Implementation of the Adiwiyata Program at SMAN 1 Wonoayu: Study of the Role of Schools in Realizing Environmental Awareness

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Abstract: This research aims to analyze the implementation of the Adiwiyata program at SMAN 1 Wonoayu, Sidoarjo. The focus of this research is the factors that influence the effectiveness of its implementation. Using a descriptive qualitative approach. Apart from that, this research collected data through interviews with school principals, the Adiwiyata team, teachers and students, as well as field observations and documentation. Data analysis was carried out using the Miles & Huberman technique, including data reduction, data presentation, and drawing conclusions. The research results show that the Adiwiyata program at SMA Negeri 1 Wonoayu has been running well, but there are several problems that need to be overcome. Limited financial resources are the main obstacle in providing adequate facilities and infrastructure. Apart from that, the lack of socialization and direction regarding plant breeding techniques to the new Adiwiyata team also hindered the effectiveness of the program. The implication of this research is the need to increase budget allocations for the Adiwiyata program as well as strengthening socialization and technical training for the implementing team. In this way, it is hoped that the implementation of the Adiwiyata program can run more optimally and contribute to increasing awareness and participation of all school residents in environmental conservation.

Keywords: Adiwiyata, Policy Implementation, Environmental Education, Sustainable Schools

Introduction

A healthy and sustainable environment is the foundation for the sustainability of human civilization. Environmental damage caused by irresponsible human activities has become an urgent global issue to address (Dwiprigitaningtias et al, 2024) (Jelita et al, 2024). Environmental education plays a crucial role in shaping public awareness and behavior toward environmental care (Rahayu et al, 2024). One of the Indonesian government's efforts to mainstream environmental education is through the Adiwiyata Program. Adiwiyata, derived from Sanskrit, means a good and ideal place for the creation of knowledge, norms, and ethics that support well-being and sustainable development (Putri et al, 2024) (Evangelyne et al, 2024). The main goal of the Adiwiyata program is to encourage schools to become conducive places for learning and environmental conservation practices while fostering an environmentally conscious character among all school members (Agustina, 2024). The benefits of implementing Adiwiyata include

improving the quality of the school environment, optimizing resource efficiency, encouraging active participation of school members in environmental management, and enhancing the school's image in the eyes of the community (Adila et al, 2024). Thus, Adiwiyata contributes positively not only to the physical environment of the school, but also to the formation of the character of the younger generation who are responsible for the environment.

Despite its great potential, the implementation of the Adiwiyata program in Indonesia still faces various challenges. Some of the problems that often arise include: a lack of understanding and commitment from all school residents, limited budget and resources, lack of socialization and training, and lack of support from local governments and communities (Amalia et al, 2024). A common phenomenon is the implementation of Adiwiyata which tends to be merely formalistic and lacks sustainability (Cahyani, 2024). As the frontline of education, schools play a central role in addressing this issue. Schools can enhance the understanding and commitment of their members through socialization activities, training, and the formation of a strong Adiwiyata team (Bahrudin et al, 2017). In addition, schools can innovate in seeking alternative funding sources and establishing collaborations with various parties to support the Adiwiyata program (Wahyuni, 2023). The school's role also includes integrating environmental values into the curriculum and daily learning activities, ensuring that environmental awareness becomes an inseparable part of the school culture (Darmawanet et al, 2022) This is in accordance with the Regulation of the Minister of Education and Culture Number 21 of 2013.

Several scientific journal studies have highlighted various aspects of the implementation of the Adiwiyata program, finding that the active participation of students and teachers is a key factor in the program's success (Mutia et al, 2024) (Shiddiq et al, 2024). Additionally, the role of school leadership is crucial in motivating and coordinating the entire school community to participate in the Adiwiyata program (Baso et al, 2024). Other studies discuss effective waste management strategies in Adiwiyata schools and examine the integration of environmental values into specific subjects (Ahmad et al, 2024). Saputra's research also analyzes the impact of Adiwiyata on students' environmental behavior changes (Saputra et al, 2024). These studies provide valuable insights into the factors influencing the success and sustainability of the Adiwiyata program in various school contexts. This study is relevant to Ecological Theory, which emphasizes the relationship between living beings and their environment. In this context, Adiwiyata can be seen as an effort to create a harmonious and sustainable school ecosystem.

The primary objective of this research is to analyze the implementation of the Adiwiyata program at SMAN 1 Wonoayu. Specifically, this study aims to:

1. identify the supporting and inhibiting factors in Adiwiyata implementation
2. analyze the strategies used by the school in managing the Adiwiyata program
3. evaluate the impact of the Adiwiyata program on environmental awareness and behavior within the school community

4. provide recommendations to enhance the effectiveness and sustainability of the Adiwiyata program.

The fundamental concepts used in this study include:
1.   Adiwiyata as an environmental education program
2.   active participation of the school community
3.   environmental sustainability
4.   behavioral change

Methodology

In this study, the author uses a qualitative research method with a scientific process of observing objects in the field (Utomo et al, 2024). The approach used is a descriptive approach that focuses on existing problems, facts in the field and new findings in accordance with real conditions in the field. This research was conducted at SMA Negeri 1 Wonoayu Sidoarjo. This location was chosen because the school has launched Adiwiyata pioneers since 2015 and has characteristics that are relevant to the research focus. The research data was collected through interviews conducted with the Principal to obtain an overview of the school's policies and support for Adiwiyata; School Adiwiyata Team to understand program planning, implementation, and evaluation; Teachers to gain perspectives on the integration of environmental values in learning; As well as students to find out their awareness and participation in Adiwiyata activities. In addition to interviews, data is also collected through observation and documentation. The data analysis technique in this study uses the Miles & Huberman analysis technique, namely reducing data, presenting data to draw conclusions (Muhajirin et al, 2024)

Result and Discussion

The Adiwiyata program is one of the programs of the State Ministry of Environment in order to encourage the creation of knowledge and awareness of school residents in an effort to preserve the environment. Every school resident is expected to be involved in school activities towards a healthy environment and avoid negative environmental impacts. According to the Minister of Environment Regulation No. 05 of 2013, Adiwiyata school is a good and ideal school as a place to obtain all knowledge and various norms and ethics that can be the basis for human beings towards the creation of welfare and the ideals of sustainable development.

But in reality, in protecting the environment, we still face problems. Where environmental problems are an issue that is often discussed in the public sphere considering the extraordinary impact that harms humans, and is caused by human actions. Environmental problems globally are biodiversity, water, deforestation, pollution and climate change. Human activities in recent decades have raised serious concerns related to the environment and its preservation. Therefore, the Ministry of Environment has created an environmental education program at the primary and secondary education levels through the Adiwiyata program, which is a school that cares for and has an environmental

culture since February 21, 2006. This program is a follow-up to the MoU on June 3, 2005 between the Minister of State for the Environment and the Minister of Education Nasonal. One of the schools that implements the Adiwiyata program in Sidoarjo Regency is SMAN 1 Wonoayu. However, in its implementation, the Adiwiyata program at SMAN 1 Wonoayu faces a number of challenges that hinder the effectiveness of its implementation. Based on the implementation theory put forward by Charles O. Jones, there are several crucial factors that affect the success of policy implementation, namely bureaucratic structure, resources, disposition and communication which are described as follows;

A bureaucratic organization consists of organizational units, which are parts of a larger model known as structure. Structure refers to the formal mechanisms through which an organization is managed. Within a structure, there is a framework and arrangement that establish a consistent pattern of relationships among functions, divisions, positions, and individuals. These elements define distinct roles, duties, authorities, and responsibilities within an organization. The purpose of structure is to organize and distribute tasks among members so that activities can be carried out effectively to achieve the organization's goals and objectives. The arrangement of structures or units must be regulated through clear rules to ensure that the authority of functions, divisions, or positions is not bypassed by bureaucracy. Clear regulations help eliminate overlapping tasks among employees and establish standardized work procedures.

In the context of the Adiwiyata program at SMAN 1 Wonoayu, the organizational structure of the implementing organization has been formed in accordance with the duties and functions of each member. Each individual in the organization has a clear role, collaborating effectively to realize the program's goals, which are to create a caring and environmentally cultured school environment. The following is a picture of the organizational structure of the adiwiyata program at SMAN 1 Wonoayu:
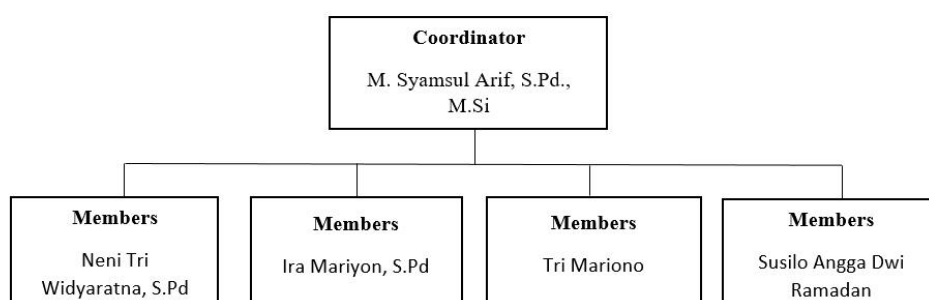

Figure 1. Organizational Structure of the Superhero Program of SMAN 1 Wonoayu

Based on the picture above, it can be concluded that the organizational structure of the Adiwiyata Program has been formed with divisions according to their respective authorities and duties. In accordance with the Principal's Decree Number 800/1296/101.6.25.12/2024. With clarity in the organizational structure, of course, it is very necessary to implement the adiwiyata program, because an organized organizational structure, can provide specific instructions for each organization regarding its tasks and functions. Thus, the members of the organization can produce superior human resources.

1) Sumber Daya

Resources in policy implementation can be viewed as one of the critical factors of public policy implementation. Important resources in policy implementation include staff of sufficient size, and having appropriate skills for the completion of their tasks, authority, and facilities needed to translate written proposals into government functions. These policy resources must also be available in order to facilitate the implementation of a policy. Based on the results of the interview, the adiwiyata program at SMAN 1 Wonoayu has problems regarding the existence of several facilities and infrastructure that are lacking such as the absence of organic and non-organic waste bins, greenhouses, toga plantation land due to the lack of land and sources of funds so that they take advantage of existing facilities. This is not in accordance with the theory put forward by Charles O Jones where Charles O Jones states that lack of physical and material support can hinder the implementation of policies, because means and infrastructure are important components of effective implementation. In addition, there is a lack of funds to carry out various adiwiyata program activities. This is because the funding for the Adiwiyata program comes from the sale of harvested crops grown by the Adiwiyata team. However, the program requires an adequate budget allocation to support various environmental activities and initiatives in accordance with Adiwiyata standards. Without sufficient funding, efforts to raise environmental awareness, implement educational programs, and maintain eco-friendly facilities will be hindered. This situation contradicts Jones' theory, which emphasizes that financial resource limitations can reduce the capacity for effective policy implementation.

2) Interpretasi

The most important thing for the success of the implementation of the adiwiyata program is that there is an understanding by all parties involved in the implementation and policymakers of the implementation guidelines, therefore it is necessary to strive for mutual understanding between the implementing officials. Therefore, according to Jones by quoting George C. Edwards, saying that a person who implements decisions/policies must know what they should do. If the policy is to be implemented appropriately, the directions and instructions for implementation must not only be accepted but also clear and if this is not clear, the implementers will be confused about what they should do, and eventually they will have their own policy in looking at the implementation of the policy.

In terms of interpretation, the key aspect to assess is whether the implementation of the Adiwiyata program at SMAN 1 Wonoayu has been effective. This effectiveness is reflected in a shared understanding between implementers and recipients regarding their respective roles. In this context, socialization plays a crucial role and must be facilitated through effective communication. The DLHK (Department of Environment and Forestry) is responsible for socializing the Adiwiyata program to the school, which then disseminates the information to the Adiwiyata team. In turn, the Adiwiyata team conveys the details of the program to students within the school. However, in reality, several obstacles remain. There is still a lack of socialization for new members of the Adiwiyata team, particularly regarding vegetable seedling cultivation. Additionally, insufficient

guidance from DLHK regarding the seedling process has led the Adiwiyata team to rely on self-taught methods for seed cultivation.

In fact, effective socialization is very important to ensure that all parties understand the objectives, responsibilities, and mechanisms of implementing the Adiwiyata program. Ignorance or inadequate understanding of the program can lead to a lack of support and participation from teams and members. According to Jones, poor communication and lack of understanding can lead to resistance or non-compliance with policies, thus hindering successful implementation.

3) Aplikasi (Penerapan)

Aplik Application or Implementation is often a dynamic process in which the implementers or officers are directed by program guidelines and benchmarks, or specifically directed by actual conditions. A policy will be successful if it can be applied, if it cannot be implemented it is just a pile of paper. Therefore, Jones said, application is a permanent provision in the service to achieve the program's goals. Through this application, it is hoped that a response will emerge from the target group. Strictly speaking, with the application of the policy, it will be possible to know whether the environment accepts or rejects the implementation and results of the policy. Therefore, applying policies is not an easy thing, it can even pose challenges that must be faced by implementers, while application activities are activities of providing services on a regular basis, payment or others in accordance with the existing policy goals and facilities.

Based on interview results, the application phase of the Adiwiyata program at SMAN 1 Wonoayu includes the allocation of resources, such as budget and workforce, to support environmental activities. For example, proceeds from the sale of pakcoy plants are used for plant maintenance and waste management. Furthermore, this policy is implemented through various environmental activities, such as planting lamtana, beautifying the area in front of the bathrooms, greening the southern school corridor, planting tambulampot (potted fruit plants), growing vegetables, Pojok Payu (a green corner initiative), and Jumat Hijau (Green Friday). Additionally, environmental education and guidance are provided to students, particularly during the MPLS (student orientation period), to encourage active participation in maintaining the school environment. To ensure effectiveness, the program must also be accompanied by regular monitoring and evaluation, along with disciplinary enforcement for violations and rewards for outstanding contributions to environmental preservation. Moreover, collaboration with the Department of Environment and Forestry (DLHK) of Sidoarjo Regency plays a crucial role in strengthening the implementation of this policy, ensuring the realization of an environmentally friendly and sustainable school.

Conclusion

Based on the results of the study, it can be concluded that the Adiwiyata program has been carried out quite well, but there are still problems found in the Adiwiyata program, one of which is the lack of funds in the Adiwiyata program because the funds generated are still sourced from the sale of pakcoy plants only. This also has an impact on

the lack of infrastructure needed in the Adiwiyata program. In addition, there is still a lack of socialization for the new adiwiyata team regarding vegetable nurseries plus there is still a lack of direction from DLHK regarding the vegetable nursery process so that the seeding process is carried out by the adiwiyata team itself. Effective socialization is essential to ensure that all parties understand the objectives, responsibilities, and implementation mechanisms of the Adiwiyata program. Ignorance or inadequate understanding of the program can lead to a lack of support and participation from teams and members.

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Conflict of Interest Statement:
The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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