

# Environmental Awareness on Sustainable Development of Secondary Students in Bankura, West Bengal

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## ABSTRACT

*Environmental education in school is increasingly approving the wider issues of sustainability for natural resources. This study seeks to find out the environmental awareness concerning to sustainable development of secondary students as a part of environmental consciousness, which is most significant in contemporary situation. Survey method adopted for this study. A self made questionnaire used to collect data, concerning with the contents within the text books of class IX in Bengali medium schools (WBBSE), awareness of sustainable development among the secondary students. Data were collected from four secondary schools in Bankura district of West Bengal, India. Data were analysed through the statistics; mean, SD, and t test. Study revealed that, awareness about sustainable development was differed in respect of gender and location of students. This paper suggested that, teachers and school authorities should consider or adopt such kind of steps or teaching approaches to facilitate uniformities regarding to the awareness on sustainable development among the student in respect of their locale and gender.*

**Key words:** Environmental awareness, Sustainable development, Secondary education.

## 1.1 Introduction

In India, in spite of her long tradition of environment friendly society, environmental issues have possessed serious attention with the global context. At present environment is highly disturbed area in terms of environmental pollution and sustainable development. Now people are suffering from a important problem of crisis due to population explosion as well as industrialization, the environmental problem like pollution, global warming, acid rain etc. have been increasing gradually. That is why protection of environment has now become a challenging matter in front of the contemporary civilian. Ultimately it is a question of shifting one's mind set. If that ensue to a major segment of society we may begin to win with an awareness of sustainable development. Sampath & Sundaramoorthy (2014) stated that, knowledge of students and teachers on the

environmental concerns is essential for sustainable management of the surrounding environment. They also mentioned that, the transformation of the awareness into right attitudes, values and behaviour could be achieved to the required level only after sustained interventions for several years. Abraham & Arjunan (2005) made an attempt to study the environmental interest of secondary school students in relation to their environmental attitude. They found that the secondary school students did not have a high level of environmental interest. A differential effect of gender and locale were observed in their environmental interest. The boy and urban students were found to have more interest compared to girls and rural counter parts respectively. Shair & Akhtar (2012) argued that, over all awareness with adolescents was far bellow than expectations. Adolescents possessed very slight knowledge

of the environment and sustainability; this was below from agreeable level. But, the students at higher education level found with some skill for solving environmental trouble and they also considered environmental education as a practice. They hold enough knowledge and awareness about their surroundings and sustainability. Environmental education has played a significant role to aware the students concerning to environment and sustainability (Biswas & Samanta; 2012). Chakraborty & Bairigia (2009) found positive and significant relationship between achievement in environmental education and environmental awareness. In our country with the increase of population, resource consumption is increasing day by day. This is one of the causes of a vulnerable sustainable future. In this concern, the role of education and awareness is very significant because, education is linked to minimise the fertility rate and significantly, it is linked with resources innovation (Das, 2013). Mondal, & Mete (2010) revealed that boys and girls of higher secondary level has significantly differed in respect of environmental awareness. Students belong to rural areas also differed significantly from urban students with regarding to awareness of environment. Shahnawaj, (1990) studied about the environmental awareness & environmental attitude of secondary and higher secondary school students. Where, girls differed significantly than boys in respect of awareness about environment. The study carried out by Maji & Sengupya (2015) reported that, students' relationship between awareness and actions regarding 3 Rs (Reduce, Reuse, & Recycle) for sustainability were moderately correlated. This was regularly resulted in preserving and conserving the resources of the environment.

There has been good deal of research about environmental education and awareness on different environmental issues. Many investigators have done environmental research on school students and about urban area but in rural area, there is not sufficient research about environmental problems. So there is a scope for the study about the awareness on sustainable development in Bankura district of West Bengal.

### 1.2 Objectives

- (i) To compare the awareness on sustainable development in respect of students locale.
- (ii) To compare the awareness on sustainable development in respect of students gender.
- (iii) To study the awareness on sustainable development among urban students.
- (iv) To study the awareness on sustainable development among rural students.

### 1.3 Hypotheses

- H<sub>0</sub>1:** There is no significant difference between urban and rural students concerning to awareness of sustainable development.
- H<sub>0</sub>2:** There is no significant difference between boys and girls students concerning to awareness of sustainable development.
- H<sub>0</sub>3:** There is no significant difference between urban boys and urban girls students concerning to sustainable development.
- H<sub>0</sub>4:** There is no significant difference between rural boys and rural girls students concerning to sustainable development.

### 2. Methods

This study considered with descriptive survey design. Researchers focused on the students (IX class) of Bankura District, West Bengal. Four Bengali medium schools

affiliated by WBBSE, were selected purposively to reach the target group. Sample of 200 school going students (male, 100 & female, 100) were considered as sample on random basis. Self-made multiple-choice questionnaire developed by the researchers. Total 40 items were fixed in the tool, based on the topics from Life Science & Geography

text book. All the items were relevant with the knowledge, which increase the awareness of students on sustainable development. Four experts (School Teacher) were asked for content judgement of the test items. The statistical techniques such as mean, SD, t - test were used in this study.

### 3. Results

Table 1; Locale wise difference in Mean, SD, t value of awareness score.

Locale	N	M	SD	t	df	Remarks
Rural	100	22.79	3.03	8.04*	198	Significant
Urban	100	19.17	3.32			

\*0.05 level

In the above (Table 1) obtained t value indicating significance of mean difference between urban and rural students at 0.05 level in measures of awareness on sustainable development score. Hence the hypothesis (**H<sub>01</sub>**) was rejected. Thus researchers may conclude that, the urban and rural students have significant difference in awareness of sustainable development.

Table 2; Gender wise difference in Mean, SD, t value of awareness score.

Gender	N	M	SD	t	df	Remarks
Boys	100	22.30	3.02	5.50*	198	Significant
Girls	100	19.66	3.76			

\*0.05 level

From the (Table 2) obtained t value indicating significance of mean difference between boys and girls students at 0.05 level in measures of awareness on sustainable development score. Hence the hypothesis (**H<sub>02</sub>**) was rejected. Therefore researchers may conclude that, the boys and girls students have significant difference in awareness on sustainable development.

Table 3; Gender wise difference in Mean, SD, t value of awareness score of Urban & Rural Area.

Variations		N	M	SD	t	df	Remarks
Urban area	Boys	50	23.84	2.17	3.75*	98	Significant
	Girls	50	21.74	3.38			
Rural area	Boys	50	20.76	2.96	5.39*	98	Significant
	Girls	50	17.58	2.86			

\*0.05 level

The analysis (Table 3) shows that obtained t value in respect of urban area indicating significance of mean difference between urban boys and urban girls students at 0.05 level in measures of awareness on sustainable development score. Hence the hypothesis (**H<sub>03</sub>**) was rejected. Thus researcher may conclude that, the urban boys were differed significantly from urban girl students in respect of awareness on sustainable development.

The obtained t value (Table 3) in respect of rural area indicating significance of mean difference between rural boys and rural girl students at 0.05 levels in measures of awareness on sustainable development score. Hence the hypothesis (**H<sub>04</sub>**) was rejected. Thus researcher may conclude that, the rural boys were significantly differed from rural girls students in respect of awareness on sustainable development.

#### 4. Findings

From the study researchers conclude that, the urban and rural students have difference in respect of awareness on sustainable development. This result is supported by Mondal & Mete (2010). The similar significant difference was recorded by Abraham & Arjunan (2005); Sarkar (2015), Banerjee *et al.* (2015).

Researchers also found that, the boys and girls students have significant difference in awareness on sustainable development. The present study was supported by earlier studies Shahnawaj (1990), Abraham & Arjunan (2005), Mondal & Mete (2010).Sarkar (2015). But the present research was inconformity of the earlier study by Banerjee *et al.* (2015).

This paper revealed that, the urban boys were differed significantly from urban girls students, similarly, the rural boys were

significantly differed from rural girls in respect of awareness on sustainable development.

#### 5. Conclusion

Awareness of secondary students on sustainable development was differed significantly in relation to pupils' gender and locale. Similarly, boys and girls differed significantly in both aspects of habitat i.e. rural and urban areas of Bankura District of West Bengal. The study recommended that, school authority should take such initiatives in this regard. Researchers also mentioned that the concerned teachers must take serious initiatives to allow students uniform knowledge and awareness about sustainable development of our environment. The introduction of effective programme of environmental education and participation of students should posses enough awareness on sustainable development, positive environmental attitude and skills of achieving objectives in relation to their surroundings.

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**Our greatest glory is not in never failing, but in rising up every time we fail.**

**~ Ralph Waldo Emerson**