



Implementation of Adiwiyata School Program That Stimulates Environmental Health Awareness of Elementary School Level Students in Kulon Progo District

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Abstract

This study aims to analyze programs and activities at Adiwiyata schools that can encourage environmental health awareness among elementary school students in Kulon Progo. This study uses a qualitative research method with a case study approach. The subjects of this research were low and high-class students at Adiwiyata schools in Kulon Progo Regency. The research sample was adiwiyata schools with the categories of district adiwiyata, provincial adiwiyata, and national adiwiyata. Two schools were selected for each adiwiyata level so the total sample in this study was six adiwiyata schools at the elementary level. The technique of taking research subjects using a purposive sampling technique. The research results show; the implementation of programs and activities at Kulon Progo Elementary School that support students' environmental health awareness is carried out, among other things, through the formulation of the school's vision, mission, and objectives which include environmental management, implementation of environmental insight habituation, program socialization and the importance of school environmental health for students, formulating environmental activity programs. These programs are expected to be able to foster awareness of environmental health for students to create a healthy and comfortable learning environment.

Keywords: *Adiwiyata School; Environmental Health; Students*

Introduction

Environmental problems globally and nationally are experienced by various countries. These environmental problems cause among others the rise in air temperature. The increase in air temperature according to Zulfa *et al.*, (2016: 35) is estimated to occur between 1990-2100 there will be an increase in the average global temperature of around 1.4 to 5.8 degrees Celsius. As a result, there will be an increase in the average sea level due to the melting of the polar ice caps. Many areas of the world will be submerged in seawater. There will be a global climate change that will cause rain and flooding to increase. Outbreaks of some diseases will increase.

The impact of environmental problems including disease outbreaks. This impact will occur if the community lacks awareness of environmental health. Islamiah *et al.*, (2022: 1) explain that public awareness of the condition of the surrounding environment is still lacking because many people do not understand the importance of protecting the environment. Therefore, many people still dispose of waste in the wrong place, so a lot of household waste pollutes the environment.

Efforts that can be made to overcome public awareness of the environment include planting environmental health. Suyono (2011) explains that environmental health is an optimum environmental condition or condition that influences optimal health status. Environmental health is not only related to physical, chemical, and biological factors but also related to behavioral factors that can potentially harm health. Various factors that have the potential to harm health require an effort to be handled, including through environmental sanitation. Environmental sanitation efforts are targeted at preventing disease and creating a healthy environment by maintaining a balance of these various factors so that existing factors do not cause conditions that can harm the community's environmental health status.

Negative impacts on environmental health can be overcome by environmental sanitation efforts. Novianti & Pertiwi (2019: 176) explain that environmental health or environmental sanitation efforts can be interpreted as activities that aim to improve and maintain basic environmental conditions and affect human well-being. Environmental sanitation includes the provision of clean and safe water, disposal of waste from humans, animals, and industry, food sanitation, clean and safe air clean, and safe housing.

The existence of environmental sanitation must be owned by all components of Indonesian society. One of these components is students in elementary schools. Novianti & Pertiwi (2019: 176) state that the existence of school environmental sanitation as part of educational infrastructure tends to be forgotten. In fact, poor sanitary conditions can have a negative effect on the health level of the school's students concerned. The threat of negative impacts of sanitation will be detrimental to students, especially children.

UNICEF Indonesia in its Clean Water, Sanitation and Hygiene Study Summary said that 88% of child deaths due to diarrhea can be caused by poor sanitation and hygiene behavior as well as unsafe drinking water. The diarrheal disease itself is the main cause of death for children under five years old in Indonesia. Diarrhea in children can be prevented through the habit of washing hands with running water and soap. Appropriate hand-washing behavior can reduce the risk of diarrheal disease by 42% to 47%. Environmental sanitation that does not meet health requirements, poor personal hygiene, and contaminated water, apart from potentially causing diarrhea, can also cause other diseases such as dysentery, cholera, typhoid, hepatitis, leptospirosis, malaria, dengue fever, scabies, chronic respiratory diseases, and infections. intestinal parasites (Feryasari, 2015).

The large number of cases related to child deaths due to diarrheal diseases makes it necessary to introduce and raise awareness about environmental health in children from an early age. Environmental health awareness in children from an early age will have a positive impact on children in their daily lives. Children must be introduced to and accustomed to being responsible so that later they can be expected to become citizens who care about the environment and have the knowledge and will to protect the earth in a sustainable manner (Risqi Wais Al Qorni *et al*, 2021: 160).

In connection with the large number of cases related to early childhood deaths, it is necessary to improve the quality of the environment by raising awareness among citizens about the importance of protecting and preventing environmental damage. In forming a child's environmental care character, it will be better if it is instilled from an early age so that it can foster a sense of responsibility in students as the successor of the nation. students in their daily lives which will later be used as a benchmark (Rosela and Ganes Gunansyah, 2022:1451-1452).

Schools as educational institutions and also a place for education for humans are the main targets for being involved in efforts to manage the environment through implementation in every subject in the world of education. Law Number 20 of 2003 concerning the National Education System says that: Education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble character, as well as the skills needed by him, for the prosperity of society, nation, and state. An understanding of the importance of protecting, preserving, and managing the environment so that it is maintained and balanced in life on this earth needs to be understood by humans and this understanding must be instilled from generation to generation (Marsiana Lina, 2016: 2).

Environmental health awareness can be instilled in students. One of the important levels of education in instilling environmental health awareness is an elementary school (SD). Elementary school students are expected to have environmental health awareness. Anggraini *et al.*, (2019: 109) explained that education about health is very good starting from school, especially in elementary school. During elementary school, children grow and develop both physically, socially, and mentally so that the school environment can have side effects on their lives. This is also in line with the basic competencies included in the curriculum which seeks for children to be able to practice how to maintain and maintain personal and environmental hygiene. Thus, the school bears responsibility for the implementation of environmental health implementation.

With the involvement of schools in efforts to increase environmental health awareness among students, the government's role is very important to control the implementation of schools related to environmental understanding and knowledge. An understanding of the environment has been included in one of the subjects based on an agreement between the Minister of Environment and the Minister of National Education with Decree number: Kep no 7 / MENLH / 06/2005 Number: 05 / VI / KB / 2005 concerning the Development and Supervision of Environmental Education on the 5th June 2005. This decision became the official letter and basis for encouraging and developing environmental education with the emphasis that environmental education is carried out in an integrated manner with existing subjects (Nurhafni, 2019:47).

Environmental health education taught at the elementary level is in accordance with the learning outcomes of physical education, sports, and health (PJOK) subjects. Phase A (generally grades I and II SD/MI/Package A Program) learning outcomes are that *students understand procedures and are able to practice health-related physical fitness development exercises. Students also understand procedures and are able to practice patterns of healthy living behavior in the form of recognizing the names and functions of body parts, as well as maintaining personal and environmental hygiene* (Badan Standards, Curriculum and Education Assessment, 2022: 358).

Environmental health education is related to the Adiwiyata school program. The program aims to instill the importance of environmental health in students. The Ministry of Environment and Forestry (2020: 1) explains that the aim of the adiwiyata program is to create school members who are responsible for protecting and managing the environment through good school governance to support sustainable development.

The Adiwiyata program is expected to be able to create school members, especially students who have a high sense of environmental care. That Adiwiyata itself is one of the Ministry of Environment's programs in order to encourage the creation of knowledge and awareness among school residents in efforts to preserve the environment. It is hoped that this will lead to a healthy school environment and avoid negative environmental impacts. In addition, the existence of the Adiwiyata program is also able to support the achievement of basic competency standards for graduation, increase the efficiency of using school operational funds, create comfortable and efficient teaching and learning conditions, increase

efforts to protect and manage the environment through pollution control activities, damage, and preservation of school environmental functions (Pomarika Simbolon, *et al*, 2021:2).

The Adiwiyata program was first implemented in 10 (ten) schools on the island of Java as a model school/madrasah involving universities and NGOs working in the field of Environmental Education. From 2007 to 2018, it has been recorded that 10,050 schools (about 3.38% of the 297,368 schools/total number of schools in Indonesia) received the Adiwiyata award at the National level (Ministry of Environment and Forestry, 2020: 1).

Adiwiyata program has been implemented in various regions in Indonesia. Researchers are trying to conduct research on evaluating the environmental health awareness of elementary school students in Kulon Progo Regency. This research is motivated by a study regarding the evaluation of students' environmental health awareness at adiwiyata schools at the elementary level in Kulon Progo Regency, which has not been carried out in-depth by previous researchers.

Research Methods

This study used qualitative research methods. Sugiyono (2015: 209) states that qualitative research methods are used by researchers in natural object conditions. Moleong (2009: 6) qualitative research is research that intends to understand phenomena about what is experienced by research subjects such as behavior, perceptions, motivations, actions, etc., holistically, and by means of descriptions in the form of words and language, in a special natural context and by utilizing various natural methods.

This study uses a qualitative research method with a case study approach. Rahardjo (2017: 3) a case study is a series of scientific activities carried out intensively, in detail and in-depth about a program, event and activity, both at the individual, group, institution or organizational level to gain in-depth knowledge about the event. Usually, the selected events, hereinafter referred to as cases, are real-life events, which are ongoing, not something that has passed. The case study in this research is the environmental health awareness of elementary school students at an adiwiyata school in Kulon Progo Regency.

This research is located at an adiwiyata elementary school in Kulon Progo Regency, Yogyakarta Special Region. The research subject is a source of data that can provide information related to the research problem under study. The technique for taking research subjects uses a purposive sampling technique, which is selected with certain considerations and goals (Sugiyono, 2015: 216). The subjects of this research were low and high-class students at Adiwiyata schools in Kulon Progo Regency. The research sample was adiwiyata schools with the categories of district adiwiyata, provincial adiwiyata, and national adiwiyata. Two schools were selected for each adiwiyata level so the total sample in this study was six adiwiyata schools at the elementary level.

Results and Discussion

The Adiwiyata school program is a form of the government's commitment to environmental management and protection through education. The policy made by the government, namely through the Minister of Environment Regulation Number 5 of 2013, was translated into the Adiwiyata school program. The Adiwiyata program is a form of practical PLH implementation in the educational environment. Literally, Adiwiyata consists of two words derived from Sanskrit, namely "Adi" and "Wiyata." The word, Adi' means big, good, great, ideal, and perfect. Meanwhile, the word, Wiyata' means a place where a person gets knowledge, norms, and ethics in social life. Thus, Adiwiyata can be interpreted as a good and ideal place where all knowledge and various norms and ethics can be obtained

which can become the basis of humans towards creating life welfare towards the ideals of sustainable development (Arbiana Putri, 2019:40).

The adiwiyata program was implemented in order to support students' environmental health awareness at Kulon Progo Elementary School. In addition, the Adiwiyata program is also expected to create school members who are responsible for protecting and managing the environment through good school governance.

To support sustainable development. The basic principles of the Adiwiyata program include the following: 1) Participatory principles, namely the school community involved in school management includes the entire planning, implementation, and evaluation process according to their respective responsibilities and roles; 2) The principle of sustainability in the form of all activities that must be carried out in a planned and continuous manner in a comprehensive manner. So when you are included in the independent Adiwiyata category, especially as a champion, you must maintain environmental conditions and the behavior of school residents who care and have a cultured environment for the better (Nanik Hidayati, 2013: 150).

The adiwiyata program has the goal of creating good and healthy environmental conditions for schools which are places for studying and raising awareness for school members in the form of; (1) Development of school policies that care and have an environmental culture; (2) Development of an environment-based curriculum; (3) Participatory-based development of activities related to the environment; and (4) Development and management of supporting facilities for schools with an environmental culture such as: saving energy or using alternative energy, saving water, managing waste, using organic fertilizers (Angellina I. Demar, 2019:68-69).

Its relation to the development of an environment-based curriculum. In developing Adiwiyata schools, an environment-based curriculum is needed. According to Hidayatun in Sri Nuzulia (2019: 161) An environment-based curriculum is a curriculum that contains material on the management and protection of the environment which is conveyed in various ways in an effort to provide an understanding of the environment. Adam Dalam Sri Nuzulia (2019: 161) added that the connection with an environment-based curriculum in a simple way can be implemented by delivering environmental material through a variety of curriculum variations to provide an understanding of the environment that is linked to everyday life.

The advantages of following adiwiyata, namely supporting the achievement of basic competency standards for graduation, increasing the efficiency of using school operational funds, creating comfortable and efficient teaching and learning conditions, increasing efforts to protect and manage the environment through activities to control pollution, damage and preservation of school environmental functions (Pomarika Simbolon *et al*, 2021: 2). According to the National Adiwiyata Team in Nanik Hidayati *et al*, 2013: 151) the implementation of Adiwiyata in schools has advantages including the following; (1) Supporting the achievement of competency standards/basic competencies and graduate competency standards (SKL) for primary and secondary education; (2) Improving the efficiency of the use of school operational funds through saving and reducing the consumption of various resources and energy; (3) Being able to foster a sense of togetherness among school members, including principals, teachers, students and other staff and create more comfortable and conducive learning and teaching conditions; (4) Become a place of learning in which there are values of good and correct environmental maintenance and management for school residents and the surrounding community; (5) Improving efforts to protect and manage the environment through pollution control activities, damage control and preservation of environmental functions in schools.

The Adiwiyata school program also has a strategic role in increasing awareness of the environment. With these goals and roles, the contribution of the Adiwiyata program to the formation of the character of caring for the environment is very likely to be realized. The Adiwiyata school program has four aspects in its implementation, including aspects of environmentally sound policies, aspects of an environmentally-based school curriculum, aspects of participatory-based activities and the last is aspects of managing environmentally friendly supporting facilities. These aspects play a role in conditioning the school environment to familiarize students and other school members with caring behavior for the environment. (Diyan Nurvika Kusuma Wardani, 2020:62).

The implementation of the adiwiyata program in schools must be carried out in an integrated manner with the 2013 curriculum through the development of Basic Competency (KD), Competency Achievement Indicators (GPA) which are then developed in the Learning Implementation Plan (RPP) for all subjects in schools without exception. It is through the development of KD, GPA, and RPP that character education, especially those related to concern for environmental preservation, is included. In addition, all media in the school environment must also be listed in the lesson plans (Sri Nuzulia, 2019: 161).

The implementation of the Adiwiyata school program has criteria seen from its components and standards. Its components include: (1) Environmentally friendly policies and school activity plans and budgets which are applied within the scope of the school in the form of a school's vision, mission, and goals which contain efforts to protect and manage the environment; (2) Implementation of an environment-based curriculum where teachers or educators are competent so that in the delivery of environmental learning can be understood and implemented by students, (3) Participatory-based protective environmental activities; (4) Management of environmentally friendly supporting facilities (Yanti Dwi Rahmah, 2014: 756).

According to KLH (2013) in Yulia Indahri (2020:128-129) the Adiwiyata Regulation also stipulates that the four components of adiwiyata have eight standards that can be used as evaluation guidelines. The environmental-oriented policy component has standards in the form of curriculum as well as activity plans and school budgets that contain programs related to environmental protection and management. The environment-based curriculum component has standards for educators and students who are involved in learning activities about environmental protection and management. The participatory-based environmental activity component has standard activities for school members and partnerships with other parties. Finally, the component of supporting environmentally friendly infrastructure management has standards for the availability and improvement of the quality of environmentally friendly infrastructure management.

Implementation of programs and activities at Kulon Progo Elementary School that support students' environmental health awareness is carried out including through:

a. Vision, Mission, and Goals of the School which Include Environmental Management

The formulation of the school's vision, mission, and goals is an ideology that becomes the school's point of view so this becomes very important in realizing the adiwiyata program in schools. The formulation of the school's vision, mission, and goals can support environmental health awareness (Melga Hotma Ida Marsauli Simanjuntak *et al*, 2022: 73). With the vision, mission, and goals of the school which includes environmental management, it will create good conditions for the school environment. A clean and healthy environment can certainly reflect the existence of school members, teachers, students, and other staff.

The formulation of the vision, mission, and goals of the school in relation to the Adiwiyata Program requires an environment-based vision, mission, and goals as well as a school curriculum. These

four things are the foundation of the school in carrying out activities at school. Every policy taken by the school must pay attention to environmental aspects. In addition, schools are also required to provide learning facilities and infrastructure that support environmental management and environmental education as stated in the vision, mission, goals, and curriculum that have been formulated and established at school (MohammadDendy Fathurahman Bahrudin, 2017: 32).

The existence of formulation of a vision, mission, and goals as well as an environment-based school curriculum is certainly expected to be able to increase the awareness of school members, especially students about the importance of environmental values and environmental problems. Apart from that, the existence of the school's vision, mission, and goals which include environmental management can also mobilize school members, both teachers, students, and other staff to be able to play an active role in efforts to preserve and protect the environment for present and future generations in the school environment. The vision, mission, and goals of an environment-based school would be better displayed or posted in every room or corner of the school so that all school members, including educators, students, and other staff, can easily read and memorize and implement the school's vision, mission and goals. By memorizing the vision and mission as well as school goals which include environmental management, students will be more enthusiastic about implementing them in their daily lives so as to support students' environmental health awareness.

b. Implementation of Environmental Insight Habits

Schools can carry out environmental insight habituation which will later raise students' awareness of the importance of environmental health. Some of the implementations of environmental insight habituation include the following: (1) Habituation related to parks, toga, school forests, school gardens, hydroponics, canteens, and school walls; (2) Practice natural resource-saving behavior, such as saving electricity, water, paper and ink; (3) Integrating the environment in compulsory subjects, local content, self-development, and extracurriculars; (4) Involve all school members so that they can organize routine programs and activities on certain days such as community service activities and clean Fridays; (5) Involving parents, surrounding communities, local government, and the business world can be a reference to enrich information, training, and help finance activities (Limawati, 2018:23).

c. Socialization of the Program and the Importance of School Environmental Health for Students

How raise students' awareness of the importance of environmental health in schools can be done through outreach. Socialization about school programs related to environmental management and the importance of environmental health can be conveyed by teachers because in general teachers are considered to be the most influential figure for students because whatever is done by teachers will usually be followed by students. Therefore, in acting and behaving the teacher must be able to provide examples of good behavior such as disposing of trash in its place. That way students will follow what the teacher is doing.

In the Law of the Republic of Indonesia Number 14 of 2005 it is explained that the main task of the teacher is to educate, teach, guide, direct, train, assess, and evaluate students. Educators can be used as role models for their students if they can carry out a role well so that students will realize that the positive traits given to them are very important for the future. A teacher can be said to be the shaper and builder of a child's character because most parents have very limited time for their children. The role of the teacher as an educator is to discipline children to comply with school rules and norms in the family and society. These tasks are related to improving children's development in order to gain experience.

The role of the teacher as a teacher, educator, and trainer has strategic position to instill a clean life attitude in the school environment. Early socialization by teachers to students regarding healthy and balanced lifestyles in activities at school aims to get children used to it and can remind each other to

always carry out clean living behavior practices. The greater the teacher's role in socializing clean living behavior, the better students will practice it at school (Yuliana, 2017:57).

Socialization about school programs related to environmental management and the importance of environmental health for students can be done by the teacher in a class where the teacher can convey the programs owned by the school related to environmental management and the importance of clean and healthy living behavior, namely by washing hands with soap before and after eating, students bring their own food from home, this can improve their health and prevent illness because students don't buy food carelessly. In addition, students make their own trash cans in class and place them on their class desks to dispose of trash, this has played an active role in creating a clean and healthy environment (M. Jen Ismail, 2021:63-64). With the socialization delivered by the teacher, it is hoped that it will be able to raise students' awareness of the health of the school environment.

d. Formulate Environmental Activities Program

The formulation of programs related to the environment is formulated in the School Activity and Budget Plan (RKAS) (Melga Hotma Ida Marsauli Simanjuntak 2022:74). These programs include the use of parks and class cleanliness. In addition, other programs that can be carried out are; (1) Environmental Campaign. This environmental campaign can be carried out through information about environmental issues through banners, billboards, and bulletin boards as well as the role and participation of teachers in disseminating information regarding Adiwiyata school programs. (2) Garbage Sorting. Waste segregation can be done by providing separate trash cans (organic and inorganic) and placed side by side. This will make it easier for students to dispose of waste according to organic and inorganic waste. (3) waste management or recycling. Waste management activities can be carried out by recycling waste into useful crafts. (4) Collecting recycled works. Crafts that have been made from waste can be displayed or contributed to adiwiyata exhibitions. (5) Developing extracurricular activities that are in line with efforts to protect and manage the environment, namely integrating PLH into all extracurriculars held by schools; (6) Clean Friday program which can be carried out through school environmental preservation activities, such as cleaning gutters at school, maintaining flower gardens, planting vegetable seeds, processing waste, and others according to a set schedule.

In addition, there are many ways that can be done to create a healthy environment, the following ways to create a healthy school environment, including the first thing that can be done is to launch a green school program. School greening programs can make schools shady and can provide comfort during the teaching and learning process. Implement school rules and maintain the cleanliness and balance of the school environment. Instilling an attitude of caring for the environment towards students by launching various programs that can make students aware of the importance of maintaining the cleanliness and health of the school environment. Carry out strict supervision and strict enforcement of school regulations so that school members are willing and consciously willing to carry out school orders and regulations. Planned activities to love the environment or school cleanliness activities. (M. Jen Ismail, 2021:63).

Conclusion

The adiwiyata program has the goal of creating good conditions for schools to become places of learning and awareness of school members so that in the future these school members can be responsible for efforts to save the environment. The Adiwiyata school program also has a strategic role in increasing awareness of the environment. With these goals and roles, the contribution of the Adiwiyata program to the formation of the character of caring for the environment is very likely to be realized. The Adiwiyata school program has four aspects in its implementation, including aspects of environmentally sound policies, aspects of an environmentally-based school curriculum, aspects of participatory-based activities and the last is aspects of managing environmentally friendly supporting facilities.

Implementation of programs and activities at Kulon Progo Elementary School that supports students' environmental health awareness is carried out, among other things, through the formulation of the school's vision, mission and objectives which include environmental management, implementation of environmental insight habituation, program socialization and the importance of school environmental health for students, formulating environmental activity programs. These programs are expected to be able to foster awareness of environmental health for students so as to create a healthy and comfortable learning environment.

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