

# Socialization of the Sustainable Construction Management Budget through Community Service in the Mekarsari Boarding House Construction Project

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### ABSTRACT

Sustainable construction management has become an important issue in this modern era due to limited natural resources, climate change and environmental problems. One construction sector that has great potential for implementing sustainable development principles is boarding houses. The demand for affordable and comfortable boarding houses continues to increase along with population growth and urbanization. However, unsustainable boarding house construction can have a negative impact on the environment and public health. Socialization of the sustainable construction management budget for the Mekarsari boarding house construction project through community service aims to introduce sustainable practices to relevant stakeholders. In the implementation method, identifying weaknesses, training, community formation, evaluation, and knowledge dissemination are key steps. The results of this community service include increasing the knowledge of project partners, forming a community that cares about sustainable development, and implementing sustainable practices in boarding house construction projects. Even though there are challenges, such as paradigm changes and regulatory complexity, this community service has great potential to become an inspiring example in the construction industry. The importance of continuing support for sustainable practices, increasing knowledge dissemination, realizing regulations, integrating technological innovation, and promoting cross-sector collaboration. By following these suggestions, this project can have a greater impact in driving positive change in the construction industry towards more sustainable development.

**Keywords:** Sustainable Construction, Boarding Houses, Project Partners, Sustainable Practices, Positive Impact

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#### **INTRODUCTION**

Sustainable construction management has become an important issue in this modern era. Limited natural resources, climate change, and other environmental problems drive the need to adopt more sustainable development practices.[1] Boarding house construction is one of the construction sectors that has great potential for implementing sustainable development principles. A boarding house or boarding house is a residence for a number of students, workers, or other individuals who need temporary housing. The demand for affordable and comfortable boarding houses continues to increase along with population growth and urbanization. However, the process of building boarding houses that is not sustainable can have a negative impact on the environment and public health.[2]



For this reason, it is necessary to socialize the sustainable construction management budget for the Mekarsari boarding house construction project. Through community service, information and knowledge about sustainable development practices can be disseminated to relevant stakeholders, including developers, contractors and prospective boarding house residents.[3] This outreach will provide an understanding of the importance of adopting sustainable development practices in boarding house construction projects, as well as the long-term benefits that can be obtained. By introducing concepts such as energy efficiency, use of environmentally friendly materials, waste management, and maintenance of the surrounding environment, it is hoped that there will be a change in the paradigm and actions related to boarding house construction.[4]

Apart from that, through community service, a community can be formed that cares about sustainable development. This community can share knowledge, experience and resources to promote sustainable practices in boarding house construction. With an active and involved community, the boarding house construction project in Mekarsari can be an inspiring example for similar projects in other areas.[5] Community service in the Mekarsari boarding house construction project will have a positive long-term impact. Apart from providing benefits to the environment and public health, more efficient and sustainable budget use can also reduce operational and maintenance costs for boarding houses in the long term.[6]

Thus, socializing the sustainable construction management budget through community service in the Mekarsari boarding house construction project is important to introduce sustainable development practices to relevant stakeholders, as well as forming a community that plays an active role in encouraging positive change in the construction industry.[7]

Socialization of the sustainable construction management budget through community service at the Mekarsari boarding house construction project aims to introduce sustainable development practices to project partners, including developers, contractors and prospective boarding house residents.[8] However, in the process, project partners may face several problems, such as lack of knowledge and awareness, budget constraints, lack of access to resources, ignorance about long-term benefits, changes in organizational paradigm and culture, and regulatory complexity. To overcome these problems, an inclusive approach, intensive training, provision of adequate resources, and the formation of a community that cares about sustainable development are needed.[9]

#### **MATERIALS AND METHODS**

The Mekarsari Boarding House Construction Project is located on Jln. Letjend Suprapto Gg.1 RT.01 RW.02 Bago Village, Tulungagung District, Tulungagung Regency. The partners in this community service activity are the CV company. Cahaya Mandiri Construction as the implementation of the Mekarsari Boarding House Construction Project which is located at Tlusung Hamlet, Jeli Village, Karangrejo District, Tulungagung Regency. Mitra Company operates in the general contractor and construction welding workshop sector. Apart from that, it also provides planning, construction, renovation of houses and buildings both in the private and government spheres.[10]





Figure 1. Development of boarding house construction Source: Researcher Process, 2024

In general, the approach to methods for implementing community service activities that partners are facing is by adapting to existing problems. The community service method applied to partners includes several stages, namely:

- a. The community service team needs to identify the problems faced by project partners. This can be done through interviews, surveys, or direct observation. Issues may relate to knowledge and awareness, budget constraints, access to resources, paradigm shifts, or regulatory complexity.
- b. After identifying problems, the community service team needs to plan specific and appropriate activities to overcome these problems. Activities can take the form of training, workshops, group discussions, or community formation. Planning must take into account the goals to be achieved, the implementation schedule, and the resources needed.
- c. The implementation phase involves carrying out planned activities. The community service team will provide training, facilitate workshops or group discussions, and assist in community formation. It is important to ensure that activities are conducted in an interactive and participatory manner, allowing partners to share knowledge, experience and build solutions together.
- d. After implementing the activities, evaluation and monitoring are carried out to measure the success of the methods that have been implemented. Evaluation may involve feedback from project partners, direct observation, or evaluation questionnaires. The results of this evaluation will help in evaluating the effectiveness of the methods that have been used and identifying areas of improvement that may be needed.
- e. This stage involves disseminating results, information and lessons learned from community service programs. This can be done through scientific publications, seminars, conferences, or social media. Effective dissemination will ensure the spread of knowledge and experience to relevant parties and the wider community, as well as increase awareness of the importance of sustainable construction management.
- f. After the service program is completed, a long-term monitoring stage is carried out to ensure the sustainability and successful implementation of sustainable development practices. This monitoring can involve ongoing collaboration with project partners, monitoring environmental impacts, as well as measuring sustainability and energy efficiency over a longer period.[11]



# Flexibility and adaptability

The implementation method approach can be adjusted to the needs and characteristics of project partners as well as the problems they face. Flexibility and adaptability in approach are very important to ensure that community service activities can provide maximum benefits for project partners and society at large. This implementation involves selecting a boarding house construction project as a pilot project. The community is actively involved in this project, with a division of roles and responsibilities. Practical training is conducted to ensure effective implementation of sustainable construction concepts.

### Monitoring and evaluation

Monitoring and evaluation is carried out through a team responsible for monitoring project progress and collecting data related to the effectiveness of socialization. Evaluation is carried out on the sustainability of the project and its impact on society. The final evaluation is carried out to evaluate the overall program and identify lessons that can be learned for future program development. With this method, it is hoped that this community service can make a positive contribution in increasing understanding and application of the concept of sustainable construction management budgets in Mekarsari.

#### **RESULTS AND DISCUSSION**

Community service in the Mekarsari boarding house construction project has produced several significant results in promoting sustainable development practices and forming a community that cares about sustainable development. Here are some of the main results achieved:

- 1. The community service team succeeded in identifying problems faced by project partners, such as lack of knowledge and awareness about sustainable practices, budget constraints, and the complexity of existing regulations in boarding house construction projects.
- 2. A number of training and workshops have been held to increase the knowledge and skills of project partners in implementing sustainable practices. It covers topics such as energy efficiency, waste management, use of environmentally friendly materials, and care for the surrounding environment.
- 3. Through community service activities, a community that cares about sustainable development was successfully formed. This community consists of developers, contractors and prospective boarding house residents who actively share knowledge, experience and resources to support sustainable practices in boarding house construction projects.
- 4. Evaluation and monitoring results show an increase in the implementation of sustainable practices in boarding house construction projects. Project partners measure energy efficiency, waste management and environmental impact regularly.
- 5. Information and learning obtained from community service have been disseminated through various channels, including scientific publications, seminars and social media. This has increased public awareness of the importance of sustainable construction management.

Community service succeeded in increasing awareness and knowledge of project partners regarding sustainable development practices. Project partners now have a better understanding of energy efficiency, waste management and the use of environmentally friendly materials. This project succeeded in forming a community that cares about sustainable development, involving developers, contractors and prospective boarding house residents. This community actively shares knowledge, experience, and resources, creating a collaborative environment that supports sustainable practices.





Figure 2. Outreach to workers at the construction site Source: Researcher Process, 2024

The Mekarsari boarding house construction project has made a significant contribution to promoting sustainable development practices in the construction industry. The following is some discussion regarding the results of this community service:

- 1. One of the most important results of this community service is increased awareness and knowledge of project partners about sustainable development practices. With a better understanding of energy efficiency, waste management, and the use of environmentally friendly materials, project partners can integrate these practices in their projects.
- 2. Communities formed through community service have great potential to become agents of change in the construction industry. They can support each other, share experiences and collaborate in adopting sustainable practices. This can create a positive domino effect among developers, contractors and other stakeholders.
- 3. The importance of long-term monitoring in ensuring the sustainability of sustainable practices has been recognised. Project partners involved in ongoing monitoring will have a better understanding of the long-term impact of these practices.
- 4. Efforts to disseminate knowledge and learning from community service must continue. This will ensure that the results of the service can benefit other projects in the construction industry and can accelerate the widespread adoption of sustainable practices.
- 5. Even though positive results have been achieved, there are still challenges and obstacles that need to be overcome, such as slow changes in paradigm and organizational culture, as well as regulatory complexity. In this case, an inclusive approach and ongoing support from the established community is very important.

## **Project evaluation**

Project evaluations show significant improvements in the implementation of sustainable practices, such as energy efficiency measurements, waste management and environmental impact monitoring. This reflects the seriousness of the project partners in implementing sustainable aspects in the construction of boarding houses. Information and lessons learned from community service have been disseminated through scientific publications, seminars and social media. This effort has succeeded in increasing public awareness about the importance of sustainable construction management.





Figure 3. Checking development progress Source: Researcher Process, 2024

Community service in the Mekarsari boarding house construction project has made a significant contribution to promoting sustainable development practices in the construction industry. Through increased knowledge, community building and ongoing monitoring, this project has the potential to become an inspiring example for similar projects across the region. Sustainability in these practices will provide long-term benefits for the environment, public health, and operational efficiency of construction projects.

Community service in the Mekarsari boarding house construction project resulted in various significant achievements in advancing sustainable development practices and forming a community that cares about sustainable development. The community service team succeeded in identifying problems faced by project partners, including lack of knowledge and awareness about sustainable practices, budget constraints, and the complexity of boarding house construction project regulations. A number of training and workshops have been held to increase the knowledge and skills of project partners, including energy efficiency, waste management, use of environmentally friendly materials, and environmental care.

Through community service activities, a community has been successfully formed that cares about sustainable development. This community consists of developers, contractors and prospective boarding house residents who actively share knowledge, experience and resources to support sustainable practices in development projects. Evaluation and monitoring results show increased implementation of sustainable practices in the project, such as measuring energy efficiency, waste management and environmental impact.

Community service succeeded in increasing project partners' awareness and knowledge of sustainable development practices, including energy efficiency, waste management, and the use of environmentally friendly materials. The project succeeded in establishing a community that actively shares knowledge, experience and resources, creating a collaborative environment that supports sustainable practices.





Figure 4. Progress of Boarding House Construction Source: Researcher Process, 2024

One of the most important results of this community service is the contribution in increasing the awareness and knowledge of project partners about sustainable development practices. Communities formed through community service have great potential to become agents of change in the construction industry, supporting each other, sharing experiences, and collaborating in adopting sustainable practices. The project evaluation showed a significant increase in the implementation of sustainable practices, reflecting the seriousness of the project partners in implementing sustainable aspects in the construction of boarding houses.

Although positive results have been achieved, challenges and obstacles need to be overcome, such as slow changes in paradigm and organizational culture, as well as regulatory complexity. Project evaluations reflect significant improvements in the implementation of sustainable practices, such as energy efficiency measurements, waste management, and environmental impact monitoring. Dissemination of knowledge and learning from community service must continue to ensure benefits for other projects in the construction industry and accelerate widespread adoption of sustainable practices.

The Mekarsari boarding house construction project makes a significant contribution to advancing sustainable development practices. Through increased knowledge, community building and ongoing monitoring, this project has the potential to become an inspiring example for similar projects across the region. Sustainability in these practices will provide long-term benefits for the environment, public health, and operational efficiency of construction projects.

#### **CONCLUSION**

Community service in the Mekarsari boarding house construction project has been successful in promoting sustainable development practices in the construction industry. The main results achieved include increasing awareness and knowledge of project partners, establishing a community that cares about sustainable development, evaluating and monitoring sustainable practices, and disseminating knowledge. This project has the potential to be an inspiring example for similar projects and provide long-term benefits for the environment, public health and operational efficiency of construction projects. Suggestions that can be taken from community in support for sustainable practices that have been introduced, increasing efforts to disseminate knowledge and learning, getting support in simplifying regulations related to sustainable practices, integrating technological innovation in construction sustainability, and



promote cross-sector collaboration between government, the construction industry, academia and civil society. By following these suggestions, this project has the potential to have a greater impact in driving positive change in the construction industry towards more sustainable development.

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