

# AWARENESS OF UNDER GRADUATE STUDENTS ON SUSTAINABLE DEVELOPMENT IN ASSAM

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## Abstract

Education is having a big impact on Sustainable development and gives kids a more sustainable future in their later years. The study's main aim was to determine how aware students were about SD. The study was conducted on Assam UG students in India and the descriptive survey method was used by the researcher. The sample size was 104 UG students selected through the help of a purposive sampling method. The researcher used a self-made questionnaire to collect the data on SD. The result of the study showed that moderated and average awareness of UG students towards SD and their were not statistically significant among the demographic variables of gender and communities. Only the economic dimension of the communities had significant differences shown out of three dimensions, and also, female students' mean scores were greater than male students'. In conclusion, the SD programme has benefited greatly from the university's increased awareness of the issue. Additional recommendations are offered to universities and colleges so that they can incorporate SD activities into their curricula and create a sustainable society for the next generation.

**Keywords** – *Sustainable Development, Under Graduate, Awareness, Social, Economical & Educational*

## Introduction

With a focus on preserving the present for the benefit of future generations, the idea of sustainable development has become a key priority for local, regional, and international

organisations and nations. The relevance and value of sustainable development are dependent on the growing attention given to the three pillars of the economy, society, and environment as defined by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) encompassing economy, society, and environment (**Michalos et al., 2012; Olsson, Gericke, & Chang Rundgren, 2015; UNESCO, 2005**). As a result, sustainable development not only addresses environmental challenges but also economic, social, and educational concerns. Due to the rising demands on society and the environment, worldwide action is required to build a more sustainable future (**Clayton & Radcliffe, 2018**).

In the modern day, sustainable development has various dimensions because it has expanded to embrace many different features and dimensions, the most significant of which are:

1. **The social dimension:** The social issue is closely related to economic development and growth, and that sustainable development can only be achieved through addressing social issues, among which the most important are the issues of unemployment and poverty. These issues can be seen as the missing piece in the treatment of poverty and growth because they are associated with social stability and security.
2. **The economic dimension:** The main goals of sustainable development were to advance the global economy.
3. **The educational dimension:** SD incorporates education to enhance sustainable development (SD) by integrating practices, values and principles of SD into all parts of education (**Uitto et al. 2011**).

#### **The responsibility of higher education:**

The role of higher education is to influence students' perspectives on sustainability and alter how future generations will view the value of sustainability. Education for Sustainable Development (ESD) has been viewed as a common solution to foster sustainability knowledge, values, behaviours and ultimately promote social transformation (**Zamora-Polo et al., 2019**). Through their educational systems, curriculums, syllabi, practices, and "green" university ideas, the younger generations are educating themselves on sustainability, such as environmental sustainability (**Hamid et al., 2017**). The Higher Education Partnerships for Sustainability (HEPS) project is a recent UK initiative. Working with 18 partner schools under the management

of forum for the future, a renowned nonprofit organization dedicated to sustainable development, this initiative aims to assist higher education institutions in delivering and sharing strategic sustainable development objectives (Cotton., M. F. Warren., Maiboroda., & Bailey; 2007).Kabadayi (2016) and Sterling (2012), emphasized that it is the duty of the educational system to equip graduates with the KSA and knowledge necessary to be viewed as agents of sustainable development both now and in the hazy future.

### **The relationship between higher education and sustainable development:**

In terms of operationalizing the various ways that sustainable development concepts, principles, and practices can be incorporated into teaching and learning, the relationship between ESD and the more general concept of sustainable development is complex and challenging to describe. The development of novel theories and technologies that form the foundation of sustainability is encouraged by higher education. Despite this, higher education institutions' contribution to society is likely underestimated (Fehlner, 2019). For many universities in the UK, ESD begins and ends with improving the sustainability of their infrastructures and energy use, with less attention being paid to the curriculum (Fiselier et al., 2017). As shown in a case study by Tierney et al. (2015) the University of Bristol's present curricula only partially combined ESD with explicit sustainability topics and another study conducted by Sterling (2014), comparable findings at the University of Plymouth, where only a few units were devoted to teaching about sustainability.

India responded to the sustainability agenda in the late 1990s in a similar manner UK. Since then, Indian educational policy initiated to support ESD and also supported by the recently released New Educational Policy 2020. In order to address sustainability demands, many higher education institutions in India are trying to build green and sustainable infrastructure. They also incorporated the notion of sustainable development into their curricula.

### **Objective of the study**

1. To study the awareness of Sustainable development on Under Graduate students.
2. To find out the level of awareness of Sustainable development on Under Graduate students.
3. To find out the statistically difference among male & female or General and Mishing students towards Sustainable development.

## Hypotheses of the study

1. There is no statistically difference between male and female students towards Sustainable development.
2. There is no statistically difference between General and Mishing students towards Sustainable development.

## Methodology

The researchers used the descriptive survey research method with the help of the Likert scale. The qualitative method was followed in this research. The population was drawn from all 2nd and 4th semester UG students in Assam State, and a total of 104 respondents were chosen as a sample from the population. Purposive sampling was used to collect data from the population.

Data was gathered by using a self-made questionnaire created by the researchers. Three categories were used in all statements. The following list includes these three categories:

### Sustainable development awareness statement for each category

Dimensions of the SD	Item
Social	1, 2, 3, 4, 5, 6, 7, 8, 21
Economic	9,10,11,13,14,16,18
Educational	15, 17, 19, 20

The questionnaire was used A positive item, 1 for strongly disagree and 5 for strongly agree, or alternative techniques used a negative item, 5 for strongly disagreeing and 1 for strongly agreeing, were used for the 5 point Likert scale and value.

The researchers used internal coefficient reliability (0.76) in this questionnaire and were very internally coefficient consistent. Dimension-specific subsections of Cronbach's alpha coefficients (0.64) were used for Sustainable development awareness. The questionnaire was reviewed by three specialists related to this paper.

The researcher prepared a Google form and shared it via messaging application Whatshap with each group chat as it is the fastest way of data collection. The data was analyzed by using SPSS Statistics software. The mean, SD, t-test, and percentage were used to analysis the data.

## Analysis of the study

Students' responses are based on items of awareness about sustainable development in the social dimension. When the data was analyzed by the researchers, the mean score and standard deviation for each statement item were displayed.

**Table 1: Awareness of SD towards social, economical and educational aspects:**

Q. no.	Items	N	SA	A	N	D	SD	Mean	SD
1	The sustainable development concept is clear to me.	104	18	48	23	10	5	3.63	1.0
2	Sustainable development can bring equality to our society.	104	14	53	22	10	5	3.6	1.0
3	Sustainable development is an anti-social act.	104	1	32	19	36	16	3.32	1.1
4	Sustainable development is the fear of a negative impact on our society.	104	2	42	24	19	15	3.54	.98
5	SD necessitates the adoption of as many renewable resources as possible.	104	10	48	26	14	6	3.4	1.0
6	Education for sustainable development emphasizes education for a culture of peace.	104	11	49	26	14	4	3.4	.98
7	Corporate social responsibility is irrelevant to sustainable development.	104	44	30	27	32	11	3.15	1.0
8	People in our society need to have a daily discussion about sustainable development.	104	14	49	21	16	4	3.5	1.0
9	Sustainable development requires economic development.	104	11	47	27	15	4	3.45	.97
10	SD will eliminate the economic crisis of all the peoples of the	104	3	35	35	29	2	2.7	1.0

	world.								
11	In my opinion, the government ought to offer financial assistance to entice more individuals to switch to environmentally friendly vehicles.	104	13	49	24	14	4	2.49	1.0
12	SD requires creating and maintaining new jobs on average.	104	6	50	27	17	4	3.35	.95
13	SD competes in national and international projects to be self-financed.	104	4	45	31	20	4	3.24	.93
14	SD always advocates for cost-cutting policies in the world..	104	8	44	32	17	3	3.35	.94
15	Modern science and technological advancements will solve our environmental problems.	104	11	32	38	21	2	3.27	.97
16	Humanity must eliminate all forms of waste in order to achieve sustainable development.	104	32	37	21	12	2	3.81	1.0
17	Students' knowledge of sustainable development needs to be educated in how to protect them against natures.	104	7	19	20	28	30	3.52	1.2
18	It is essential for sustainable development that people are aware of how the economy works.	104	9	35	22	25	13	2.98	1.19
19	I believe that men and women should have equal access to education and work opportunities worldwide.	104	6	46	26	21	5	2.74	1.0
20	All people must have access to quality education if sustainable development is to be achieved.	104	4	41	31	22	6	3.14	.98
21	Sustainable growth requires a	104	3	35	29	31	6	3.0	.99

	society where disputes are settled amicably through dialogue.								
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The 1<sup>st</sup> respondent item very clearly shows that 68% of students are very mature about sustainable development. 63% of students put their statement "Sustainable development can bring equality to our society (items no-2). 36% disagree & 16% strongly disagree with the 3<sup>rd</sup> statement, "Sustainable development is an anti-social act." Only 1% of students strongly agree. And the fourth negative item was 34% of students select Strongly agree& Disagree options. Sustainable development is the fear of negative impact on our society. 58% of students are interested in the statement that sustainable development requires shifting to the use of renewable resources as much as possible, and 49% of students select the agree option for the 6<sup>th</sup> item, "Education for Sustainable Development emphasizes education for a culture of peace. Concerning item no. 7, the opinion of the students was selected (SA-40%, A-30%, N-27%, D-32%, & SD-11%) "Corporate social responsibility is irrelevant to sustainable development". People in our society need to have daily discussion about sustainable development, and 36% of students said that society needs to have daily discussion about sustainable development. 3% of students gave their opinion that sustainable development does not create an artificial environment for our lives.

Students' responses are based on items of awareness about sustainable development in the economic dimension. Statement 9 has a mean of 3.45 and 47% of students agree with it. 35% of students tick the "agree" statement that SD will eliminate the economic crisis of all peoples of the world. It is also very interesting that only 4% of students select the SD option on the statement No-10. Government economic policies should act if a country is wasting its natural resources. Statements 13 and 14: a total of 45% agreed option was chosen; the mean score was 3.24 & 3.35. Sustainable development must help to conserve our resources for future generations; the total agrees statement was 37% and the SA option was 32. Students' responses in the educational dimension result from items of awareness on sustainable development. SD requires creating new jobs on average; 50% of students select the agree option. Statements 20 and 21 have a very low percentage of students who agree with them; this sustainability is

creating the artificial environment of our lives and reducing the use of sustainable transportation commuting to campus.

**Level of Sustainable development**

Table no 1; it’s very clearly shown that maximum item apply into a moderate level of areas. All statements’ mean score was applying into 3 to 3.61. So it can be inferred that the UG students have a neutral awareness about Sustainable development.

Table 2:summarizes the results; into three dimensions of social (58.57%), economic (89.57) and educational (76.92%), students have a moderate level of awareness among UG students.

**Table -2: Levels of awareness on social, economical and education Dimensions**

Dimensions	Category	Frequency	M	SD
Education	Low	15.38 (N=16)	30.67	4.57
	Moderate	76.92 (N=80)		
	High	7.69 N=8)		
Economic	Low	7.69 (N=8)	22.03	2.08
	Moderate	89.57 (N=89)		
	High	6.73 (N=7)		
Social	Low	27.88 (N=29)	18.94	2.27
	Moderate	58.65 (N=61)		
	High	13.46 (N=14)		

\*\*\*Level of awareness: Mean: 1.00-2.5 low, 2.6-3.75 moderate, 3.75-5.00 high.

Table 2 summarises the results; into three dimensions of social (58.57%), economical (89.57) and educational (76.92%) students has a moderate level of awareness among UG students.

The Independent Samples T-Test was applied to identify the awareness scores towards sustainable development by gender and community-

**Table 3: Independent Samples T-Test Results of UG students on awareness of Sustainable development by Gender and Community**

Gender					
Social	Male	53	29.867	4.155	-185
	Female	51	31.5	4.867	
Economic	Male	53	21.66	2.26	-19
	Female	51	22.43	1.82	
Educational	Male	53	18.81	2.25	-.596



	Female	51	19.07	2.31	
<b>Community</b>					
Social	General	63	31.76	4.69	3.137
	Mishing	41	29	3.86	
Economic	Male	63	22.23	2.05	1.21
	Mishing	41	21.73	2.13	
Educational	General	63	19.39	2.15	2.59
	Mishing	41	18.24	2.29	

According to the results of table no. 3, the analysis in the awareness of the UG students does not show a significant difference in the sub-dimensions of social,  $t = -104$ ,  $p > 0.05$ , economic,  $t = 19$ ,  $p > 0.05$ , and educational,  $t = -595$ ,  $p > 0.05$  according to gender.

According to the results of table no. 3, there is no significant difference in the sub-dimensions of economic awareness among UG students ( $t = 1.21$ ,  $p > 0.05$  according to Gender). On the other hand, the awareness of sustainable development among UG students shows a significant difference in the dimensions of social  $t = 3.137$ ,  $p < .05$ , and educational  $t = 2.59$ ,  $p < .05$  according to Community.

### Finding of the study

i. The study revealed the degree of sustainability awareness among UG students. "Social" was the first dimension. A majority of students—50%, to be exact—put the statement and other debatable associated views of SD in the first table's item no. 1,2. 48% concur with the claim that pupils are highly aware of their available resources and intercultural harmony in item (2 and 3). Statement submitted for 50% agreement (items 5, 6) of the creation of a sustainable culture through various campus activities like building frameworks for institutions (**Inga & Pereira, 2021**). On the eighth statement, "People in our society need to have everyday discussions on sustainable development," 49% chose the agree option.

The economy was the second dimension. They need to make their toolkit for crafting policy, in particular, more market-oriented, integrative, and inclusive of the concerns of emerging nations. A defined agenda is also necessary for progress, with particular emphasis placed on those areas where the risks of unsustainable development patterns are greatest, such as the management of other natural resources and climate change (**Hynes & Wang, 2012**). Over 58% students predicted government economy policy should increased sustainable production.

35% students believed that SD will eliminate the economy crisis in the world (item -10) and same opinion was shown on the study of SD and its role in containing crises (**Al-dabbagh, 2020**). **AL Azzawi**. (2013), indicate that, the SD aims, as they are not limited to raise the level of national income, but progress in areas of life whether education, health and environmental balance.

ii. The dimension of educational aspect, over 44% of respondents predicted including the element of (item – 15). Similarly 50% students predicted including elements of SD (Item – 19, 20, 21). Majority statement received agree statement on key parts of SD. these students love their environment, in contrast, as students learned basis science and they only needed to understand the content of syllabus without deals.

Since the mean scores for all items 1 through 9 are high, it is obvious that the responder has a moderate knowledge of the SD. This result is comparable to that of **Zainordin et al. (2019)**, revealed that the lack of exposure to and attention to SD among Malaysian UG students did not bode well for SD awareness. **Zeegers and Clark (2020)**, citing this study's findings, have stated that social and economic dimensions constitute the foundation of the SD and that none of these components can be neglected.

Programs should be adaptable and incorporate sustainable, student-centered learning in order to promote the teaching of knowledge of SD in higher education institutions. The majority of the students come from a wide range of socioeconomic backgrounds, and they participate in faculty-organized activities that promote student involvement in various SD-related initiatives and foster their innovative thinking. This study supported by **Mojilis et al., (2020)**, who highlighted that students has moderate level of awareness about SD. Reported a level of awareness of 70% among students have moderate awareness. This supports the nation that students globally are at a similar level.

iii. The study looked at UG students' understanding of SD in relation to gender and community demographic variables, specifically in terms of the social, economic, and educational aspects. The analysis was compared to the findings of other studies on the awareness of UG students. In the research the first demographic variable was awareness of SD among UG students in

relation to gender. The results has been shown there is no significant on gender different on the social aspect towards Sustainable development of UG students and the awareness of UG female students on SD is determined to be the higher than the male students . No other significant are detected terms of gender in any of the sub-dimension of the economic and educational aspect. Female UG students of the economic and educational aspects higher than average of the male students about the awareness of sustainable development. The situation is similar to the results shown of **Bauri et al. (2018)**, study of attitude of the PG students towards SD. **Cifuentes et al. (2006)**, showed that female pupils in Spanish schools frequently had a strong understanding of the environment and were more inclined to commit to living sustainably. Female students possess strong moral principles and are capable of distinguishing between environmental good (**Patai et al, 2015**) and compared to male students, female students participated in various environmental programmes more efficiently.

For the second sub-problem of the study, the awareness of UG students towards SD on community, according to the results, there is no significant difference in the community's sub-dimension of economy. On the other side there is a significant difference according to the community's dimension of social and educational aspect. **KundaShamakuwar (2016)**, due to hereditary reasons, economic reasons, and available facilities, the perception and problem-solving abilities are somewhat different for mishing students. Economical aspect of the sub-dimension of the Community's has no significant difference between general and Mishing students. **Mahambare et al. (2018)**, explored those caste-based differences in community levels among young caste students by their completed years of formal schooling. According to **Planning Commission (2007)**, the class should have 50.8 percent SC/ST/OBC students. He believed that offering opportunities to the group and making certain specific concessions would result in social and academic equality. In a study was conducted, and the findings revealed that a higher proportion of ST (mishing students) received their middle level education in regional language. **Kirpal. (1973)**, demonstrated that the SC/ST pupils in her study had excellent perceptions of the general students.

## Conclusion

Currently, sustainable development includes all of the fundamental requirements for a good life in the society, including good health, education, a clean environment, prosperity, and

stable political institutions. Students who are knowledgeable about sustainable development should be motivated to others, to build a harmonious educational community and be prepared to face the challenges of the twenty-first century by adopting sustainable lifestyles for a better future. This programme can be start from all educational campus, where university plays a crucial role in transforming the society. Finally, education has the key role in attaining the objective of SDGs and hope that SD goals will be full-fill by 2030.

### **Educational implication**

1. Graduate students who understand sustainability are more likely to be conscious of our interdependence in the society where we live in. Therefore, through their instructors, colleges play a key role in educating and improving students, knowledge and behaviour toward sustainability development.
2. To effectively promote sustainability and sustainable development in educational field, UG student needs additional training, education and development.
3. To enhance the level of competence of SC/ST students in respect to SD. The principles should arrange specific classes, courses and aptitude development programmes on SD.
4. The institution's primary goal should be to raise the Sustainable development concept among ST students and put them on par with students in the general category.
5. Teachers, students, and administrators should all be motivated to carry out sustainable development in proper manner.

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