International Journal of Innovative Research & Growth
E-ISSN: 2455-1848
homepage: http://www.ijirg.com/ijirg/
Volume: 15 Issue: 1, January 2026

Environmental Justice and Decision Making Towards Sustainability of Higher Secondary School Students

Simi .M[1], Pallavi Sasidharan Pillai[2*], Bindu R. L.[3]
[1]Post-Doctoral Fellow, Department of Education, University of Kerala, Thiruvananthapuram-695034, Kerala, India
[2]Research Scholar, Department of Education, University of Kerala, Thiruvananthapuram-695034, Kerala, India
[3]Professor, Department of Education, Dean Faculty of Education, University of Kerala, Thiruvananthapuram-695034, Kerala, India

CORRESPONDING AUTHOR

Pallavi Sasidharan Pillai
e-mail: pallavisasidharanpillai@gmail.com

KEYWORDS

Environmental Justice, Decision Making, Sustainability, Environmental Learning Higher Secondary School Students.

ARTICLE DETAILS

Received 11 June 2025; revised 21 August 2025; accepted 21 November 2025

DOI: 10.26671/IJIRG.2026.1.15.347

CITATION
Simi, M., Pillai, P. S., Bindu, R. L. (2026). Environmental Justice and Decision Making Towards Sustainability of Higher Secondary School Students. *Int J Innovat Res Growth*, 15(1), 151014-151021. DOI

Abstract

In the current scenario, environmental justice and decision making towards sustainability have emerged as crucial and interconnected concepts, particularly in the education of higher secondary school students. Environmental justice is regarded as the equitable treatment and meaningful participation of all people in environmental policies, with the goal of ensuring that no group bears a disproportionate share of environmental harm or is denied environmental benefits. On the other hand, decision making towards sustainability involves the ability to make responsible choices that balance environmental, social, and economic needs for the well-being of current and future generations. For students, integrating awareness of environmental justice into their decision-making processes equips them to become informed, empathetic, and active citizens capable of contributing to sustainable development in a just and inclusive manner. This study explores the relationship between Environmental Justice and Decision Making towards Sustainability of Higher Secondary School Students. Utilizing a normative survey method, data were collected from a representative sample of 245 higher secondary school students. The data was collected using an Awareness test on Environmental Justice and a Test on Decision making through random sampling. The analysis revealed a significant positive relationship between Environmental Justice and Decision Making towards Sustainability of Higher Secondary School Students. The findings suggest that this relationship can provide insights into how students' sense of justice informs their choices and actions regarding sustainable living; it aims to support the ongoing development of educational practices by fostering socially and environmentally conscious decision-making in our next generation. The findings will support the integration of justice-oriented environmental education in the teaching and learning process.

1. Introduction

In the contemporary world, environmental issues have gained prominence due to the increasingly evident consequences of ecological degradation, climate change, biodiversity loss, and unsustainable development. Among various frameworks developed to address these issues, the concept of environmental justice emerges as a vital paradigm that seeks to ensure fairness and equity in environmental decision-making, particularly concerning marginalized and vulnerable communities (Bullard, 2020). Environmental justice goes beyond the equitable distribution of environmental burdens and benefits; it is about ensuring meaningful participation in environmental decision-making and recognizing the rights of all individuals to live in a safe and sustainable environment.

The pressing challenges posed by environmental degradation require not only scientific and policy interventions but also a socio-educational transformation wherein young individuals are empowered to make environmentally responsible decisions. The role of education in this transformation is crucial. Specifically, higher secondary school students; being at a critical stage of cognitive, ethical, and social development; stand as pivotal agents of change. Integrating the principles of environmental justice and sustainability into their decision-making processes fosters a generation that not only understands environmental problems but is also equipped with the knowledge, values, and skills to address them responsibly (UNESCO, 2022).

Decision making towards sustainability in education involves the cultivation of ethical reasoning, critical thinking, and empathy towards ecological systems and affected communities (Tilbury & Wortman, 2021). It requires engaging students with real-world problems, participatory learning, and socially responsible practices. This aligns with the goals of Education for Sustainable Development (ESD), which emphasizes the development of competencies to make informed and ethical decisions for the well-being of current and future generations.

Environmental justice education enables students to comprehend the socio-political dimensions of environmental problems. It encourages them to analyze how power, privilege, and inequality influence the distribution of environmental harms and benefits. By embedding this framework in the school curriculum, students can better understand the interconnectedness between environmental sustainability and social justice (Agyeman et al., 2016). Such an approach not only promotes environmental literacy but also strengthens democratic citizenship and inclusive development.

India, with its socio-ecological diversity and growing environmental concerns, presents an urgent case for integrating environmental justice in educational discourse. Recent environmental events; ranging from deforestation and air pollution to water crises and natural disasters; highlight the critical need for building ecological consciousness among young learners (Chakraborty & Basu, 2023). Higher secondary education, therefore, becomes a strategic platform to instill such awareness and shape future leaders capable of sustainable decision-making.

2. Need and Significance of the Study

Although environmental awareness has been increasingly emphasized in school curricula, a significant gap persists between awareness and meaningful action among students. Many educational programs address environmental issues in isolation, often neglecting the socio-political and ethical dimensions that shape real-world outcomes (Evans et al., 2017). Consequently, students learn about pollution or climate change but remain uninformed about who is most affected or why certain communities are disproportionately impacted. This disconnect limits their capacity to make decisions rooted in justice and sustainability.

The integration of environmental justice into education responds directly to this gap. It allows students to connect environmental knowledge with ethical reasoning and social responsibility, thereby fostering a more comprehensive understanding of sustainability. By addressing issues of inequality, power, and participation, students are better equipped to make decisions that are both ecologically sound and socially fair (Schlosberg, 2007). This is particularly important for higher secondary students, who are on the threshold of adulthood and civic participation.

Moreover, research indicates that educational interventions focused on justice and equity can significantly improve students' engagement and commitment to sustainable practices (Jorgenson et al., 2020). They become more empathetic, more critical of unjust systems, and more motivated to enact change in their communities. In this way, education becomes not just a site of learning, but a platform for transformative social action.

Adolescence is a pivotal period for the development of decision-making abilities, identity formation, and ethical orientation. Cognitive neuroscience studies reveal that during adolescence, individuals develop the capacity for complex reasoning, future-oriented thinking, and perspective-taking (Blakemore & Robbins, 2012). Hence, this stage offers a unique window of opportunity to nurture competencies that influence long-term environmental behavior.

Incorporating environmental justice into educational experiences helps students practice making decisions that involve trade-offs, stakeholder perspectives, and ethical dilemmas; skills that are foundational to responsible citizenship. Through project-based learning, simulations, and community engagement, students can explore real-world scenarios such as pollution in marginalized communities, access to green spaces, or resource distribution, encouraging them to think critically about sustainability and justice (Simonneaux & Simonneaux, 2012).

Furthermore, in the context of commerce and economics education, decision making should not be restricted to profit maximization but should also consider environmental externalities, social costs, and ethical responsibilities. Teaching students to balance economic decisions with environmental justice principles ensures they grow into leaders who prioritize sustainable development over mere short-term gains (Raworth, 2017).

The United Nations' Sustainable Development Goals (SDGs), particularly SDG 4 (Quality Education), SDG 13 (Climate Action), and SDG 16 (Peace, Justice, and Strong Institutions), emphasize the importance of inclusive, equitable, and justice-centered education. These global goals urge member states, including India, to develop educational systems that empower learners to promote sustainable societies (UN, 2015).

National education policies have also recognized this imperative. The National Education Policy (NEP) 2020 of India advocates for holistic, multidisciplinary, and value-based education that equips students with the skills needed for sustainable living and active citizenship. The policy highlights the need for critical thinking, environmental awareness, and ethical reasoning as core components of future-ready learners (Government of India, 2020).

This study directly contributes to these global and national objectives by designing pedagogical frameworks that combine environmental justice and decision-making education. It seeks to develop curriculum models, teaching strategies, and assessment tools that foster justice-oriented sustainability practices among higher secondary students.

3. Promoting Equity in Environmental Learning

A justice-based approach to environmental education also addresses existing disparities in how environmental issues are taught across schools. Students from underprivileged backgrounds may experience environmental degradation more directly; such as poor air quality, water scarcity, or unsafe housing; but may lack access to high-quality education that helps them critically understand and address these issues (Cutter-Mackenzie-Knowles et al., 2020). This raises questions about equity in environmental learning itself.

By incorporating environmental justice into teaching, we can equip all students; regardless of socio-economic status; with the ability to gain access to relevant, context-sensitive, and empowering knowledge. It also allows students to take their lived experiences to the classroom, recognize multiple ways of knowing, and co-create solutions from local realities.

Furthermore, gender-sensitive and inclusive pedagogy can also enable young girls, indigenous children, and other individuals in vulnerable groups to become active participants in environmental decision-making. This aligns with a broader vision of democratic, participatory, and socially just education.

The present-day climate crisis, pandemics, and economic shifts have given rise to an overpowering sense of fear and uncertainty among youths. The majority of youths are afflicted with eco-anxiety or are powerless in the presence of apparently irreversible global issues (Clayton, 2020). Empowering them with the capacity to understand, analyze, and act against environmental injustices has the ability to shift fear and anxiety into agency. Through justice-based sustainability education, we can empower students to be more resilient, hopeful, and purposeful. They will better be able to see themselves as solutions, potentially making their communities and the world a better place. Agency is the center of transformation. When empowered to make choices—over the utilization of resources, consumption, activism, or civic participation—students gain a sense of control and sense of responsibility. This not only enhances their environmental conduct but also their health and civic self. The present research is especially timely in an age where the environmental crisis is not merely ecological, but intensely socio-economic and political in character. It calls for attention to the critical imperative of education frameworks that equip learners to comprehend and act upon these interlinked challenges. Since climate change worsens social injustices and environmental degradation hits the most vulnerable, education has to change in order to equip students with the instruments of justice, ethics, and civic duty. This study is unique in emphasizing the relationship between environmental justice and student choice. Although environmental education tends to emphasize scientific facts, this research emphasizes the values, viewpoints, and everyday decisions that students actually need to wrestle with. Doing so, it shows an emphasis on education that is action-oriented and human-centered.

Additionally, the research has significant contextual application within India. The nation is experiencing an accelerated shift in its rural, industrial, and urban landscapes. Topics such as disposal of waste, scarcity of resources, air pollution, and encroachment of forests are not only environmental but are intricately linked with issues of rights, access, and social justice. As students are motivated to interact with these realities through a justice perspective, they emerge not only as informed students, but as socially conscious and action-oriented adults. This relevance also permeates psychological and emotional realms. As more than ever before, reports of eco-anxiety in young people continue to grow (Clayton, 2020), the research provides a route towards developing resilience, agency, and hope. Through engagement in decision-making, awareness of systemic injustices, and local contributions to solutions, students feel empowered; an essential ingredient in ensuring long-term environmental involvement. This research adds to three broad areas: educational innovation, environmental sustainability, and social change. It not only develops new knowledge on how justice-focused education can influence student decision making but also offers real avenues for designing inclusive, relevant, and meaningful

environmental education approaches. Its results will guide educators, school principals, policy-makers, and scholars aiming to cultivate responsible, critically conscious, and sustainability-literate citizens.

4. Objectives of the Study

- To find out level of Environmental Justice towards Sustainability of Higher Secondary School Students.
- To find out level of Decision making towards Sustainability of Higher Secondary School Students.
- To find out whether there is significant difference in Environmental Justice towards Sustainability of Higher Secondary School Students based on gender.
- To find out whether there is significant difference in Decision making towards Sustainability of Higher Secondary School Students based on gender.
- To find out the relationship between Environmental justice and Decision making towards Sustainability of Higher Secondary School Students.

5. Methodology in Brief

The Investigators adopted normative survey method for the study. The population of the study comprises Higher Secondary School Students across Kerala. A sample of 245 higher secondary school students from various educational institutions across Thiruvananthapuram district was selected for the present study. The Random sampling technique was used for the study. An awareness test on Environmental justice was prepared by investigator which contained 30 test items. The components of Environmental justice are distributive justice, procedural justice, and recognition justice. A test on decision making was prepared by the investigator which contained 40 test items for measuring abilities such as Logical reasoning, Critical thinking, Adaptability and problem-solving. The data collected was analyzed using descriptive statistics, test of significance difference between means and correlation analysis.

6. Analysis And Interpretation of Data

The data for the study was collected from a sample of 245 from schools using the Normative Survey Method. It was collected by using appropriate tools and analyzed with proper statistical techniques. The analysis of the data has been presented in the following heads.

6.1 Descriptive Statistics of Environmental Justice and Decision Making of Higher Secondary School Students

The Descriptive statistics of Environmental justice and Decision making of Higher Secondary School Students are given in the table 1

Table 1: Descriptive Statistics for the variable's Environmental justice and Decision making towards Sustainability of Higher Secondary School Students.

Descriptive Statistics	Environmental Justice	Decision Making
N	245	245
Mean	19.95	26.71
Standard Deviation	4.99	6.93
Skewness	-0.24	-0.42
Std. error of Skewness	0.15	0.15
Kurtosis	-1.05	-0.67
Std. error of Kurtosis	0.31	0.31

The skewness and kurtosis values for the variables Environmental Justice and Decision Making towards Sustainability among higher secondary school students indicate that both distributions are approximately normal. The skewness values (−0.24 for Environmental Justice and −0.42 for Decision-Making) fall well within the acceptable range of ±1, suggesting a slight negative skew but no substantial deviation from symmetry. Similarly, the kurtosis values (−1.05 and −0.67 respectively) point to slightly flatter distributions compared to the normal curve but still remain within the limits for normality.

6.2 Analysis of The Level of Environmental Justice Towards Sustainability of Higher Secondary School Students

The selected samples were classified into high, moderate, and low groups based on their Environmental Justice scores. The mean (M) and standard deviation (σ) of the selected 245 samples were found. Then M+ σ and M- σ were found. The students who scored above M+σ, i.e., scored above 25, were included in high groups. Students who scored M- σ, i.e., scores below 15, were included in the low group, and students between 25 and 15 were included in the moderate group. The percentage of students belonging to each group was analyzed, and the analysis details are presented in table 2.

Table 2: Classification of higher secondary school students based on their level of Environmental Justice towards Sustainability.

Groups	No. of students	Percentage of students
High level group	54	22
Moderate level group	147	60
Low level group	44	18

From table 2, it is clear that 22% of higher secondary school students out of the total sample belong to the high-level group, 60% higher secondary school students out of the total sample belong to the moderate-level group, and 18% of higher secondary school students of the total sample belongs to the low-level group. Hence the investigator concluded that the level of Environmental Justice towards Sustainability of Higher Secondary School Students is moderate.

6.3 Analysis of The Level of Decision Making Towards Sustainability of Higher Secondary School Students.

The selected samples were classified into high, moderate, and low groups based on their Decision-making scores. The mean (M) and standard deviation (σ) of the selected 245 samples were found. Then M+ σ and M- σ were found. The students who scored above M+σ, i.e., scored above 34, were included in high groups. Students who scored M- σ, i.e., scores below 20, were included in the low group, and students between 34 and 20 were included in the moderate group. The percentage of students belonging to each group was analyzed, and the analysis details are presented in table 3.

Table 3: Classification of higher secondary school students based on their level of Decision making towards Sustainability.

Groups	No. of students	Percentage of students
High level group	56	23
Moderate level group	143	58
Low level group	46	19

From table 3, it is clear that 23% of higher secondary school students out of the total sample belong to the high-level group, 58% higher secondary school students out of the total sample belong to the moderate-level group, and 19% of higher secondary school students of the total sample belongs to the low-level group. Hence the investigator concluded that the level of Decision making towards Sustainability of Higher Secondary School Students is moderate.

6.4 Comparison of Environmental Justice towards Sustainability of Higher Secondary School Students based on gender.

The Environmental Justice scores of the male and female higher secondary school students of the selected sample were compared using the test of significance difference between means. The difference between their mean scores was computed by using the critical ratio. Details regarding the results obtained are given in Table 4

Table 4: Data and result of the test of significance of the difference between the mean Environmental Justice scores of male and female higher secondary school students

Gender	N	Mean	S. D	C.R	Level of significance
Female	128	19.75	4.87		
Male	117	20.17	5.12	0.65	Not significant

From table 4, it is clear that there is no difference between means that are significant at 0.05 level (C. R = 0.65). This result shows no significant difference in the Environmental Justice towards Sustainability of male and female higher secondary school students. Here the mean score of female higher secondary school students (M= 19.75) is almost equal to that of male students (M=20.17). Hence, the result is statistically not significant. This indicates that there is no significant difference in Environmental Justice scores between male and female students in the sample. It can be interpreted that both male and female students demonstrate a comparable level of understanding and awareness regarding environmental justice, suggesting that gender may not play a determining role in shaping environmental perspectives at the higher secondary school level.

6.5 Comparison of Decision making towards Sustainability of Higher Secondary School Students based on gender.

The Decision-making scores of the male and female higher secondary school students of the selected sample were compared using the test of significance difference between means. The difference between their mean scores was computed by using the critical ratio. Details regarding the results obtained are given in Table 5

Table 5: Data and result of the test of significance of the difference between the mean Decision-making scores of male and female higher secondary school students.

Gender	N	Mean	S. D	C.R	Level of significance
Female	128	27.96	6.81		
Male	117	25.35	6.82	2.98	0.01

From table 5, it is clear that there is difference between means that are significant at 0.01 level (C. R = 2.98). This result shows significant difference in the Decision making towards Sustainability of male and female higher secondary school students. Here the mean score of female higher secondary school students (M=27.96) is more than that of male students (M=25.35). Hence, the result is statistically significant. This indicates that there is significant difference in Decision making scores between male and female students in the sample. This suggests that female students tend to demonstrate more responsible and thoughtful decision making behavior in sustainability contexts. The difference may stem from higher emotional awareness, empathy, or social responsibility commonly observed among girls.

6.6 Relationship between Environmental Justice and Decision Making Towards Sustainability of Higher Secondary School Students

Table 6: Relationship between Environmental Justice and Decision Making Towards Sustainability of Higher Secondary School Students.

Variables	N	Co-efficient of correlation (r)
Environmental Justice		
Decision making	245	0.824

From table 6**,** the investigator used Karl Pearson's Coefficient of Correlation (r) to study the intensity of the relationship between Environmental Justice and Decision Making Towards Sustainability of Higher Secondary School Students. The obtained value of r is 0.824, the calculated r = 0.824 and it is significant at the 0.01 level. ($r = 0.824$; $p < 0.01$). Investigator concluded a significant positive relationship between Environmental Justice and Decision Making Towards Sustainability of Higher Secondary School Students.

7. Findings of the Study

- The level of Environmental Justice towards Sustainability of Higher Secondary School Students is moderate.
- The level of Decision making towards Sustainability of Higher Secondary School Students is moderate.
- There is no significant difference in the Environmental Justice towards Sustainability of male and female higher secondary school students.
- There significant difference in the Decision making towards Sustainability of male and female higher secondary school students. Female students tend to demonstrate more responsible and thoughtful decision-making behavior in sustainability contexts.
- There is a significant positive relationship between Environmental Justice and Decision Making Towards Sustainability of Higher Secondary School Students

8. Key Educational Implications Based on the Findings

- ❖ Introduce decision making abilities development sessions specifically for male students through classroom discussions, scenario analysis, and case studies.
- ❖ Design environmental activities that help students actively apply their knowledge of environmental justice, such as project-based learning and fieldwork.
- ❖ Organize eco-club initiatives and school-level sustainability programs to provide hands-on experience in solving real-life environmental problems.
- ❖ Include socio-emotional learning (SEL) components in the curriculum to enhance students' empathy, ethical reasoning, and personal responsibility.
- ❖ Adopt gender-inclusive teaching methods to ensure balanced participation and motivation among both male and female students in sustainability tasks.
- ❖ Use reflective assessment tools, such as personal journals and real-life decision-making exercises, to evaluate students' ability to act responsibly.
- ❖ Conduct parent awareness programs to extend environmental learning beyond the classroom and promote sustainable habits at home.
- ❖ The integration of justice-oriented environmental education into the teaching and learning process, emphasizing not only awareness but also ethical reasoning, critical decision-making, and active participation in sustainability practices.
- ❖ Provide in-service training for teachers on fostering environmental values and decision-making through experiential, value-based teaching practices.
- ❖ Align classroom practices with NEP 2020 goals, emphasizing competency-based and value-based education.

Acknowledgement

We are deeply thankful to our mentors, colleagues and peers for their valuable guidance, constructive feedback and continuous encouragement throughout the research process. We also extend our appreciation to teachers and staff of Department of Education, University of Kerala for providing the necessary resources and support to carry out this study. We remember with gratitude Principals, Teachers and Students of Higher Secondary Schools for their sincere cooperation and help in conducting the study. Finally, we are grateful to the editorial board and reviewers for their insightful comments and suggestions, which significantly improved the quality of this paper.

Conflict of Interest

There is no conflict of interest to declare for this paper.

Source of Funding

The paper was self-funded and not supported by any external funding agency.

References

[1] Agyeman, J., Schlosberg, D., Craven, L., Matthews, C. (2016). Trends and directions in environmental justice: From inequity to everyday life, community, and just sustainabilities. *Annual Review of Environment and Resources*, 41(1), 321–340. https://doi.org/10.1146/annurev-environ-110615-090052

[2] Awasthi, A., Agarwal, R., Sethi, S. (2020). Environmental equity and air pollution in Indian cities. *Environmental Research*, 191, 110144. https://doi.org/10.1016/j.envres.2020.110144

[3] Blakemore, S. J., Robbins, T. W. (2012). Decision-making in the adolescent brain. *Nature Neuroscience*, 15(9), 1184–1191. https://doi.org/10.1038/nn.3177

[4] Bullard, R. D. (2020). *Dumping in Dixie: Race, class, and environmental quality* (3rd ed.). Westview Press.

[5] Chakraborty, S., Basu, M. (2023). Environmental education in India: Challenges and imperatives for sustainable development. *International Journal of Environmental Studies*, 80(1), 77–92. https://doi.org/10.1080/00207233.2022.2102754
[6] Chawla, L., Cushing, D. F. (2021). Education for environmental justice and sustainability. *Environmental Education Research*, 27(2), 153–166. https://doi.org/10.1080/13504622.2020.1834381
[7] Clayton, S. (2020). Climate anxiety: Psychological responses to climate change. *Journal of Anxiety Disorders*, 74, 102263. https://doi.org/10.1016/j.janxdis.2020.102263
[8] Cutter-Mackenzie-Knowles, A., Malone, K., Barratt Hacking, E. (2020). *Researching early childhood education for sustainability: Challenging assumptions and orthodoxies*. Routledge.
[9] Evans, G., Phelan, L., Davis, J. M. (2017). *Ecological justice and education: Creating diverse and inclusive learning communities*. Routledge.
[10] Government of India. (2020). *National Education Policy 2020*. Ministry of Education. https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf
[11] Han, H., Ahn, S. W. (2021). Youth activism and environmental justice. *Youth & Society*, 53(7), 1090–1113. https://doi.org/10.1177/0044118X19852141
[12] Hickman, C., Marks, E., Pihkala, P., Clayton, S., Lewandowski, R. E. (2021). Climate anxiety in children and young people and their beliefs about government responses. *The Lancet Planetary Health*, 5(12), e863–e873. https://doi.org/10.1016/S2542-5196(21)00278-3
[13] IPCC. (2022). *Climate Change 2022: Impacts, Adaptation, and Vulnerability*. https://www.ipcc.ch
[14] Jorgenson, S., Stephens, J. C., White, B. (2020). Environmental education in transition: Toward a more just, inclusive, and resilient future. *Journal of Environmental Studies and Sciences*, 10(4), 423–431. https://doi.org/10.1007/s13412-020-00614-x
[15] Mackay, C. M., Schmitt, M. T. (2019). Do people who feel more connected to nature do more to protect it? *Journal of Environmental Psychology*, 65, 101322.
[16] National Education Policy (NEP). (2020). *Ministry of Education, Government of India*. https://www.education.gov.in
[17] Ojala, M. (2017). Hope and anticipation in education for a sustainable future. *Futures*, 94, 76–84. https://doi.org/10.1016/j.futures.2016.01.003
[18] Raworth, K. (2017). *Doughnut economics: Seven ways to think like a 21st-century economist*. Chelsea Green Publishing.
[19] Schlosberg, D. (2007). *Defining environmental justice: Theories, movements, and nature*. Oxford University Press.
[20] Simonneaux, L., Simonneaux, J. (2012). Educational configurations for teaching environmental justice issues. *International Journal of Environmental and Science Education*, 7(4), 597–620.
[21] Sterling, S. (2020). Education for sustainable development: A strategic framework. *Journal of Education for Sustainable Development*, 14(2), 213–230.
[22] Stevenson, R. B., Brody, M., Dillon, J., Wals, A. E. J. (2018). *International handbook of environmental education*. Routledge.
[23] Sze, J., London, J. (2018). Environmental justice at the crossroads. *Sociology Compass*, 12(7), e12547.
[24] TERI. (2020). *India Climate Risk Index 2020*. The Energy and Resources Institute.
[25] Thompson, S. C. G., Barton, M. A. (2018). Ecocentric and anthropocentric attitudes toward the environment. *Journal of Environmental Psychology*, 55, 57–64.
[26] Tilbury, D., Wortman, D. (2021). Education for sustainable development and social transformation. In S. Sterling (Ed.), *The Sustainable University* (101–115). Routledge.
[27] UNESCO. (2021). *Education for sustainable development: A roadmap*. https://unesdoc.unesco.org/ark:/48223/pf0000374802
[28] UNESCO. (2022). *Education for Sustainable Development: A roadmap*. United Nations Educational, Scientific and Cultural Organization. https://unesdoc.unesco.org/ark:/48223/pf0000374802
[29] United Nations (UN). (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*. https://sdgs.un.org/2030agenda
[30] United Nations. (2020). *Transforming our world: The 2030 agenda for sustainable development*. https://sdgs.un.org/2030agenda
[31] Walker, G. (2018). Environmental justice concepts. *Routledge Handbook of Environmental Justice*.