International Journal of Innovations & Research Analysis (IJIRA)
ISSN : 2583-0295, Impact Factor: 5.449, Volume 02, No. 01, January - March, 2022, pp 69-74

STRATEGIES FOR TACKLING CLIMATE CHANGE ISSUES: IN THE PERSPECTIVE OF SECONDARY SCHOOL STUDENTS

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ABSTRACT

Global climate change is causing various effects on the environment as well as human beings. This article aims to explore strategies in addressing climate change issues based on students 'perspectives. Data were obtained from library research and the researchers 'own experience. The results of the study found three main recommendations in addressing the issue of climate change from the perspective of students, namely continuous tree planting, creating and enhancing awareness and disseminating environmental education, collaborating with all parties in overcoming the implications and measures to restore the environment. The implications of this study provide basic knowledge and direction for researchers and practitioners to constantly improve strategies in terms of cause and effect as well as measures in overcoming climate change.

Keywords: *Global Climate, Environmental Education, Researchers, Students 'Perspectives, Human Economy.*

Introduction

Human activities such as specific industries, pollution, open burning, and carbon monoxide emissions all contribute to this climate change. Based on Figure 1.0, there are many causes and effect of climate change to world (Zeng et.al.,2022, Malhi et.al.,2021 and McGuire et.al.,2021). Climate change not only affects the environment, but it also has ramifications for the human economy, society, and health. Natural disasters and climate change's greenhouse impacts will cause ongoing disruptions to human and non-human life's activities. Any adaptive measures done at this point will come at a very high social and economic cost. Because of this, society has a responsibility to protect the environment and maintain it clean.

Figure 1: Shows the various causes and effects of climate change on the world

As we work to mitigate the harmful effects of climate change on our world, we must put into action a wide range of ideas and suggestions to accomplish this. All parties on the world stage must work together to address the issue of climate change in order to achieve the aim of saving lives and protecting our planet.

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Literature Review

There have been a number of previous studies looking at ways to mitigate climate change's negative effects on the environment. Planting trees in the streets can improve the quality of life in urban areas, especially for the people who live there (Tan, & Shibata, 2022). As a result, developing and highly populated areas need to pay particular attention to raising public awareness of tree planting methods that are favourable to biodiversity (Liu, & Slik, 2022). To combat urbanisation and improve global terms and urbanisation, tree planting is a real tool (Lau et.al., 2022).

Climate change is causing an increase in heat-related mortality (Sinha et.al., 2022). Due-death cases in the United States are increasing. Air pollution in the indoor and outdoor environments pose a danger to human health. Restoration of the current atmosphere and treatment of filthy air can be done by plants (Han et.al., 2022). Continuous tree-planting, therefore, has the potential to save human life. To ensure that legitimate and effective agroforestry and extraction of natural flora products and management is carried out, the suitable mechanism for coordination of such practises is forest certification to prevent unlawful forest exploitation (Urruth et al. .al., 2022).

The challenge of global warming is exacerbated by plastic pollution. Liars' lives and health are at risk because to the growing environmental impact of plastic waste. There are a variety of approaches, such as changing consumer habits, expanding research into new ways to minimise plastic manufacturing and increase recycling rates, as well as promoting the use of ecologically friendly alternatives and spreading information widely (Sandu et al., 2022).

Education about the environment can be accomplished by enforcing environmental education in public schools. Consequently, environmental education should be incorporated into every educational facility (Tadena et.al., 2021). Social and environmental responsibility are important considerations for student-centered education (Komatsu et.al., 2021). It is also possible that university-level research on climate change will aid teachers in raising student understanding of the issue (Jeong et.al., 2021). When all parties work together on the issue of climate change, it can be solved.

Methodology

Based on predetermined criteria, this study evaluates the effectiveness of various measures to combat climate change. As a result of this progress, many environmental sustainability principles can be traced back to their roots. The best ways to control climate change are discussed in this article, which examines a number of studies. Libraries and other literary resources, as well as electronic search engines, are used in systematic literature reviews to find information on teaching ethics. Prior to conducting an objective evaluation of the writing goals, relevant articles are picked and examined for appropriateness. Each publication's specific information was gathered in order to allow for appropriate interpretation, summary, and summary of conclusions. Secondary data was used to gather all of the information for this study, but it was supplemented by unstructured questionnaires from secondary schools in the Beluran district of Sabah, Malaysia, in order to obtain student suggestions that were both appropriate for the time period in which the study was conducted as well as thought-provoking.

Finding and Discussion

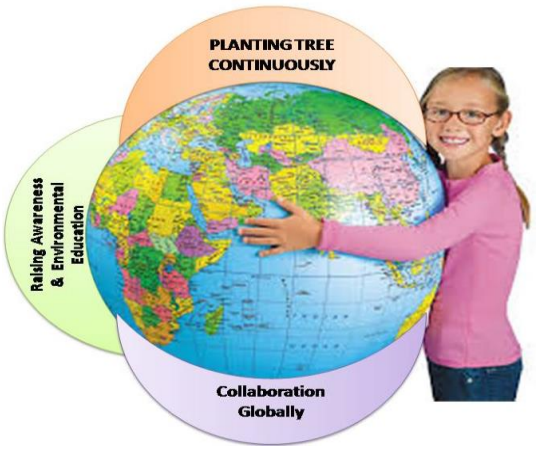

Figure 2: The Concept of Resolving the Issue of Climate Change

Figure 2.0 presents three main ideas for combating climate change and protecting the planet. The appendix that follows provides a thorough breakdown of the ideas outlined in table 3.0.

Table 3: Coping Strategies in the Face of Climate Change

No.	Strategy	Example Program	Method of Implementation	Expected Impact
1	Planting Tree Continuously Tan, & Shibata, (2022), Liu, & Slik, (2022) Lau *et.al.,(*2022). Han *et.al.,*2022	Save Nature & Life	• Planting in school areas, housing and places at risk • Planting and Recording Through Digital Applications • Giving Credit (Tokens, Certificates, E-Wallets) To Those Involved.	Reducing the problem of natural disasters and climate change
2	Raising Awareness and Disseminating Environmental Education Apte, & Mishra, (2023) Sandu *et.al.,(*2022) Tadena *et.al.,(*2021) Komatsu *et.al.,(*2021) Jeong *et.al.,(*2021) Neto *et.al.,(*2021)	• Environment Day Celebration • Study Tour • Green Space • Recycling Campaign • "Plastic Free Day"	• Co -curricular Activities in Schools • Make it a National Youth Activity • Competition • Forums, Talks And Environmental Debates • Global Campaign (SDG)	Students, teachers, parents and the local community will practice the value of love and appreciate nature.
3	Collaboration with all parties Parra *et.al*., 2022 and Ornelas *et.al*., 2022	Healthy Environment	• Collaboration with Government Agencies • Collaboration with NGO's • Collaborate In Obtaining Tree Seeds, Fertilizers, Soil And Other Resources For The Implementation Of Environmental Programs	Able to create comprehensive environmental awareness in all departments.

Planting Tree Continuously

There is no denying the significance of the tree to all of humanity. Planting a lot of trees can have a significant impact on a place's microclimate. Providing life with oxygen through the use of fuel. Large trees can provide shade as well as serve as a source of income. Educate the public on the importance of environmental stewardship. Our school, for example, regularly plants around 100 trees around the school. Every student has been taught the value of planting trees, and as a result, nearly every classroom in the school has some sort of greenery. We also undertake a lot of planting around the house with the help of our parents. Planting trees surrounding our school can help to prevent global warming, which is typically caused by human activity.

In addition, the process of photosynthesis increases oxygen in the earth's atmosphere, ensuring a reduction in carbon dioxide indirectly. As a result, the likelihood of the "greenhouse effect" occurring is reduced. The rise in Earth's temperature, then, can be slowed down. Compared to locations where forests have been cut down, this illustrates that planting numerous trees can balance the climate of an area while also lowering the temperature and need for air conditioning. The temperature usually rises and the environment becomes warmer.

Raising Awareness and Disseminating Environmental Education

Education has the ability to affect change, and knowledge is linked to taking better care of the environment for the benefit of its inhabitants. The problem of global warming can be controlled by education Tadena *et.al.,(*2021). This instruction should begin in the classroom because we must teach our children environmental responsibility in the classroom for the foreseeable future. A good example is education, which can help people become more conscious of environmental challenges. People with a good environmental education can do their part to decrease or reduce global warming.

- **Environment Day Celebration**

Establishing and celebrating environmental week an opportunity for environmental education and knowledge dissemination. For instance, I used to organize an environmental week at school every year. Teachers and students will work together to make the school the cleanest and most comfortable location for pupils. Various events, such as competitions, forums, tree planting, and recycling, will be held during the school's environmental week celebration to raise awareness among students and the broader school community, including parents (Tadena *et.al.,*2021)

We may foster environmentally friendly attitudes in the school community and the local community by working with schools, so that everyone understands the significance of the universe to human beings. Students can indirectly benefit from outstanding school hygiene and use this experience in the future to help solve environmental concerns like pollution and global warming. In the end, every school should help celebrate Environmental Day at school to develop children who love the environment more and help prevent global warming at the same time.

- **Environmental Study Tour**

One strategy to raise community awareness, particularly among teens, is to teach environmental knowledge through study excursions (Lo *et.al*.,2021 and Repina, 2021). Student understanding and knowledge of future environmental concerns can be improved by taking recycling learning tours waste treatment plants, solar energy, and hydroelectric management, for example. They'll eventually start coming up with innovative solutions to environmental issues.

- **Creating Green Space**

A growing body of research shows that exposure to green space reduces stress in the individual. Students' tension can be relieved and their appreciation for the environment deepened by the green space created in the classroom and the school garden. The resulting green space can also be used as a teaching tool in geography classes. Additionally, it enhances the aesthetics of the surrounding neighbourhood around the school. Green space can also help with air quality and soil health. Green space also decreases air pollution and regulates the temperature or climate of the environment, all of which help to combat global climate change (Subbotina *et.al.,*2022) Every urban and rural resident should therefore construct green space in their homes as a means of combating climate change.

- **Recycling Campaign**

Recycling reduces the quantity of garbage that needs to be burned or discarded, lowering greenhouse gas emissions. Malaysians must participate in 3R. (Reuse, Reduce, and Recycle). Instead, recycle plastic mineral bottles, paper, cans, and aluminium. As a result, less energy is used and less pollution is produced. I feel that implementing the 3R principle into daily actions can help to reduce global warming (Apte, & Mishra, 2023 and Sandu *et.al.,*2022)

Our school recycling bin competition helped youngsters divide trash into three categories: plastic, paper, and metal. Students design recycling bins using recycled materials like paper, mineral bottles, and milk jugs. The competition can better collaborate with each child's parents to help our planet reduce global warming through recycling. So, every residential area in Malaysia should include recycling bins so residents may learn about and contribute in the fight against global warming.

- **"Plastic Free Day"**

"Plastic-Free Day" is a day when people avoid from using plastic. Malaysia's government should establish a "Plastic Free Day," which would be held twice a week in the country. This will assist the government in addressing the problem of pollution while also focusing on mitigating the effects of greenhouse gas emissions and climate change. For example, Every Friday in our school holds a "Plastic Free Day." To regulate the use of non-biodegradable plastic, the use of plastic on a specific day is not allowed at all in the school area (Neto *et.al.,*2021 and Sandu *et.al.,*2022). This promotes awareness among all members of the school community about the importance of environmental stewardship and contributing to global climate change mitigation.

Collaboration with all Parties

All parties must be concerned about environmental challenges and must work together to achieve the aim of reducing global warming through the United Nations Foundation's Sustainable Development Goals. For example, Malaysia's Ministry of Energy and Natural Resources mandates that all government agencies and non-governmental groups participate in various environmental preservation and conservation projects. Each program done around diverse implications in globally bound climate change control can be channelled (Rosmaladewi, 2020).

For example, to collect black soil, fertilizer, and tree seeds, our school once employed a school greening program in partnership with NGO's enterprises (Parra *et.al*., 2022 and Ornelas *et.al*., 2022). As a result, the school should engage with environmental non-governmental groups that have the capacity to raise awareness among students and the school community. As a result, all stakeholders, including government agencies and non-governmental groups, must work together to combat global climate change, particularly in Malaysia.

Conclusion

To sum it up, we strongly recommend that, the higher authorities should apply three main strategies as planting trees on a regular basis, raising awareness and distributing environmental education, and holding collaborations with all parties in solving issues of climate change . I hope that members of the community will continue to contribute to the collaborative greening of Malaysian earth and to the preservation and conservation of the environment in order to control the global climate change issue, particularly in Malaysia.

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