

The Role of Adiwiyata Cadres in Fostering Students' Environmental Awareness Character as Manifestation of Social Capital in Madrasah

Nabila Rahma Shabrina¹, Dasim Budimansyah² Dwi Iman Muthaqqin³

Universitas Pendidikan Indonesia¹²³

shabrinaa@upi.edu,¹ budimansyah@upi.edu,² dwiimanm@upi.edu³

Abstract: This study focuses on the role of Adiwiyata Cadres in developing environmental awareness as a form of students' social capital at MTsN 10 Tasikmalaya. The background of this research stems from the low quality of the environment in Indonesia, particularly in Tasikmalaya Regency, which is caused by a lack of public awareness regarding the importance of environmental preservation. This study aims to describe the implementation, impact, as well as the challenges and efforts made by Adiwiyata Cadres in Islamic junior high schools in shaping students' environmentally caring character. This research employs a qualitative approach with a case study method. Data collection techniques include participatory observation, in-depth interviews, and document analysis. The findings indicate that Adiwiyata Cadres at MTsN 10 Tasikmalaya internalize Islamic values. Their activities positively influence the development of students' environmental awareness and strengthen the religious-based social capital within the school environment. The obstacles faced by the Adiwiyata Cadres come from both internal and external cadre management. This study supports the idea that Adiwiyata Cadres must be continuously developed as integral to character education and sustainable education in Islamic-based junior secondary schools.

Keyword: Adiwiyata Cadres; Environmentally Caring Character; Social Capital; Madrasah

Abstrak: Penelitian ini berfokus pada peran Kader Adiwiyata dalam membangun karakter peduli lingkungan sebagai wujud modal sosial siswa di MTsN 10 Tasikmalaya. Latar belakang penelitian ini berangkat dari rendahnya kualitas lingkungan hidup di Indonesia, khususnya di Kabupaten Tasikmalaya, yang disebabkan oleh kurangnya kesadaran masyarakat terhadap pentingnya menjaga lingkungan. Tujuan dari penelitian ini adalah untuk mendeskripsikan pelaksanaan, dampak, serta hambatan dan upaya yang dilakukan oleh Kader Adiwiyata di sekolah madrasah dalam membentuk karakter peduli lingkungan pada siswa. Penelitian ini menggunakan pendekatan kualitatif dengan metode studi kasus. Teknik pengumpulan data meliputi observasi partisipatif, wawancara mendalam, dan studi dokumentasi. Hasil penelitian menunjukkan bahwa Kader Adiwiyata di MTsN 10 Tasikmalaya menginternalisasikan ajaran agama Islam. Kegiatan Kader Adiwiyata tersebut berdampak positif terhadap peningkatan karakter peduli lingkungan dan memperkuat modal sosial siswa yang religius di lingkungan sekolah. Hambatan yang dihadapi oleh Kader Adiwiyata di MTsN 10 Tasikmalaya berasal dari internal dan eksternal pengurus kader. Penelitian ini mendukung bahwa Kader Adiwiyata perlu terus dikembangkan sebagai bagian integral dari sistem pendidikan karakter dan pendidikan berkelanjutan di sekolah jenjang menengah pertama berbasis madrasah.

Kata kunci: Kader Adiwiyata; Karakter Peduli Lingkungan; Modal Sosial; Madrasah

Corresponding Author:

Nabila Rahma Shabrina

Universitas Pendidikan Indonesia; shabrinaa@upi.edu

Introduction

The environment should ideally have a balanced ecosystem, with biodiversity of both biotic and abiotic components functioning in harmony and supporting one another, thereby creating well-being and sustainability for all living beings in meeting their needs (Almond et al., 2020). However, in reality, the environmental conditions in Indonesia today have not yet met ecological quality standards, as reflected in performance reports by the Ministry of Environment and Forestry of the Republic of Indonesia (KLHK, 2023)). It is stated that the indicators of environmental quality, as measured by the Environmental Performance Index (EPI) in 2023, show that Indonesia obtained a score of 473 points, below the global average. This EPI score places Indonesia at 79th out of 113 countries globally and 13th out of 23 countries in Asia, reflecting a less-than-encouraging position in the regional context.

The low quality of the national environment is also influenced by environmental conditions at the provincial level, particularly in West Java. According to the performance report of the Ministry of Environment and Forestry of the Republic of Indonesia report (KLHK, 2023), The Environmental Quality Index (IKLH) of West Java in 2023 reached 64.77 points, categorizing it as one of the provinces with lower environmental quality compared to others. West Java ranked second lowest, just above the province of DKI Jakarta. Behind the low environmental quality in West Java lies a concerning reality, as such conditions contribute to the high frequency of natural disasters. Data compiled by the Central Bureau of Statistics (BPS, 2023) recorded that West Java experienced 844 natural disaster events, making it the province with the highest average index of natural disaster occurrences. The high average index of natural disasters reflects that West Java faces serious environmental challenges.

The issue of poor environmental quality in West Java Province, which contributes to the high frequency of natural disasters, is also evident in one of its regions, namely Tasikmalaya Regency. This condition is supported by data from Satu Data Indonesia of Tasikmalaya Regency, compiled by the Regional Disaster Management Agency (BPBD), which shows a high frequency of natural disasters in the region in 2023. A total of 210 natural disaster events were recorded, including 10 flood events, 152 landslides, 16 strong wind incidents, three earthquakes, and 29 droughts. These figures reflect a relatively high frequency of natural disasters and indicate that Tasikmalaya Regency is vulnerable to various disasters that can negatively impact the environment and human life. One of the causes of poor environmental quality is human indifference toward the environment. Humans

often act as 'free riders' (exhibiting indifferent behavior toward the environment). In reality, humans are an inseparable part of both biotic and abiotic components within the ecosystem. (Safitri et al., 2020) stated that the relationship between the two is circular-dynamic, where human actions directly impact the surrounding environment. Therefore, like other organisms, human survival depends on preserving their ecosystem. To maintain harmony between the two, adequately addressing the human factor and the ecosystem's sustainability is crucial.

This issue certainly cannot be ignored, as it may lead to various environmental problems, and humans will ultimately feel its negative impacts. According to (Suryani, 2018) An unmaintained environment will hinder fulfilling material, physical, mental, and spiritual needs. Given this threat, we must realize that improving environmental quality is a shared responsibility, as ecological quality is a common good. This has been mandated in the National Medium-Term Development Plan (RPJMN) 2020-2024, in line with Law Number 32 of 2009 concerning Environmental Protection and Management. Therefore, one of the necessary steps is to foster an environmental care character by building awareness, attitudes, and concrete actions (Lickona, 1991). This ecological care character is developed individually and cultivated collectively through norms, networks, and trust, enabling cooperation to achieve common goals (Putnam, 1993). Thus, the environmental care character instilled becomes a manifestation of social capital itself.

The manifestation of social capital is not only applicable to adults. Still, it should also be instilled in individuals from an early age, particularly among students at the junior high school level. Adolescents are more open to new ideas and changes. Thus, they have great potential to become agents of change in environmental issues ((Chawla, 2020). To maximize this potential, education must guide students toward a good understanding of themselves so they can contribute to society and acquire the skills necessary for achieving a safe, happy, and prosperous life (Dewantara, 1961).

In this regard, environmental-based education must be pursued to increase students' awareness of the environment by providing opportunities for learners to explore and understand the connection between humans and nature. Through this understanding, students will build a sense of responsibility that is crucial for the future of the Earth (David W, 1994). As a concrete effort to integrate environmental education at the junior high school level, a program is needed to address environmental challenges while instilling values of sustainability. Therefore, the Ministry of Education and Culture and the Ministry of Environment and Forestry collaborated to establish the Adiwiyata Program to accelerate the development of environmental education across all levels of education in Indonesia. In its

implementation, there are Adiwiyata Cadres, a group of selected students who act as agents of change to encourage other students' participation in caring for the school environment. The presence of Adiwiyata Cadres is symbolic of the program and serves as a medium for character development through role modeling, habituation, and direct involvement in various environmental activities.

The character development program for environmental care, which manifests students' social capital through Adiwiyata Cadres, can be implemented in MTs. This educational institution can effectively support the development of ecological care character in young citizens. The MTs curriculum emphasizes Islamic religious education, including subjects such as Al-Quran Hadith, Aqidah Akhlaq, Fiqh, Islamic Cultural History, Arabic, and general subjects taught in junior high schools. With this approach, MTs instill scientific concepts and build values of faith, sharia, and morality. Moreover, MTs students receive special attention for character development through a personal and value-based approach. Character education at MTs is not only taught but also directly exemplified. This method of character development involves the habituation of noble behavior through daily worship practices, such as congregational prayers, Quran memorization, religious extracurricular activities, and other positive habits imbued with Islamic values (Sumantri et al., 2023, p. 4492).

This characteristic makes MTs an excellent educational institution that shapes students' character, which is especially important given Indonesia's current state of education. With a holistic and integrative approach, MTs not only educate students to be academically intelligent but also equip them with strong moral and spiritual values so that the character education applied can enhance the overall quality of education (Haningsih, 2008). In line with the curriculum and teaching methods used to build environmental care character, MTs implement the Adiwiyata Program and activate Adiwiyata Cadres, which are integrated with Islamic teachings that emphasize preserving and caring for God's creation. In this way, MTs can create a generation that is not only environmentally conscious but also possesses a high moral awareness of their responsibilities as part of society.

MTsN 10 Tasikmalaya is one of the secondary formal education institutions based on a madrasah that implements the Adiwiyata program and involves Adiwiyata Cadres in various environmental activities as part of an ecological education effort integrated with Islamic religious values, known as 'Madrasah Adiwiyata.' It is known that the program was initiated out of concern for the lack of environmental awareness among students, prompting MTsN 10 Tasikmalaya to think globally and act locally (Bainus & Rachman, 2019).

Several studies have been conducted regarding the role of Adiwiyata Cadres in building environmental care character as a manifestation of social capital. One

survey by Kamil et al., (2020) stated that the Adiwiyata Program effectively increases students' ecological literacy, especially in class XI, compared to class X. The optimization of this program requires the implementation of environmentally friendly policies, an environment-based curriculum, student participation, and the management of supporting facilities. Additional extracurricular programs involving students and practitioners can strengthen environmental literacy through direct experience. Another previous study by Hammada, (2015) revealed that Adiwiyata has elements of social capital that can be utilized to implement the concept of education for Sustainable Development (ESD). Developing a sustainable education model at Independent Adiwiyata schools can be used to create policies that foster an environmental culture in the school community by utilizing social capital, particularly trust.

Although several studies have discussed the effectiveness of the Adiwiyata Program in increasing environmental literacy and strengthening social capital to build an environmental care culture among students (Nurwidodo et al., 2020; Hammada, 2015). These studies are still general and have not specifically focused on the role of Adiwiyata Cadres as the main subject in developing students' environmental care character as a form of social capital. Furthermore, the limited research conducted in madrasah-based schools, particularly at the MTs level, such as MTsN 10 Tasikmalaya, shows that the religious context and integration of Islamic values in environmental programs have not been explored in depth. Therefore, there is a gap in studies that combine aspects of social capital, environmental character education, and the religious approach characteristic of madrasah educational institutions. Integrating of environmental education and religious values in madrasah has a strong potential in shaping students' social capital. Hence, there is a need for research that specifically examines the role of Adiwiyata Cadres in developing students' environmental care character as a form of social capital at madrasah-based schools, as done at MTsN 10 Tasikmalaya.

Therefore, this study aims to analyze the role of Adiwiyata Cadres in developing environmental care character as a manifestation of social capital among students at MTsN 10 Tasikmalaya. The purpose of this study is to analyze how the Adiwiyata Cadre program at MTsN 10 Tasikmalaya is designed to integrate Islamic religious values into various activities or programs of the Adiwiyata Cadres, creating an environment that supports students at MTsN 10 Tasikmalaya in understanding and applying environmental care character in their daily lives, both within the school environment and the community, which is a tangible form of the students' social capital in achieving goals or solving environmental issues around them. The novelty of this research lies in the qualitative approach, which delves into the role of Adiwiyata Cadres in building environmental care character as a form of

social capital among students, and the specific case study conducted at a madrasah-based school, namely MTsN 10 Tasikmalaya. The results of this study are expected to contribute to both the author and the readers in fostering environmental awareness by strengthening solidarity and cooperation in environmental activities, particularly in madrasah-based schools.

Method

Based on the objectives of this study, the qualitative method is considered the appropriate approach for data collection. This approach allows the researcher to analyze how the study subjects' experiences, backgrounds, and social contexts play a role in shaping their meanings and perceptions regarding the issues being studied (Creswell, 2015). With this approach, the researcher can gather descriptive data through data collection methods such as in-depth interviews, participatory observation, and documentary studies to collect relevant information, thereby enabling a better understanding of how Adiwiyata Cadres contribute to building environmental care character among students. Moreover, this study uses a case study design that is widely used in various situations to contribute to our knowledge about individual, group, organizational, social, political, and related phenomena (Yin, 2018). In this case, the study focuses on the dynamics and factors influencing the implementation of the Adiwiyata Cadres and the impact of Adiwiyata Cadres in shaping the environmental care character among students at MTsN 10 Tasikmalaya.

Furthermore, selecting research subjects is necessary to answer the questions and achieve the study's objectives. In this research, subjects were classified based on their experience, understanding, or involvement with implementing Adiwiyata Cadres at MTsN 10 Tasikmalaya. Therefore, the participants in this study include Adiwiyata Cadre and non-Cadre students at MTsN 10 Tasikmalaya, school staff, including the Adiwiyata Cadre mentor and the Principal of MTsN 10 Tasikmalaya, as well as the Environmental Sector of the Public Works and Spatial Planning Office of Tasikmalaya Regency. The data obtained will be processed using the Miles and Huberman data analysis model, which consists of data reduction, data presentation, conclusion, and data verification (Miles et al., 2014). In the process of data verification, triangulation of data sources is carried out through interviews with the Adiwiyata Cadre mentor, students of MTsN 10 Tasikmalaya, and the Environmental Sector of the Public Works and Spatial Planning Office of Tasikmalaya Regency. Additionally, data collection techniques will be triangulated by checking the same source with different methods, such as in-depth interviews, observation, and documentary studies, to ensure the consistency of the results and serve as the basis for conclusions.

Results And Discussions

Results

Based on the research findings, the Adiwiyata Cadres have the task and function of providing knowledge and serving as role models for the school community, especially the students of MTsN 10 Tasikmalaya, regarding the importance of maintaining environmental sustainability.

According to the observations made by the researcher, in carrying out their duties and functions, the Adiwiyata Cadres carry out various environmental activities that are divided into several working groups (pokja), namely the cleanliness, sanitation, and drainage group; waste management group; tree planting and maintenance group; energy conservation group; water conservation group; and the environmental-friendly behavior innovation group. The environmental activities in each group are carried out in the Adiwiyata extracurricular activities held every week, Friday Clean activities every Friday, Outdoor Classroom Day held once a month, and Environmental Projects scheduled conditionally based on the decision of the Adiwiyata Cadre mentors at MTsN 10 Tasikmalaya. In addition to managing environmental activities, one of the Adiwiyata Cadre students stated, "We also discipline fellow students to comply with environmental regulations. We remind them and note their names and mistakes so that we can report them to the mentor teacher or the Adiwiyata program leader. Initially, we might remind them, but if it's difficult, we report it to the mentor teacher or the Adiwiyata administrator." Therefore, the Adiwiyata Cadres at MTsN 10 Tasikmalaya are actively carrying out other tasks, such as reminding fellow students to maintain cleanliness and enforcing environmental regulations at MTsN 10 Tasikmalaya.

The research results indicate that students directly involved in the Adiwiyata Cadre activities demonstrate high environmental awareness. The students are more active in maintaining cleanliness in their surroundings, particularly around the school, such as disposing of trash properly and reducing the use of disposable items. One of the Adiwiyata Cadre students stated, *"I have gotten used to using my lunch box and water bottle when buying snacks at the canteen."* The students said that participating in the Adiwiyata Cadre activities made them more aware of the importance of contributing to the environment. They believe that even the smallest action towards the environment can significantly impact the wider community. A student from MTsN 10 Tasikmalaya mentioned, *"I feel that my behavior has changed since I became part of the Adiwiyata Cadre. I used to throw trash anywhere, but since joining the Adiwiyata Cadre, I always dispose of my trash properly because I have become aware of the negative impact it causes."* In addition, several students appeared uncomfortable with the unpleasant smell caused by the accumulation of waste. Based on the observations made by the researcher at the research location, it was evident that some students

already had environmental awareness, as they collected the trash and disposed of it in the nearest trash bin. Students at MTsN 10 Tasikmalaya frequently reminded each other to separate their trash, making recycling easier

Furthermore, based on the interview results, through the Adiwiyata Cadre program, students have become more concerned about the environment. One student stated, *"Before, I didn't care much about electricity or water; I just used them without thinking. But now, after participating in the energy-saving campaign activities, I've become more disciplined. I often remind my friends not to waste water or electricity, and I also ask my fellow Cadre members to check the rooms in case lights are left on."* The students of MTsN 10 Tasikmalaya view wasting resources such as electricity and water as wasteful behavior (*ashraf*) and believe Muslims should avoid it, as it is an unwise action that will impact the sustainability of resources in the future. As a result, the students of MTsN 10 Tasikmalaya frequently remind each other to use water sparingly when washing hands and performing ablution. Some students were also upset when they found classrooms or other rooms with lights still on at almost midday. Therefore, the students often remind each other to turn off the lights when they are no longer needed. This effort is also supported by the energy conservation working group Cadre, which regularly checks the electricity usage in the school rooms. The students stated that the energy and water-saving campaigns have made them more disciplined in using resources. They also shared that they learned how water conservation is practiced by using wastewater from ablution and handwashing to irrigate the fish farming in the school pond. The students acknowledged that this activity helped them understand the concept of water recycling and its sustainable use.

In addition, the students of MTsN 10 Tasikmalaya have consistently adhered to the environmental regulations around the school. The students acknowledge that their compliance with the environmental rules is driven by their understanding of their responsibility as stewards of the Earth and their awareness of the benefits of following the rules for the environment. They are also motivated by the reluctance to be recorded as violators, as they feel embarrassed when reprimanded in front of their peers. One student stated, *"I comply because I know, as a human, I should take care of the environment as a trust from Allah. I also understand the benefits of following the regulations. I feel embarrassed if I break the rules because I might get caught and scolded in front of my friends, and I'll be noted down."*

The belief and compliance of the students of MTsN 10 Tasikmalaya with the environmental norms and culture of the school have led them to adopt wise environmental behaviors in their daily lives, thereby assisting the Kader Adiwiyata in advancing the madrasah's goal of fostering an environmentally conscious culture. This can be seen from students' high level of participation and cooperation in

environmental cleanliness activities. Based on the observations and documentation study conducted by the researcher, most MTsN 10 Tasikmalaya students participate in activities such as Jum'at Bersih and Outdoor Classroom Day. One student from MTsN 10 Tasikmalaya stated, *"This teamwork is even more noticeable during cleanliness activities like Jum'at Bersih. We divide tasks for all madrasah members to participate, making us work on our respective areas, so each cleaning group must trust one another to complete their designated areas."* These environmental activities, therefore, build trust, cooperation, and strong relationships among students and other parties involved. The entire madrasah community, including students, the principal, teachers, and staff at MTsN 10 Tasikmalaya, is involved in the school's cleanliness activities. This collective involvement has made it easier and faster to achieve the goal of maintaining a clean school environment.

With awareness, togetherness, solidarity, and shared belief in the environment, the student cadres participate in environmental activities around the madrasah and extend their efforts to the surrounding community. This includes activities such as gotong royong (communal work) to clean the Rancamaya highway, the courtyard of the Singaparna Medika Citrautama General Hospital in Tasikmalaya, and the community environment of Cicarulang Village. The involvement of the student cadres outside the school environment stems from the information about community service activities received from the local community. This represents a significant difference between the student cadres and non-cadre students, giving them a distinct advantage in managing environmental issues.

Furthermore, the students of MTsN 10 Tasikmalaya successfully addressed one of the environmental issues, namely waste. Based on the observation results, it was found that the Kader Adiwiyata collaborated with external parties such as Pesantren Cintawana to recycle waste, SMK Cintawana to distribute the school's waste, and the surrounding community as waste collectors to sort and distribute recyclable materials such as plastic bottles and cardboard. According to the documentation study conducted by the researcher, there was a 63% decrease in the volume of waste from August to December 2024.

In implementing the Kader Adiwiyata program, several obstacles are faced internally and externally within the cadre team. Internal challenges include communication patterns between the cadre team and non-cadre students. A Kader Adiwiyata program mentor teacher stated, "Sometimes, a cadre reminds their peers with a loud voice or points at them, which creates a problem between cadres and non-cadres." Additionally, another challenge faced relates to the lack of supporting facilities and infrastructure. A student from the cadre team expressed, "What needs to be improved is the number of three-colored trash bins. We also don't have a waste bank." Another student added, "More cleaning tools should be added because,

during cleaning activities, not all students have access to the cleaning tools provided by the school. This delays the implementation because we have to wait for each other." Moreover, there are external challenges related to the participation of non-cadre students. The Kader Adiwiyata program is intended for the cadre students and all students of MTsN 10 Tasikmalaya. One cadre student mentioned, "Our challenge is that it's difficult to encourage our peers to participate in our activities." The cadre team continuously strives to invite other students to join in caring for the school environment.

Discussions

The environmental activities of Kader Adiwiyata for students of MTsN 10 Tasikmalaya are a form of environmental-based education aimed at internalizing the importance of maintaining ecological balance in daily life. In line with (David W, 2011) perspective, all forms of education should always be connected with environmental aspects because education is not just about transferring knowledge but also about shaping mindsets and attitudes that care about the sustainability of ecosystems.

According to Lickona, (1991) A person is considered to have good character if they possess knowledge (moral knowing), feelings (moral feeling), and actions (moral action). In this case, Kader Adiwiyata plays a positive role in building the knowledge, emotions, and moral actions of MTsN 10 Tasikmalaya students. The students can classify organic and inorganic waste, and they have developed an awareness of their actions in managing waste that can impact the environment. Furthermore, the students understand the importance of wise resource management, especially electricity and water. They view the wasteful use of resources (ashraf) as an action that should be avoided. Thus, the students of MTsN 10 Tasikmalaya demonstrate an understanding of the importance of environmental preservation, not only by knowing the consequences of an unprotected environment but also by recognizing the social responsibility every individual must have in maintaining cleanliness. As explained by Lickona (Damariswara et al., 2021,) Moral knowing is not only related to cognitive knowledge but also involves moral awareness, moral knowledge, moral perspectives, moral reasoning, decision-making, and self-knowledge.

When the students of MTsN 10 Tasikmalaya understand the moral values related to the environment, they are emotionally triggered to protect it (S & Abdulkarim, 2022; Umam & Hasan, 2025). The students exhibit exceptional motivation in managing the school environment. Negative emotional experiences, such as anxiety when encountering litter, drive them to participate in activities supporting cleanliness (Riswan et al., 2022). Moreover, the students are outraged by resource waste. This dissatisfaction serves as a motivator for them to remind each

other to conserve and use resources wisely. Thus, the students of MTsN 10 Tasikmalaya demonstrate a drive to protect their school environment, a form of moral feeling where their emotions influence their actions and behavior toward the surrounding environment. Damariswara et al., (2021) defines moral feelings as awareness, self-respect, empathy, love of goodness, self-control, and humility. These moral feelings motivate individuals to behave well and protect the environment. Emotional involvement in environmental issues encourages individuals to take more active actions. Individuals with high morality tend to act environmentally friendly (Wu & Yang, 2018; Rozaq et al., 2024).

The moral feelings of the students at MTsN 10 Tasikmalaya motivate they are motivated to engage in pro-environmental behavior in all activities within the school. The students have shown exceptional discipline in maintaining the cleanliness of their classrooms through class duty and disposing of waste according to its classification. This demonstrates that the students at MTsN 10 Tasikmalaya have made progress in their environmental responsibility through their capabilities. The students have also been disciplined in using water and electricity resources and have implemented responsible waste management practices, such as reusing wudhu water and handwashing water for fish cultivation and utilizing rainwater storage tanks and river water for plant irrigation. Through the behavior and skills of the students at MTsN 10 Tasikmalaya, the Kader Adiwiyata program plays a role in developing the moral actions of students, which is the culmination of their ethical knowledge and feelings. This involves knowing, feeling, and controlling oneself, which is manifested in their actions. Lickona (Damariswara et al., 2021, p. 34) explains that moral actions consist of competence, will, and habits that are continuously repeated.

The Kader Adiwiyata program successfully builds environmental awareness and positively strengthens the social capital of the students at MTsN 10 Tasikmalaya. Through their involvement in the Kader Adiwiyata ecological activities, the students comply with environmental regulations based on their understanding that preserving the environment is a way to uphold the trust the Creator gives. Therefore, the belief influenced by the Islamic principles embraced through the Kader Adiwiyata program at MTsN 10 Tasikmalaya functions as a system of faith and as a norm that governs social interactions and individual behavior within the community. The norms that arise from this religiosity play an essential role in fostering trust and solidarity among the madrasah community, especially the students, and improving the quality of the school environment. As Arifin (2021) states, high religiosity reduces free-riding behaviors, making individuals more inclined to contribute to social activities for the common good. Thus, the norms that

the students believe, including the Islamic principles, function as a binding force that strengthens social capital within the community.

Students at MTsN 10 Tasikmalaya view environmental regulations as a guiding compass in carrying out their activities at school, and they experience a sense of shame when violating these rules. Hasbullah, (2006) states that every member of society understands norms and that they serve as guidelines for desired behavior in social relationships. The positive attitudes among students are also influenced by the norms within the school environment, where they feel socially pressured to follow the rules. The phenomenon of feeling embarrassed when being reprimanded in front of peers demonstrates that the environmental regulations implemented at the school not only function as regulations but also as a social mechanism that strengthens pro-environmental behavior. (Usman, 2023, p. 5) explains that cooperation, supported by social sanctions, can be essential in fostering the positive effects of social capital. Strong norms enable group or community members to monitor each other, thus preventing individuals from engaging in deviant behavior. This shows how social mechanisms, such as peer accountability and the social sanctions of feeling ashamed, strengthen the collective commitment to maintaining the environment at MTsN 10 Tasikmalaya.

With the increased compliance of students to environmental regulations, coupled with their understanding of Islamic principles regarding ecological stewardship, students demonstrate that they not only understand but also strive to apply these values in their daily lives. (Putnam, 1993) states that norms develop from the history of past cooperation and are used to support creating an environment conducive to collaboration. This is evident in the participation of students in environmental activities such as Jum'at Bersih and Outdoor Classroom Day. Student involvement in these school environmental activities manifests the social norms that have been formed and clearly indicates their commitment to a comfortable and clean school environment. The participation of individuals in collective activities reflects the norms and values internalized through the Kader Adiwiyata environmental program (Yasril & Nur, 2018). This manifestation is seen in the team-based task distribution established by the Kader Adiwiyata team. In this task division, the team communicates and coordinates with all parties to ensure the success of the environmental cleaning activity. Communication and coordination are crucial in strengthening the relationships between members to achieve their goals (Hiplunudin, 2023). This fosters collaboration and builds trust among the members of the madrasah, including students, the school principal, teachers, and staff. (Wijayanti et al., 2021) assert that positive environmental character development will manifest through community-based programs that involve all parties. Therefore, the cleanliness activities at MTsN 10 Tasikmalaya make the physical environment

cleaner and strengthen the trust between students and staff in achieving shared objectives.

The Adiwiyata Cadre also encourages students to engage in broader environmental activities. They contribute to the school environment and participate in cleanliness activities in the surrounding community. This community service, which is participated in by the Adiwiyata cadre students, demonstrates a difference or a greater potential possessed by the cadre students compared to non-cadre students. The Adiwiyata Cadre team, which is given more authority over its responsibility in managing the school environment, shows the trust placed by the school community in the cadre students' abilities and commitment. Additionally, this is made possible through the connection of the cadre students and the trust given by the surrounding community to involve the cadre team in cleanliness activities. This has given the cadre students a distinct advantage, making them more capable of managing a wider environment. A common goal will be achieved in line with the view that a group possesses adequate norms, trust, and social networks (Siskayanti & Chastanti, 2022). This reflects the potential or ability of the students in environmental management and also signals the existence of a social network, namely the relationship between the cadres, the school, and the surrounding community, which supports the students in increasing their environmental awareness. Therefore, the Adiwiyata Cadre prepares students to face environmental management challenges at the school level and to contribute to society.

In addition, MTsN 10 Tasikmalaya has also successfully addressed the waste issue within the school environment. A significant reduction in waste volume has been recorded, with a 63% decrease during the documented period. This reduction indicates a change in behavior and collective awareness among students toward the environment, particularly in waste management, a critical environmental issue at MTsN 10 Tasikmalaya. When students feel that they share a collective responsibility in maintaining the cleanliness and beauty of the school environment, it strengthens positive social networks, where students support one another in completing cleanliness tasks (Wijayanti et al., 2021; Azizah et al., 2023). The participation of the madrasah community, including students, teachers, the headmaster, and staff, has been a key factor in the success of this program. Furthermore, the Adiwiyata Cadre students have collaborated with external parties, such as Pesantren Cintawana, SMK Cintawana, and the surrounding community, who act as waste collectors, to support the waste management process. The network of relationships between the Adiwiyata Cadre and external parties through the school has played a role in addressing the waste issue at MTsN 10 Tasikmalaya.

Therefore, the environmental activities initiated by the Adiwiyata Cadre have proven to play a positive role in fostering an environmentally-conscious character and strengthening social capital among the students of MTsN 10 Tasikmalaya.

Implementing the Adiwiyata Cadre activities at MTsN 10, Tasikmalaya, encountered several obstacles in enhancing student awareness and strengthening social capital toward the environment. These obstacles stemmed from both internal and external factors of the Adiwiyata Cadre team. Internal challenges within the Adiwiyata Cadre team included:

a) Communication between Cadre Students and Non-Cadre Students

In carrying out their duties and responsibilities, some cadre students have not maintained harmonious communication and coordination between cadre students and non-cadre students, leading to misunderstandings between both parties. (Meivia Anggraini et al., 2024) state that incorrect non-verbal communication, such as facial expressions, body language, and tone of voice, can send signals that differ from spoken words. Therefore, when Adiwiyata Cadre members convey something that does not align with the message, it can confuse the other party and lead to miscommunication. To address this barrier, the Adiwiyata Cadre facilitators mediate between both parties. As Rahmadi, (2010) suggests, the impact of conflicts can lead to hostility or fights between students, and resolving such issues often requires assistance from specific personnel within the educational institution, such as class advisors, subject teachers, and guidance and counseling teachers.

b) Facilities and Infrastructure

Facilities and infrastructure are crucial elements in environmental education, David W, (2011) states that there needs to be an adjustment in the physical architecture of the school, including its facilities and infrastructure. The Adiwiyata Cadre does not have a special fund and relies on the facilities provided by the school. To overcome this challenge, the Adiwiyata Cadre communicates and coordinates with the school to improve cleanliness facilities and collaborates with external parties in waste management through school-community relations. As Aulia et al., (2020) argue, creating reciprocal relationships between schools and the community involves two-way communication, enabling the community to support these programs.

In addition to challenges arising from the internal organization of the Adiwiyata Cadre, another obstacle that hinders the smooth implementation of the program is the participation of non-cadre students, one of the main target groups of the Adiwiyata environmental program. Some non-cadre students find it difficult to be encouraged to participate in activities, influenced by the indifference of some students toward the programs carried out by the Adiwiyata Cadre. This aligns with

Wijayanti et al.'s statement, "Environmental mismanagement can occur due to one of the factors, namely the lack of moral responsibility." Therefore, the indifferent attitude displayed by students reflects their low moral responsibility, making the participation of several non-cadre students in the Adiwiyata environmental program challenging.

Conclusion

In its implementation, the role of the Adiwiyata Cadres as pioneers of school environmental activities and as a liaison and partner of the school has established cooperation with the community, non-governmental organizations, and the government to support the objectives of the Madrasah Adiwiyata program. The environmental activities of the Adiwiyata Cadres at MTsN 10 Tasikmalaya are divided into several working groups, including (1) the cleanliness, sanitation, and drainage working group, (2) the waste management working group, (3) the tree planting and maintenance working group, (4) the energy conservation working group, (5) the water conservation working group, and (6) the innovation for implementing environmentally friendly behaviors working group. The environmental activities in these working groups are reflected in the Adiwiyata extracurricular activity schedule, Clean Friday, Outdoor Classroom Day, and Environmental Projects. The implementation of these activities is divided into several stages: planning, pre-implementation, implementation, and program evaluation. These activities involving students directly give the impression that the Adiwiyata Cadres are committed to building students' awareness of the environment through real actions to establish MTsN 10 Tasikmalaya as an environmentally cultured school.

The involvement of MTsN 10 Tasikmalaya students in the Adiwiyata activities positively increases their understanding and awareness of the importance of environmental conservation. The students have knowledge, concern, and actively implement real actions for ecological sustainability. In maintaining and preserving the school environment, a relationship based on mutual trust, solidarity, and commitment has been created among the students, which is a manifestation of the social capital possessed by the students of MTsN 10 Tasikmalaya. This has led them to be capable of solving various environmental problems at the school, such as the reduction of accumulated waste. Furthermore, the students' environmentally conscious actions have extended to the surrounding community near MTsN 10 Tasikmalaya, indicating that their concern is not limited to the school environment.

The challenges faced by the Adiwiyata Cadres at MTsN 10 Tasikmalaya include (1) facilities and infrastructure, (2) communication between cadre and non-cadre students, and (3) participation of non-Adiwiyata students. In response to these challenges, efforts made to enhance the environmentally caring character as a form of social capital among the students include: (1) the Adiwiyata Cadres conducting

communication and coordination with the school to improve facilities and infrastructure, as well as cooperating with external parties through school-community relations (housemates), and (2) conducting mediation between cadre and non-cadre students by the Adiwiyata Cadres' mentor.

REFERENCES

- Almond, R., Grooten, M., & Petersen, T. (Eds.). (2020). *Living Planet Report 2020 – Bending the curve of biodiversity loss*.
- Arifin, S. R. (2021). Pengaruh Religiusitas Terhadap Sikap Anti-Free Riding Yang Dimoderasi Oleh Kesejahteraan Ekonomi. *At-Tasharruf 'Jurnal Kajian Ekonomi Dan Bisnis Syariah'*, 2(2), 47–57. <https://doi.org/10.32528/at.v2i2.4100>
- Aulia, N., Sari, E., & Rahmawati, D. (2020). Manajemen Hubungan Sekolah dengan Masyarakat (HUSEMAS) di SDN Peninggilan 02 Kota Tangerang. *Intelektium*, 1(1), 26–37.
- Azizah, M., Jariah, S., & Aprilianto, A. (2023). Pembentukan Karakter Religius Siswa Melalui Pembelajaran Pendidikan Agama Islam di Sekolah Menengah Kejuruan. *Ngaos: Jurnal Pendidikan Dan Pembelajaran*, 1(1), Article 1. <https://doi.org/10.59373/ngaos.v1i1.2>
- Bainus, A., & Rachman, J. B. (2019). Editorial: Think globally, Act locally. *Intermestic: Journal of International Studies*, 3(2), 100–106. <https://doi.org/10.24198/intermestic.v3n2.1>
- Chawla, L. (2020). Childhood Nature Connection and Constructive Hope: A Review of Research on Connecting with Nature and Coping with Environmental Loss. *People and Nature*, 2(3), 619–642. <https://doi.org/10.1002/pan3.10128>
- Creswell, J. W. (2015). Research Design Pendekatan Kualitatif, Kuantitatif, dan Mixed. In *Yogyakarta: Pustaka Pelajar*.
- Damariswara, R., Wiguna, F. A., Khunaifi, A. A., Zaman, W. I., & Nurwenda, D. D. (2021). Penyuluhan Pendidikan Karakter Adaptasi Thomas Lickona. *Dedikasi Nusantara: Jurnal Pengabdian Masyarakat Pendidikan Dasar*, 1(1), 25–32. <https://doi.org/10.29407/dedikasi.v1i1.16057>
- David W, O. (1994). *Earth in Mind: On Education, Environment, and the Human Prospect*. Island Press.
- David W, O. (2011). *Hope Is An Imperative*. Island Pres.
- Dewantara, K. H. (1961). *Karya Ki Hajar Dewantara (bagian pertama): Pendidikan*. Majelis Luhur Taman Siswa.
- Hammada, M. A. S. (2015). *Model Pendidikan Berbudaya Lingkungan Melalui Pemanfaatan Modal Sosial*. Universitas Indonesia.
- Haningsih, S. (2008). Peran Strategis Pesantren, Madrasah dan Sekolah Islam di Indonesia. *El-Tarbawi*, 1(1), 27–39. <https://doi.org/10.20885/tarbawi.vol1.iss1.art3>
- Hasbullah, J. (2006). *Social Capital (Menuju Keunggulan Budaya Manusia Indonesia)*. MR-United Press.
- Hiplunudin, A. (2023). *Modal Sosial: Solusi Kesejahteraan Masyarakat dan Perekat bagi Masyarakat yang Terbelah*. Makmur Tanjung Lestari.

- Kamil, P. A., Putri, E., Ridha, S., Utaya, S., Sumarmi, & Utomo, D. H. (2020). Promoting environmental literacy through a green project: A case study at adiwiyata school in Banda Aceh City. *IOP Conference Series: Earth and Environmental Science*, 485(1), 012035. <https://doi.org/10.1088/1755-1315/485/1/012035>
- KLHK. (2023). Laporan Kinerja KLHK 2023. In *Kementerian Lingkungan Hidup dan Kehutanan*.
- Lickona, T. (1991). *Educating for Character: How Our School Can Teach Respect and Responsibility*. Bantam Books.
- Meivia Anggraini, A., Nur Wijayanti, A., Trunojoyo Madura Alamat, U., Raya Telang, J., Kamal, K., Bangkalan, K., & Timur, J. (2024). Analisis Pengaruh Miskomunikasi dalam Suatu Hubungan. *Jma*, 2(1), 1250–1259.
- Miles, M. B., Huberman, A. M., & Johnny, S. (2014). *Qualitative Data Analysis A Methods Sourcebook* (Third). SAGE Publications.
- Nurwidodo, N., Amin, M., Ibrohim, I., & Sueb, S. (2020). The Role of Eco-School Program (Adiwiyata) Towards Environmental Literacy of High School Students. *European Journal of Educational Research*, 9(3), 1089–1103. <https://doi.org/10.12973/EU-JER.9.3.1089>
- Putnam, R. (1993). *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton University Press.
- Rahmadi, T. (2010). *Mediasi Penyelesaian Sengketa Melalui Pendekatan Mufakat*. Rajawali Press.
- Riswan, R., Bertha, I. J. A., Hosea, F. N., Farida, S., & Nelwan, E. J. (2022). Tingkat Pengetahuan PHBS Guru Wali Dan Pola PHBS Murid. *JURNAL KESEHATAN LINGKUNGAN: Jurnal Dan Aplikasi Teknik Kesehatan Lingkungan*, 19(1), 129–134. <https://doi.org/10.31964/jkl.v19i1.292>
- Rozaq, A., Setiawan, T. A., Hakim, A. R., & Yanto, F. (2024). Peningkatan Pemahaman Siswa Pada Mapel Akidah Akhlak Melalui Tayangan Sinetron Islam KTP. *Irsyaduna: Jurnal Studi Kemahasiswaan*, 4(3), Article 3. <https://doi.org/10.54437/irsyaduna.v4i3.1827>
- S, S. O., & Abdulkarim, A. (2022). The Use of the VCT Model in Civic Education to Build the Moral Awareness of Students in the Global Era. *Proceedings of the Annual Civic Education Conference (ACEC 2021)*, 636(Acec 2021), 412–416. <https://doi.org/10.2991/assehr.k.220108.075>
- Safitri, D., Putra, Fauzan, F., & Marini, A. (2020). Ekolabel dan Pendidikan Lingkungan Hidup. In *Pustaka Mandiri*. PT Pustaka Mandiri.
- Siskayanti, J., & Chastanti, I. (2022). Analisis Karakter Peduli Lingkungan pada Siswa Sekolah Dasar. *Jurnal Basicedu*, 6(2), 1508–1516. <https://doi.org/10.31004/basicedu.v6i2.2151>
- Sumantri, S., Muchtarom, Yusmansyah, E. F., Rahman, I. A., & Karimah, I. (2023). Implementasi Standar Pendidikan Tingkat SMP/MTs di MTs Al Ihsan Baleendah. *Jiip (Jurnal Ilmiah Ilmu Pendidikan)*, 6(6), 4491–4501. <https://doi.org/10.54371/jiip.v6i6.2079>

- Suryani, A. S. (2018). Pengaruh Kualitas Lingkungan Terhadap Pemenuhan Kebutuhan Dasar di Provinsi Banten. *Jurnal Aspirasi*, 9(1), 35–63. <https://doi.org/10.22212/aspirasi.v9i1.991>
- Umam, K., & Hasan, M. S. (2025). Increasing Student Resilience Through Integration of Islamic Values in PAI Learning. *Tafkir: Interdisciplinary Journal of Islamic Education*, 6(2), Article 2. <https://doi.org/10.31538/tijie.v6i2.1673>
- Usman, S. (2023). *Modal Sosial (II)*. Pustaka Pelajar.
- Wijayanti, A., Hariri, H., Karwan, D. H., & Sowiyah, S. (2021). Principal's Strategies in Realizing Adiwiyata School: A Literature Review. *Eduvest - Journal of Universal Studies*, 1(9), 841–849. <https://doi.org/10.59188/eduvest.v1i9.114>
- Wu, B., & Yang, Z. (2018). Data to assess the effect of moral identity on green consumption tendency. *Data in Brief*, 21, 256–258. <https://doi.org/10.1016/j.dib.2018.09.090>
- Yasril, Y., & Nur, A. (2018). Partisipasi Masyarakat Dalam Pemberdayaan Lingkungan. *Jurnal Dakwah Risalah*, 28(1), 1. <https://doi.org/10.24014/jdr.v28i1.5538>
- Yin, R. K. (2018). *Case Study Research and Applications: Design and Methods (Six)*. SAGE.