Pro-Environmental Behaviour Among Secondary School Students of Kamrup (Metropolitan) And Kamrup Districts of Assam

Dr. Anjum Sahidullah
Assistant Professor, Department of Education, Dakshin Kamrup College,
Mirza, Assam, India

Abstract

Most environmental crises today are largely the result of human actions. The degradation of natural resources, climate change, pollution, and biodiversity loss are primarily driven by patterns of human consumption and behaviour. Therefore, transforming human behaviour from resource exploitation to environmental stewardship has become essential. Pro-environmental behaviour refers to conscious actions taken by individuals to reduce negative environmental impacts or contribute positively to environmental protection. The present study investigates the level of pro-environmental behaviour among secondary school students of Kamrup (Metropolitan) and Kamrup districts of Assam with reference to gender and locality. The study employed a descriptive research design. A total of 200 Class IX students affiliated to the Assam State School Education Board (erstwhile SEBA) were selected through stratified random sampling. The sample consisted of 100 male and 100 female students, equally distributed between urban and rural areas. The Pro-Environmental Behaviour Scale (PEBS-SA) developed by A. Suhane (2012) was used for data collection. Statistical techniques such as percentage analysis, mean, standard deviation, and t-test were applied. The findings revealed that most students exhibited an average level of pro-environmental behaviour. No significant differences were found based on gender or locality.

Keywords: Pro-Environmental Behaviour, Secondary School Students, Gender, Locality

Introduction

The Earth is the only known planet capable of sustaining life. Its environmental systems provide essential resources that support human survival as well as biodiversity. However, increasing human activities have caused severe environmental imbalance. Issues such as deforestation, pollution, climate change, depletion of natural resources, and water scarcity are escalating globally due to unsustainable human behaviour.

Environmental deterioration is primarily anthropogenic, meaning it originates from human actions. Continuous exploitation of resources without adequate conservation efforts has resulted in ecological stress. It is therefore necessary to cultivate responsible behaviour that promotes environmental protection rather than degradation.

*Corresponding Author Email: anjumsahid523@gmail.com
Published: 10 March 2026
DOI: https://doi.org/10.70558/SPIJSH.2026.v3.i3.45574

Pro-environmental behaviour refers to actions undertaken deliberately to minimize environmental harm. Such behaviour may include conserving resources, recycling, reducing waste, participating in environmental campaigns, and making eco-friendly lifestyle choices. Since behavioural change can be effectively nurtured at a young age, educational institutions play a vital role in fostering environmental responsibility among students.

Concept of Pro-environmental Behaviour

Pro-environmental behaviour (PEB), also described as eco-friendly or environmentally responsible behaviour, includes actions aimed at protecting and sustaining the environment. It involves personal and social practices that contribute positively to environmental well-being.

Such behaviour may occur in private domains (e.g., saving electricity, recycling) or public domains (e.g., participating in environmental movements). Scholars have used various related terms such as environmentally responsible behaviour, ecological behaviour, sustainable behaviour, and environmental protection behaviour. Broadly, PEB represents morally guided actions intended to promote environmental welfare.

Review of Related Literature

Samal and Behera (2015) investigated the pro-environmental behaviour of the secondary students of West Bengal in respect of gender and localities. Purposive sampling method was followed for selecting a sample of 145 students from ten schools, considering that the schools must be chosen in both rural and urban areas. Samal and Sarkar Pro-Environmental Behaviour Questionnaire (SSPBQ) developed by researchers was used. No difference of pro-environmental behaviour was found with regard to gender but significant differences were found with regard to localities. Rural students showed better pro-environmental behaviour than the urban students

Haloi and Kalita (2020) assessed the pro-environmental behaviour of the 10^{th} students of Tihu Barama block of Nalbari District, Assam, India with respect to gender and economic status. 100 students (25 from each school) were randomly selected as the sample for the study. Personal data sheet and self-structured questionnaire on pro-environmental behaviour have been used for collecting data. Percentage analysis and chi-square test were used to analyse data. Students were found to have lack of knowledge about pro-environmental behaviour. Results revealed that gender and economic conditions were not significant predictors of pro-environmental behaviour

Goswamee and Sharma (2021) investigated the pro-environmental behaviour and environmental attitude of 100 (50 boys and 50 girls) secondary school students of Sivasagar district of Assam who were randomly selected. Two standardized tools i.e., Pro-Environmental Behaviour Scale and Environmental Attitude Scale were used. Majority students were found to possess average level of pro-environmental behaviour and environmental attitude. Significant difference was found between boys and girls with respect to their pro-environmental behaviour. However, regarding environmental attitude, no significant difference existed between boys and girls. Negative correlation existed between pro-environmental behaviour and environmental attitude of secondary school students

Prasanthi and Ali (2023) investigated the levels of environmental ethics and pro-environmental behaviour of 80 Higher Secondary School Students from Palakkad district of Kerala. Environmental Ethics Scale (EES) constructed by Dr Haseen Taj (2001) and Pro-Environmental Behaviour Scale (PERS-SA) constructed by Dr Prof. Mercy Abraham and Arjunan have been used. 90% of the students possessed high level of environmental ethics while majority of the students were found to possess average level of pro-environmental behaviour. A positive relationship was found between Environmental Ethics and Pro-Environmental Behaviour

Banerjee and Singh (2024) investigated the association amongst attitude relating to environment as well as pro-environmental behaviour of 105 secondary school students studying under W.B.S.E board of Kolkata. There was no significant difference between male and female students with respect to environmental attitude and pro-environmental behaviour. There was Significant relationship amongst environmental attitude and pro-environmental behaviour

Latha and Bai (2025) investigated the pro-environmental behaviour of 100 secondary school students of Prakasam district. Survey method and simple random sampling technique were used. Pro-Environmental Behaviour Scale developed by Anjuli Suhane (2012) was used. Mean, standard deviation, percentage of mean and 't' values were calculated. Secondary school students possessed above average level of pro-environmental behaviour. Girl secondary school students showed higher pro-environmental behaviour. However, no significant difference in pro-environmental behaviour was found with respect to locality and type of school

Previous research has explored pro-environmental behaviour among students across different regions:

- Studies conducted in West Bengal reported no gender differences but identified locality-based variations.
- Research in Assam revealed that gender and economic status were not significant predictors of pro-environmental behaviour.
- Investigations in Sivasagar district found average levels of PEB among students, with some gender differences reported.
- Studies in Kerala observed high environmental ethics but moderate pro-environmental behaviour among students.
- Research in Kolkata identified significant associations between environmental attitude and pro-environmental behaviour.
- Recent findings from Prakasam district indicated above-average PEB, with girls showing relatively higher levels.

Overall, findings across studies remain mixed regarding the influence of gender and locality.

Need of the Study:

Rapid industrialization, urbanization, and population growth have intensified environmental

challenges. Scientific evidence indicates that human activities significantly influence global environmental systems. Since environmental protection depends largely on individual and collective behaviour, understanding pro-environmental behaviour becomes essential.

Students represent future decision-makers and change agents. Examining their level of environmental responsibility can help design appropriate educational interventions. Hence, the present study attempts to assess pro-environmental behaviour among secondary school students in Kamrup (Metropolitan) and Kamrup districts of Assam.

Operational Definition of Key Terms

Pro-environmental Behaviour: The score obtained by students on the Pro-Environmental Behaviour Scale (PEBS-SA) developed by A. Suhane (2012), reflecting behaviours that reduce environmental harm.

Secondary School Students: Male and female students studying in Class IX under the Assam State School Education Board in Kamrup (Metropolitan) and Kamrup districts.

Objectives of the Study

1. To determine the level of pro-environmental behaviour among secondary school students
2. To examine whether there are differences in pro-environmental behaviour based on gender.
3. To examine whether there are differences in pro-environmental behaviour based on locality.

Hypotheses of the Study

1. There is no significant difference in pro-environmental behaviour between male and female students.
2. There is no significant difference in pro-environmental behaviour between urban and rural students.

Delimitations of the Study

Delimitation in simple terms means the act of marking or prescribing the limits or boundaries, to demarcate. The present study is delimited to;

- Class IX students
- Government schools
- Kamrup (Metropolitan) and Kamrup districts
- Students affiliated with the Assam State School Education Board

Research Method

Descriptive research method was adopted.

Sample

The sample consisted of 200 students selected using stratified random sampling based on gender and locality. Equal representation was ensured for male–female and urban–rural categories.

Tool

The Pro-Environmental Behaviour Scale (PEBS-SA) (A. Suhane, 2012) containing 40 items was used. Each item had three response options scored as 2, 1, or 0.

Statistical Techniques for analysis of data

- Percentage analysis
- Mean and Standard Deviation
- Independent sample t-test

The data was analyzed objective-wise. The hypotheses were systematically tested and have

been presented in the following section

Analysis of Objective 1

To determine the level of pro-environmental behaviour among secondary school students

To determine the level of pro-environmental behaviour (PEB), students were categorized into three groups—High, Average, and Low—based on their scores obtained from the Pro-Environmental Behaviour Scale. Initially, the mean (M) and standard deviation (σ) of the total scores were calculated.

Students whose scores ranged between M + σ and M − σ were classified under the Average category. Those scoring below M − σ were placed in the Low category, while students scoring above M + σ were categorized as having High pro-environmental behaviour.

The computed mean score was 62 and the standard deviation was 8. Therefore:

- Scores above 70 (62 + 8) were considered High
- Scores below 54 (62 − 8) were considered Low
- Scores between 54 and 70 were categorized as Average

The distribution of students across these categories is presented below:

Table 1- Scores of Secondary School Students in Pro-Environmental Behaviour Scale

High Pro-Environmental Behaviour	Average Pro-Environmental Behaviour	Low Pro-Environmental Behaviour	Total
16%	69%	15%	100%

The table indicates that a substantial proportion of students (69%) fell within the average category. A smaller percentage (16%) demonstrated high levels of pro-environmental behaviour, while 15% were found in the low category. Hence, it may be concluded that most secondary school students exhibited average level of pro-environmental behaviour.

Analysis of Objective 2

To examine whether there are differences in pro-environmental behaviour based on gender.

To address this objective, the following null hypothesis was formulated:

There is no significant difference in pro-environmental behaviour between male and female secondary school students.

The relevant statistical results are presented below.

Table -2 Mean, S.D and t- values of Pro-Environmental Behaviour of Male and Female Secondary School Students

Variable	**Gender**						**t-value**	**Interpretation**
Pro-Environmental Behaviour	Male			Female			0.38	Not Significant
	N	Mean	S.D.	N	Mean	S.D.		
	100	62.24	8.56	100	61.84	5.88		

To test the hypothesis, the mean and standard deviation were computed separately for male and female students. The calculated t-value was 0.38, which is lower than the critical value of 1.97 at the 0.05 level of significance. This indicates that the observed difference between the two groups is statistically insignificant.

Therefore, the null hypothesis is accepted. It can be inferred that gender does not significantly influence pro-environmental behaviour among the students studied.

These findings agree with the studies conducted by Behera & Samal (2015) and Haloi & Kalita (2020), who also reported no significant gender differences. However, the results differ from those of Goswamee & Sharma (2021) and Latha & Bai (2025), who observed significant gender-based variations.

Analysis of Objective 3

To examine whether there are differences in pro-environmental behaviour based on locality.

For this objective, the following null hypothesis was proposed:

There is no significant difference in pro-environmental behaviour between urban and rural secondary school students.

The statistical outcomes are shown below.

Table -3 Mean, S.D and t- values of Pro-Environmental Behaviour of Urban and Rural Secondary School Students

Variable	Locality						t-value	Interpretation
Pro-Environmental Behaviour	Urban			Rural			0.17	Not Significant
	N	Mean	S.D.	N	Mean	S.D.		
	100	62.2	8.65	100	62.02	5.94		

Separate mean and standard deviation values were calculated for urban and rural students. The computed t-value (0.17) was lower than the critical value (1.97 at 0.05 level), indicating that the difference between the two groups is not statistically significant.

Accordingly, the null hypothesis is accepted. The findings suggest that locality does not significantly affect the pro-environmental behaviour of secondary school students.

These results are consistent with Latha and Bai (2025), although Behera & Samal (2015) reported a significant locality-based difference.

Findings

1. Most secondary school students demonstrated an average level of pro-environmental behaviour.
2. No statistically significant difference was observed between male and female students. Both groups exhibited almost similar levels of pro-environmental behaviour.
3. Urban and rural students did not differ significantly in their pro-environmental behaviour.

Suggestions

There is a need to further encourage students to adopt environmentally responsible practices in their daily routines. Schools should regularly organize environmental awareness programmes aimed at fostering a more sustainable outlook among learners.

Workshops, seminars, and awareness campaigns focusing on environmental conservation should be conducted by educational institutions and relevant authorities. Active participation of teachers and students in such initiatives can enhance understanding of environmental challenges and possible solutions.

Additionally, environmental education should be systematically incorporated into the curriculum at all educational levels to strengthen long-term behavioural change.

Conclusion:

The present study examined the pro-environmental behaviour of secondary school students and found that most students exhibited an average level of such behaviour. Although a considerable number of students demonstrated average behavioural tendencies, a smaller segment displayed low levels of environmental responsibility. No significant differences were found with respect

to gender or locality, indicating that these demographic factors did not influence students' pro-environmental behaviour in this context. To enhance environmental responsibility among students, curriculum frameworks should promote commitment toward environmental protection and sustainable resource use. Environmental topics should be linked with real-life situations at the secondary level to ensure meaningful learning. Teachers can also motivate students to stay informed about environmental issues through newspapers, television programmes, and other media sources.

References

1. Banerjee, S., & Singh, A. (2024). A Study on the Relationship between Pro Environmental Behaviour and Environmental Attitude of Secondary School Students of Kolkata. *International Journal of Creative Research Thoughts (IJCRT)*, g761-g767.
2. Behera, J., & Samal, R. M. (2015). Pro-Environmental Behaviour of Secondary School Students: A Topographical Analysis. *International Journal of Science and Research (IJSR)*, 698-703.
3. Goswamee, G., & Sharma, R. (2021). A Study on Pro-Environmental Behaviour and Environmental Attitude of Secondary School Students. *International Educational Scientific Research Journal*, 35-40.
4. Haloi, S., & Kalita, S. (2020). A Study on Pro-Environmental Behaviour of High School Students. *Psychology and Education*, 7196-7205.
5. Latha, G. K., & Bai, G. S. (2025). Pro-Environmental Behaviour of Secondary School Students. *Hong Kong International Journal of Research Studies*, 48-51.
6. Prasanthi, P. K., & Ali, M. M. (2023). Environmental Ethics in relation to Pro-Environmental Behaviour among Higher Secondary School Students . *Cognitive Discourses: International Multidisciplinary Journal*, 325-335.
7. Sahidullah, A. (2022). Environmental Awareness among High School Students: A Study in Majuli District of Assam, India. *Eco.Env. & Cons.*, 347-351.