

## TRAINING IN MAKING ORGANIC COMPOST TO BUILD THE CHARACTER OF ENVIRONMENTAL CARE IN STUDENTS OF ELEMENTARY SCHOOLS 13 TALIWANG

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### Abstract

Land productivity is significantly influenced by the patterns of land use and management practices employed. The excessive application of chemical composts and pesticides has been shown to degrade soil fertility and pose long-term threats to environmental sustainability. To mitigate these adverse effects, it is essential to introduce the principles of conservation-oriented agriculture from an early age. This community engagement activity was designed to provide elementary students at SD Negeri 13 Taliwang, West Sumbawa Regency, with direct experience in the production and application of organic compost. Moreover, the program aligns with the objectives of the Pancasila Student Profile Strengthening Project (P5), particularly through its focus on practical planting activities using potted plants. The implementation methods included an introductory session on the concept and environmental benefits of bokashi, which included a practical session involving direct student participation in the compost making process. Besides introducing eco-friendly technologies, the activity fostered environmental awareness among students. Similar programs should be continued to support early understanding of sustainable agriculture.

**Keywords:** Organic Composts, Training, Elementary School

### INTRODUCTION

The problem of land productivity, which is closely related to the way land is utilized and managed, is a common challenge in various agricultural systems. Cropping patterns that do not consider conservation principles, such as farming on steep slopes and the use of inorganic inputs such as chemical composts and pesticides, can have long-term impacts on land productivity. Furthermore, a shift towards sustainable agricultural practices is essential in addressing these productivity challenges, as it emphasizes the integration of organic farming methods and conservation techniques. For example, the adoption of conservation agriculture, which includes practices such as minimum tillage and crop rotation, has shown promise in improving soil fertility and erosion resistance, especially on sloping land (Ariangga & Lowery, 2007). In

addition, the use of inorganic composts and pesticides can cause degradation of land quality due to the accumulation of chemical residues in the soil that are toxic. Anwar et al. (2019) stated that the negative impacts of chemical compost use include physical soil hardening and reduced nutrient content in the soil. The basic principles previously described should ideally be instilled in individuals from an early age in order to form a strong awareness of the environment. Learning methods that actively involve students, such as hands-on experiences, discussions, and demonstrations, are proven to be effective.

Learning methods that actively involve students, such as hands-on experiences, discussions, and demonstrations, have proven effective in increasing children's concern for the environment. Tamara (2016) asserts that such an approach is able to shape students' caring attitude towards environmental sustainability through emotional involvement and hands-on practice. Therefore, community service activities targeting elementary school students should be designed with an interactive and participatory approach so that environmental conservation messages can be embedded more deeply.

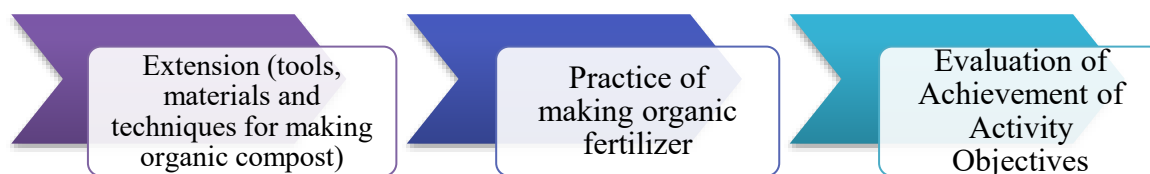
SD Negeri (Elementary School) 13 Taliwang is located in Arab Kenangan Village, Taliwang Sub-district, West Sumbawa Regency, West Nusa Tenggara. This public school is under the auspices of the local government and was officially established on October 1, 2009 with Decree No. 723 of 2009, with 178 students and 12 teachers. There is a reading room, and a sports field that is utilized by students and teachers for various teaching and learning activities.

Land limitation is a major challenge for SD Negeri 13 Taliwang in developing planting activities. Located in a residential area, the school requires innovation in utilizing limited space, such as the use of vertical planting media, hanging pots, or simple hydroponics to still encourage environmentally-based contextual learning. Under these conditions, the utilization of available land must be optimized effectively. To reduce the failure rate in planting, agricultural input support is needed. The use of chemical composts should be avoided as they have the potential to leave toxic residues in the soil. As a solution, the use of organic composts is recommended because it is safer and supports sustainable soil quality. According to Mulyati (2016), the low awareness and concern for the environment in students is closely related to the lack of integration of environmental education in the learning process at school. This is in line with the findings of Monroe, Andrews, and Biedenweg (2007) who stated that when conservation education in the community has not been running optimally, the attitude, behavior, and active participation of the community, including children, in preserving the environment will tend to be low. Based on these conditions, the community service activity at SD Negeri (Elementary School) 13 Taliwang was designed to encourage children to directly practice the making and utilization of simple organic composts, both in the school environment and at home.

## IMPLEMENTATION METHOD

The training activity on making organic compost for elementary school students in Negeri (Elementary School) 13 Taliwang was carried out through several structured stages with an educational and participatory approach. The main objective of this method is to provide conceptual understanding as well as practical skills to children about the utilization of organic materials for simple environmentally friendly agriculture. The stages of the activities carried out are as follows:

- a) Initial counseling. The activity began with a counseling session on the tools, materials, and steps for making organic compost. The material was delivered through interactive lecture methods and open discussions to arouse students' curiosity. After that, a simple simulation was carried out to show the process of making organic compost. All tools and materials used have been prepared in advance by the activity implementation team.
- b) Field practice. After gaining a basic understanding, participants consisting of students from grade 4 to grade 6 were given the opportunity to practice directly how to make organic compost. This practical activity is carried out in groups to encourage cooperation and communication between students and facilitate assistance by the implementation team.
- c) Activity evaluation. To assess the effectiveness of the activity, an evaluation was carried out through short interviews with participants. This interview aims to find out the impressions, understanding, and benefits felt by students after attending the training. This information is the basis for reflection for organizers in improving the quality of similar activities in the future.



## RESULTS AND DISCUSSION

The Community Service activity carried out at SD Negeri (Elementary School) 13 Taliwang is one of the concrete manifestations of efforts to support the implementation of the Pancasila Student Profile Strengthening Project (P5). This activity takes the form of planting and caring for potted flowers and vegetables, which not only fosters concern for the environment, but also strengthens the values of mutual cooperation and responsibility. One important aspect of P5 is to build the education unit as an open space that allows community participation and encourages schools to become learning organizations that actively contribute to the environment and surrounding communities. This vision can be realized through an organic compost training program that involves elementary school students as active participants. Through this approach, students not only learn about simple environmentally friendly agricultural practices, but are also trained to be part of the solution to local environmental problems around them.

The training activity on making organic compost received a very positive response from

the children and teachers at SD Negeri (Elementary School) 13 Taliwang. The enthusiasm of the participants was seen from the beginning of the activity, especially during the hands-on session of making organic compost which actively involved the children. The teachers also welcomed this activity because it is considered capable of enriching thematic learning that is environmentally based and in line with the values in the Pancasila Student Profile Strengthening Project (P5). This positive response is an indicator that the experiential learning approach is very effective in increasing students' understanding and concern for environmental issues.

Research conducted by Mustakin, Muh Yunus, and Hastuti (2022) shows that student activeness in the learning process has a significant effect on improving learning achievement. Students who are active in asking questions, discussing, and directly involved in learning activities tend to have a better understanding of the material and higher learning outcomes. This is in line with the implementation of community service activities involving children at SD Negeri (Elementary School) 13 Taliwang, where they actively participated in a series of training on making organic compost. Some of the benefits obtained by the children in this activity include additional knowledge about the benefits of organic composts, an understanding of the positive impact of using organic composts on the environment in the long term, and practical skills in making simple bokashi composts. The active involvement of children in this activity not only increases their knowledge and skills, but also builds awareness of the importance of preserving the environment from an early age. Based on research by Utomo et al. (2023), training in making organic compost by utilizing local materials can increase participants' understanding and skills in managing organic waste productively. This approach is relevant to children, as it not only introduces them to the concept of a sustainable environment, but also trains practical skills through hands-on experience. By utilizing materials that are easily found around them, children learn to appreciate local potential and foster a sense of responsibility for the environment from an early age.

The community service activities held at SD (Elementary School) Negeri 13 Taliwang were designed as a form of real contribution in supporting school capacity building. The series of activities are as follows:

1. Initial counseling. This stage was conducted through lecture and discussion methods that conveyed material about the meaning of organic compost, its benefits for plants and the environment, the constituent components of compost, and how to apply it. Students were given space to actively ask questions and discuss directly with the resource person to deepen their understanding. The atmosphere of counseling was interactive and encouraged children to think critically about environmental issues.
2. Field practice. After the counseling session, the activity continued with hands-on practice of making organic compost. Children are invited to be involved in every stage of the process, from mixing ingredients to initial fermentation using the tools and materials that have been prepared. This activity provides concrete experience while fostering basic skills in managing organic waste into useful products.
3. Activity evaluation. The evaluation was carried out by interviewing participants directly regarding their understanding of the material, the clarity of delivery from the resource person, and the extent to which they were motivated to try making organic compost at home.

Based on the evaluation results, it can be seen that most students feel happy and interested in practicing the activity again. This evaluation is an important benchmark to see the effectiveness of the method and the impact of the learning that has been provided. Based on the questions given, the children participating in the activity at SD Negeri (Elementary School) 13 Taliwang showed a positive response and stated that the training on making organic compost was very useful because it provided practical knowledge directly. This is in line with Baydillah and Rintaningrum (2021) who emphasized that effective communication, including clarity of information and student involvement in the question and answer process, can create meaningful learning and increase the absorption of students. Through interactive delivery of information, this kind of service activity can form an active and reflective learning culture from an early age. During the activity, all stages can be carried out smoothly without experiencing significant obstacles. This success cannot be separated from the establishment of good coordination and cooperation between the school as a partner and the institution implementing community service.

Kegiatan Pengabdian kepada Masyarakat yang dilaksanakan di SD Negeri 13 Taliwang memberikan dampak sosial yang berarti melalui terjalinnya kemitraan erat antara institusi pelaksana dan SD Negeri 13 Taliwang sebagai mitra pendidikan di wilayah tersebut. Kerja sama antar institusi pendidikan ini menjadi sangat penting dalam membangun sistem pembelajaran yang berkelanjutan dan inklusif bagi berbagai jenjang dan kelompok usia. Dengan adanya kemitraan yang kokoh, proses transfer pengetahuan serta pengembangan kapasitas dapat berjalan lebih efektif guna meningkatkan kualitas pendidikan secara menyeluruh. Selain itu, kolaborasi ini juga membuka peluang untuk mengembangkan metode pembelajaran yang inovatif sekaligus memperkuat keterlibatan aktif siswa dan guru dalam beragam kegiatan edukatif.

## **CONCLUSION**

The organic compost training activity at SD Negeri (Elementary School) 13 Taliwang helped strengthen the school's role in supporting the development of student character and competencies in accordance with the Pancasila Student Profile Strengthening Project (P5). The positive response from the participants and the school showed that the program was effective in delivering practical knowledge while fostering environmental awareness from an early age. Thus, this activity can be a sustainable educational empowerment model and provide added value to educational institutions and the surrounding community.

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