



Strategy for Establishing Civic Responsibility in Creating a Sustainable Environment through the Climate Village Program

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<http://dx.doi.org/10.18415/ijmmu.v10i7.4720>

Abstract

This study aims to describe strategies for building the character of civic responsibility in creating a sustainable environment to address the impacts of climate change through mitigation actions for the Climate Village Program. This study uses descriptive qualitative research types. Collecting data in this study using observation techniques, interviews, and documentation. The results of the study show that forming the character of civic responsibility in creating a sustainable environment through the Climate Village Program is carried out with strategies namely (1) outreach and training; (2) the habit of maintaining and maintaining cleanliness; (3) exemplary and motivation; (4) a culture of mutual appeal; (5) a fine; (6) strengthening citizen participation. This strategy is integrated into the mitigation actions implemented in the Climate Village Program, namely (1) waste management; (2) energy saving; (3) wise use of land; and (4) other environmental activities as an effort to reduce greenhouse gas emissions. The civic responsibility in creating a sustainable environment will be formed through strategies that have been planned and integrated into the mitigation actions of the Climate Village Program.

Keywords: *Strategy; Civic Responsibility; Sustainable Environment; Climate Village Program*

Introduction

The term environment comes from the French word “environ” which means “around”, so the environment means everything that surrounds us (Pandey, 2020). The environment refers to all living places for creatures that exist on earth in the form or components of biotic and non-biotic (Pant, Verma, and Surya, 2020). The relationship between the environment and humans is related or has influence. The environment for humans is not only to be exploited and explored but also a prerequisite for a stable relationship between their environment and humans. The environment is very influential on the survival of all citizens as human beings in the world to meet their daily needs requires natural resources in the environment. (Safitri, Putra and Marini, 2020). To build harmony and serenity in people's lives, and to provide opportunity and support, humans and nature must first be consistent and profitable. Man has always perfected his mind to better meet his own needs to survive and develop. This hurts environmental quality, native species, and human quality of life. The relationship between humans and nature must be based on the principles of mutualism and benevolence (Santoso, Atfalusoleh, Kusmanto, Hasjim, and Al-Ma'ruf, 2020).

The development of the era is getting faster, modern and technology is getting more sophisticated, but the development and progress of this technology are not in line with the environmental conditions which are getting worse and worse over time. The issue of environmental damage is a threat and challenge throughout the country because environmental damage causes problems and disasters. Environmental damage problems will occur when the quality or quantity of environmental components changes, which affects all life on Earth either directly or indirectly. As a result of human intervention or mistreatment of the Earth, environmental problems are characterized as problems with planetary systems (air, water, land, etc.) (Pant, Verma, and Surya, 2020). Factors that cause the environment in Indonesia to experience various kinds of problems are a lack of responsibility and no sense of concern for the environment (Suryana, 2017). According to research conducted by the Youth Research Institute in 2019, some young children do not understand the importance of studying the environment and do not feel compelled by the task of protecting the environment (Luong and Van, 2021). Humans meet their needs by using natural resources excessively and irresponsibly such as deforestation and forest conversion, mining, or activities that cause air, water, and soil pollution are factors that cause environmental damage (Ashar, 2018). Environmental problems occur due to greedy behavior in using natural resources without thinking about the effect on the survival of the people and the earth. The current environmental problems are the thinning of the ozone layer, carbon emissions, climate change, and rising sea levels (Rozman and Azmi, 2022). Environmental issues are a serious 21st-century challenge. These environmental issues include, (1) climate change (2) rapid urbanization and industrialization (3) excessive consumption (4) ozone depletion is the depletion or loss of ozone in the stratosphere. (5) deforestation is the felling of trees and the destruction of natural vegetation. (6) desertification is land degradation (Sadiku, Ashaolu, Majebi, and Musa, 2020).

One of the environmental problems which is an important topic to be addressed immediately is climate change. Since the 1992 Earth Summit in Rio de Janeiro, Brazil, the issue of climate change has begun to receive attention on a global scale. The findings of the Intergovernmental Panel on Climate Change (IPCC) study on climate change are now the basis for the United Nations Framework Convention on Climate Change (UNFCCC), which was established some 28 years ago. The IPCC, climate change, and global warming are becoming increasingly evident everywhere on Earth. The most pressing problem for nations in this century is climate change caused by global warming (Yulianto and Susanto, 2020). Climate change is a dynamic and multifaceted system of changes in environmental conditions that affect biotic and abiotic components so that environmental conditions experience changes such as CO₂ levels and temperature, rainfall, heat waves, and new pathogens (Chaudhry and Sidhu, 2021). The Meteorology, Climatology, and Geophysics Agency (BMKG) data report regarding warming or temperature rise in 2020 ranks as the second warmest year with an anomaly value of 0.7°C, and 2019 is in third place with an anomaly value of 0.6°C. The data report as a comparison of global average temperature information released by the World Meteorological Organization (WMO) in its last report in early December 2020 also placed 2016 as the hottest year (ranked first), with 2020 being on the track towards one of the three hottest years ever recorded. The most visible consequence of the industry is climate change, which is generated by air pollution. Climate change due to greenhouse gas emissions is starting to be felt in various coastal areas in Indonesia, both small towns and big cities. Finally, as a result of the impact of climate change, the survival of humanity is threatened (Sumampouw, 2019). Climate change causes air temperatures to become high which disrupts human health, extreme weather has an impact on the economy and decreases the efficiency of agriculture and forestry (Mikhaylov, Moiseev, Aleshin, and Burkhardt, 2020).

One of the 17 global goals included in the 2030 sustainable development agenda is combating climate change, and it is necessary to adopt an integrated strategy by incorporating anticipatory climate change initiatives into national policies, strategies, and plans to achieve this goal (Izzatusholekha, Kholilurrohmah and Salam, 2022). Sustainable development is organizational ideas and principles developed to achieve human development goals and to increase the capacity of the global system to provide critical information and services to the economy and the public (Ever, 2017). Sustainable

development is a development strategy that benefits resources being developed so that they (resources) can continue to exist for future generations (Mohieldin, 2017). The concept of sustainable development is a development model that maintains a standard of living without destroying ecosystems or producing environmental problems such as deforestation and water and air pollution, which can cause problems such as climate change and species extinction (Benaim & Raftis, 2008; Browning & Rigolon, 2019). Economic expansion, environmental preservation, and social justice are the three main principles of sustainable development (Taylor, 2016). Environmental sustainability refers to the possibility of a resilient and productive nature to support human life. Ecosystem health and environmental quality are interrelated (Brodhag & Taliere, 2006; Mensah & Enu-Kwesi, 2019). Another fundamental component of sustainable environmental development is good human resource management. Humans are responsible for utilizing and preserving the environment (Wang, 2016). Citizens or communities need to learn more about how to protect the environment, the economy and develop citizens (Collste et al, 2017).

The government has carried out various strategies and regulations related to preserving the environment and sustainable development by directly involving local-level residents. One of them is initiating the Climate Village Program with a bottom-up approach as a form of addressing climate change. The Paris Agreement, which the Indonesian government accepted, became Law No. 16 of 2016 concerning the UN Framework Convention Agreement on Climate Change, implemented through the Climate Village Program (ProKlim) initiative. Minister of Environment and Forestry Regulation Number: P.84/MenLHK-Setjen/Kum.1/11/2016 concerning the Climate Village Program and Regulation of the Director General of Climate Change Control Number: P.1/PPI/SET /KUM.1/2/ 2017 concerning Guidelines for the Implementation of the Climate Village Program became the legal basis for the Climate Village Program (ProKlim) (Herdiansyah, 2021).

One of the areas in Indonesia that have implemented the Climate Village Program (ProKlim) is Selosari Village, Magetan Regency. Citizens' responsibility is important in the implementation of this program as the goal of sustainable development point thirteen is related to handling climate change. Related to this, building the character of citizen responsibility towards awareness of creating a sustainable environment in tackling climate change is very important. The strategy of forming the character of responsibility is needed so that citizens become human beings who have the character of being responsible for protecting and preserving the environment through the Climate Village Program. Law Number 32 of 2009 Article 67 related to Protection and Maintenance of the Environment, states that everyone is obliged to maintain the preservation of environmental functions and control environmental pollution and/or damage. Based on the description above, this study discusses strategies for establishing civic responsibility in creating a sustainable environment through mitigation actions for the Climate Village Program that have been implemented in the Selosari Village, Magetan Regency.

Method

This study uses a qualitative descriptive research type. Denzin and Lincoln stated that qualitative research is research that has a multi-method focus and its subject matter is related to interpretive and naturalistic approaches (Aspers and Corte, 2019). The research locations in this study were RW 02 and RW 03, Selosari Village, Magetan Regency. Research subjects were selected using a purposive sampling method with certain criteria. The subjects of this study were the head of ProKlim and residents implementing the Climate Village Program in RW 02 and RW 03, Selosari Village, Magetan Regency. Data collection in this study was carried out by observation, interview, and documentation techniques. Observations made were passive participatory observations by direct observation of the environment around the houses of RW 02 and RW 03 Selosari Village and their environmental maintenance activities and mitigation actions. The interviews conducted were semi-structured interviews with the heads and residents of RW 02 and 03 Selosari Village. Documentation is done by collecting documents related to the implementation of mitigation actions in the Climate Village Program. Data were analyzed based on

data analysis according to Miles and Huberman which consisted of data reduction, data presentation, conclusions, and verification (Lune and Berg, 2017).

Results and Discussion

Civic Responsibilities to the Environment

Civic responsibility is citizens who are aware of their rights and obligations as a form of citizen responsibility (Halimah and Nurul, 2020). Every citizen has the duty and responsibility to protect the environment as well as possible (Gusmadi, 2018). Indicators of responsibility are (1) having an attitude, high awareness, and showing a sense of responsibility at work; (2) being able to complete the workload properly and on time; (3) daring to take the risk of the chosen decision; (4) diligent and highly dedicated at work; (5) provide optimal service according to the task field (Yusuf, 2018). Responsibility is two things, namely (1) personal responsibility and (2) responsibility to other people and the environment, humans as social beings who need other people in their lives for self-development (Mustofa, Sugiaryo, and Supeni, 2019).

The character of responsibility is an attitude and action that must be possessed by every good citizen. One of the attitudes of responsibility that a competent citizen must possess is responsibility for the environment. Citizens who have qualified competence will be responsible for environmental sustainability. Preserving the environment is everyone's responsibility, regardless of which group they belong to (Rahman, 2016). The basis for citizens to act responsibly towards the environment is Law Number 32 of 2009 Article 65 point four regarding the Protection and Maintenance of the Environment, that everyone has the right to play a role in protecting and managing the environment. Law Number 32 of 2009 Article 67 related to Protection and Maintenance of the Environment, states that everyone is obliged to maintain the preservation of environmental functions and control environmental pollution and/or damage. Law Number 32 of 2009 Article 70 regarding the Protection and Maintenance of the Environment, states that the community has equal and broadest rights and opportunities to play an active role in protecting and managing the environment.

The formation of civic responsibility in maintaining, managing, and overcoming environmental problems such as climate change is urgently needed to create a sustainable environment. Strategy in Griffin's opinion is a comprehensive plan to achieve goals (Rinta, Febriana, and Wulandari, 2022). High-level plans to achieve one or more goals in the face of uncertainty are called strategies (Barad, 2018). Forming civic responsibility for the environment using environmental education which is integrated with social science, will greatly help reduce or overcome environmental problems (Hollstein and Smith, 2020). The formation of civic responsibility for the environment can be realized through behavior, namely (1) maintaining environmental cleanliness, such as not littering; (2) not over-exploit nature, bearing in mind the limited natural resources available; (3) using environmentally friendly technology, so that the cleanliness and beauty of the environment is well maintained (Kustiyono, 2019). Keynan and Lazar (2017) claim that good citizens do not litter and care about the environment and animals. The Semarang City Environment Service (2020) community responsibility efforts to preserve the environment can be carried out by (1) cultivating crops wisely; (2) using domestic products; (3) protecting rare flora and fauna; (4) maintaining forest sustainability; (5) do medal; (6) reforestation.

Strategy for Establishing Civic Responsibility in Creating a Sustainable Environment Integrated Through the Climate Village Program

The Climate Village Program has been implemented since 2019 by all residents of RW 02 and RW 03, Selosari Village, Magetan Regency. Initiation of the implementation of the Climate Village Program started with an invitation from the Magetan Regency Environmental Service because this area has the potential to make efforts to mitigate environmental problems. It is hoped that the appointment of

RW 02 and RW 03 in the Selosari Village can address climate change as a form of sustainable development goals. The implementation of the Climate Village Program is carried out in various stages according to the rules in the Regulation of the Minister of Environment and Forestry of the Republic of Indonesia Number P.84/Menlhk-Setjen/Kum.1/11/2016 namely, preparation, planning, implementation, and development of adaptation and mitigation actions climate change. After the appointment of RW 02 and RW 03 Selosari Village as locations for the implementation of the Climate Village Program by the Magetan Regency Environmental Service, the residents responded, and to run the program a management structure/committee was formed. Various parties were involved in the preparation, planning, and implementation as well as evaluation of the Climate Village Program, starting from the Environment Agency, the Head of the Sub-District, the Head of RW, community leaders, and all residents.

The Climate Village program is carried out by residents of RW 02 and RW 03, Selosari Village, which focuses more on mitigation activities. Mitigation activities that have been planned and have been carried out, namely the procurement of waste banks, management of waste and waste into creative goods and compost, greening throughout the area, planting trees, cleaning rivers and waterways, the obligation for every house to have Butorantas (fruit, toga, vegetables, ornamental plants), the establishment of nursery gardens, routine community service, hydroponic cultivation, programs to save energy and electricity and other activities related to reducing greenhouse gas emissions. The implementation of the Climate Village Program in Selosari Village went quite well, residents were enthusiastic about this program because residents were required to be responsible for environmental conditions.

The strategy for establishing civic responsibility for environmental sustainability through the Climate Village Program is a way for residents to be more competent and more aware of their responsibilities regarding climate change issues in RW 02 and RW 03 Selosari Village, Magetan Regency. The strategy and implementation of the formation of community responsibilities in RW 02 and RW 03 Selosari Village, Magetan Regency in creating a sustainable environment are carried out in various ways or methods that have been planned and integrated through the actions of the Climate Village Program. The strategy that establishes civic responsibility is carried out through methods namely (1) outreach and training; (2) the habit of maintaining and maintaining cleanliness; (3) exemplary and motivation; (4) a culture of mutual appeal; (5) a fine; (6) strengthening civic participation. These strategies were then integrated into mitigation actions for the Climate Village Program activities with the help of various parties such as the Magetan Regency DLH, environmental activists, the Head of the Sub-District, the head of the Climate Village Program, and the environmental cadres that had been formed.

The implementation of socialization and training as a strategy for establishing civic responsibility is carried out as a means of environmental education and education to increase citizen competence. This is according to the United Nations International Conference on environmental education, which was held in Tbilisi in 1977, environmental education is important to help people and communities understand the complex nature of the environment. As long as they have the necessary knowledge, skills, and practical experience to participate effectively and tenaciously in handling environmental problems and improving environmental quality (Luong and Van, 2021). From the results of observations and interviews, it can be seen that the Magetan Regency Environmental Service organizes socialization and training for residents to increase knowledge, abilities, and attitudes to prepare them to carry out mitigation actions for the Climate Village Program in Selosari Village. This outreach and training aim to increase people's understanding of the impacts of climate change and environmental degradation so that they can recognize their local environmental problems and come up with creative solutions. Making hydroponics, learning to sort and process waste into creations or making compost, learning energy-saving and environmentally friendly technologies, learning to use natural resources and other training related to environmental protection skills are only a small part of the activities usually carried out in outreach activities. and training in Kelurahan Selosari. Through this socialization and training, knowledge competence, ability, and attitude of civic responsibility will be formed to create a sustainable environment as a step in dealing with climate change. This is by Chawla and Cushing (2007) that citizens who behave responsibly towards

the environment will know, understand and care about environmental problems and believe in the effects they will receive due to environmental issues. Georgiou, Hadjichambis, and Hadjichambi (2021) citizens know, and have environmental skills, are aware of environmental challenges, and are involved in responsible environmental movements.

The application of the habit of maintaining and maintaining daily hygiene is carried out in the family environment and the community environment as a way of forming habits and responsible behavior for children, youth, and adults. Habituation is an iterative learning process that involves breaking down concepts and ideas into smaller, more manageable, and automatic parts. The habituation process is equivalent to repetition, namely certain tactics that are carried out formally and eventually become biased (Anggraeni, Elan, and Mulyadi, 2021). The results of observations and interviews revealed that the residents of RW 02 and RW 03 Kelurahan Selosari apply habits of each family member to take care of the environment and keep the house clean by doing household chores such as sweeping, mopping, washing, caring for plants, sorting and disposing of waste properly. Children are accustomed to being aware of their rights and obligations, by teaching and practicing the habit of keeping the house clean from an early age to develop an independent attitude and responsibility towards the surrounding environment. Children are actively involved in the division of labor within the family structure, which helps them understand their responsibilities in the household, such as cleaning up their cutlery after eating. Parents will sometimes put pressure on their children to participate in household chores regarding cleanliness and environmental maintenance. Parents can give praise as a reward if their child shows the behavior of caring for the environment and keeping it clean so that it encourages them to get used to this behavior. The repetition of this habit will strengthen the child's sense of responsibility, allowing them to develop the habit of living clean even when their parents are not around. This is in Akhwani's opinion, habituation forms feelings into habits which then become character or behavior (Naziyah, Akhwan, Nafiah, and Hartatik, 2021). The practice of keeping the environment clean can be done by utilizing clean water, reducing the use of plastic, disposing of trash in its place, and other similar actions. Teaching aids such as photographs and infrastructure can help children, especially young ones, to develop clean living habits (Yufiarti, Edwita, and Suharti, 2019).

Motivation and examples in protecting the environment from the impacts of climate change and mitigation actions for the Climate Village Program are carried out by providing direct examples so that residents are motivated to participate in carrying out their responsibilities towards the environment. Motivation according to McDonald is an individual's sustainable energy which is manifested as a burning desire to achieve the desired goal (Febnasari, Arifin & Setianingsih, 2019). The Big Indonesian Dictionary explains that exemplary comes from the word exemplary which means an act that should be emulated (Poerwadarminta, 2003). The results of observations and interviews show that the head of the Climate Village Program, decision-makers, environmental activists, and environmental cadres in RW 02 and RW 03 Selosari Village, directly or indirectly, always provide exemplary motivation to always protect and preserve the environment. Those who are trusted to become leaders, environmental cadres, and environmental activists will find it easy to invite their citizens to carry out environmental responsibility. Environmental cadres are formed to provide direct role models and motivation because they have previously participated in socialization and training activities related to environmental issues, climate change mitigation, and adaptation initiatives so that they have the information, skills, and attitudes needed to deal with climate change and environmental challenges effectively. Decision makers such as the head of the Climate Village Program, District DLH, environmental activists, and environmental cadres offer instructions and demonstrations on examples of how to properly manage waste, examples of making vertical plants, examples of utilizing energy-saving power, and other practices. Examples of direct behavior on how to overcome and preserve the environment by the head of the Climate Village Program, District DLH, environmental activists, and environmental cadres will be seen by residents, and residents will become motivated in protecting and preserving the environment as a response to climate change. Other forms of motivation and examples are activities to invite environmental experts, comparative studies, or visits to areas or villages that have implemented the Climate Village

Program which can provide new knowledge and role models for better and more responsible implementation of mitigation actions. In addition, motivation and exemplary forms are carried out using posters containing pictures or writings on the dangers of climate change, energy-efficient living, and invitations to protect the environment through the Climate Village Program which are installed on the streets of RW 02 and RW 03, Selosari Subdistrict, Magetan Regency. as strengthening the motivation of citizens to protect the environment.

The culture of mutual appeals is implemented in RW 02 and RW 03 Selosari Sub-District, Magetan Regency as a way of establishing the responsibility of all residents to remind other residents to protect the environment and deal with climate change issues. The results of observations and interviews showed that the residents of RW 02 and RW 03, Selosari Village, Magetan Regency, had to immediately warn other residents they observed doing actions that damaged the environment. Residents will be ashamed of themselves with this culture of encouraging each other, so they will be careful in their actions so as not to be punished by their neighbors or reported to the head of Proklim for damaging the environment and violating environmental laws. The obligation of citizens to protect the environment is formed from a culture that demands contempt for those who violate or damage the environment.

The next strategy used to shape citizens' responsible attitude towards the environment is fined. The fine method is applied by residents of RW 02 and RW 03, Selosari Subdistrict, Magetan Regency, if residents violate rules relating to their environment and the activities of the Climate Village Program. This fine is applied so that residents are responsible for the rules of preserving the environment and mitigation activities. An example of a fine that is applied is if residents arrive late for events such as community service, river cleaning, or meetings will be fined. Violations of regulations including littering and burning of waste will also result in fines. Fines come in the form of cash or citizens choosing to take the initiative by providing food while doing community service rather than participating in regular fines.

Strengthening civic participation in all environmental activities in RW 02 and RW 03 Selosari Subdistrict, Magetan Regency so that residents become active in mitigating climate change. Strengthening civic participation in all activities will make citizens active and aware of their responsibilities. This is by the explanation that someone who has an awareness of their environmental responsibility makes it possible to participate in environmental activities (Aarnio-Linnanvuori, 2019). The results of observations and interviews showed that strengthening community participation in RW 02 and RW 03 Selosari Village, Magetan Regency was carried out through community service activities, meetings, and discussions related to existing problems in the environment. Strengthening civic participation is supported by making youth groups, managing waste banks, PKK activities, and other actions that can facilitate residents to become actively involved in tackling climate change through the Climate Village Program.

Strategies for establishing civic responsibility for creating a sustainable environment and sustainable development are implemented quite effectively by integrating into the activities of the Climate Village Program. These environmental responsibility strategies can provide direct experience to residents through mitigation actions and increase citizen competence. The capacity of knowledge, skills, and attitudes to be aware of the responsibilities of a citizen toward sustainable development related to tackling climate change will be formed. The civic responsibility towards the environment must be carried out and continued so that a sustainable environment will be created and the goals of national development will be realized.

Conclusion

Environmental sustainability is the responsibility of citizens around the world. Establishing civic responsibility in creating a sustainable environment requires a strategy that can be integrated through environmental mitigation actions in the Climate Village Program. The strategy for establishing civic responsibility towards a sustainable environment is through (1) outreach and training; (2) the habit of

maintaining and maintaining cleanliness; (3) exemplary and motivation; (4) a culture of mutual appeal; (5) a fine; (6) strengthening citizen participation. This strategy is integrated into the mitigation actions implemented in the Climate Village Program, namely waste management, energy saving, wise land use, and other activities to reduce greenhouse gas emissions. This strategy is quite effective because it raises awareness and strengthens awareness of the civic responsibility to create a sustainable environment in the face of the threat of climate change.

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