

## Awareness on Biodiversity Among Secondary School Students

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### ARTICLE DETAILS

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**Research Paper**

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*Biodiversity, Sustainable living, Awareness*

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### ABSTRACT

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Awareness on Biodiversity is not merely a concept for the students to study, but a need for them for a sustainable living. It is a realisation of the value, importance and the need for conservation and sustainable use of the same for a fruitful future. Awareness on biodiversity sow the seeds of realisation of the dos and don'ts that should be followed by each of us though we are always consumers of mother Earth. And also, this realization turns to action for the wellbeing of Biodiversity.

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Life on earth constitutes variety and variability and is known as biodiversity. Awareness on Biodiversity is that to know, to identify and to make essential steps for its conservation. It is very essential to have a thorough knowledge on biodiversity and how to deal with it in the present scenario of fast and furious development. Man brought lot of changes on biodiversity with his great skill and adaptive power in order to upgrade the life style and need. It results in a great loss of biodiversity as an after effect of environmental problems.

Awareness on biodiversity is the understanding of the variety of life on Earth and the importance of its conservation. It is also the willingness to take action to protect biodiversity.

- Millennium Ecosystem Assessment (2005)

In order to aware a mass on biodiversity, it is important to make it possible from the base itself. Of course, that should be initiated with the students and can be fulfilled through education. Education inculcates human and make them conscious and knowledgeable about biodiversity. For an action, awareness is very much important. The main aim behind the action is to make familiar and sensitize the young growing minds about the biodiversity and the main problems faced by it. The awareness of students on biodiversity helps them to play their role on society very efficiently and effectively. Hence,

it is very necessary to know that how far the school students are aware about the biodiversity and its problems.

### **OBJECTIVE OF THE STUDY**

- To identify the level of Awareness on Biodiversity among Secondary School Students
- To compare the level of Awareness on Biodiversity among Secondary School Students based on sub sample, locale (urban and rural)

### **HYPOTHESIS OF THE STUDY**

- There is a significant difference in the level of Awareness on Biodiversity among Secondary School Students
- There is a significant difference in the level of Awareness on Biodiversity among Secondary School Students based on sub sample, locale (urban and rural)

### **METHODOLOGY**

In the present study Normative Survey is used.

### **POPULATION**

Population of the present study is Secondary School Students and in Kerala state.

### **SAMPLE SELECTED FOR THE STUDY**

Sample of the study constitutes 300 students of the eighth and ninth standard from Thiruvananthapuram district

### **STATISTICAL TECHNIQUES**

The statistical techniques employed for the present study are

- Percentage analysis
- Mean
- Standard Deviation

- t test

**ANALYSIS AND INTERPRETATION**

**Level of Awareness on Biodiversity among Secondary School Students from the whole sample**

Level of Awareness on Biodiversity among Secondary School Students from the whole sample. The whole sample contains 300 students studying in secondary school.

**Table (a)**

*Mean and standard deviation of Awareness on Biodiversity among Secondary School Students*

<b>Sample</b>	<b>Number</b>	<b>Mean</b>	<b>SD</b>
<b>Whole</b>	<b>300</b>	<b>28.2</b>	<b>1.19</b>

From table (a), it can be seen that the mean score of Awareness on Biodiversity for the whole sample is 28.2 and standard deviation is 1.19. The level of Awareness on Biodiversity for the whole sample are given in the table (b)

**Table (b)**

<b>Variable</b>	<b>Sample</b>	<b>Number</b>	<b>Levels</b>					
			<b>Low</b>		<b>Average</b>		<b>High</b>	
			<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
<b>Awareness on Biodiversity</b>	<b>Whole</b>	<b>300</b>	<b>25</b>	<b>8.3</b>	<b>232</b>	<b>77.3</b>	<b>43</b>	<b>14.4</b>

From table (b), it is observed that the majority of secondary school students exhibit an average level of Awareness on Biodiversity (77.3%), while 14.4% demonstrate a high level of such awareness. Conversely, only 8.3% showcase a low level of Awareness on Biodiversity.

**Level of Awareness on Biodiversity among Secondary School Students based on sub sample, locale (urban and rural)**

Level of Awareness on Biodiversity among Secondary School Students from the whole sample. The whole sample contains 194 students from Urban Secondary Schools and 206 students from Rural Secondary Schools.

Table (c)

Variable	Locale	Sample	Mean	S. D
Awareness on Biodiversity	Rural	125	65.98	5.56
	Urban	175	65.01	5.59

The table (c) shows that mean score for students of urban locale have biodiversity awareness 65.98 and standard deviation 5.56. the mean score on biodiversity awareness of secondary school students belongs to rural area is 65.01 and standard deviation 5.59.

The number and percentages of rural and urban school students in each level are given in table (d).

Table (d)

Levels	Rural N = 194		Urban N = 206	
	Number	%	Number	%
High	112	13.89	115	12.15
Average	170	74.53	168	64.15
Low	18	22.99	17	21.59

It is inferred from the table (d) that 13.89%, 74.53%, 22.99% of rural secondary school students have high, average and low levels of Awareness on Biodiversity respectively. From the table it is also found that 12.15%, 64.15%, 21.59% of urban secondary school students have high, average and low levels of Awareness on Biodiversity respectively.

**Comparison of Awareness on Biodiversity among Secondary School Students on the basis of Locale (using t test)**

The responses of the rural and urban Secondary School Students were compared with respect to their Awareness on Biodiversity so as to find out that there is any significant difference between the means of two groups. The researcher calculated the mean and standard deviation of data in order to find out the significant difference of rural and urban Secondary School Teachers in their Biodiversity Awareness. The data and the result of the test of significance were shown in table (e)

Table (e)

Variable	Locale	Number	Mean	S. D	t value	Result
Awareness on Biodiversity	Rural	125	67.38	5.59	2.93	Significant at 0.01 level
	Urban	175	64.03	5.69		

Table (e) indicated that the computed t value is 2.93. The critical value of t with 198 degrees of freedom at 0.01 level of significance is 2.58. The computed t value is greater than the critical value. Hence there is a significant difference between the mean Awareness on Biodiversity scores of rural and urban secondary school students at 0.01 level. Since the mean value of rural secondary school students (67.38) is greater than that of urban secondary school students (64.03). That is, rural Secondary School students have more Awareness on Biodiversity.

**FINDINGS**

### **Findings based on the level Awareness on Biodiversity among Secondary School Students with whole sample**

1. The mean scores of Awareness on Biodiversity of selected sample are 28.2
2. Standard deviation of Awareness on Biodiversity of selected sample are 1.19.
3. Percentage analysis shows that only 8.3% of Secondary School Students belongs to high Biodiversity Awareness group
4. 77.3% of Secondary School Students belongs to average Biodiversity Awareness group
5. 14.4% of Secondary School Students have low Biodiversity Awareness group

From the findings, it could be assessed that majority of Secondary School Students have average level of Awareness on Biodiversity.

### **Findings based on the Awareness on Biodiversity among Secondary School Students with sub sample, locale (t test)**

1. Comparison of Awareness on Biodiversity scores of Secondary School Students on the basis of locale reveals that the compound 't' value is 2.93.
2. The critical value of t with 198 degrees of freedom at 0.01 level of significance is 2.58. The computed t value is greater than the critical value.
3. There is a significant difference between the mean Awareness on Biodiversity scores of rural and urban secondary school students at 0.01 level.
4. The mean value of rural secondary school students (67.38) is greater than that of urban secondary school students (64.03).

That is, from the findings it could be assessed that rural Secondary School Students have more Awareness on Biodiversity than that of Urban Secondary School Students.

### **SCOPE OF THE STUDY**

The people today are well known of the surroundings or environment they live. They know what is biodiversity but, are not aware of what actually the biodiversity is, what is its importance, what is human role in maintaining the same. Students know some basics on biodiversity and how to behave from their informal surroundings but that is not enough in the era of AI. As per the study, average number of students have Awareness on Biodiversity. That means the students are only stocked enough for a

cognitive or a materialistic awareness. The students should have exposure to a practical experience of the same. The study reveals the level of students in the awareness on biodiversity and based on the same, the authorities or government should have to take chances for a practical or simulation-based experience for the students on what they can do to protect biodiversity. Also, it helps students to take part in sustainable development.

In the scenario of vast sources of knowledge acquisition, it is important to ensure the authenticity of the sources that the students used as their primary data resource. The authorities can deal this by ensuring or providing authentic data through library (both physical and virtual). Otherwise, schools can conduct interactive discussions with environmentalists, activists and the like. The main thing to kept in mind is that, students have a basic backup knowledge and so we have to inculcate the same with adding something more in the next level of knowledge cycle. Dealing with actual forests by having trucking and excursions helps the students to aware the biodiversity and its facts. Miyawaki forests in the school also adds more for this.

Mere awareness doesn't have anything to do. So that, student's understanding on the importance on the biodiversity and its conservation should be evaluated and rewarded. Students' performance in the study reveals their knowledge and awareness on biodiversity. By this it can determine how far the school curricular and co-curricular activities influences the student's knowledge to become awareness and to become an action. With the understanding of student awareness, the authorities or government can recheck and implement new programs and initiatives, both curricular and co-curricular for the students.

The study evaluates Awareness on Biodiversity among secondary school students by encompasses the knowledge, attitude, perception and approach of the student on biodiversity and its conservation. Even the study is confined to secondary school students, it can be done with other levels of students too. Also, it can be conduct over the course in an academic year.

Here, it is assessed that rural Secondary School Students have more Awareness on Biodiversity than that of Urban Secondary School Students. The reason for this is about the availability of space for concern experiential activities or simply doing activities. So that for the betterment of Awareness on Biodiversity among Secondary School Students it should make plans for better utilization of the space for biodiversity awareness related activities that are already mentioned.

This study points on the awareness of secondary school students on biodiversity, its importance and conservation. This helps to make some drastic changes in the curricula from mere material study to a real practical experience. By that, the knowledge of students upgraded to awareness, then to action. This molding helps the students to live a heartfelt sustainable life which have no harmful effects on biodiversity. So, while deal with a curriculum regarding the biodiversity awareness should consider the given aspects.

1. Curriculum should emphasize more practical or real-life experience for the students other than mere knowledge giving.
2. Organize trips, trucking, discussion, conferences, simulation and the like for the students for compare them with what they know on biodiversity and what don't know on biodiversity.
3. Training programs to deal with biodiversity, to make students familiar with Miyazaki Forest.
4. Group activities should be enhanced because human is a social animal and biodiversity is a social concept that everyone should be aware of while living on earth.
5. Provisions for better utilization of the spaces available to the institution for various biodiversity awareness enriched activities.

## CONCLUSION

Biodiversity awareness is a basic thing that everyone should know in the present scenario of global warming climate change and the like. By prioritizing this the human skilled to deal with biodiversity to meet the needs without harming any others. It is important to have awareness on these basic things like biodiversity though they are much close enough to our life. The study is done to understand secondary school students' awareness on biodiversity.

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