

A Study on Environmental Awareness of Elementary Students in Nongjriong Village, in East Khasi Hills Districts, Meghalaya

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ABSTRACT

This thesis examines the level of environmental awareness among elementary school students in Nongjrong Village, East Khasi Hills District, Meghalaya. Using a descriptive survey method, the study covered 100 students from Classes V–VIII and employed the Environmental Awareness Scale developed by Haseen Taj. The findings show that most students had below-average environmental awareness, with 55% falling in the below-average category and 27% in the low category. The study found no significant difference in environmental awareness between male and female students. It also compared awareness levels based on school management and found differences between government-aided and private school students. The thesis concludes that stronger environmental education, practical school activities, community participation, and awareness programmes are needed to improve environmental responsibility among elementary students in Nongjrong.

Keywords: *Environmental Awareness; Elementary Students; Nongjrong Village; East Khasi Hills; Meghalaya; Environmental Education; Gender; School Management; Sustainability; Rural Education.*

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CHAPTER ONE INTRODUCTION

Environmental awareness is the foundation of understanding environmental literacy, environmental education, environmental issues and environmental programmes. It serves as the initial step towards ensuring environmental security for sustainable development. It is widely acknowledged that the environment is elaborate and connected to human beings, thereby impacting their health and overall well-being. It enhanced our environment through increased awareness and education. It also helps the children to be impartial about resources, environmental pollution, soil erosion, deforestation and protection of endangered plants and animals. It also plays a significant role in enhancing environmental protection efforts. Education is an advance that yields long term benefits serving and valuable assets (Kumari, 2018).

Environmental awareness is crucial for the preservation and prosperity of our planet. It entails recognizing the need to safeguard the earth and developing an understanding of the natural world and the consequences of our action. Our choices and behavior can either contribute positively to the environment or cause further harm. Adopting an environmentally friendly lifestyle involves making changes to minimize our negative impact on the natural world.

Human activities have a significant impact on the environment, including pollution of land, air and water, excessive exploitation of natural resources, and sustainable energy consumption and waste generation. These actions not only affect ecosystems, wildlife, and climate but also pose risk to human health and well-being.

There are numerous environmental issues, and it is possible to prioritize certain areas of concern. However having a general awareness of environmental issues and practicing good environmental stewardship can bring about a wide range of benefits. The approach to raising awareness may vary depending on the specific circumstances of our business (O'Regan Victoria).

➤ *Important of Environmental Awareness in School*

Environmental awareness in educational institutions is of utmost importance as it not only cultivates students' gratitude towards our planet, but also fosters wholesome habits, ignites the potential of future leaders, and enhances the overall school environment.

Schools have the ability to enhance environmental consciousness by incorporating it into the curriculum, providing outdoor learning experiences, implementing waste reduction initiatives, collaborating with local groups, and organizing events and activities related to the environment. This can contribute to the development of a more environmentally aware and responsible community, which is essential for the sustainable future of both people and the Earth.

While numerous methods are available to enhance environmental consciousness in educational institutions, the following are among the most impactful.

- *Organize Events and Activities*

Educational institutions have the opportunity to organize various events and activities, including inviting guest speakers, screening films, or holding nature festivals, in order to raise awareness about the environment and motivate students to engage with environmental concerns.

- *Celebrate Special Occasions to value the Environment*

Certain days in the human calendar are specifically designated to raise awareness about the environment, like World Environment Day on the 5th of June. We can encourage children to celebrate and comprehend the significance of these days in the calendar.

- *Incorporate Environmental Concepts into the Academic Program*

Integrating environmental concepts into the educational syllabus can facilitate students in comprehending the intricacies of the natural world and the consequences of human activities on the environment. This may encompass subjects like preservation, sustainable energy, and contamination.

- *Set an Example*

It is a well-known fact that actions carry more weight than mere words. It is crucial for us to set an example for children, enabling them to observe and learn from us. One way to achieve this is through teachers in schools collectively planting trees and encouraging their students to do the same.

- *Establish Recycling and Waste Minimization Initiatives*

Schools have the ability to establish recycling initiatives and motivate students to minimize waste through the utilization of reusable containers and cutting down on disposable items.

Promote Outdoor Education: Bringing students outdoors to explore the environment and ecosystem can cultivate a deeper respect for nature. This may include excursions, nature hikes, or outdoor science classes.

- *Collaborate With Local Groups*

Schools have the opportunity to collaborate with nearby organizations, like conservation groups or environmental NGOs, in order to raise awareness about the environment and participate in conservation and restoration projects. (December 29, 2022)

- *The Role of School in Promoting Environmental Awareness*

Recognizing the importance of environmental awareness in sustainable development, schools have a crucial role to play in advocating for it. Given the growing apprehension regarding climate change and other environmental challenges, it is essential for schools to integrate environmental education into their curriculum to cultivate knowledgeable and conscience individuals.

- *Offering Education on Environmental Matter*

Schools have the opportunity to offer environmental education to students across various educational stages. This type of education encompasses knowledge about the environment and the consequences of human actions on it. It can be integrated into a range of subjects, including science, geography, and social studies. Students can gain insight into various environmental concerns, such as climate change, pollution, and the decline of biodiversity. Additionally, they can acquire knowledge about sustainable development methods and ways to minimize their environmental footprint. Environmental education aids students in cultivating a more profound comprehension of the natural world and their place within it.

- *Promoting Environmentally-Friendly Initiatives*

Schools have the ability to promote sustainable practices by incorporating them into their daily operations. This encompasses measures like minimizing energy usage, promoting recycling, and minimizing waste generation. Additionally, schools can inspire students to embrace sustainable practices, such as utilizing public transportation, minimizing plastic consumption, and conserving water.

- *Raising Awareness Through Campaigns and Initiatives*

Schools have the opportunity to raise awareness among students and the broader community through various campaigns and initiatives. These efforts may involve activities like planting trees, organizing clean-up drives, and conducting awareness campaigns on different environmental issues. By engaging in such activities, students can gain a deeper understanding of the significance of environmental care and be motivated to take proactive measures.

- *Inspiring Students to Drive Change*

Schools can inspire students to make a difference beyond the confines of the classroom. This can instill a sense of responsibility in them and motivate them to take action in safeguarding the environment. By providing necessary resources and support, schools can empower students to initiate their own environmental projects, such as establishing community gardens, implementing recycling programs, or advocating for environmental policies at the local level. By empowering students to take the lead, schools can foster environmental awareness and encourage positive environmental transformations.

- *Collaborating with the Community*

Schools can also collaborate with the wider community to promote environmental awareness. This can be achieved through partnerships with local environmental organizations, active participation in community events, and encouraging students to volunteer for environmental causes. By engaging with the community, schools can foster a collective effort towards raising environmental awareness and driving action. (Chauhan 2023).

- *About Nongjrong Village*

Nongjrong village is located in the East Khasi Hills District of Meghalaya. It is approximately 50 km away from Shillong. It falls under the Mawkynrew constituency. The village is famous for the sunrise view as many tourists from India and abroad visit to see the stunning sunrise. In order to see this beautiful cloud floating on top of the hills, tourists will have to visit the spot early in the morning before the sun starts to rise. The best time to visit and witness the beautiful sunrise is from November to February. It is also famous for its orange. The Khasi mandarin orange is cultivated by many peoples of Nongjrong Village. These oranges are then sold in the market to earn their living. The people living in the village consist of only the Khasi people. They stay at the top of the hill and for cultivating the people will have to go down the hills to cultivate their crops. The crops harvested in this area are paddy, maize, tomato, etc. The village is surrounded on three sides by three rivers: the Umngot River, The Wah Umli River and the Wah Tangphar.

- *Need and Justification of the Study*

Environmental awareness is of utmost importance in providing elementary schools with knowledge about the environment and their surroundings. This awareness can bring about a positive change in students' lives and encourage them to think about ways to keep the environment clean through organized awareness programs in schools. These programs help students understand the

significance of the environment, which is essential for our survival, providing us with clean air, water, and food. Education should emphasize that every child should learn new ways to keep the environment clean. The unique habits and personalities of children allow them to share their experiences and teach other students to do good things.

Environmental awareness should be incorporated as a classroom lesson to remind students to keep the environment clean. Through school-organized programs, students should be encouraged to develop a competitive spirit and guide others towards good habits. In today's generation, it is crucial to teach students good values, as technology has led to an increase in negative habits. The current state of the environment is highly polluted, affecting the lives of people and all living organisms that depend on it for food and sustenance. Environmental issues have become globalized, posing problems for humanity.

In Nongjrong, where the village is situated in a rural setting, fostering environmental awareness holds significant importance. Rural communities often lack awareness regarding environmental sustainability. However, through education, individuals can learn to utilize their surroundings responsibly, leading to improved quality of life. Organizing various programs focused on environmental protection and cleanliness can be instrumental in achieving this goal.

Given the village's status as a tourist destination, educating its residents becomes even more imperative. By instilling knowledge about maintaining cleanliness in the surroundings, both locals and tourists can contribute to preserving the area's natural beauty. Recognizing the value of nature is essential for all, and everyone should take an active role in caring for and protecting the environment. This starts with personal responsibility, setting an example for others to emulate.

Schools play a crucial role in this process, as they provide a platform for instilling environmental consciousness from a young age. By teaching students the importance of proper waste disposal and demonstrating habits like using designated bins for plastic and food waste, schools lay the foundation for responsible behavior. Through consistent practice within the school environment, students develop a sense of ownership and preservation that extends beyond the classroom and into their homes and communities.

➤ *Statement of the Problem*

The statement of the problem is "A study on the Environmental Awareness of Elementary Students in Nongjrong Village, in East Khasi Hills Districts, Meghalaya "

➤ *Operational Definition*

- **Environment:** Environment refers to the surroundings or conditions in which individuals, animals, or plants exist.
- **Environmental awareness:** Environmental awareness involves developing concern and sensitivity towards environmental issues.
- **Elementary Students:** Students are volunteer participants selected from the student population from elementary schools in Nongjrong village.

➤ *Objective of the Study:*

- To find out the level of environmental awareness of elementary school students.
- To compare the level of environmental awareness of elementary school students based on gender.
- To examine the level of environmental awareness of elementary school students based on management.
- To provide suggestions to foster more environmental awareness of elementary school students.

➤ *Hypothesis of the Study*

- Ho1 There is no significant difference in the level of environmental awareness between male and female students
- Ho2 There is no significant difference in the level of environmental awareness based on the type of management.

➤ *Delimitation of the Study*

This present study is delimited to class V-VIII student due to the lack of time and financial constraints.

➤ *Conclusion*

Environmental awareness initiatives in elementary schools is a critical role in educating young students about the importance of sustainability and conservation. By providing the students with a foundation of knowledge about environmental issues, such as deforestation, pollution, and climate change, schools play a crucial role in shaping the future. This education not only equips students with the awareness and understanding necessary to make decisions about their impact on the environment. As elementary school programs come to an end, it is essential for teachers to continue to educate these concepts throughout students' academic careers and beyond, ensuring that they grow and develop into environmentally responsible citizens who actively work towards creating a more sustainable world.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

➤ *Introduction*

A literature review serves as a comprehensive compilation of previous research conducted on a specific topic. Its purpose is to systematically list, describe, summarize, objectively assess, and clarify the findings of this prior research. By providing a theoretical foundation, it aids the author in determining the direction and scope of their own research. Additionally, a literature review delves into published information within a particular subject area, and at times, within a specific time frame. While it can be a simple summary of various sources, it typically follows an organized structure that combines both summary and synthesis. This written overview encompasses significant writings and other relevant sources pertaining to the chosen topic, such as scholarly journal articles, books, government reports, and websites. Each source is described, summarized, and evaluated within the literature review.

➤ *Review of Related Literature*

Torri, (2013) conducted a study focusing on environmental awareness training within the elementary education system. The study aimed to explore how theories of environmental ethics could be integrated into the Romanian curriculum at the primary level, as well as how to effectively implement environmental awareness training for student. The result of the study revealed that the application of environmental ethics in the curriculum varied between urban and rural environments. Specifically, the study found that individuals in rural areas exhibited a consistently high level of environmental awareness compared to their urban counterparts. The average coefficient value for individuals in rural areas ranged between 7.10 and 7.82, which was lower than the average coefficient value observed in urban areas.

Maravic, M., Cvjeticanin, S., & Ivkovic, S., (2014) conducted a study on the level of environmental awareness among students in the Republic of Serbia. The primary objective of the study was to develop and analyze the environmental awareness levels of students in both primary and secondary schools. The sample consisted of 198 students, selected using a descriptive method. The results of the study indicated that there was no significant difference in the level of environmental awareness between students in high schools. However, the study did find that there was also no significant difference in the level of environmental awareness between students in high schools and those in agriculture schools.

Rao.u (2014) conducted a study on environmental awareness in ancient India. The aim of the study was to find out the rich ancient India tradition of taking care of the environment. The result found that effort is made to understand the environment awareness that was prevalent in ancient India and bring out the importance related to the present scenario. However, the study showed that nature can take care by itself as a human being to be aware of the repercussions to the action on the environment.

Simekli, (2014) conducted a study on an implementation to raise environment awareness of elementary education students. The aim of the study indicates the environment education practices on elementary education student awareness of the environment and the problem in their environment. Descriptive and content analysis were used to analyse the data. The result found that there has been an increase in the number of students who had the problem, the cause of the problem in the environment and proposed solutions for those problems. However, the result revealed that there has been an increase in the number of students who volunteer to take part in environmental activities within the school or out of the school.

Ali (2015) conducted a study on environmental awareness level among Secondary school student in Terengganu, Malaysia based on different variables. The aim of the study was to find out the difference of environmental awareness of student related to age and gender. The sample consisted 600 students including both boys and girls. Survey method is used to select the sample of the study. The study revealed that the level of environmental awareness is low. It also indicates that there are no significant differences found with respect to age and related to the environment awareness of the student. However, the study found that the significant different in the environmental awareness of secondary school student belonging to different age group.

Panigrahi, (2016) conducted a study on the environmental awareness of secondary school students in Boudh District. The objective of the study was to assess the level of environmental awareness among secondary school boys in comparison to the overall group of boys and girls. The study utilized a survey method to gather data. The result of the study indicated that there was no significant difference in the mean level of environmental awareness between boys and girls. However, it was observed that boys displayed slightly higher levels of environmental awareness compared to girls.

Bhartia, (2017) conducted a study on the assessment of environment awareness among the general public of Assam (India) with the aim to provide access about the environment awareness among the people of Assam. The study is conducted by a descriptive survey method. The present study revealed that the female of Assam is more aware in differential to that of male of Assam.

Cynk, (2017) conducted a study on the environmental awareness of students from Poland, Slovakia, and Ukraine, focusing on selected results. The study aimed to assess the level of environmental knowledge, values, and attitudes among university

students in Central Eastern Europe. The sample for the study included 130 students, gathered using the snowball sampling technique. The results of the study indicated that the respondents expressed a positive attitude towards environmental conservation, but their environmental awareness was primarily based on information. Despite this, the study also suggested that participation in environmental research and production could potentially enhance their environmental awareness.

Patonah, (2017) conducted a study on the environmental awareness profile of pre-service elementary school teachers. The purpose of the study was to assess the level of environmental knowledge and concern among pre-service elementary school teachers. The study sample included 164 participants. The results indicated that in order to cultivate a strong environmental awareness and promote action, prospective elementary school teachers need to be well-prepared. Interestingly, female students demonstrated a higher level of concern for the environment compared to their male. However, the study also revealed that many pre-service elementary school teachers rely on motor vehicles, such as motorcycles, rather than choosing more sustainable modes of transportation like walking. This suggests a need for further education and awareness-building in the realm of environmental sustainability among future educators.

Danielraje, (2019) conducted a study on the environmental awareness of students at the higher secondary school level. The purpose of the study was to provide recommendations for addressing issues related to environmental awareness. The sample for the study included 180 student respondents.

The results of the study revealed a significant difference in the mean score of environmental awareness between students in science and arts groups. Additionally, the study showed a difference in the mean score of environmental awareness between students in science and vocational groups. However, there was no significant difference in the mean score of environmental awareness between students in vocational and arts groups. Furthermore, the study found no significant difference in the mean score of environmental awareness based on gender or the type of institution attended by the students.

Danilo & Rogava,(2019) conducted a study on environmental awareness and practices among science students. The purpose of the study was to explore the relationship between environmental awareness and practices among science students at a public secondary school in Zambales. The sample size for the study consisted of 100 participants. The researchers utilized a descriptive correlation method to collect data. The findings of the study revealed that science students demonstrated a high level of awareness regarding the meaning of the environment and the current state of the environment, including associated issues and problems. However, the study also indicated a moderate correlation between students' awareness of environmental problem-solving and their level of commitment to addressing environmental issues.

Muldoon et al. (2019), conducted a study on environmental awareness of primary school-aged children in Brisbane, Australia. The primary objective of the study was to explore the level of environmental awareness among children of this age group, and to determine if factors such as gender or age had any influence on their awareness. The study sample consisted of 105 participants, and the results indicated that there were notable gender differences in attitudes and concerns regarding environmental issues. Interestingly, the findings contradicted previous research by Tuncer et al. (2005), which suggested that females were more environmentally conscious. However, the current study revealed that both genders showed similar levels of awareness in terms of providing correct responses.

Furthermore, the study highlighted that females were more inclined towards activities such as recycling and composting, indicating a higher level of engagement with environmental practices. These results provide valuable insights into the environmental awareness of primary school-aged children and emphasize the importance of further research in this area.

Boruwa,(2020) conducted a study on environmental awareness among elementary school students in Lakhimpur District, Assam. The objective of the study was to assess the level of environmental awareness among elementary school students in the district. The sample size included 200 adolescent students. The result indicated that there was no significant difference in the mean score of environmental awareness based on the gender of the elementary school students. However, students from urban areas demonstrated higher levels of environmental awareness compared to students from rural areas.

Sudhakar, et al. (2020) conducted a comprehensive study on the environmental awareness levels among secondary school students in the Guntur district of Andhra Pradesh. The primary objective of the research was to assess the extent of environmental awareness among students in the Bapatla Mandal area of Guntur District, Andhra Pradesh. The study sample comprised 240 students, selected using the normative survey method. The result of the study revealed that there is a noticeable lack of significant environmental awareness among the students, with variations observed based on gender and location. This highlights the need for targeted interventions and educational programs to enhance environmental consciousness among secondary school students in the region.

Goswami, (2021) conducted a study on the environmental awareness of secondary level students. The primary objective of the study was to assess the level of awareness and the impact of environmental issues among students. The sample for the study included 100 students. The results of the study indicated that only a small percentage of students demonstrated a satisfactory

understanding of environmental concepts, such as the factors contributing to environmental pollution, government initiatives to mitigate pollution, and the potential consequences of current pollution levels on future generations.

Bashir, et al. (2022) conducted a study on environmental awareness, attitudes, and behaviors among secondary school students in district Kulgam, Jammu and Kashmir, India. The primary objective of the study was to assess the level of environmental awareness among secondary school students and to examine how attitudes vary based on gender and school type (private vs. government) within the district. The study sample comprised 200 students, and the results indicated significant differences in both environmental awareness and attitudes among the students. Interestingly, male students demonstrated higher levels of environmental awareness, while female students exhibited a more positive attitude towards participating in environmental activities. Furthermore, the study revealed that students attending private schools displayed greater environmental awareness compared to their counterparts in government schools. However, government school students showed a higher level of positive attitudes and participation in environmental activities. These findings suggest that there are distinct differences in environmental awareness and attitudes among secondary school students in district Kulgam, with gender and school type playing significant roles in shaping these perceptions. Further research in this area could provide valuable insights for developing targeted interventions to enhance environmental education and engagement among students.

Biber et al. (2022), conducted a study on environmental awareness and attitudes of children attending nature-centered private kindergartens compared to those attending public kindergartens. The primary objective of the study was to investigate the environmental awareness and attitudes towards the environment of 5-6 year old children enrolled in nature-centered private kindergartens. The study sample consisted of 96 children within the 5-6 year age group. The findings of the study indicated that children attending nature-centered private kindergartens exhibited higher levels of environmental awareness and more positive attitudes towards the environment compared to their peers attending public kindergartens.

Dutta, J; Ngomle, Y., (2022) conducted a study on environmental awareness among elementary school students in the Papum Pare District of Arunachal Pradesh. The purpose of the study was to compare the level of environmental awareness between government and private elementary school students in the district. A total of 200 students, including 100 boys and 100 girls from 8 different standards, were randomly selected as the sample for the study. The results of the study indicated that the overall level of environmental awareness among elementary school students was average, with a mean value of 68.04. There was no significant difference in awareness between male and female students towards environmental education. Additionally, similar variability was observed between male and female students in terms of environmental awareness. However, a significant difference was found in the level of awareness between urban/rural and government/private school students towards environmental education. It was noted that students from urban areas and private schools exhibited a higher level of environmental awareness compared to students from rural areas and government schools.

Awalina et al.(2023). Conducted a study on early environmental awareness character education through coenzyme making training for students at Telkom Padang Elementary School. The purpose of the study was to cultivate a sense of environmental responsibility in students at a young age by providing training in ecozyme production. The findings of the study revealed that educating elementary school students on the importance of environmental preservation through waste processing into useful resources not only instilled a positive attitude towards the environment from an early age, but also fostered a sense of environmental stewardship among both students and the school community.

Bozak, Hegedis, and Hus, (2023) conducted a study on ecological awareness among third-grade students in primary schools. The purpose of the study was to assess the level of ecological awareness among third-grade students in two regions of Slovenia. The study sample included 200 students from elementary schools in the selected region. The researchers utilized a descriptive and non-experimental empirical method of pedagogical research. The findings of the study revealed that students demonstrated a strong ability to identify major polluters and displayed a high level of awareness regarding the importance of maintaining a clean environment. The students exhibited environmentally conscious behavior, such as separating garbage to conserve electricity and water. Additionally, the students showed a keen interest in learning more about environmental issues.

Olaya et al.(2023) conducted a study analyzing environmental awareness among fourth-grade elementary school students in public institutions in Lima, Peru. The study focused on 135 students from the "Maria Reiche Grosse" school in the district of Pucnte Picdra. The findings of the study revealed that students displayed a moderate level of environmental awareness in the cognitive and affective dimensions, while demonstrating a high level of awareness in the behavioral dimension. This suggests that students possess a positive attitude, value for the environment, and pro-environmental behaviors as a result of the knowledge and wisdom they have acquired.

➤ *Concluding Remark*

In conclusion, the literature review concerning elementary school students lies in understanding how to effectively integrate and evaluate environmental education within their curriculum. While there is acknowledgment of the importance of early environmental awareness, there remains a need for more targeted studies focusing on age-appropriate educational strategies and their impact on fostering sustainable behaviours among young children. Specifically, research could delve into developing

curriculum materials that are engaging and comprehensible for elementary students, as well as assessing the effectiveness of experiential learning approaches such as outdoor activities and school-based environmental projects. Moreover, there is a gap in understanding how teacher training and classroom practices influence the delivery of environmental education at this level, and how socio-economic factors and community involvement shape children's environmental attitudes and behaviours. Longitudinal studies are also lacking, which could provide insights into the lasting effects of early environmental education throughout a child's development and into adulthood. Addressing these gaps would contribute to enhancing the effectiveness and inclusivity of environmental education programs tailored for elementary school students.

CHAPTER THREE METHODOLOGY

➤ Introduction

Research methodology is a systematic and scientific approach utilized to gather, analyse, and interpret either quantitative or qualitative data in order to address research inquiries or test hypotheses. It serves as a blueprint for conducting research and assists researchers in staying focused by defining the scope of the study. Prior to selecting an appropriate research methodology, various factors need to be taken into account, including research limitations and ethical considerations that may impact the study.

In a scientific paper, the research methodology section outlines the different methodological decisions made, such as the methods employed for data collection and analysis, and provides justification for these choices. The rationale should elucidate why these methods are the most suitable for addressing the research question. A well-designed research methodology also ensures the reliability and validity of the research findings. Researchers can choose from three types of research methodology—quantitative, qualitative, and mixed-method—based on their research objectives. (Sreekumar Divya)

➤ Research Design

Research methodology explains the overall plan of a study. Considering the problem's nature, the investigator used a descriptive survey method for this scientific research. This method focuses on accurately describing the phenomenon or providing a clear picture of what is being studied.

➤ Population of the Study

In research, the term population refers to the entire group of individuals, objects or events that like to share common experience and deal with the study. Population is analytical step in research design as it set a boundaries and the area of the study finding (Ahmad, Alias & Razak, 2023)

The population of the present study consists of 100 elementary school students in Nongjrong and currently enrolled in East Khasi Hill District of Meghalaya. The distribution of the population of the present study is displayed in the table 1.

Table 1 Population of the Study

Sl. No.	Name of the school	Male	Female
1	Nongjrong Presbyterian L.P school	5	10
2	Nongjrong upper Primary school (SSA)	11	22
3	Nongjrong Government L.P school	3	8
4	Church of God secondary school (SSA)	17	24
	Total	36	64
	Grand Total	100	

➤ The Sample of the Study

The research was conducted in the school of Nongjrong village, and the present study has been identified through census survey sample technique.

The sample for this study consisted of 100 students which classified as 64 girls and 36 boys from different schools of Nongjrong village. Since the researcher found out that the population is less a study was conducted on all the students in the Nongjrong villages. The sample obtained from this study is a representation of the population.

➤ Description of the Tool

The research uses the Environmental Awareness Scale EAS-HT developed by Haseen Taj. The scale reflected various aspect of environmental such as.

- Bio- diversity (animals and plant)
- Relationship (among element of ecology)
- Overpopulation
- Food production
- Health and hygiene (diet and communicable diseases)
- Deterioration of habitats, and
- Pollution of air water and soil

➤ Meaning of Environmental Awareness

Environment has undergone revolution: population has exploded, physical resources are being depleted and technological growth has been phenomenal resulting in an unprecedented state such as, water and noise pollution, land destruction and

accumulation of pesticide residues. We have started to realize and are rather haunted by the feeling that the world is moving ahead long towards disaster, or perhaps we might have reached its brink and may soon destroy ourselves. It is, therefore, very urgent that we should diagnose this malady and adopt preventive and curative measures.

➤ *Scoring*

In scoring each correct answer is awarded a '1' score and incorrect answer is scored as '0'.

➤ *Standardization of the Scale*

For the purpose of standardization, the scale was administered on a student sample between the 10 to 18 years age group studying in upper primary classes.

The total sample was 100 students, having 36 boys and 64 girls.

➤ *Reliability*

A test score is said to be reliable when the scores are stable and trustworthy. Stability and trustworthiness depend upon the degree to which the score is an index of the true ability or is free of chance error. Reliability was established by the test- retest method.

➤ *Test –Retest Reliability*

Co- efficient computed by this method are frequently called co-efficient of stability. The test was given and repeated after 3 weeks on a group of 200 primary and higher primary school children and the correlation was computed between the first and second sets of score by using Pearson product moment correlation for environmental awareness scale was found to be 0.76 with time gap of 3 weeks between the two administrations which is significant at .01 level of significance.

Table 2 Test –Retest Reliability

Reliability	N	Coefficient of correlation	Index of Reliability $\sqrt{r}$
Test-retest	200	0.76	0.87*

➤ *Validity*

The validity of a test depends upon the fidelity with its measure, what it purports to measure. A test is valid when the performance which it measures corresponds to the same performance as otherwise independently defined. Validity is a relative term, and a test can be valid for a particular purpose or in a particular situation and, not in all situations.

To establish the validity of the tool construction, different types of validity measures were adopted. They are:

• *Content Validity*

Content validity is also called "curricular" validity and is most widely used in achievement testing. To establish content validity, the researcher analysed the content and also appraised the various aspects of the content. Then it was given to a few experts for their judgement. Based on their opinion and suggestions the tools were modified.

• *Predictive Validity*

The researcher administered the test to predict the future outcome. Such tests that forecast the future behaviour for which it is designed possessed predictive validity. The test was administered to a randomly selected sample. Results obtained from their performance, helped to establish the future outcome of the test, which was to be administered to the group chosen for the study.

• *Cross Validity*

The tool was administered to a group of 100 students other than the sample chosen for try-out of the scale. Hence, this cross check the validity of the scale.

• *Intrinsic Validity*

The index of reliability is something taken as a measure of intrinsic validity. It measures the dependability of test scores by showing how well obtained scores agree with their theoretically true values. This intrinsic validity is measured by the square root of the reliability.

The reliability co- efficient calculated for the test was 0.78 and 0.76 for split- half and test-retest method respectively. The square roots of split-half and test- retest are 0.88 and 0.87 which indicate high intrinsic validity of the scale.

- *Items validity*

The response obtained from performances of the students were analysed and item discrimination was computed. Only such items which had a significance at 0.05 and 0.01 level of probability were selected for the final scale, eliminating items which had low significance. This shows that the scale had item validity.

Therefore, the correlation established for the test-retest and split-half test and for the whole test indicate that the tool constructed is a reliable one. And the various types of validity adopted indicate that the tool is also valid.

➤ *Norms*

Based on the statistical result presented in table 3, z-score norms separately for boys and girls have been prepared and the same have been presented in table 4 and 5 respectively.

Norms for interpretation of the level of environmental Awareness have been presented in table 3.

Table 3 Norm for Interpretation of the Level of Environmental Awareness

Sl. No.	Raw score Range		z-score Range	Grade	Level of Environmental Awareness
	Boys	Girls			
1	89 & above	87 & above	+2.01 & above	A	Extremely High
2	78- 88	76 - 86	+1.26 to +2.00	B	High
3	67- 77	65 - 75	+0.51 to +1.25	C	Above Average
4	52 - 66	50 - 64	-0.50 to +0.50	D	Average
5	41 - 51	39 - 49	-1.25 to -0.51	E	Below Average
6	30 - 40	28 - 38	-2.00 to -1.26	F	Low
7	29 & below	27 & below	-2.01 & below	G	Extremely Low

Table 4 Z – Score Norms for Environmental Awareness Scale: Boys Group Mean: 59.00 SD: 14.70 N: 375

Raw score	Z- score	Raw score	Z- score	Raw score	Z- score	Raw score	Z- score
21	-2.58	41	-1.22	61	+0.13	81	+.49
22	-2.51	42	-1.15	62	+0.20	82	+1.56
23	-2.44	43	-1.08	63	+0.27	83	+1.63
24	-2.38	44	-1.02	64	+0.34	84	+1.70
25	-2.31	45	-0.95	65	+0.40	85	+1.76
26	-2.24	46	-0.88	66	+0.47	86	+1.83
27	-2.17	47	-0.81	67	+0.54	87	+1.90
28	-2.10	48	-0.74	68	+0.61	88	+1.97
29	-2.04	49	-0.68	69	+0.68	89	+2.04
30	-1.97	50	-0.61	70	+0.74	90	+2.10
31	-1.90	51	-0.54	71	+0.81	91	+2.17
32	-1.83	52	-0.47	72	+0.88	92	+2.24
33	-1.76	53	-0.4	73	+0.95	93	+2.31
34	-1.70	54	-0.34	74	+1.02	94	+2.38
35	-1.63	55	-1.27	75	+1.08	95	+2.44
36	-1.56	56	-1.2	76	+1.15	96	+2.51
37	-1.49	57	-0.13	77	+1.22	97	+2.58
38	-1.42	58	-0.06	78	+1.29	98	+2.65
39	-1.36	59	-0.00	79	+1.36	99	+2.72
40	-1.29	60	±0.06	80	+1.42	100	+2.78

Table 5 Z-Score Norms for Environmental Awareness Scale: Girls Group Mean: 57.00 SD: 14.50 N: 250

Raw score	Z- score	Raw score	Z- score	Raw score	Z- score	Raw score	Z- score
16	-2.82	36	-1.46	56	-0.06	76	+1.31
17	-2.75	37	-1.38	57	± 0.00	77	+1.38
18	-2.68	38	-1.31	58	+0.06	78	+1.45
19	-2.62	39	-1.24	59	+0.13	79	+1.51
20	-2.55	40	-1.17	60	+0.20	80	+1.58
21	-2.48	41	-1.10	61	+0.27	81	+1.65
22	-2.41	42	-1.03	62	+0.34	82	+1.72
23	-2.34	43	-0.95	63	+0.41	83	+1.79

24	-2.27	44	-0.88	64	+0.48	84	+1.86
25	-2.20	45	-0.82	65	+0.55	85	+1.93
26	-2.13	46	-0.75	6	+0.61	86	+2.00
27	-2.06	47	-0.68	67	+0.68	87	+2.06
28	-2.00	48	-0.61	68	+0.75	88	+2.13
29	-1.93	49	-0.55	69	+0.82	89	+2.20
30	-1.86	50	-0.48	70	+0.88	90	+2.27
31	-1.79	51	-0.41	71	+0.95	91	+2.34
32	-1.72	52	-0.34	72	+1.03	92	+2.41
33	-1.65	53	-0.27	73	+1.10	93	+2.48
34	-1.58	54	-0.20	74	+1.17	94	+2.55
35	-1.51	55	-0.13	75	+1.24	95	+2.62

➤ *Procedure for Data Collection*

The researcher has followed these steps for data collection:

- The researcher in the first place has sought permission from the school authorities in order to obtain and distribute the questionnaire to the students.
- Once the permission was granted, the researcher handed out the questionnaire to the students and provided them with a clear instruction of the study's objectives and purpose.
- Before answering the questions, the researcher explained the instructions to the students.
- The researcher established a rapport with the students through a brief interaction.
- The researcher informed the students that there was no fixed time limit for the test, but typically students took around 45 minutes to complete it.
- The researcher ensured that the respondents were aware of the confidence of their responses, emphasising that they would be used solely for research purposes.
- The researcher told the students to select the correct answer and put a tick mark on the options provide

➤ *Analysis of Data*

The data was analysed by using the methods of determining the frequency, mean, percentage, standard deviation and t-test value.

➤ *Conclusion*

This present chapter focuses on a detailed description of the method and the procedure for collecting data used by the investigator on Environmental awareness. Through questions, providing them makes the investigator find answers related to the behaviour of the people based on environmental awareness. Analysis of data provides more information related to the field of study which bring significance and not significant about the aim of environmental awareness.

CHAPTER FOUR

ANALYSIS AND INTERPRETATION

➤ Introduction

This chapter shows the analysis and interpretation of data collected. It is an important part of any research activity. It plays a crucial role in the research field, utilizing tables, figure and appropriate statistical method. The investigation should provide comprehensive explanations and enable other to gain a thorough understanding of environmental awareness. Analysis involves summarizing the data to address research inquiries, aiming to make the data comprehensible and draw meaningful inferences relevant to the study.

The aim of the study is to explore the Environmental Awareness among the Elementary students of Nongjriong with the help of environmental awareness scale (Haseen Taj, 1971). The data collected on this study with the help of computer based on the Microsoft tools of computer.

➤ The Level of Environmental Awareness of Elementary School Student in Nongjriong

- Objective 1: To Find Out the Level of Environmental Awareness of Elementary School Students

Table 6 Shows the Level of Environmental Awareness of Elementary School Students of Nongjriong

Sl. No	Range of Z-score	Frequency	Percentage	Level of Environmental Awareness	Grade
1	+2.01 & above	0	0%	Extremely high	A
2	+2.26 to +2.00	1	1%	High	B
3	+0.51 to +0.50	1	1%	Above Average	C
4	-0.50 to +0.50	16	16%	Average	D
5	-1.25 to -0.51	55	55%	Below Average	E
6	-2.00 to -1.26	27	27%	Low	F
7	-2.01 & below	0	0%	Extremely Low	G
8	Total	100	100%		

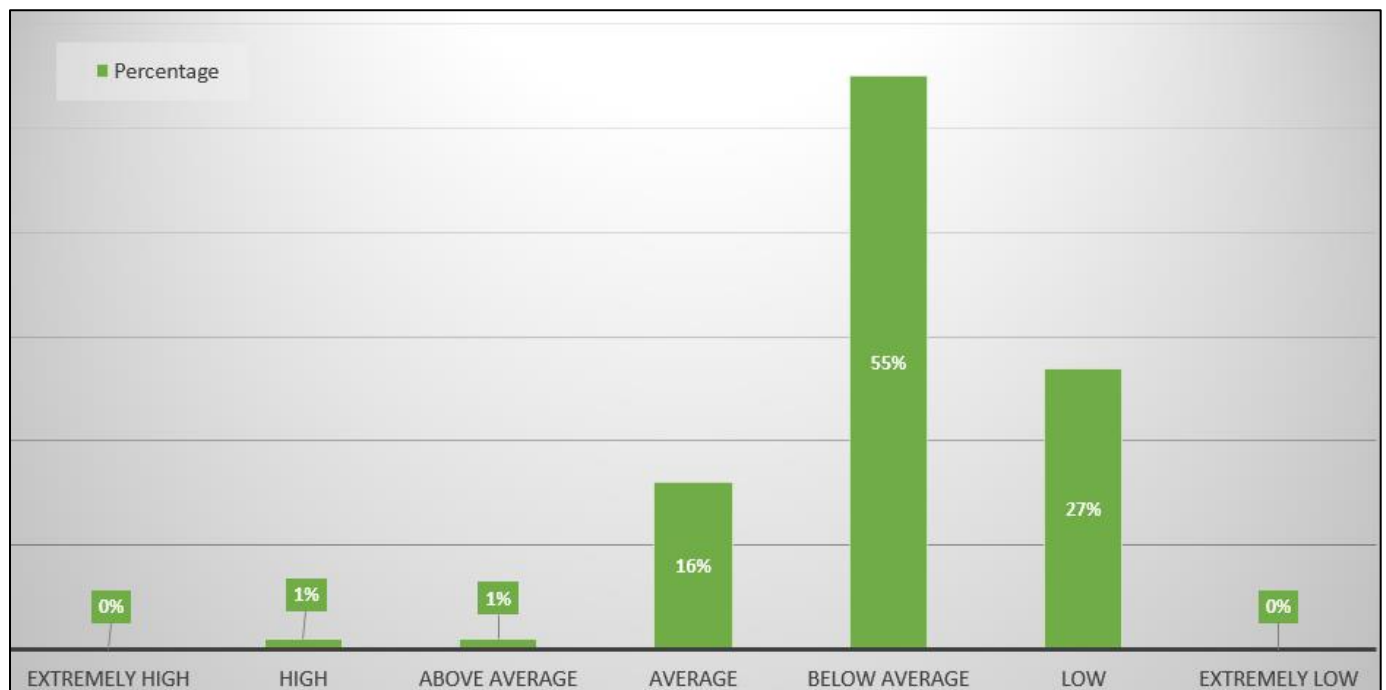


Fig 1 Shows the Level of Environmental Awareness of Elementary School Students of Nongjriong

➤ Analysis

Table 6 and figure 1 shows there is no students in the extremely low level of environmental awareness, 27% of the students fall in the low level of environmental awareness, a good number of the students of 55% fall in the below average level of environmental awareness, 16% fall in the average level of environmental awareness, 1% fall in the above average level of environmental awareness and 1% fall in the high level of environmental awareness and none of the students falls in the extreme high level of environmental awareness.

➤ Interpretation

Table 6 and figure 1 result revealed that 55% fall in the below average level of environmental awareness and 27% fall in the low level of environmental awareness 16% fall in the average level of environmental awareness and interestingly only 1% fall in the above average level of environmental awareness and only 1% fall in the high level of environmental awareness.

Although there is a minimal percentage of 1% of the students in the level of above average and 1% fall in the high level of environmental awareness. While a neutral and constant of 16% of the students are in the level of average in the Environmental awareness.

Table 7 Shows the Level of Environmental Awareness of Male Students in Nongjrong

Range	No of Respondent	% of Respondent	Level of Environmental Awareness	Grade
89 & above	0	0.00%	Extremely High	A
78-88	1	2.78%	High	B
67-77	0	0.00%	Above Average	C
52-66	4	11.11%	Average	D
41-51	18	50.00%	Below Average	E
30-40	13	36.11%	Low	F
29 & below	0	0.00%	Extremely Low	G
Total	36	100.00%		

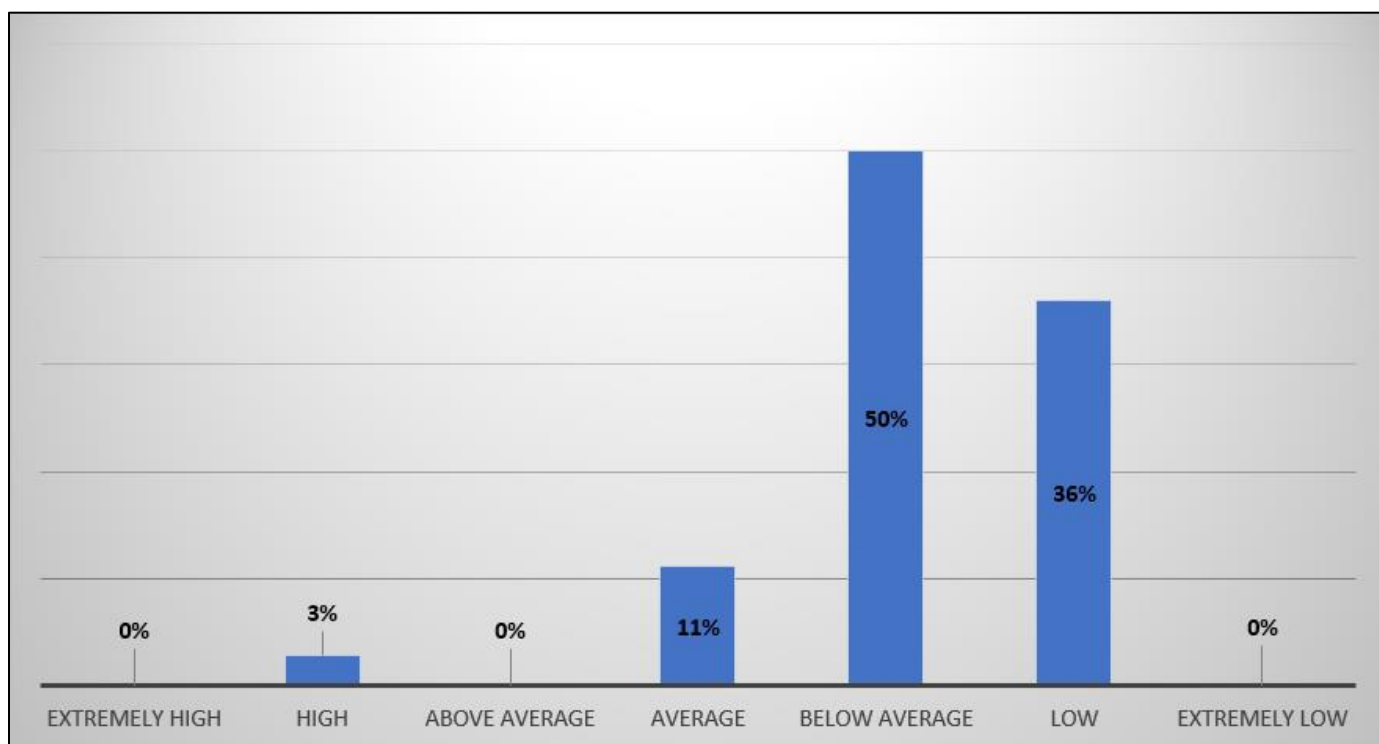


Fig 2 Shows the Level of Environmental Awareness of Male Students in Nongjrong

➤ Analysis

Table 7 and Figure 2 illustrate the distribution of students based on their level of environmental awareness. It is evident that none of the students are classified in the extremely low level of environmental awareness. 36.11% of the students are categorized in the low level, while a significant portion of 50.00% fall into the below average level. Additionally, 11.11% of students are classified in the average level of environmental awareness. None of the students fall in the above average level, with another only 2.78% falling in the high level of environmental awareness. Interestingly, none of the students are classified in the extreme high level of environmental awareness.

➤ Interpretation

The results, revealed that the majority of male students in Nongjrong possess an average level of environmental awareness, accounting for 50% of the population. Additionally, 36.11% exhibit low average awareness, 2.78% demonstrate a high level of awareness, and 11.11% are in the average range. Overall, these findings suggest that the male students in Nongjrong are generally well-informed and conscious of the various environmental issues.

Table 8 Shows the Level of Environmental Awareness of Female Students in Nongjriong

Range	No of Respondent	% of Respondent	Level of Environmental Awareness	Grade
87 & above	0	0.00%	Extremely High	A
76 - 86	0	0.00%	High	B
65- 75	1	1.35%	Above Average	C
50 - 64	12	18.75%	Average	D
39 - 49	37	57.81%	Below Average	E
28 - 38	14	21.88%	Low	F
27 & below	0	0.00%	Extremely Low	G
Total	64	100.00%		

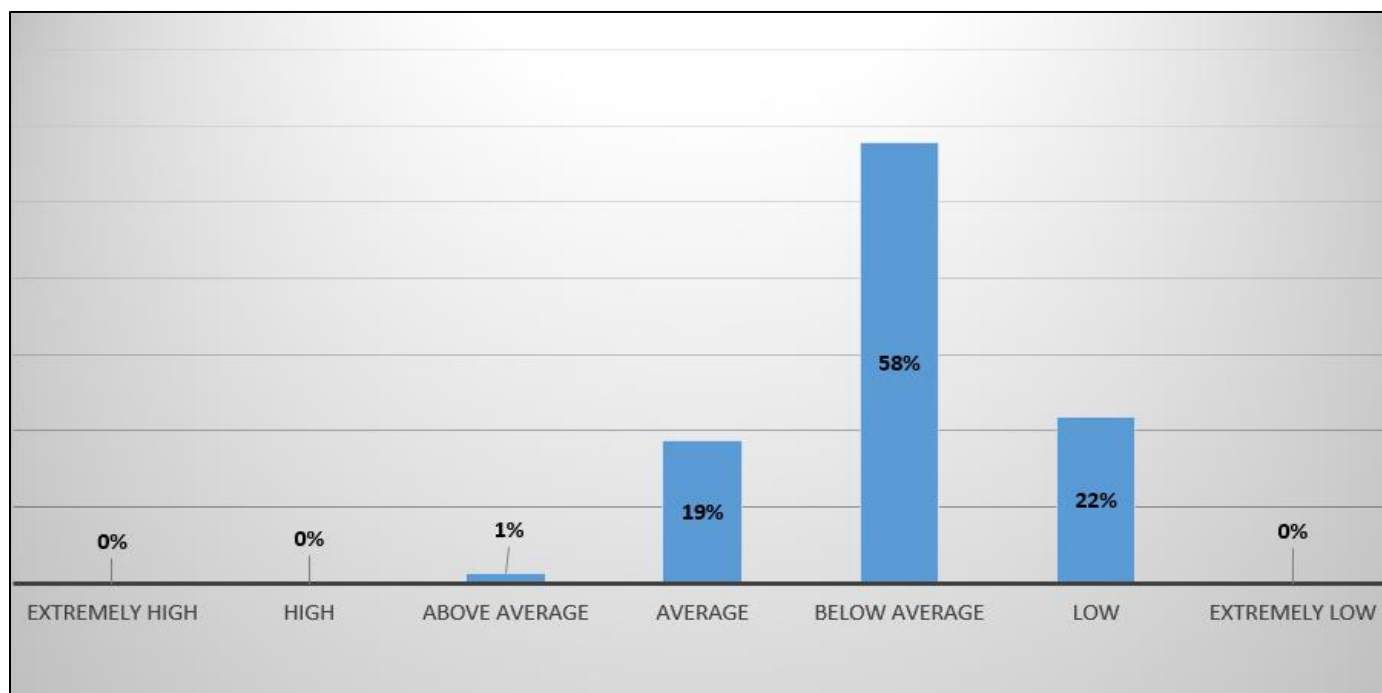


Fig 3 Shows the Level of Environmental Awareness of Female Students in Nongjriong

➤ Analysis

Table 8 and Figure 3 illustrate the distribution of female students based on their level of environmental awareness. The data shows that none of the students fall into the extremely high or high level of awareness categories. Only a small percentage, 1.35%, of students fall into the above average level of awareness. A modest number, 18.75%, fall into the average level of awareness. A significant portion, 57.81%, fall into the below average level of awareness. Additionally, 21.88% of students fall into the low level of environmental awareness. Interestingly, none of the students fall into the extremely low level of awareness category. This data provides valuable insights into the environmental awareness levels among students.

➤ Interpretation

The study conducted in Nongjriong found that a significant portion of female students of 57.81%, fall into the below average category in terms of awareness. Additionally, 21.88% are classified as low, 18.75% as average, and only 1.35% as above average categories. None of the students were categorized as having extremely low, extremely high, or high levels of awareness.

- *Objective 2: To Compare the Level of Environmental Awareness of Elementary School Students Based on Gender.*

✓ H₀. There is no significant difference in the level of Environmental awareness between male and female students.

The present study compare the mean score of male and female students of Elementary schools student in Nongjriong which is shown in the table 9. Difference in the mean score of male and female students of elementary school students in Nongjriong (N-100)

Table 9 Comparison Between Male and Female with Regards to Level of Environmental Awareness

Gender	No of respondent	Mean	SD	df	Computed 't' value	Critical t -value	Remark
Female	64	44.90	8.59	98	0.47	1.66	*Not Significant
Male	36	44.06	8.79				

*Not Significant at 0.05 level

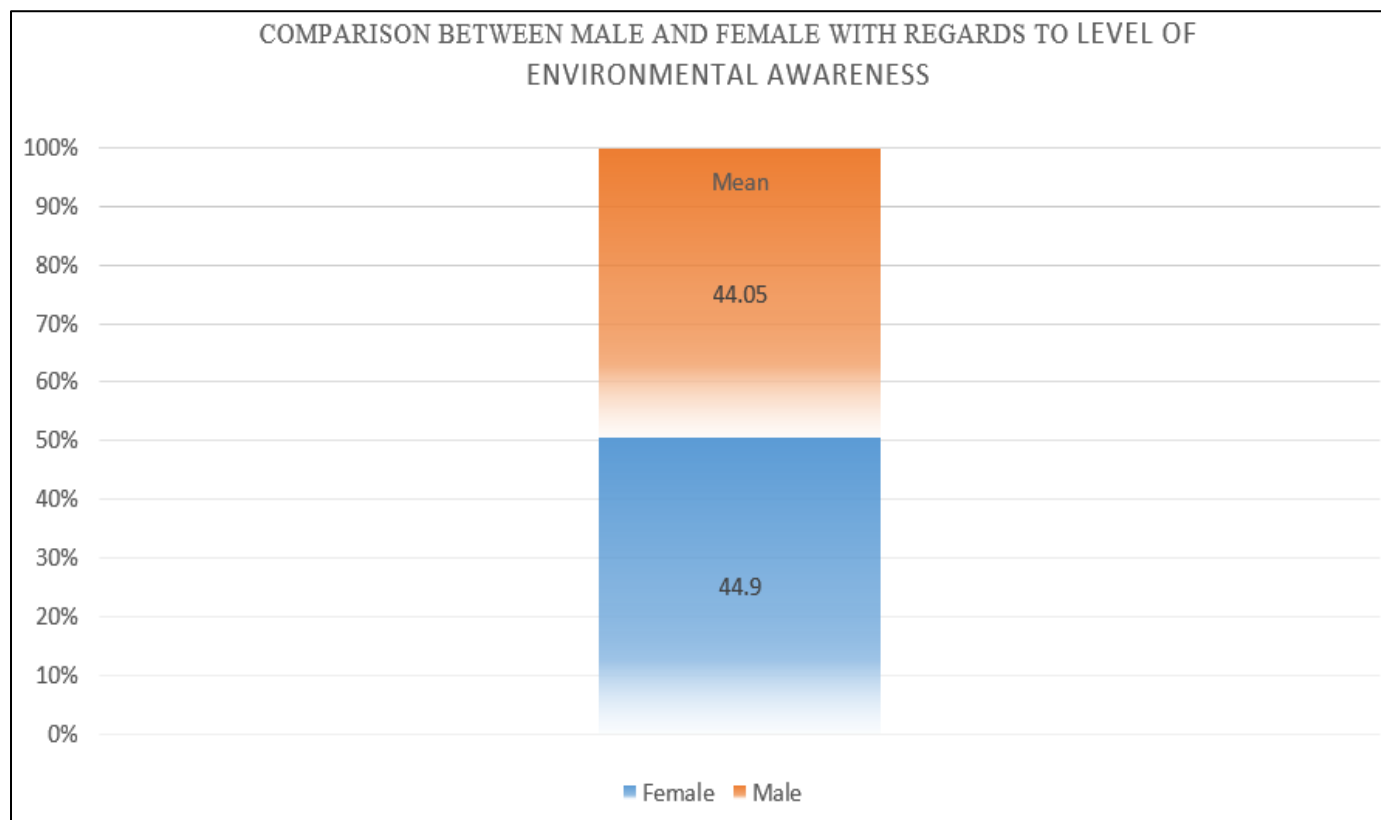


Fig 4 Comparison Between Male and Female with Regards to Level of Environmental Awareness

➤ Analysis

Table 9 and Figure 4 shows the mean scores of male and female students in level environmental awareness of elementary school student in Nongrong. The mean score for females is 44.90, while the mean score for males is 44.06. The computed t-value is calculated to be 0.47 and the critical t-value is 1.66 with a degree of freedom of 98 indicating that the difference is statistically significant at the 0.05 level. Therefore, the null hypothesis is rejected, suggesting that there is no significant difference between male and female students in terms of their level of environmental awareness.

➤ Interpretation

Table 9 and figure 4 revealed that the calculated t-value 0.47 and the df= 98 at 0.05 level of significant. Thus there was no significant differences between male and female students of environmental awareness of elementary students.

Hence, the stated null hypothesis “There is no significant difference in the level of environmental awareness between male and female student” was retained. This indicated that the male and female of elementary school student do not differ in their level of Environmental awareness. Therefore, gender does not play a significant role in determining the student’s level of environmental awareness.

- *Objective 3: To Examine the Level of Environmental Awareness of Elementary School Students Based on Management.*

✓ *Ho: There is no significant difference in the level of environmental awareness based on the type of management.*

The Significant mean difference in environmental awareness between government and private elementary school students. The t-value of 0.94 and the critical t-value is 1.67 at df = 98 indicates that the difference is statistically significant at the 0.5 level of significance.

The t-test provides valuable insight into the differences in environmental awareness levels among government and private elementary school students, to promote environmental education and sustainability practices in schools.

Table 10 Differences in the Level of Environmental Awareness Between Government and Private Elementary School Students

Type of Management	Mean	SD	df	Computed ‘t’ Value	Critical t-Value	Remarks
Government Aided	44.94	8.83	98	0.94	1.67	*Significant
Private	42.67	7.32				

* Significant at 0.05 level

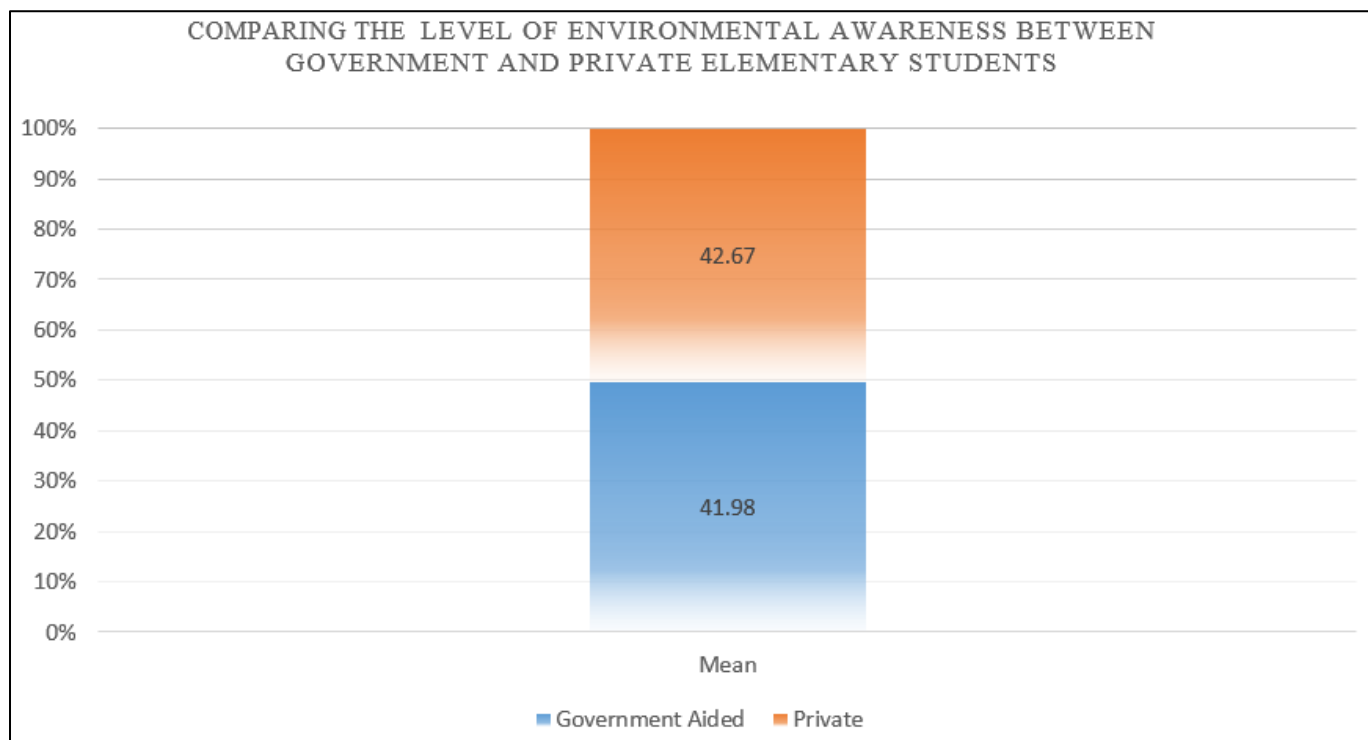


Fig 5 Comparing the Level of Environmental Awareness Between Government and Private Elementary Students

➤ Analysis

The table 10 and figure 5 shows that the mean score of the government aided is 44.94 and the private school is 42.67 respectively; the computed t-value 0.94, which is greater than the critical t-value 1.67 with df 98 at 0.05 level. Therefore, it has been indicated that the environmental awareness of elementary schools in Nongjriong has very less significance differences between government aided and private school.

➤ Interpretation

The table 10 and figure 5 present the t- value comparison in difference toward environmental awareness between the government and private of elementary school student. The observation from the table shows that the calculated t-value-0.94 and the critical t-value of 1.67 with df 98 at 0.05 level of significant. Thus, there is a significant different between governments and private of elementary school student in the environmental awareness. Hence, the stated null hypothesis “There is no significant difference in the level of environmental awareness based on the type of management” was rejected. This indicated that the government aided has higher level of environment awareness as compared to those studying in private school in Nongjriong.

➤ Conclusion

This chapter provide a detailed procedure analysis and interpretation of the data collected on level of environmental awareness of elementary students in Nongjriong. The chapter includes a graphical representation of the various level of environmental awareness, as well as a comparison of various variables including gender and school management.

CHAPTER FIVE

FINDINGS, DISCUSSION, SUGGESTION AND CONCLUSION

➤ *Introduction*

This chapter provides a detailed description of the major findings of the study and compares them to previous research. It explains the significance of the findings and their contribution to existing knowledge. The chapter also discusses the implications of the study and suggests areas for improvement and future research.

➤ *Major Finding, Implications and Discussion*

The following are the major finding of the present study investigation:

➤ *Level of Environmental Awareness of Elementary School Student in Nongjrong*

The results of the study describe the level of environmental awareness among the students in Nongjrong. Specifically, 55% of the student's shows below-average environmental awareness, 27% shows low environmental awareness. While 16% of the student's shows an average level of environmental awareness, with only 1% each showing above-average and high levels of environmental awareness.

However, there was a minimal percentage of 1% for both above-average and high levels of awareness. Conversely, a consistent 16% of students maintained an average level of environmental awareness.

• *Level of Environmental Awareness Among Male Students*

The study conducted in Nongjrong indicates that the environmental awareness among male students is predominantly at an average level, with 50% falling into this category. A portion of 36.11%, show a lower than average awareness, while only 2.78% exhibit a high level of awareness and also 11.11% are situated within the average range. These findings collectively imply that male students in Nongjrong possess a reasonable understanding of environmental concerns. The study understand the importance of fostering greater environmental consciousness among the younger population, particularly in regions like Nongjrong, to address and reduce environmental challenges effectively.

• *Level of Environmental Awareness Among Female Students*

The research conducted in Nongjrong shows that majority of female students, comprising 57.81%, falls below-average levels of environmental awareness. Further analysis reveals that 21.88% of female students fall into the low awareness category, while 18.75% are classified as having an average level of awareness. It is also observed that only a small portion of 1.35%, demonstrate above-average awareness. Surprisingly, none of the female students were categorized as having extremely low, extremely high, or high levels of environmental awareness. These findings understand the disparity of environmental awareness in female students at Nongjrong and emphasize the necessity for targeted educational interventions to enhance their understanding of environmental issues. Implementing initiatives aimed at increasing awareness and fostering a sense of environmental responsibility in female students could contribute significantly to addressing environmental challenges in Nongjrong.

➤ *Discussion*

The current findings align with the research conducted by Torri (2013) and Boruwa (2020), indicating that the level of environmental awareness is generally lower in rural areas compared to urban ones. Ali (2015) also observed low levels of environmental awareness, consistent with previous studies. Bashir et al. (2022) found that male students tend to have higher levels of environmental awareness, while female students exhibit more positive attitudes towards participating in environmental activities than males.

• *To Compare the Level of Environmental Awareness of Elementary School Students Based on Gender*

It was found out from the analyzed of the data which is calculated t-value of 0.47 and computed t-value is 1.66 with degrees of freedom (df) equal to 98, at a significance level of 0.05. These results suggest that there is no statistically significant difference in environmental awareness between male and female elementary school students. Consequently, the null hypothesis stating "There is no significant difference in the level of environmental awareness between male and female students" was retained. This implies that gender does not play a significant role in determining the level of environmental awareness among elementary school students. These findings understand the importance of addressing environmental education in a gender-neutral manner, ensuring that both male and female students receive equitable opportunities to develop awareness and understanding of environmental issues

➤ *Discussion*

The analysis of the Environmental awareness of elementary school student based on gender indicate no significant different, as evidenced by t-test value of 0.47 which is not statistically significant at 0.05 level. Studies carried out by Panigrahi (2016) and Biber et.al (2022) who found that there is no significant difference between the mean of boys and girls and it also found that the boys are little bit more aware towards the environment as compare to the girls contradict to the current study. It was also seen that the study is in contrasts with Bhartia (2017) and patonah (2017) who reported better environmental awareness among female

students than male students. However, the result is consistent with Boruwa (2020) and Sudhakar, et.al (2020) who found that there is no significant difference between male and female of elementary school student on the level of environmental awareness. Danielraje, (2019) study showed that there was no significant difference in the mean score of environmental awareness between the students in terms of gender and in terms of types of institutions which is in line with the current finding.

- *To Examine the Level of Environmental Awareness of Elementary School Students Based on Management*

The finding found that a comparison of t-values regarding environmental awareness between government and private elementary school students. The analysis reveals a calculated t-value of 0.94 and critical t-value is 1.67 with degrees of freedom (df) equal to 98, at a significance level of 0.05. These findings suggest that there is no statistically significant difference in environmental awareness between government and private elementary school students. Consequently, the null hypothesis, "There is no significant difference in the level of environmental awareness based on the type of management," was rejected. This implies that government and private elementary school students do not differ significantly in their environmental awareness levels. These results understand the importance of implementing uniform environmental education strategies across both government and private school systems, ensuring that students receive equitable exposure to environmental awareness initiatives regardless of school management type.

➤ *Discussion*

The study implies that majority of elementary school students studying in different types of school management indicate minimal difference in Government and private schools with regards to environmental awareness, as evidenced by t-value is 0.94 and computed t-value is 1.67 which is statistically significant at 0.05 level. Descriptive statistics suggested a difference, with the government having higher mean 44.94 than private with a mean of 42.67, this difference was not statistically significant. Thus the study conclude that government and private of elementary school student are significant in their level of environmental awareness. The results of this study contradicts with Bashir, et.al. (2022) and results which found that private school students had more environmental awareness than government school students. It indicates the level of participation in environmental activities was greater in government school students than private school students. Dutta, J; Ngomle, Y., (2022) study showed that a significant difference was found in the level of environmental awareness between government and private school students towards environmental awareness which is contradict to the current study.

- *To Provide Suggestions to Foster More Environmental Awareness Among the Elementary School Students*

Fostering environmental awareness among elementary school students is crucial for building a generation that cares for the planet. Here are some suggestions:

- ✓ Hands-On Activities: Engage students in hands-on activities like planting trees, creating compost bins, or starting a school garden. These activities help them connect with nature and understand the importance of environmental conservation.
- ✓ Field Trips: Organize field trips to nature reserves, wildlife sanctuaries, or recycling centers. Seeing environmental issues first-hand can have a profound impact on students and inspire them to take action.
- ✓ Guest Speakers: Invite environmentalists, conservationists, or local experts to speak to students about environmental issues and solutions. Hearing from real-life role models can motivate students to get involved.
- ✓ Classroom Projects: Assign projects that focus on environmental topics such as pollution, endangered species, or renewable energy. Encourage creativity and critical thinking to find solutions to these issues.
- ✓ Reduce, Reuse, Recycle Campaigns: Launch campaigns within the school to promote the principles of reduce, reuse, and recycle. Encourage students to minimize waste, reuse materials, and recycle whenever possible.
- ✓ Environmental Education Curriculum: Incorporate environmental education into the school curriculum across subjects like science, social studies, and language arts. This ensures that students receive consistent exposure to environmental concepts.
- ✓ Green Initiatives: Implement green initiatives within the school such as energy-saving practices, waste reduction programs, and eco-friendly transportation options. Encourage students to participate and take ownership of these initiatives.
- ✓ Nature Walks and Outdoor Learning: Take students on regular nature walks and facilitate outdoor learning experiences. Allow them to observe and interact with the natural environment, fostering a deeper appreciation for nature.
- ✓ Storytelling and Literature: Use storytelling and literature to introduce environmental themes in an age-appropriate manner. Reading books and sharing stories about nature and conservation can inspire empathy and understanding.
- ✓ Community Involvement: Encourage students to get involved in community clean-up events, tree planting drives, or environmental advocacy campaigns. Connecting with the broader community reinforces the importance of collective action.
- ✓ Technology Integration: Utilize technology to explore environmental issues through interactive games, virtual field trips, and multimedia presentations. Leverage digital resources to make learning engaging and accessible.
- ✓ Celebrate Earth Day and Environmental Holidays: Organize special events and activities to celebrate Earth Day and other environmental holidays. Use these occasions to raise awareness and inspire action among students.

By implementing these suggestions, elementary schools can play a significant role in nurturing environmentally conscious citizens who are equipped to protect and preserve the planet for future generations.

➤ *Suggestion for Further Studies*

Based on the insight and finding of the present study, the investigator is suggesting the following for further study:

For elementary school students interested in studying environmental awareness in Nongjrong, it's essential to tailor the topics to their level of understanding and engagement. Here are some suggestions for further studies suitable for elementary school students:

- **Local Habitats and Wildlife:** Encourage students to explore the local habitats and wildlife of Nongjrong through guided nature walks, field trips, or virtual tours. They can learn about the different plants, animals, and ecosystems found in the region.
- **Reduce, Reuse, Recycle:** Teach students about the importance of waste management and the 3Rs (reduce, reuse, recycle) principles. Engage them in hands-on activities such as waste sorting, creating recycled crafts, or organizing a school-wide recycling program.
- **Water Conservation:** Raise awareness about the importance of water conservation and the need to protect water sources in Nongjrong. Students can learn about water cycle, pollution prevention, and simple water-saving techniques they can practice at home and school.
- **Energy Conservation:** Educate students about the importance of energy conservation and renewable energy sources. They can learn about the benefits of solar, wind, and hydroelectric power, and how they can reduce energy consumption in their daily lives.
- **Native Plants and Tree:** Introduce students to the native plants and trees of Nongjrong and their importance in maintaining biodiversity and ecosystem health. Encourage them to participate in tree planting activities or create a school garden with native species.
- **Pollution Awareness:** Help students understand the different types of pollution (air, water, soil) and their impacts on the environment and human health. Discuss simple actions they can take to reduce pollution, such as avoiding littering and using eco-friendly products.
- **Environmental Heroes:** Introduce students to environmental heroes and role models who have made a positive impact on the environment. They can learn about local conservationists, activists, or community leaders working to protect Nongjrong environment.
- **Nature Journaling:** Encourage students to keep a nature journal where they can document their observations, drawings, and reflections about the natural world around them. This can help foster a deeper connection to nature and develop their observational skills.
- **Environmental Games and Activities:** Incorporate fun and interactive games, quizzes, and puzzles to reinforce environmental concepts and engage students in learning. You can also organize eco-themed competitions or challenges to inspire creativity and teamwork.
- **Community Projects:** Empower students to take action in their community by organizing environmental projects or campaigns. They can initiate litter clean-ups, tree plantings, or awareness-raising events to involve their peers and make a positive impact.

By providing hands-on experiences, interactive learning activities, and opportunities for active participation, elementary school students can develop a strong foundation in environmental awareness and become stewards of the environment in Nongjrong and beyond.

➤ *Conclusion*

In conclusion, fostering environmental awareness among elementary students is crucial for promoting responsible behavior and preserving our natural resources. Incorporating environmental education into school curricula and organizing awareness programs can empower students to take positive actions towards environmental stewardship. In rural communities like Nongjrong, where awareness may be lacking, targeted educational initiatives can lead to improved quality of life and sustainability. Educating residents, including tourists, about the importance of environmental conservation ensures collective efforts towards preserving the area's natural beauty. Ultimately, schools serve as vital platforms for instilling lifelong values of environmental responsibility, creating a generation of environmentally-conscious individuals who actively contribute to a cleaner and healthier world.

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APPENDIX - A**APPENDIX – A****➤ Scoring Key for Section – I**

1	C	23	A	45	B
2	A	24	C	46	B
3	B	25	A	47	B
4	D	26	B	48	B
5	A	27	B	49	C
6	C	28	B	50	C
7	C	29	B	51	B
8	C	30	B	52	B
9	B	31	D	53	C
10	D	32	A	54	A
11	D	33	D	55	B
12	C	34	B	56	B
13	B	35	B	57	B
14	C	36	B	58	A
15	A	37	B	59	A
16	B	38	C	60	B
17	B	39	A	61	B
18	C	40	A	62	B
19	B	41	B	63	B
20	D	42	B	64	C
21	B	43	B	65	D
22	D	44	A	66	C

➤ Scoring Key for Section –II

1	False	19	False
2	False	20	False
3	True	21	True
4	False	22	False
5	False	23	True
6	False	24	True
7	True	25	True
8	True	26	True
9	False	27	False
10	False	28	False
11	False	29	False
12	False	30	False
13	False	31	False
14	True	32	False
15	True	33	False
16	False	34	True
17	False	35	False
18	True		

➤ *Scoring Key for Section –III*

• *Answers:*

1	Paper	9	Noise
2	Transpiration	10	Soil
3	Shade	11	Air
4	Oak	12	Syrup
5	Nest	13	Furniture
6	Wood	14	Carbon dioxide
7	Food	15	Oxygen
8	Erosion	16	Cone

APPENDIX - B



Dr. Haseen Taj (Bangalore)

Consumable Booklet

of

EAS-HT

(English Version)

Please fill in the following Information :

Date Name Father's Name Date of Birth Gender : Male ☐ Female ☐Class School Place Area : Metropolitan ☐ Unban ☐ Rural ☐School Management : Government ☐ Aided ☐ Private ☐Type of Family : Joint ☐ Nuclear ☐Number of Siblings : Brothers Sisters Total Including self

INSTRUCTIONS

On the following pages 117 statements about Environment have been given.

Read each statement carefully and answer as per the instructions.

Please do answer to all the 117 statements.

Be rest assured, your answer will be kept. Confidential

SCORING TABLE

Section	Raw Scores			z-Score	Grade	Level of Environmental Awareness
	I	II	III			
Score						
Total Score						

Estd. 1971

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NATIONAL PSYCHOLOGICAL CORPORATION

UG-1, Nirmal Heights, Near Mental Hospital, Agra-282 007

SECTION - I**➤ Instructions**

For each of the statements 1 to 66, you will find 4 alternatives. There is only one correct answer for each of the item. Select the correct answer and tick mark of each of the item. Select the correct answer and tick mark ☒ of cell of the corresponding alphabet. If you have to erase, do it completely. If you mark more than one answer to an item you will get no credit to that answer.

1 Fruits and vegetables must be washed before use because.

- a) By washing they look very colourful
- b) It is a habit to do so
- b) It is a habit to do so
- d) They become more tastier

☐ ☐
2 Drinking pond water become polluted because

- a) Washing and bathing
- b) Wind blows
- c) Rainfall
- d) Silt

☐ ☐
3 Suspended impurities in drinking water can cause:

- a) Skin and oral cancer
- b) Cholera and jaundice
- c) Head and stomach pain
- d) Cold and cough

☐ ☐
4 The best way of purifying water is:

- a) Evaporation
- b) Decantation
- c) Boiling
- d) Filtration

☐ ☐
5 One of the main sources of communicable disease is:

- a) Contaminated water
- b) Uncleansed utensil
- c) Infectious
- d) Direct contact.

☐ ☐
6 Plant should be nurtured and protected because they give out:

- a) Chlorophyll
- b) Carbon dioxide
- c) Oxygen
- d) Nitrogen

☐ ☐
7 During respiration human's use:

- a) Nitrate
- b) Carbon dioxide
- c) Oxygen
- d) Methane

☐ ☐

8 Drinking water should be free from:

- a) Oxygen
- b) Bleaching powder
- c) Disease germ
- d) Potassium permanganate.

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9 It is necessary to keep our environment clean, to prevent:

- a) Health
- b) Diseases
- c) smell
- d) Garbage

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10 Tree planting should be encouraging tin cities mainly to ensure:

- a) Fruits
- b) Fuel wood
- c) Fodder to animals
- d) Pure air

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11 Keeping the surrounding of our houses and school clean is the responsibilities of:

- a) Municipalities
- b) Health officer
- c) Sanitary inspectors
- d) All of us.

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12 While cleaning our house, unwanted and waste things should be:

- a) Thrown to the streets
- b) Thrown into the running water
- c) Collected in polythene bags and deposited in dustbins
- d) Thrown into neighbour compound.

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13 Stools and urines should be passed:

- a) Near ponds
- b) In latrines
- c) Near compound wall
- d) On pavements.

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14 Soil erosion can be prevented by:

- a) Construction dams
- b) Stopping rain
- c) Planting rain
- d) Building Houses.

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15 The soil carried by flowing water can destroy:

- a) small plants
- b) Mountains
- c) big plants
- d) Animals.

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16 Conversion of cow dung into goober gas not only solves the fuel and manure problem, but also control:

- a) Soil erosion
- b) Pollution of environment
- c) Deforestation
- d) Waste.

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17 Humus is very essential for the growth of:

- (a) Animals
- (b) Plants
- (c) Humans
- (d) Birds.

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18 The wearing out of soil by the running water is called:

- (a) Humus
- (b) Fertility
- (c) Soil erosion
- (d) Muddy water.

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19 The fertility of the soil can be maintained by:

- (a) Rearing animals
- (b) Planting trees
- (c) Watering sufficiently
- (d) Using chemical fertilizers.

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20 One of the most important reasons for growing forests is:

- (a) To destroy wild animals
- (b) To remove silt
- (c) Not being able to cultivate
- (d) To prevent soil erosion.

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21 Deforestation is mainly because of:

- (a) Soil erosion
- (b) Population explosion
- (c) Whirl wind
- (d) Heavy rainfall.

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22 Which one of the following is not caused due to destruction of forests:

- (a) Poor rainfall
- (b) Animals living forests lose their habitat
- (c) Soil erosion
- (d) Water pollution.

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23 Organic environment refers to:

- (a) All living beings
- (b) Non-living beings
- (c) Animals
- (d) Plants.

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24 Air pollution can cause:

- (a) Cholera
- (b) Smallpox
- (c) Lung cancer
- (d) Vomiting.

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|-----------|---|--------------------------|----------------------|
| 25 | Water and Sun are natural sources of: | | |
| | (a) Energy | ☐ | |
| | (b) Fuel | ☐ | |
| | (c) Growth | ☐ | <input type="text"/> |
| | (d) Heat. | ☐ | |
| 26 | Fuels should not be wasted because: | | |
| | (a) They are very expensive | ☐ | |
| | (b) They are limited and valuable | ☐ | |
| | (c) They create foul smell, when spilled | ☐ | <input type="text"/> |
| | (d) They are dangerous, when burnt. | ☐ | |
| 27 | Use of solar ovens: | | |
| | (a) Increases environmental pollution | ☐ | |
| | (b) Decreases environmental pollution | ☐ | |
| | (c) Increase demand for solar energy | ☐ | <input type="text"/> |
| | (d) Increases demand for solar ovens. | ☐ | |
| 28 | Resources such as water, sunlight, air, plants, hills, soils and metals are called as: | | |
| | (a) Artificial resources | ☐ | |
| | (b) Natural resources | ☐ | |
| | (c) Man made resources | ☐ | <input type="text"/> |
| | (d) Earth resources | ☐ | |
| 29 | The main reason for air pollution is: | | |
| | (a) Household and agricultural emissions | ☐ | |
| | (b) Industrial and motor vehicle emissions | ☐ | |
| | (c) Motor vehicle and household emissions | ☐ | <input type="text"/> |
| | (d) Household and industrial emissions. | ☐ | |
| 30 | The depletion of forests can be replaced by: | | |
| | (a) Enacting laws | ☐ | |
| | (b) Replacing trees | ☐ | |
| | (c) Not using trees | ☐ | <input type="text"/> |
| | (d) By chasing away all herbivorous animals living in forests. | ☐ | |
| 31 | Without air there can be no: | | |
| | (a) Rock on earth | ☐ | |
| | (b) Water on earth | ☐ | |
| | (c) Sunlight on earth | ☐ | <input type="text"/> |
| | (d) Life on earth. | ☐ | |
| 32 | There can be no vegetation without: | | |
| | (a) Water | ☐ | |
| | (b) Animals | ☐ | |
| | (c) Chemical fertilizers | ☐ | <input type="text"/> |
| | (d) Money. | ☐ | |
| 33 | The solar energy is: | | |
| | (a) Limited | ☐ | |
| | (b) Exhaustible | ☐ | |
| | (c) Non-renewable | ☐ | <input type="text"/> |
| | (d) Non-exhaustible. | ☐ | |

34 The main food of herbivores is:

(a) Animals

(b) Plants

(c) Animals and plants

(d) Insects.

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35 The animals who eat only flesh are called:

(a) Herbivores

(b) Carnivores

(c) Omnivores

(d) Reptiles.

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36 The manure which is formed out of dead and decaying living organisms is called:

(a) Chemical fertilizers

(b) Organic fertilizers

(c) Bio-mass fertilizers

(d) Mineral fertilizers

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37 The major damage to environment is caused by:

(a) Animals

(b) Humans

(c) Birds

(d) Natural calamities.

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38 Afforestation means:

(a) Cutting of forests

(b) Clearing lands for cultivation

(c) Tree plantation

(d) Barren land.

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39 Use of fire crackers during festivals contributes to:

(a) Noise and air pollution

(b) Air and water pollution

(c) Noise and food pollution

(d) Food and water pollution.

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40 When too much of salts and minerals are dissolved in water it is called:

(a) Saline water

(b) Fresh water

(c) Rain water

(d) Soft water.

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41 The Indian government has taken up the task of purifying the river:

(a) Jamuna

(b) Ganga

(c) Tungabhadra

(d) Narmada.

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42 Reasons for occurrence of Cholera is:

- (a) The curse of the village deity
- (b) Drinking impure water
- (c) Deficiency of nutritious food
- (d) Deficiency of oxygen in the atmosphere.

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43 The citizens forum in Kerala fought against the destruction of the natural reserves is called as:

- (a) Chipko movement
- (b) Silent valley
- (c) Ganga cleaning project
- (d) Narmada valley project.

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44 The living beings which cannot cope will dwindle, while that of the adopted ones will increase. This process is called:

- (a) Habitat
- (b) Adjustment
- (c) Natural selection
- (d) Survival.

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45 Looking after our natural resources and protecting them from damage is known as:

- (a) Protection
- (b) Conservation
- (c) Development
- (d) Sustainment.

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46 Things which decompose naturally are called:

- (a) Non-bio-degradable waste
- (b) Bio-degradable waste
- (c) Renewable waste
- (d) Non-renewable waste

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47 Domestic wastes such as tin cans, bottles and plastic goods can be:

- (a) Used to enrich soil
- (b) Recycled in different ways
- (c) Decomposed
- (d) Thrown away.

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48 As a result of air pollution, the harmful gases and particles form clouds and when they fall to the earth, it is known as:

- (a) Air pollution
- (b) Acid rain
- (c) Ultraviolet rays
- (d) Ozone layer.

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Plants produce their own food using non-living things.

49 Herbivorous animals eat plants. Carnivorous animals eat herbivorous animals and other smaller carnivores and so on. The cycle of who eats whom is called as:

- (a) Natural selection
- (b) Survival of fittest
- (c) Food chain
- (d) Food web.

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50	The organisms that live and breed in water are called:		
	(a) Amphibians	☐	
	(b) Herbivores	☐	
	(c) Aquatic	☐	
	(d) Carnivores.	☐	
51	The resistance by women to the cutting of forest in Himalayan regions is known as:		
	(a) Silent valley	☐	
	(b) Chipko movement	☐	
	(c) Jagriti	☐	
	(d) Vimochana.	☐	
52	The food chains are linked together by one or more common species to form a:		
	(a) Food chain	☐	
	(b) Food web	☐	
	(c) Energy web	☐	
	(d) Biosphere	☐	
53	Any area or place where living organisms and non-living things co-exist, exchange the materials necessary for life and using them again and again is called:		
	(a) Abiotic	☐	
	(b) Biotic	☐	
	(c) Ecosystem	☐	
	(d) Afforestation	☐	
54	The process of making air, water and soil harmful by smoke, pesticides and sewage is called:		
	(a) Pollution	☐	
	(b) Decay	☐	
	(c) Decomposers	☐	
	(d) Contamination	☐	
55	The completely decomposed products of plants and animals is called:		
	(a) Gravel	☐	
	(b) Humus	☐	
	(c) Clay	☐	
	(d) Sand	☐	
56	The process of removal of top soil from one place and carrying it to another by the action of natural agents like wind and water is known as:		
	(a) Soil conservation	☐	
	(b) Soil erosion	☐	
	(c) Loamy soil	☐	
	(d) Alluvial soil	☐	

57	Which one of the following soils holds maximum amount of water?	☐	
	(a) Sandy soil	☐	
	(b) Clay soil	☐	
	(c) Loamy soil	☐	
	(d) Rocky soil	☐	
58	Chemically humus is:	☐	
	(a) Organic in nature	☐	
	(b) Organic and inorganic	☐	
	(c) Inorganic in nature	☐	
	(d) Chemical in nature.	☐	
59	The topmost layer of the soil which has good water holding capacity is:	☐	
	(a) Humus	☐	
	(b) Gravel	☐	
	(c) Sand	☐	
	(d) Rocks	☐	
60	When sewage flows into rivers or the sea, fish and other aquatic animals die because of:	☐	
	(a) Lack of carbon di-oxide	☐	
	(b) Lack of oxygen	☐	
	(c) Excess decomposes	☐	
	(d) Lack of food.	☐	
61	The excessive use of pesticides and fertilizers can pollute:	☐	
	(a) Air and soil	☐	
	(b) Water and soil	☐	
	(c) Water and air	☐	
	(d) Plant and animals.	☐	
62	All those resources that are replenished through relatively rapid natural cycles are called:	☐	
	(a) Exhaustible resources	☐	
	(b) Renewable resources	☐	
	(c) Non-renewable resources	☐	
	(d) Inexhaustible resources.	☐	
63	Using the resources carefully without depleting them is called:	☐	
	(a) Renewability	☐	
	(b) Conservation	☐	
	(c) Non-renewability	☐	
	(d) Development.	☐	
64	Without plants animal life is impossible to exist due to:	☐	
	(a) Lack of oxygen for animals to respire	☐	
	(b) Lack of food supply	☐	
	(c) Both of (a) and (b)	☐	
	(d) Lack of carbon dioxide.	☐	
65	An environmentalist is a person who is interested in the conservation of:	☐	
	(a) Only forests	☐	
	(b) Only animals	☐	
	(c) Only humans	☐	
	(d) Total eco-system.	☐	
66	Air is:	☐	
	(a) Composed of compound gases	☐	
	(b) Composed of a single gas	☐	
	(c) A mixture of different gases in different proportions	☐	
	(d) mixture of different gases in equal proportions.	☐	

Total Score Section I

SECTION II**➤ Instructions**

In this section, against each statement from 1 to 35 you will find 'True' and 'False' responses. If a statement is true tick mark the cell below. True responses, if a statement is false, tick mark the cell below false response against the appropriate number of statements. For example:

➤ Motor Vehicle Emissions Pollute Air

The statement is true, so tick mark ☒ the cell below True.

Remember you have to indicate a correct response. In this way you have to respond to all the statements.

Sr. No.	Statements	True	False	Score
1	Freely available natural resources such as forests, soil and water can be over used.	☐	☐	☐
2	Drinking water ponds can also be used for washing and bathing.	☐	☐	☐
3	Birds and animals migrate during cold seasons.	☐	☐	☐
4	Hailstorms will not damage crops and property.	☐	☐	☐
5	During respiration humans use carbon dioxide.	☐	☐	☐
6	Waste papers and banana peels can be thrown on streets.	☐	☐	☐
7	Spitting and throwing waste everywhere can cause diseases.	☐	☐	☐
8	Environment includes all that we see around us.	☐	☐	☐
9	Human life and progress depend upon the natural resources, so we should exploit them to the maximum.	☐	☐	☐
10	Waste products of a factory should be let out to a nearby pond or river.	☐	☐	☐
11	Plants absorb oxygen and release carbon dioxide.	☐	☐	☐
12	Running water does not get polluted, even when the waste is dumped into it.	☐	☐	☐
13	Underground water need not be purified before drinking.	☐	☐	☐
14	All species of plants and animals should be protected to maintain balance in nature.	☐	☐	☐
15	The continuous use of some natural resources such as coal and petroleum get exhausted, if they are not used judiciously.	☐	☐	☐
16	Since 3/4 of the earth's surface is water, it can be used plentifully.	☐	☐	☐
17	Cutting of forests is essential to increase the revenue to government than benefit to society.	☐	☐	☐
18	We should try to use renewable sources of energy instead of non-renewable.	☐	☐	☐
19	Chipko movement took place in Kerala.	☐	☐	☐
20	River Ganga cleaning project has been undertaken by Govt. of Uttar Pradesh.	☐	☐	☐
21	River Narmada is associated with hydro-electricity project.	☐	☐	☐
22	Excessive use of chemical fertilizers enhances the fertility of the soil.	☐	☐	☐
23	Agricultural pesticides and insecticides pollute the surrounding water resources.	☐	☐	☐
24	Deforestation causes natural imbalance.	☐	☐	☐
25	Plants help to maintain a gaseous balance in atmosphere.	☐	☐	☐
26	Waste materials like paper, glass and plastic can be recycled.	☐	☐	☐
27	Use of solar ovens leads to air pollution.	☐	☐	☐
28	Sunlight is an exhaustible resource.	☐	☐	☐
29	The cycle of who eats whom is called food web.	☐	☐	☐
30	The animals who eat only plants are called carnivores.	☐	☐	☐
31	Plants are non-renewable resources.	☐	☐	☐
32	Photosynthesis is a process that goes on in animals.	☐	☐	☐
33	Ultra-violet ray and acid rains are one and the same.	☐	☐	☐
34	Food stored in damp places and uncleaned containers gets spoiled by germs.	☐	☐	☐
35	Meda Patekar is associated with National Literacy Mission.	☐	☐	☐

Total Score Section I

SECTION – III**➤ Instructions**

For each of the items 1 to 16 fill up the blanks choosing correct answer provided at the end of this page in brackets.

1. Most of the.....we use comes from trees.
2. Water is given off by trees in a process called
3. The.....of trees help to keep us cool.
4. The timber fromtrees is often used to make furniture.
5. Trees are often used by birds for their
6. Trees provides for building and heating houses.
7. Nuts and fruits from trees are an important source of
8. Trees help prevent soil
9. Trees help to cut down on pollution.
10. Decaying logs and leaves enrich the.....
11. Trees remove some pollutants from the.....
12. The we use on pancakes comes from trees.
13. Most of our is made from trees.
14. Trees consume
15. is given off by trees in the process of photosynthesis.
16. Theof pine trees is a favourite Christmas decoration.

Total Score Section III

(Wood, erosion, noise, syrup, air, soil, shade, nest, oak, paper, cone, furniture, food, oxygen, carbon dioxide, transpiration).

Total	Section	I	II	III	Grand Total
Score					