

## Environmental Awareness among the Teachers teaching in Private Universities: A Study in Dhaka City, Bangladesh

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**Abstract:** This study identifies environmental awareness of teachers in different private universities in Dhaka, Bangladesh. A total of 300 teachers (both male & female) in universities were randomly selected for the present study. The environmental awareness test was employed to assess the level of environmental awareness (EAW) among teachers. Chi-square test and contingency table analysis were employed to find out the significance of difference between the teachers with respect to their gender, years of experience, area of specialization and academic qualification of teachers. Results revealed majority of the teachers had moderate levels of environmental awareness. Teachers in the age groups of below 30 years had higher levels of awareness as compared to other age groups. Teachers having longer years of experience have moderate level of environmental awareness. Among the junior groups, the youngest teachers have the higher awareness. Teachers of Law and Arts faculty have the greater awareness than other faculties.

**Keywords:** Environment; Awareness; Faculty members; Education; Dhaka city.

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### I. Introduction

The development and survival of human being depend on the supporting system of life, that is, clean water and environment, including the requirement of oxygen. When human population was little and technology in its early life, the activities of man did not affect the environment. The peaceful and balanced coexistence of the environment has been destroyed by the advanced industrial development. By changing and exploiting the mineral resources, the human society is destroying the stability of nature.

The word environment embraces the circumstances or influences under which any organism or thing exists, lives or develops. All these may be placed into three divisions such as the set of physical conditions affecting the growth and progress of an individual and community; the social and cultural conditions influencing the nature of an individual or community; and the surroundings of an inanimate object of intrinsic social value. Therefore, environment includes the sum total of all the conditions, circumstances and influences surrounding and affecting the life of an organism or a group of organisms (Trivedi and Raj, 1992). So, it may be affirmed that the concept of environment is a complex one as a whole, far ranging in its implications and challenging to our consideration.

Over recent decades, global problems relating to environmental issues have increased dramatically. Natural resources are exhausted by extreme use. For instance, in recent time fresh water scarcity on a global scale, deforestation, degradation of coastal and marine areas, soil depletion and loss of biodiversity have become the major global concern. In a shocking revelation by the UN Climate Panel (2007), the melting of Himalayan glaciers could have serious consequences since over 800 million residents; almost half of the Indian and Bangladeshi population relies on the Ganges and the Brahmaputra river basins for water supply. With Himalayan glaciers melting, its eastern islands sinking and freak rain flooding deserts, environmentalists opine global warming is already taking its toll on one of most populous Asian nation, Bangladesh.

Bangladesh is one of the most over populated countries with limited land area (about 0.06 ha/ person) (Ali, 1995 and UNDP, 1995). Due to huge population pressure, massive amount of natural resources are being used every day and the quality of the environment is worsening directly and indirectly through various anthropogenic as well as natural activities. Nevertheless, a threat to human civilization on global arena is caused due to this environment degradation (Kabir and Mahmud, 2009).

Deterioration in the overall environmental situation has become the major concerns of policy issues (Planning Commission, 1997). Although environmental awareness is increasingly reflected in sectoral policies, public concern of environmental issues and individual responsibilities are poor in both urban and individual societies. Perceptions of environmental impacts (e.g. susceptibility to noise pollution and flood hazards) are different in Bangladesh than elsewhere and differ significantly among diverse segments of the population (e.g. with regard to land encroachment, soil degradation, and loss of biodiversity). It is frequently accepted by the people that a highly degraded environment is either a fatalistic manner or they blame government agencies. Generally common views are that a single person cannot make contribution to solving environmental problems, and poor governance and accountability are counterproductive to any initiative (Asian Development Bank, 2000: 21). Public awareness of the environmental issues of the country, their consequences, and the actions that have to be taken to address these issues is an urgent requirement (Ambrose and Ali, 1995:29). Many environmental problems and their cost are as a result of unawareness. General public, including decision makers in government, the industrial sector, and rural landowners and managers are not aware of the full environmental impact of their actions (Ambrose and Ali, 1995:34). Aggravation of the process of environmental degradation in the country depends to a great extent on this.

In such a state, the significance and demand for environmental awareness can hardly be stressed at present. The term environmental awareness has a broad sense. It implies knowledge about environment as well as values and necessary skills to solve environmental problems. Moreover, environmental awareness is the preliminary step ultimately leading to the skill to carry on responsible citizenship behaviour (Sengupta, Das and Maji, 2010). Though man has realized the need to conserve resources and check environment pollution, the desired amount of attempt necessary to undertake the problems is not being made. A global approach and a change in man's attitude towards environment are needed to successful control of these problems. One must realize that, to improve environment is to improve the quality of life. There is a dire need for environmental awareness to help social groups and individuals attain awareness and understanding about the total environment and its allied problem. Environmental awareness can be raised through environmental education. Currently, the steady global environment worsening is a matter of great concern and gives stress on environmental education and awareness based courses and trainings. Environmental education certainly, a powerful vehicle bringing about change, a solution of all problems and an effective weapon for prevention plays a central role in the society. The need of the hour is to build people aware towards nature through a strong programme of environmental education (Nachimuthu and Vijayakumari, 1993). Environmental education is not only some literatures and textbook full of hypothesis but also the remedy of the upcoming disaster. In order to protect and preserve the environment, enabling people to lead quality life, importance has been given to environmental education in both formal and non-formal system of education.

Schools, college, universities and other territory institutions are responsible for environmental education at the formal level of education. (Palmer, 1998) In formal system, teachers are vital factors which can extend environmental education, skills, values and solutions to coming genera. Environmental Education has been established as a basic tool to contribute to the change of conceptions, principles, and attitudes (Tracana et al, 2008). Hence, it is receiving consideration from people who are concerned with the problem of a sustainable environment (Rii, 2000). Those individuals must learn in a formal way to reflect on the implication of their actions and perform in positive ways that maintain and support the quality of life.

Teachers are considered to be at the forefront pursuing the actions on environment education, whether performing as individuals infusing environment perspectives into their classes or collectively promoting environmental education through educational institutions, professional societies, state infrastructures, and local or national advocacy groups. In order to execute this noble yet demanding role effectively, there is every need to find out how responsible the university teachers are about the environment themselves, what is their level of concern and awareness about the environment.

A number of research works have been taken up in this respect. A study was done by Shahnawaj (1990) regarding environmental awareness and environmental attitude of secondary and higher secondary teachers and students in Rajasthan and found that female students possessed significantly more awareness than males. In contrast, Tripathi(2000) reported boys had superior awareness than girls. Sabhlok Rou (1995), in a study on environmental awareness observed that urban teachers differed significantly from rural and tribal teachers on their awareness of environmental problems. No difference was found between rural teachers and the tribal teachers whereas (Dinakara, 2000) reported significant difference between urban and rural school teachers in environment awareness. Also government and private school teachers differed significantly in their environmental awareness. Patel and Patel (1995) observed significant impact of environment awareness programs on the environmental awareness of the teachers.

Larijani(2010), in a study on environmental awareness of higher primary school teachers of Mysore City in India, observed that female teachers had significantly higher levels of environmental awareness as compared to their male counterparts and teachers with 31-50years age limit had higher levels of environmental

awareness. It was also found that teachers working in private schools had significantly higher environmental awareness than teachers working in government schools. (Kumari et al,2012)in their study on junior and senior secondary teachers' awareness of environmental issues of the Bareilly city of India showed that differences were observed in the teachers environmental awareness in accordance with different variables e.g. sex, school board and teachers qualification. Female teachers, younger teachers who have higher qualification are more aware and held more positive attitudes towards environment indicating that these variables affect teachers' awareness. Kainth (2009) surveyed school teachers of Punjab, India and the study revealed that there exists environmental awareness among teachers and the awareness level of science teachers was found to be more as compared to art teachers. Singh and Aziz (2015) conducted a study on all the primary and secondary teachers teaching in schools of Allahabad and found that primary teachers possessed more awareness than secondary teachers while no difference was observed between below 30 years and above 30 years primary and secondary teachers of Allahabad. No significant difference in the awareness level of male and female teachers and rural and urban primary and secondary teachers of Allahabad was found while private teachers had better awareness than government school teachers teaching in primary and secondary schools of Allahabad. Ghosh (2014) studied the level of environmental awareness among secondary school students of Golaghat district in the state of Assam and found that environmental awareness among the secondary school male and female students was not significant whereas the students of rural and urban secondary school are not equally aware about the environment.

An attempt was made by Rajput *et al.* (1980) to identify the awareness of children of primary level, towards the scientific and social environment. The study revealed that only one of the four group (2 schools X 2 Class) were significantly different on Environmental awareness at pretest stage, whereas at the post test stage two experimental group were significantly better than the control group.

Islam (2008), conducted a study to examine the level of awareness of citizens' (professionals, women, rural people/peasants and local leader/elite) about environmental problems of Katakhalypourashava in Rajshahi district of Bangladesh and the findings of the research revealed that awareness level of respondents was very low. The level of awareness of female respondents was significantly lower than the male respondents. (Mamun et al,2012)attempted to study the environmental awareness among the people of different age groups of Tangail district of Bangladesh and the study revealed that young people (19-33years old) were more concern about current environmental issues and male participants responded more than female respondents regarding environmental issues.(Shil et al,2013)studied the environmental awareness among the different classes of industrial workers working in several industries in the region of Tangail district, Bangladesh and found that most of the people were illiterate and they didn't have appropriate scope to accept all of the required awareness issues. Majority of the workers never took part in any environmental program and males were more concerned to participate in environmental program than that of females.

The present study would attempt to find out the level of environmental awareness of the private university teachers of Dhaka city in Bangladesh and help in sensitizing them in realizing the importance of their duty towards the coming generation in general and students in particular.

**Specifically, the objectives of the study are:**

- To find the awareness among the university teachers about environment;
- To find out the difference, if any, in the awareness level on environment among arts, science and business teachers.
- To find out the difference, in the awareness level on environment on the basis of demographic variables of gender and age.

To find out the difference, in the awareness level on environment on the basis of years of experience, area of specialization and academic qualification of teachers.

## **II. Methods and Materials**

**Sample:** A cross-sectional study was conducted in different private universities located in Dhaka metropolitan areas. For this purpose, there was a random selection of a total of 30 universities out of 47 universities located in Dhaka metropolitan areas. There were 2329 fulltime faculties in those selected universities. The sample size was determined using Fisher's formula based on confidence level and precision rate. The survey was on a total of 300 faculty members, teaching different subjects like, Science, Social Science, Arts, Business and Law following simple random-sampling technique.

**Tools Employed:**

Environmental Awareness Test (EAW)

Environment Awareness Test developed by Yeshodhara and Asha in the year 2005 was used and self-made questionnaire were also used to measure the level of Environmental awareness among teachers of private universities. This test is norm referenced test and consists of 25 multiple choice items each, focusing on different areas of Environmental awareness such as Environmental Concepts, Pollution and its control, Population, Health and Hygiene, Biodiversity, Energy, Environmental Concern and Legislation and lastly Sustainable Development. Self-made questions were designed through extensive literature review to include the important elements regarding Bangladesh context. There were self-made question. Faculties were asked to put (✓) mark on the correct answer. A numerical weight age of one mark was assigned to the correct response of the question and zero mark to the incorrect response of the question. Thus, on the total scale, the scores range between 0 to 25. This gives combined scores of environmental awareness ability of the faculties. Norms have been prepared for the Environmental Awareness Test and classified as high awareness level with a score range of 20 to 25; moderate awareness level with a score of 10 to 19 and low awareness level with a score range of 0 to 9.

### III. Procedure

Data was collected through personal visit to some of the selected universities in the year 2018, where there was a faculty meeting for explaining purpose of the study individually and were instructed how to answer to Environmental Awareness Test consisting of questions related to objectives of the study. Further clarifications were offered on the questions raised by them and they were requested to cooperate with the investigator for successful completion of the study. A total of 10 data collectors were trained on the data-collection mechanism and brief them comprehensively on the data-collection instrument. The data collection took approximately 21 days during August 2018.

**Data Analysis:** Chi-square test and contingency coefficient test were computed in the present study. In order to know the significance of difference between frequencies of 3 levels of EAW chi-square test was done in the study. To find out association between levels of Environmental awareness and gender, age group, years of experience, area of specialization and academic qualification of teachers, Association test analysis was employed. Data was analyzed using the Statistical Package for Social Science (SPSS), version 20.

**Ethical Considerations:** All respondents regarding the objectives of the study and the use of the information to be collected from them were informed well. Written consent prior to the survey from all of them was obtained. There was sheer avoidance of any hint of coercion in both getting their consent and interviewing. Strict privacy was maintained during the data collection process and throughout the whole study. Respondents were given assurance about maintaining the secrecy of their responses.

### IV. Results on Data analysis

#### Profile of the Respondents:

300 valid responses were received at the end of March 2018. Respondents are the faculties of different public and private universities of Bangladesh. Male and female constitutes 42.0% and 58.0% respectively; 50.7% were aged below 30 years, 39.0% respondents aged between 31 to 40 years, 6.0% respondents aged between 41 to 50 years and 4.3% respondents aged above 50 years. Almost Three-fourth of the respondents (73.3%) had Masters Degree. In terms of length of teaching experience, more than half of the respondents (58.0%) have below 6 years of experience. Faculties were predominantly from Business arena (46.3%).

**Table no.1:** Demographic characteristics of Faculty members

Characteristics	Respondents (%)
<b>Sex</b>	
Male	42.0
Female	58.0
<b>Age Groups</b>	
Below 30	50.7
31-40	39.0
41-50	6.0
Above 50	4.3
<b>Education</b>	
Masters	73.3
Mphil/PhD or others	26.7
<b>Length of Teaching Experience</b>	
Up to 6 years	58.0
7-12 years	23.3
13-18 years	12.7
19-24 years	3.0
25 years and above	3.0

Area of Specification	
Arts	14.3
Science	18.3
Business Studies	46.3
Social Science	5.7
Law	11.0
Others	4.3

**Table no. 2: Score of the Faculty Members**

Score of the Faculty	Respondents (%)
Low score	7.7
Moderate score	71.3
High score	21.0
Total	100

The analysis of score of the Faculty members reveals a clear dominance (71.3%) of moderate level i.e. most of them encompass a moderate knowledge about environment awareness. The following group has high scores.

**Test of Association (Chi-square test)  
Environmental Awareness and Gender:**

Gender-wise comparison revealed a significant association between gender and levels of awareness of faculty members at 5% level of significance (p-value=0.014 < 0.05).

**Table no. 3: Cross-Tabulation and Test of Association between Environmental Awareness and Gender**

		Score of the faculty			Total	Chi-square test
		Low Score	Moderate Score	High Score		
Male	Count	16	88	22	126	Pearson Chi-Square : 8.538 df : 2 Asymp. Sig. (2-sided) : <b>0.014</b>
	% within Gender	12.7%	69.8%	17.5%	100.0%	
	% within Score	69.6%	41.1%	34.9%	42.0%	
Female	Count	7	126	41	174	Asymp. Sig. (2-sided) : <b>0.014</b>
	% within Gender	4.0%	72.4%	23.6%	100.0%	
	% within Score	30.4%	58.9%	65.1%	58.0%	
Total	Count	23	214	63	300	

Further, from the table it is clear that only 34.9% of the male teachers had high awareness as against 65.1% of the female teachers. Again, the percentage within low score, male dominates their female counterparts whereas in case of high score, the situation just alters. Percentage within the moderate score the gender equity exists.

**Environmental Awareness and Age Groups:**

Age-group comparison revealed a significant association with levels of environmental awareness (P<0.046).

**Table no. 4: Cross-Tabulation and Test of Association between Environmental Awareness and Age Groups**

		Score of the faculty			Total	Chi-square test
		Low Score	Moderate Score	High Score		
Below 30	Count	10	100	42	152	Pearson Chi-Square: 12.803 df : 6 Asymp. Sig. (2-sided) : <b>0.046</b>
	% within Age Group	6.6%	65.8%	27.6%	100.0%	
	% within Score	43.5%	46.7%	66.7%	50.7%	
31-40	Count	11	89	17	117	Asymp. Sig. (2-sided) : <b>0.046</b>
	% within Age Group	9.4%	76.1%	14.5%	100.0%	
	% within Score	47.8%	41.6%	27.0%	39.0%	
41-50	Count	2	12	4	18	Asymp. Sig. (2-sided) : <b>0.046</b>
	% within Age Group	11.1%	66.7%	22.2%	100.0%	
	% within Score	8.7%	5.6%	6.3%	6.0%	
Above 50	Count	0	13	0	13	Asymp. Sig. (2-sided) : <b>0.046</b>
	% within Age Group	0.0%	100.0%	0.0%	100.0%	
	% within Score	0.0%	6.1%	0.0%	4.3%	
Total	Count	23	214	63	300	Asymp. Sig. (2-sided) : <b>0.046</b>
	% within Age Group	7.7%	71.3%	21.0%	100.0%	
	% within Score	100.0%	100.0%	100.0%	100.0%	

From Table 4, percentage within all the age group revealed that majority of the faculty members acquire moderate awareness regarding environmental issues. Within age groups below 30 years had maximum

of high scoring performances (27.6%) compared to teachers with age groups of 31-40 (14.5%) and 41-50 years (22.2%). All the faculty members aged above 50 have moderate score.

**Environmental Awareness and Year of Experience:**

A significant association was observed between years of experience of the respondent and levels of environmental awareness at 55 level of significance (as P value = 0.038<0.05).

**Table no. 5:** Cross-Tabulation and Test of Association between Environmental Awareness and Year of Experience

		Score of the faculty			Total	Chi-square test
		Low Score	Moderate Score	High Score		
Up to 6 years	Count	15	113	46	174	Pearson Chi-Square: 16.290 <sup>a</sup>  df : 8  Asymp. Sig. (2-sided) : <b>0.038</b>
	% within experience	8.6%	64.9%	26.4%	100.0%	
	% within Score	65.2%	52.8%	73.0%	58.0%	
7-12 years	Count	4	58	8	70	
	% within experience	5.7%	82.9%	11.4%	100.0%	
	% within Score	17.4%	27.1%	12.7%	23.3%	
13-18 years	Count	4	25	9	38	
	% within experience	10.5%	65.8%	23.7%	100.0%	
	% within Score	17.4%	11.7%	14.3%	12.7%	
19-24 years	Count	0	9	0	9	
	% within experience	0.0%	100.0%	0.0%	100.0%	
	% within Score	0.0%	4.2%	0.0%	3.0%	
25 years and above	Count	0	9	0	9	
	% within experience	0.0%	100.0%	0.0%	100.0%	
	% within Score	0.0%	4.2%	0.0%	3.0%	
Total	Count	23	214	63	300	
	% within experience	7.7%	71.3%	21.0%	100.0%	
	% within Score	100.0%	100.0%	100.0%	100.0%	

Percentage within the experience revealed that all the score of faculties having experience above 18 years are moderate level. And those below 18 years also predominantly exist in moderate level. Percentage within score revealed that, in all level of score, the youngsters (faculty having experience up to 6 years) are the majority as that stratum was the largest among all. But, in comparison of their senior two groups, the performance is slightly better (73% among high score and 65.2% among low score).

**Environmental Awareness and Area of specialization:**

A significant association was observed between area of teaching of the respondent and levels of environmental awareness at 5% level of significance (As P value = 0.005<0.05).

**Table no. 6:** Cross-Tabulation and Test of Association between Environmental Awareness and Area of specialization

		Score of the faculty			Total	Chi-square test
		Low Score	Moderate Score	High Score		
Arts	Count	2	26	15	43	Pearson Chi-Square: 25.049  df : 10  Asymp. Sig. (2-sided) : <b>0.005</b>
	% within Area	4.7%	60.5%	34.9%	100.0%	
	% within Score	8.7%	12.1%	23.8%	14.3%	
Science	Count	6	37	12	55	
	% within Area	10.9%	67.3%	21.8%	100.0%	
	% within Score	26.1%	17.3%	19.0%	18.3%	
Business Studies	Count	13	104	22	139	
	% within Area	9.4%	74.8%	15.8%	100.0%	
	% within Score	56.5%	48.6%	34.9%	46.3%	
Social Science	Count	0	17	0	17	
	% within Area	0.0%	100.0%	0.0%	100.0%	
	% within Score	0.0%	7.9%	0.0%	5.7%	
Law	Count	2	18	13	33	
	% within Area	6.1%	54.5%	39.4%	100.0%	
	% within Score	8.7%	8.4%	20.6%	11.0%	
Others	Count	0	12	1	13	
	% within Area	0.0%	92.3%	7.7%	100.0%	
	% within Score	0.0%	5.6%	1.6%	4.3%	
Total	Count	23	214	63	300	
	% within Area	7.7%	71.3%	21.0%	100.0%	
	% within Score	100.0%	100.0%	100.0%	100.0%	

Results of Percentage within area of specialization of faculty explored that most of them have moderate level of awareness regarding this issue. Again, From the table it is clear that 39.4% high scoring law teachers dominant in this arena and their follower is 34.9% high scoring arts faculty members.

**Environmental Awareness and Academic qualification:**

Academic qualification-wise comparison revealed a significant association between qualification and levels of awareness. The obtained P value = 0.014 that is less than 5% level of significance.

**Table no. 7:** Cross-Tabulation and Test of Association between Environmental Awareness and Academic qualification

		Score of the faculty			Total	Chi-square test
		Low Score	Moderate Score	High Score		
Masters	Count	11	160	49	220	Pearson Chi-Square : 8.513 df : 2
	% within Academic Qualification	5.0%	72.7%	22.3%	100.0%	
	% within Score	47.8%	74.8%	77.8%	73.3%	
Mphil/PhD or others	Count	12	54	14	80	Asymp. Sig. (2-sided) : <b>0.014</b>
	% within Academic Qualification	15.0%	67.5%	17.5%	100.0%	
	% within Score	52.2%	25.2%	22.2%	26.7%	
Total	Count	23	214	63	300	
	% within Academic Qualification	7.7%	71.3%	21.0%	100.0%	
	% within Score	100.0%	100.0%	100.0%	100.0%	

Further, from the table it is clear that within the percentage of score, 73.3% Faculties with master’s degree have scored high against just only 26.7% from their counterparts. The lower echelon of education cannot be a barrier for achieving awareness of environment.

**V. Discussion**

The overall analysis revealed though majority of the teachers had moderate level of environmental awareness, only few of them had high level of awareness. Female teachers found to have higher levels of environmental awareness compared to male teachers. Teachers in the age groups of below 30 years had higher levels of awareness as compared to other age groups. Teachers having longer years of experience (above 18 years) have moderate level of environmental awareness. Among the junior groups, the youngest teachers have the higher awareness. Teachers of Law and Arts faculty have the greater awareness than Business and other faculties. Lastly, teachers having master degree have higher awareness than their counterparts.

Our earth has suffered due to anthropogenic interference; there is an vital need to educate the public regarding the phenomena like global warming, environmental degradation, etc. This can be very well initiated at school level by giving advanced training to teachers on environment related aspects. If children at their early age learn about these negative effects, as they grow at least they can make some effort for sustainable development. The results obtained in the present study are more or less not in accordance with some of the studies mentioned here. Badkobi and Hadipour (2001) found significant difference among male and female teachers in their awareness about environmental education where male teachers had higher awareness. Jinarajan(1999) in his study on student teachers from Bangalore did not reported any gender difference in environmental awareness. Again, Vipinder and Jaswinder (2005) reported that male and female teachers had equal levels of scores on environmental education awareness. Kumari et al (2012) focused on the junior and secondary teachers’ awareness on environment of the Bareilly city of India. Female teachers, younger teachers and teachers who have higher qualification are more aware and held more positive attitudes towards the environment.

Islam(2008)examined the level of environmental awareness of citizens’(Professionals, women, local leader/elite) of Katakhalypourashava in Rajshahi district and the findings of the research revealed that awareness level of respondents was very low and the level of awareness of female respondents was significantly lower than the male respondents. Mamun et al(2012)studied the level of environment awareness among the people of different age groups of Tangail district and it was found that young people (19-33years old)were more concern about environmental issues and male participants responded more than female respondents regarding environmental awareness.

## VI. Conclusion

In the present context each individuals need to develop an awareness of protection and conservation towards environment. Our environment is degrading at a shocking rate. Therefore, it is necessary to preserve our environment. The teachers are considered as the main driving force behind the development of the nation. Teachers' awareness on environment can play a pivotal role in addressing environmental problems in a more thoughtful manner. The findings of the research reveal that awareness level of majority of the teachers is in moderate level. Environmental awareness has to be developed through both formal and non-formal channels of education. There should be sufficient coverage of environmental education in the teacher training programmes for university teachers both in service and pre service. Arrangement should be made for the provision of audio visual materials on environmental awareness for both formal and non formal education. Courses on environment should be strengthened and updated in all the universities and institutions of higher education in the country. The press should give more coverage to environmental issues. Environmental awareness programs should be widely disseminated through the mass media in which teachers are target audiences.

Environment awareness makes influential community to preserve the integrity and diversity of nature and to ensure that natural resources are used in an equitable and ecologically sustainable manner. Awareness on environment of the teachers may bring fundamental change among the students in the way of thinking, living and working. Teachers can play an important role in educating their students about environment which is possible only when the teachers themselves have the necessary level of environmental awareness. Increase spontaneous participation in environment related program (Tree plantation, Environmental fair, Environmental rally, etc.) should be there to increase awareness on environment.

Environmental awareness is important due to present global agenda of sustainable development. Deployment of environmental knowledge in public and private environment management sectors to instruct people about environment protection to pressing sustainable environment within limited opportunities and limitations will progress the present environmental condition of Bangladesh.

## References

- [1]. Ali AM. Population pressure, environmental constraints and agricultural change in Bangladesh: examples from three agroecosystems. *Agriculture, ecosystems & environment*. 1995;55(2):95-109.
- [2]. Badkobi A, Hadipour M. Assessment of primary school teacher's educational condition in different zones of Tehran Municipality in Environmental subjects and the ways of elevating their awareness. *Scientific Quarterly Journal Environment*. 2001;33:79-80.
- [3]. Dinakara SA. Environmental awareness, environmental attitude and teaching practices of elementary school teachers of Mysore district in environmental related topics. Dissertation. Department of Education, Mysore University. 2000.
- [4]. Ghosh K. Environmental awareness among secondary school students of Golaghat district in the state of Assam and their attitude towards environmental education. *IOSR Journal of Humanities and Social Science*. 2014;19(3):30-34.
- [5]. Islam MS. Towards a sustainable e-Participation implementation model. *European Journal of ePractice*. 2008;5(10).
- [6]. Kabir, M. H. and M. S. Mahmud. Environmental Education in Bangladesh: Institutional practices and opportunities. *Development Compilation*. 2009;2(1): 1-5.
- [7]. Kainth GS. Environmental Awareness Among School Teachers. *ICFAI Journal of Environmental Economics*. 2009;7(1).
- [8]. Khalequzzaman M. Environmental stewardship: a pre-requisite for sustainable development in Bangladesh. Assistant Professor of Geology, Georgia Southwestern State University, Americus, GA. 1999;31709.
- [9]. Larijani M. Assessment of environmental awareness among higher primary school teachers. *Journal of Human Ecology*. 2010;31(2):121-124.
- [10]. Kumari S, Gangwar RK, Singh J, Singh AP. Assessment of environmental awareness and attitude among the school teachers in bareilly city. *International Journal of Innovative Research and Development (ISSN 2278-0211)*. 2012;1(8):486-492.
- [11]. Mamun SA, Nessa A, Aktar M, Hossain MR, Saifullah AS. Perception of Environmental Education and Awareness Among Mass People: A Case Study of Tangail District. *Journal of Environmental Science and Natural Resources*. 2012;5(2):263-266.
- [12]. Mastaller M, Montgomery RD, Weinstock JA. Bangladesh: Toward an environment strategy. *Asian Development Bank*; 2000.
- [13]. Nachimuthu K, Vijayakumari G. An urgent need for environmental education. *Edu. Rev.* 1993;94(3):11-14.
- [14]. Palmer JA. Environmental education in the 21st century: Theory, practice, progress and promise. *Routledge*. 2002.
- [15]. The Fifth Five Year Plan. Planning Commission. Dhaka. 1997.
- [16]. Singh N. Effect of herbicides on physiological parameters, growth, yield and quality of soybean (*Glycine max L.*)(Doctoral dissertation, JNKVV).
- [17]. Rii HU. The Place of Geography and Environmental Education in the Korean School Curriculum. *International Research in Geographical and Environmental Education*. 2000;9(1):67-70.
- [18]. Sabhlok R. A study of the awareness and attitude of teachers and students of high schools toward environmental education in Jabalpur district. *Indian Edu. Abstr.* 1995;1(24):62-63.
- [19]. Sengupta M, Das J, Maji PK. Environmental awareness and environment related behaviour of twelfth grade students in Kolkata: Effects of stream and gender. *Anwesa*. 2010 Jan;5(1):1-8.
- [20]. Jinarajan, S.A.K. A Study of Environmental Awareness and Attitude towards Environmental Education of Student Teachers of Bangalore City. *Bangalore University*. 1999.
- [21]. Shil SC, Sarker BC, Akter A, Bakali B. Environmental awareness among the industrial workers: A study in Tangail district, Bangladesh. *Journal of the Bangladesh Agricultural University*. 2013;11(1):159-164.
- [22]. Singh AK, Aziz SS. A Study of Environmental Awareness of Teachers Teaching In Primary and Secondary Schools of Allahabad District. *International Journal of Multidisciplinary Approach & Studies*. 2015;2(5).
- [23]. Tracana RB, Carvalho GS, Ferreira C, Ferreira ME. Analysing the theme of pollution in Portuguese geography and biology textbooks. *International Research in Geographical and Environmental Education*. 2008;17(3):199-211.



- [24]. Tripathi MP. A comparative study of environmental awareness of students studying in central schools and other schools at 10+ level in Uttar Pradesh. *National Journal of Education*. 2000;6(1):47-51.
- [25]. Vipinder S, Jaswinder SD. Environmental education awareness among elementary school teachers. *Perspectives in Education*. 2005;21(2):117-122.

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