# SUSTAINABLE DEVELOPMENT AS THE BASIS FOR ENVIRONMENTAL EDUCATION IN DEVELOPING GREEN SCHOOLS

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Abstract: This research discusses Sustainable Development as the basis for Environmental Education in developing Green Schools. The method used in this research is library research. The results of this study indicate that the large impact experienced by the environment cannot be separated from globalization. Among the issues in the global world that are currently taking place are extreme climate change, food crises, and economic difficulties that must be faced in today's global world. The environment is very important for human life, therefore preserving it is a form of responsibility for its sustainability for future generations. Schools are one of the tools of society that have a role in integrating the values of green education through the application of the Education for Sustainable Development (ESD) method of developing critical thinking and attitude skills in making decisions on issues related to environmental quality both nationally and globally. It is hoped that in addition to successful sustainable development, the quality of the environment will also improve.

Keywords: Sustainable Development, Environmental Education, Green School.

#### INTRODUCTION

The global climate change caused by environmental damage has impacted the increasing of international attention to environmental. This damage is the result of the construction of irresponsible leader who have changed the world's social system<sup>1</sup> The social and political forces play a major role in global warming. The reason is the community problem of demanding for economic needs fulfillment <sup>2</sup>

<sup>1</sup> Hertanto. "Partisipasi Masyarakat Dalam Upaya Pengurangan Risiko Bencana Perubahan Iklim di Perkebunan Kopi PT. Nusantara IX". UMS: Prosiding Seminar Nasional Geografi, (2016), 35

<sup>&</sup>lt;sup>2</sup> Legionosuko. "Posisi dan Strategi Indonesia dalam Menghadapi Perubahan Iklim guna Mendukung Ketahanan Nasional". Jurnal Ketahanan Nasional, 25(3), (Desember 2019), 295-305.

The modern society lifestyle tends to shift towards a more exploitative lifestyle to make as much profit as possible <sup>3</sup>. In fact, the excessive exploitation of nature and the use of technologies that is not environmentally friendly have resulted in damage to the environmental rule. So, this environmental problems because of the lack of wisdom in treating the environment by humans<sup>4</sup>. It results the community life damage. Whereas humans should be able to live side by side in harmony with the environment and nature because both of them need each other <sup>5</sup>

The long process of development in all fields is basically the human desire to fulfill the welfare of life needs. All efforts to exploit natural resources were carried out threaten life and future generations<sup>6</sup>. This awareness of the environment is then set forth in various agreements including sustainable development. It is the overarching paradigm of the United Nations. The concept of sustainable development was described by the Brundtland Commission Report in 1987 as "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs".

Sustainability is a thinking paradigm about the future by considering a balanced environment, social and economy in pursuing development and improving the quality of life. All three fields-society, environment and economy-are interrelated. For example, a prosperous society depends on a healthy environment to provide its citizens with food and resources, safe drinking water, and clean air <sup>8</sup>

<sup>&</sup>lt;sup>3</sup> O, Arifudin, "Pengaruh Kelas Sosial, Pengalaman dan Gaya Hidup Terhadap Perilaku Penggunaan Kartu Kredit". Jurnal Ilmiah MEA (Manajemen, Ekonomi, & Akuntansi), Vol 5, No 1, (2021), 286–298

<sup>&</sup>lt;sup>4</sup> Sulistyo. Konsep Pendidikan Lingkungan Hidup Dalam Pandangan Islam. Cahaya Pendidikan., 4(1), (2018). 45–58.

<sup>&</sup>lt;sup>5</sup> Pradana. Analisis Dampak Perubahan Iklim Terhadap Curah Hujan Berdasarkan Perubahan Zona Agroklimatologi Pada Skala Lokal Politeknik Negeri Lampung. Jurnal Wacana Pertanian., 14(1), (2018), 35.

<sup>&</sup>lt;sup>6</sup> Y.Utomo, S, Utaya, S, Mahanal, F, Rohman, R, Hartono, N, Zakia, & S. Hidayat, "Pendidikan Lingkungan Hidup Untuk Sekolah Menengah Atas kelas XII jilid 3". Malang: Kerjasama Pusat Penelitian Lingkungan jilid 3. (2009).

<sup>&</sup>lt;sup>7</sup> UNESC. "Education For Sustainable Development Sourcebook". Paris: United Nations Educational, Scientific and Cultural Organization. Retrieved from https://sustainable.development.un.org/content/documents/926unesco9.pdf (2012).

<sup>&</sup>lt;sup>8</sup> UNESC. "Education For Sustainable Development Sourcebook". Paris: United Nations Educational, Scientific and Cultural Organization. Retrieved from https://sustainable.development.un.org/content/documents/926unesco9.pdf (2012).

As a follow up to the United Nations Conference on The Human and Environment<sup>9</sup> for the global level and seminar of "Management of the Human Environment and National Development" for the national level<sup>10</sup>, the Indonesian government had not only included environmental aspects in the GBHN since 1973, but has also established an institution or agencies in charge of the environment in 1998, the Minister of State for Supervision of Development and Environment (PPLH) was formed. In 2002, it was changed to the State Minister of Population and Environment (KLH). In 2003, it was changed to the State Minister for the Environment (LH). Finally in 2015, it was changed to the Minister of Environment and Forestry (LHK). This ministry has a very important and strategic role to provide an environmental foundation for the implementation of development in Indonesia.

Responsibility to keep and preserve the environment is gather responsibility towards sustainability for future generations. Community active participation in environmental preservation really helps sustain life<sup>11</sup>To realize an environmentally which has conception of environment, a service contributes greatly is needed to develop a sustainable environmental care character that indirectly helps the government's duties in the form of worship to God through increasing peace in society with concern for the environment.

Schools as formal institutions are expected to be a way to develop environmental awareness and become main foundation for sustainable development <sup>12</sup>. In addition, the teacher role is also needed to be able to carry out government policies to continue the education and guidance in a better direction, especially in addressing the current issues.

<sup>&</sup>lt;sup>9</sup> UN. "Report Of The United Nations Conference On The Human Environment" (Stockholm, 5-16 June 1972, United Nations publication Sales No; E.73.II.A.14). (Switzerland: United Nations Publication, 1972)

<sup>&</sup>lt;sup>10</sup> UN. "Report Of The United Nations Conference On The Human Environment" (Stockholm, 5-16 June 1972, United Nations publication Sales No; E.73.II.A.14). (Switzerland: United Nations Publication, 1972)

<sup>&</sup>lt;sup>11</sup> R. Tanjung, Manajemen Mitigasi Bencana. (Bandung: Widina Bhakti Persada, 2020), 45

Arifudin, "Optimalisasi Kegiatan Ekstrakurikuler dalam Membina Karakter Peserta Didik". JIIP-Jurnal Ilmiah Ilmu Pendidikan, Vol 5, No 3, (2012), 829–837

#### **METHOD**

The method used in this study is the Library Research, in this case, the researchers collecting data on books, writings, articles, and other literature that relate to the problems discussed in this study, both primary and secondary sources. As a process of understanding the research data, the researchers interpreted using analytical description method beginning with systematic and consistent data collection; it then combined and analyzed, selected and combined and draw conclusions using deductive analysis of general problems and concluded.

#### FINDING AND DISCUSSION

## A. Sustainable Development

## 1. Definition of Sustainable Development

The long process of development in all fields is basically the human desire to meet the needs or welfare of life. All efforts to exploit natural resources were carried out and over time it was realized that the damage to nature that had been done would threaten life and future generations

This awareness of the environment is then set forth in various agreements including sustainable development. Sustainable development is the overarching paradigm of the United Nations (UN). The concept of sustainable development was described by the Brundtland Commission Report in 1987 as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". Development that meets the needs of the present without compromising the ability of future generations to meet their own needs<sup>13</sup>

Sustainability is a paradigm for thinking about the future by considering a balanced environment, social and economy in pursuing development and improving the quality of life. All three fields - society, environment and

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<sup>&</sup>lt;sup>13</sup> UNESC. "Education For Sustainable Development Sourcebook". Paris: United Nations Educational, Scientific and Cultural Organization. Retrieved from Y, Utomo, S, Utaya, S., Mahanal, F Rohman, R, Hartono, N Zakia,., & Hidayat, S. Pendidikan lingkungan hidup untuk Sekolah Menengah Atas kelas XII (Malang: Kerjasama Pusat Penelitian Lingkungan 2019), 3https://sustainable.development.un.org/content/documents/926unesco9.pdf (2012).

economy - are interrelated. For example, a prosperous society depends on a healthy environment to provide its citizens with food and resources, safe drinking water, and clean air<sup>14</sup>

Sustainable paradigm is a major change from the previous paradigm of economic development with the consequences of environmental and social damage. Until recently these consequences were visible and unavoidable. However, we now realize that major damage or serious threats to human wellbeing and the environment in the pursuit of economic development do not place us in a sustainable paradigm<sup>15</sup>

The difference between sustainable development and sustainability is, sustainability is often considered a long-term goal (i.e. a more sustainable world) while sustainable development refers to the many processes and pathways to achieve it (e.g. sustainable agriculture and forestry, sustainable production and consumption, good governance, research and technology transfer, education and training, etc.)<sup>16</sup>

Sustainable development is a translation of the word "sustainable development" which is very popularly used in western countries. The use of the term "sustainable development" was officially used for the first time in MPR Decree No. IV/MPR/1999 concerning *Garis-Garis Besar Haluan Negara* (GBHN). Meanwhile, the use of the term "sustainable development with an environmental perspective" was used for the first time in Law Number 23 of 1997 concerning Environmental Management. In addition, the term "environment and development" is also known, which was previously more popular with the term "environmentally sound development" as a translation of the word "cco-development"

15 Ibid.,

<sup>14</sup> Ibid.,

<sup>16</sup> Ibid.,

Y, Utomo, S, Utaya, S., Mahanal, F Rohman, R, Hartono, N Zakia, & Hidayat, S. Pendidikan lingkungan hidup untuk Sekolah Menengah Atas kelas XII (Malang: Kerjasama Pusat Penelitian Lingkungan 2019), 3

Since the 1980, the environmental political agenda has begun to focus on the paradigm of sustainable development<sup>18</sup> The first time the term "sustainable development" appeared in the World Conservation Strategy Living Resource Conservation for Sustainable Development from the activities of The International Union for Conservation of Nature and Natural Resources/IUCN (1980) in collaboration with the United Nations Environment Program (UNEP) and the World Wildlife Fund (WWF). The term was later used by Brown in his book "Building a Sustainable Society" (1981). Subsequently, the term became very popular through the Bruntland Commission Report (1987), entitled Our Common Future.

The year 1992 was the culmination of the political process, which finally at the United Nations Conference on Environment and Development, also called the Earth Summit in Rio de Janeiro, Brazil, the paradigm of sustainable development was accepted as an agenda. development policy for all countries in the world. The Rio Declaration emerged. A total of 172 countries participated, including 108 heads of state or government. Agenda 21 is the official document of the Earth Summit <sup>19</sup>

Apart from UNESCO, there are a number of experts in Indonesia who provide definitions of sustainable development, namely:

- a. "a development process that optimizes the benefits of natural resources and human resources by harmonizing natural resources with humans in development";
- b. the type of development that refers to the optimal utilization of natural resources and human resources, as well as maintaining a balance between various conflicting demands on these resources (Ignas Kleden);
- c. a development process in which technological development and institutional changes are carried out in harmony by taking into account current and future

<sup>19</sup> UNESC. "Education For Sustainable Development Sourcebook". Paris: United Nations Educational, Scientific and Cultural Organization. Retrieved from https://sustainable.development.un.org/content/documents/926unesco9.pdf (2012).

<sup>&</sup>lt;sup>18</sup> S. Keraf, Filsafat Lingkungan Hidup, Alam Sebagai Sebuah Sistem Kehidupan. (Yogyakarta: Kanisius, 2012)452012

potentials in fulfilling community needs and aspirations (Sofyan Effendi); and

d. "Progressive transformation of social, economic and political structures to increase people's certainty in fulfilling their current interests without compromising the ability of future generations to fulfill their interests (Sofyan Effendi)".

From the various literature and opinions above, it can be concluded that sustainable development is development to meet the needs of the present without compromising the ability of future generations to meet their needs by paying attention to 3 aspects, namely environmental, social and economic balance in the pursuit of development and quality of life improvement.

## 2. Legal Basis for Sustainable Development in Indonesia

As a follow-up to the "UN Conference on Humans and the Environment" or the United Nations Conference on The Human and Environment (UN, 1972) for the global level and the seminar "Management of the Human Environment and National Development" for the national level (Padjadjaran University, 1972), the Indonesian government has not only included environmental aspects in the GBHN since 1973, but has also established an institution or agencies in charge of the environment., in 1998, the Minister of State for Supervision of Development and Environment (PPLH) was formed. In 2002, it was changed to the State Minister of Population and Environment (KLH). In 2003, it was changed to the State Minister for the Environment (LH). Finally in 2015, it was changed to the Minister of Environment and Forestry (LHK). This ministry has a very important and strategic role in providing an environmental foundation for the implementation of development in Indonesia.

In the Law on Basic Provisions for Integrated Environmental Management (Law Number 14 of 1982 concerning Basic Provisions for Integrated Environmental Management) it is stated that it is a must to link the implementation of development with environmental management through what is called development, environmentally sound. Article 1 point 13 of the

Law states that "environmentally-oriented development is a conscious and planned effort to use and manage resources wisely in sustainable development to improve the quality of life".

Furthermore, Law no. 4 of 1982 was repealed and replaced by Law no. 23 of 1997 concerning Environmental Protection and Management. In Article 1 point 3 of the Law it is stated that sustainable development with an environmental perspective is a conscious and planned effort, which integrates the environment, including natural resources into the development process to guarantee the capability, welfare and quality of life of present and future generations (Law Number 23 of 1997 concerning Environmental Protection and Management).

In its development, Law no. 23 of 1997 was also repealed and replaced by Law no. 32 of 2009 concerning Environmental Protection and Management. Article 1 point 3 of the Law states that sustainable development is a conscious and planned effort that integrates environmental, social and economic aspects into a development strategy to ensure the integrity of the environment and the safety, capability, welfare and quality of life of the present and future generations. (Law Number 32 of 2009 concerning Environmental Protection and Management).

From the explanation above, it can be concluded that there are 3 types of legal basis for sustainable development in Indonesia, namely: (1) Law no. 14 of 1982 concerning Basic Provisions for Integrated Environmental Management, (2) Law no. 23 of 1997 concerning Environmental Protection and Management, and (3) Law no. 32 of 2009 concerning Environmental Protection and Management.

## 3. Principles of Sustainable Development

According to Utomo et al. (2009: 10), there are 9 principles of sustainable living, namely:

- a. Respect and maintain the community of life,
- b. Improve the quality of human life,
- c. Preserving the vitality and diversity of the earth,

- d. Avoid non-renewable resources,
- e. Try not to exceed non-renewable capacity,
- f. Changing people's attitudes and lifestyles,
- g. Support community creativity to maintain their own environment,
- h. Provide a national framework for carrying out conservation development efforts, and
- i. Create global cooperation.

While according to<sup>20</sup>, the principles that accompany sustainable development are perspectives that have become part of the global sustainability dialogue, namely:

- a. The systems thinking approach, not an approach that looks at problems in isolation should be used. Sustainability issues are always associated with and are part of the "whole".
- b. Understand local issues in a global context and recognize that solutions to local problems can have global consequences.
- c. Recognizing that individual consumer decisions influence and give rise to resource extraction and manufacturing in distant locations.
- d. Considering different views before reaching a decision or judgment.
- e. Recognizing that economic values, religious values, and social values compete for the interests of people with different interests and backgrounds.
- f. Seeing all humans have universal attributes/needs.
- g. Knowing that technology and science alone cannot solve all problems.
- h. Emphasizes the role of community participation in community and government decision-making. Living people are influenced by decisions, so they must be involved in the process leading to decisions.
- Emphasizes transparency and accountability in government decisionmaking.

<sup>20</sup> UNESC. "Education For Sustainable Development Sourcebook". Paris: United Nations Educational, Scientific and Cultural Organization. Retrieved from https://sustainable.development.un.org/content/documents/926unesco9.pdf (2012).

j. Emphasizes the precautionary principle of taking action to avoid the possibility of serious or environmental or social damage even when scientific knowledge is incomplete or inconclusive.

From the explanation above it can be concluded that there are 7 principles of sustainable development, namely: (1) economic principles, (2) social principles, (3) religious principles, (4) participatory principles, (5) transparency principles, (6) accountability, and (7) the precautionary principle.

## B. Environmental Education

# 1. History of Environmental Education

Environmental education (PLH) has implicitly started since the use of the 1975 curriculum by integrating it into relevant subjects, starting from elementary to high school level based on Ministerial Decree P and K No. 008/U/1975 <sup>21</sup>. The development of PLH in Indonesia was carried out by the Jakarta Teaching and Learning Institute (IKIP) in 1975. In 1977/1978, the pilot Outlines of the Environmental Teaching Program were piloted in 15 elementary schools in Jakarta. In 1979, under the coordination of the Office of the State Minister for Development and Environmental Supervision, Centers for Environmental Studies (PSL) were formed in various public and private universities, where the Education on Environmental Impact Analysis (AMDAL) was developed. Until 2010, the number of PSLs who were members of the Coordinating Board for the Center for Environmental Studies (BKPSL) had grown to 101 PSLs<sup>22</sup>

The Directorate General of Primary and Secondary Education of the Ministry of National Education determined that the delivery of subjects on population and environmental issues in an integrated manner was outlined in the 1984 curriculum system by incorporating population and environmental issues into all subjects at the general and vocational secondary levels. In 1989/1990 to 2007, PLH was carried out by the Directorate General of Primary and Secondary Education of the Ministry of National Education

<sup>&</sup>lt;sup>21</sup> Tim Adiwiyata Tingkat Nasional. Panduan Adiwiyata Sekolah Peduli Dan Berbudaya Lingkungan. (Jakarta: Kerjasama Kementerian Lingkungan Hidup dengan Kementerian Pendidikan dan Kebudayaan, 2011)
<sup>22</sup> Ibid.,

through the Population and Environmental Education (PKLH) project. In 2003, Schools with Environmental Culture (SBL) began to be developed in 120 schools. Until the end of 2007, the PKLH project had succeeded in developing SBL in 470 schools, 4 Education Quality Assurance Institutions (LPMP), and 2 Teacher Upgrading Development Centers (PPPG) in Indonesia<sup>23</sup>.

Environmental education development in Indonesia is also carried out by LSM. Finally, the Environmental Education Network (JPL) was formed in 1996/1997 which consisted of LSM who were interested in and concerned about environmental education in Indonesia. Until 2010, there were 150 JPL members (individuals and institutions) engaged in the development and implementation of environmental education. In 1998 – 2000, the Swisscontact project, which was centered at the Vocational Education Development Center (VEDC) Malang, developed PLH in SMKs through 6 PPPGs by developing PLH teaching materials and various environmental trainings for SD, SMP, SMA and SMK teachers<sup>24</sup>

From the description above, it can be concluded that PLH in Indonesia has been running for quite a long time, namely since 1975. In its development, PLH has involved many ministries, universities, institutions/institutions, and environmental NGOs, both domestic and foreign.

## 2. Definition of Environmental Education

In the following, several definitions of PLH are presented from various sources, namely:

a. Based on the results of the Intergovernmental Conference on Environmental Education (Tbilisi Declaration) it is stated that PLH is a process that aims to create a world community that has concern for the environment and the problems involved in it and has the knowledge, motivation, commitment and skills to work well individually. as well as collectively in finding alternatives or providing solutions to existing

<sup>&</sup>lt;sup>23</sup> Tim Adiwiyata Tingkat Nasional. Panduan Adiwiyata Sekolah Peduli Dan Berbudaya Lingkungan. (Jakarta: Kerjasama Kementerian Lingkungan Hidup dengan Kementerian Pendidikan dan Kebudayaan, 2011)
<sup>24</sup> Ibid.,

- environmental problems and to avoid the emergence of new environmental problems <sup>25</sup>
- b. There are 5 global PLH goals that have been agreed upon by the international community after the meeting in Tbilisi <sup>26</sup>, namely:
  - Knowledge areas: helping individuals, groups and communities to gain experiences and gain knowledge about what is needed to create and maintain a sustainable environment.
  - 2) Awareness field: assisting social groups and individuals to gain awareness and sensitivity to the environment as a whole and its associated issues, questions and concerns related to environment and development.
  - 3) The field of behavior: helping individuals, groups and communities to acquire a set of values, feelings of concern for the environment and motivation to actively participate in the improvement and protection of the environment.
  - 4) Skills: helping individuals, groups and communities to mend acquire skills to identify, anticipate, prevent, and solve environmental problems.
  - 5) Participation: providing opportunities and motivation for individuals, groups and communities to be actively involved in creating a sustainable environment.
- c. PLH is an effort to change behavior and attitudes carried out by various parties or elements of society which aims to increase knowledge, skills and public awareness about environmental values and issues of environmental problems which in turn can drive environmental safety for the benefit of present and future generations.<sup>27</sup>

From the description above it can be concluded that PLH is an educational process to change attitudes and behavior so that it is environmentally friendly and has the knowledge, motivation, commitment and

<sup>&</sup>lt;sup>25</sup> UN. "Report Of The United Nations Conference On The Human Environment" (Stockholm, 5-16 June 1972, United Nations publication Sales No; E.73.II.A.14). (Switzerland: United Nations Publication, 1972)
<sup>26</sup> Ibid.,

<sup>&</sup>lt;sup>27</sup> Tim Adiwiyata Tingkat Nasional. Panduan Adiwiyata Sekolah Peduli Dan Berbudaya Lingkungan. (Jakarta: Kerjasama Kementerian Lingkungan Hidup dengan Kementerian Pendidikan dan Kebudayaan, 2011)

skills to work both individually and collectively in finding alternatives or providing solutions to existing environmental problems and to avoid the emergence of new environmental problems. While the objectives of PLH are 5 aspects, namely: (1) knowledge, (2) awareness, (3) behavior, (4) skills, and (5) participation.

## 3. Legal Basis for Environmental Education in the Qur'an

Based on the teachings of Islam, the legal basis for the importance of PLH can be seen from the following Al-Qur'an Surah Ar-Ruum verse 41:

لَعَلَّهُمْ يَرْجِعُونَ ٢

It means: It has been seen that damage on land and at sea is caused by the actions of human hands, so that Allah will feel to them some of the (results of) their actions, so that they return (to the right path). QS: Ar-Ruum: 41.

From the verse above it is shown that environmental damage that occurs in this world is caused by human actions and activities in order to meet their needs. Therefore, PLH becomes very important to do for the protection and management of the environment. From the description above it can be concluded that the legal basis as an order to protect and preserve the environment is Al-Qur'an Surah Ar-Ruum verse 41.

# 4. Aspects of Environmental Education

According to the National Level Adiwiyata Team (2011), aspects of PLH implementation, whether through formal, non-formal or informal education, must include aspects of:

- a. Development of environmental education institutions.
- b. Improving the quality of human resources.
- c. Development of facilities and infrastructure.
- d. Increasing and efficiency of the use of the budget.

e. Development of environmental materials.

f. Communication and information level.

g. Empowering community participation in implementation and

development.

h. Development of environmental education methods.

From the description above, it can be concluded that the eight aspects

of PLH need to be developed so that they can become effective and

efficient driving tools for the progress of PLH in Indonesia.

C. Green School

1. Definition of Green School (Green School)

There is no standard definition of a green school. There are several terms

that are often used interchangeably, namely the terms "green/green",

"healthy/healthy", "sustainable/sustainable", and "high performance/high

performance". However, there are several principles that are often used to define

green schools, namely: protecting the environment, lowering operational costs,

improving the health and quality of the learning environment, and integrating

learning opportunities with the environment (ZAS Architechs Inc.).

A green school is an energy-efficient, high-performance school that can

benefit the environment, is economical to build and operate, and offers an

enhanced learning environment. The topic of green schools has increased

recently, driven by greater environmental awareness and increased energy and

costs.

United States Green Building Council(USGBC, 2008), on its website

greenschoolbuildings.org has defined a green school as a building or facility that

creates a healthy and conducive environment for learning as well as saving

energy, resources and school costs.

Gordon states that a green school is the physical result of a planning,

design, and construction consensus process that takes into account the

building's performance in the 50-60 year life cycle as a whole. Gordon further

points out that green schools are built so as to provide clean and fresh air, comfortable temperature ranges, abundant lighting, and low noise disturbance while maximizing resource efficiency, minimizing pollution, and teaching students about the importance of innovation in the environment.

Gary Bailey, Vice President of Innovative Design, in an interview session with Olson and Kellum (2003) agreed that sustainable schools or green schools can create better learning environments. The concept of sustainable development reflects the understanding that we must meet the needs of the present without compromising the ability of future generations to meet their own needs. A sustainable school not only includes the concept of sustainability, but in itself, is a teaching tool for sustainability.

In language, a green school or green school, is not only the physical appearance of a green or shady school, but the form of a school that has educational programs and activities that lead to awareness and wisdom towards the environment. Green school is a school that has a commitment and systematically develops certain programs to internalize environmental values into all school activities. The physical appearance of the school is arranged ecologically so that it becomes a vehicle for learning for all school members to be wise and behave in an environmentally friendly manner.

While the Adiwiyata Program is one of the programs of the State Ministry of Environment in order to encourage the creation of knowledge and awareness among school residents in efforts to preserve the environment. In this program it is hoped that every school member will be involved in school activities towards a healthy environment and avoid negative environmental impacts.

In its implementation, the State Ministry for the Environment, in collaboration with stakeholders, rolled out this adiwiyata program with the hope of inviting school members to carry out the teaching and learning process for environmental materials and participate in preserving and protecting the environment in schools and their surroundings.

The word Adiwiyata comes from two Sanskrit words, namely "Adi" and "Wiyata". "Adi" means: big, great, good, ideal or perfect. While "Wiyata" means: a place where a person gets knowledge, norms and ethics in social life. If the two words are combined, then Adiwiyata is "a good and ideal place where all knowledge can be obtained and various norms and ethics that can become the basis of humans towards creating life welfare and leading to the ideals of sustainable development"28

In the Regulation of the Minister of State for the Environment of the Republic of Indonesia Number 05 of 2013 concerning Guidelines for the Implementation of the Adiwiyata Program it is also stated that "Adiwiyata is a good and ideal school as a place to obtain all knowledge and various norms and ethics that can become the basis of humans towards creating a prosperous life and ideals the goal of sustainable development".

From the description above, it can be concluded that a green school is a good and ideal school that creates a healthy and conducive environment for learning and saves energy, resources and school costs so that it becomes a caring and environmentally cultured school to support sustainable development.

## 2. Adiwiyata Program History

In 1996, the first collaboration was agreed between the Ministry of National Education and the State Ministry of Environment on environmental education (PLH) in Indonesia. The collaboration was renewed again in 2005 and 2010. In 2006, the Ministry of Environment developed the PLH program at the primary and secondary education levels through the "Adiwiyata Program" as a follow-up to the 2005 agreement. The adiwiyata program was first implemented in the Java Island region with involving various stakeholders ranging from government agencies, universities and NGOs working in the field of environmental education<sup>29</sup>

<sup>&</sup>lt;sup>28</sup> Tim Adiwiyata Tingkat Nasional. *Panduan Adiwiyata Sekolah Peduli Dan Berbudaya Lingkungan*. (Jakarta: Kerjasama Kementerian Lingkungan Hidup dengan Kementerian Pendidikan dan Kebudayaan, 2011) <sup>29</sup> Ibid.,

Basically, the implementation of the adiwiyata program is a mandate from Law no. 32 of 2009 concerning Environmental Protection and Management. Article 65 point 2 states that "everyone has the right to environmental education, access to information, access to participation and access to justice in fulfilling the right to a good and healthy environment". Therefore, as a follow-up to Law no. 32 of 2009 was the issuance of Regulation of the State Minister for the Environment Number 02 of 2009 concerning Guidelines for the Implementation of the Adiwiyata Program (which is now refined to become Regulation of the Minister of State for the Environment Number 05 of 2013 concerning Guidelines for the Implementation of the Adiwiyata Program). By law or regulation,

From the explanation above, it can be concluded that the adiwiyata (green school) program in Indonesia was initially initiated by 2 ministries, namely the Ministry of National Education and the Ministry of Environment in 1996 with the implementation of environmental education (PLH) at the formal education level and in its implementation supported by a number of laws and regulations.

## 3. Definition and Purpose of the Adiwiyata Program

In Indonesia, the term green school program is called the adiwiyata program, which is one of the programs of the State Ministry of Environment and the Ministry of Education and Culture in order to encourage the creation of knowledge and awareness among school residents in preserving environmental functions.

According to the National Level Adiwiyata Team<sup>30</sup>, green school or adiwiyata has an understanding or meaning as a good and ideal place where all knowledge and various norms and ethics can be obtained which can become the basis of human beings towards the creation of a prosperous life and towards the ideals sustainable development. In this program it is hoped that all school

<sup>&</sup>lt;sup>30</sup> Tim Adiwiyata Tingkat Nasional. Panduan Adiwiyata Sekolah Peduli Dan Berbudaya Lingkungan. (Jakarta: Kerjasama Kementerian Lingkungan Hidup dengan Kementerian Pendidikan dan Kebudayaan, 2011

members will be involved in school activities towards a healthy environment and avoid negative environmental impacts.

Meanwhile, 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 <sup>31</sup>The aim of the Adiwiyata program is to create good conditions for schools to become places of learning and awareness of school members, so that school members can take responsibility in efforts to save the environment and sustainable development.

The main activity of the adiwiyata program is to create school institutions that care and have an environmental culture for primary and secondary schools in Indonesia. With this program, it is hoped that in every development of science and technology, it is always studied how this technology can balance the carrying capacity of the environment<sup>32</sup>

Responding to environmental developments, environmental education methods, and to increase knowledge and understanding of environmental insights to students and the public, on June 2, 2005 a joint agreement (Memorandum of Understanding/MoU) was signed between the State Minister of Environment and the Minister of Education National. As a realization of the MoU, on February 21 2006 a green school program or what is known as Adiwiyata school, namely a school that cares and has an environmental culture, was launched.

Green schoolin the concept of adiwiyata is a school that is able to optimize the potential of natural resources as a solution to solving problems faced by school residents. The other components are complements that are adapted to the conditions of the school environment. Green school has goals for all school members. With a view to building and exploring the participation of school members in activities that contain the management and preservation of environmental functions.

<sup>&</sup>lt;sup>31</sup> Tim Adiwiyata Tingkat Nasional. Panduan Adiwiyata Sekolah Peduli Dan Berbudaya Lingkungan. (Jakarta: Kerjasama Kementerian Lingkungan Hidup dengan Kementerian Pendidikan dan Kebudayaan, 2011
<sup>32</sup> Ibid...

In its implementation, the State Ministry for the Environment cooperates with various stakeholders, rolling out this green school or adiwiyata with the hope of inviting school residents to carry out the teaching and learning process of environmental material and participate in preserving and protecting the environment in schools and their surroundings. From the description above it can be concluded that the purpose of a green school has four aspects, namely: (1) to preserve environmental functions, (2) to control environmental pollution, (3) to control environmental damage, and (4) to support sustainable development.

## **CONCLUSION**

Sustainable development (sustainable development) is development to meet the needs of the present without compromising the ability of future generations to meet their needs by taking into account 3 aspects, namely environmental, social and economic balance in the pursuit of development and improving the quality of life. Environmental Education (PLH) is an educational process to change attitudes and behavior so that they are environmentally friendly and have the knowledge, motivation, commitment and skills to work both individually and collectively in finding alternatives or providing solutions to existing environmental problems and to avoid emergence of new environmental problems. While the objectives of PLH are 5 aspects, namely: knowledge, awareness, behavior, skills, and participation. green school (green school) is a good and ideal school that creates a healthy and conducive environment for learning as well as saving energy, resources and school fees so that it becomes a caring and environmentally cultured school to support sustainable development.green school goalgreen school) there are four aspects, namely: to preserve environmental functions, to control environmental pollution, to control environmental damage, and to support sustainable development (sustainable development).

#### REFERENCES

- Arifudin, Optimalisasi Kegiatan Ekstrakurikuler dalam Membina Karakter Peserta Didik, JIIP-Jurnal Ilmiah Ilmu Pendidikan, Vol 5, No 3, (2012), 829–837
- Hertanto. Partisipasi Masyarakat Dalam Upaya Pengurangan Risiko Bencana Perubahan Iklim di Perkebunan Kopi PT. Nusantara IX". UMS: Prosiding Seminar Nasional Geografi, 2016, 35
- Legionosuko. Posisi dan Strategi Indonesia dalam Menghadapi Perubahan Iklim guna Mendukung Ketahanan Nasional". Jurnal Ketahanan Nasional, Vol 25, No 3, Desember 2019, 295-305.
- O, Arifudin, Pengaruh Kelas Sosial, Pengalaman dan Gaya Hidup Terhadap Perilaku Penggunaan Kartu Kredit". Jurnal Ilmiah MEA (Manajemen, Ekonomi, & Akuntansi), Vol 5, No 1, 2021, 286–298
- Pradana. Analisis Dampak Perubahan Iklim Terhadap Curah Hujan Berdasarkan Perubahan Zona Agroklimatologi Pada Skala Lokal Politeknik Negeri Lampung. Jurnal Wacana Pertanian., No 14, Vol 1, 2018, 35.
- R. Tanjung, Manajemen Mitigasi Bencana. Bandung: Widina Bhakti Persada, 2020 45
- S. Keraf, Filsafat Lingkungan Hidup, Alam Sebagai Sebuah Sistem Kehidupan. Yogyakarta: Kanisius, 2012, 45
- Sulistyo. Konsep Pendidikan Lingkungan Hidup Dalam Pandangan Islam. Cahaya Pendidikan., Vol 4, No 1, 2018) 45–58.
- Tim Adiwiyata Tingkat Nasional. *Panduan Adiwiyata Sekolah Peduli Dan Berbudaya Lingkungan*. Jakarta: Kerjasama Kementerian Lingkungan Hidup dengan Kementerian Pendidikan dan Kebudayaan, 2011
- UN. "Report Of The United Nations Conference On The Human Environment" (Stockholm, 5-16 June 1972, United Nations publication Sales No; E.73.II.A.1). Switzerland: United Nations Publication, 1972
- UNESC. Education For Sustainable Development Sourcebook. Paris: United Nations Educational, Scientific and Cultural Organization. Retrieved from https://sustainable development. un. org/content/documents/ 926unesco9.pdf (2012).
- Y, Utomo, S, Utaya, S., Mahanal, F Rohman, R, Hartono, N Zakia,., & Hidayat, S. Pendidikan lingkungan hidup untuk Sekolah Menengah Atas kelas XII (Malang: Kerjasama Pusat Penelitian Lingkungan 2019), 3