

Kids Farming for the Initiation of Love for Agriculture and the Environment

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Abstract

Community service programs through Kids Farming for the initiation of love for agriculture and the environment aim to, among others: (1) increase children's understanding and insight into the importance of agriculture in the future and modern agriculture; (2) improve children's skills in planting practices; (3) increase responsible attitudes and love for agriculture in children; (4) increase students' knowledge about the importance of environmental conservation, and environmentally friendly agriculture (zero waste); (5) increase responsible and environmentally loving attitudes in children. To achieve the expected goals and output targets, the implementation method used in this program is a fun learning method through training and mentoring of children. This program has stages in the implementation of activities, including preparation, interactive learning, planting, mentoring, and follow-up. The results of the implementation of this program include: (1) the formation of teamwork in children's students to strengthen togetherness and erode individualism; (2) the formation of student character expression by loving the world of agriculture more and environmental preservation through a green lifestyle; (3) the formation of concern for the surrounding environment; (4) a change in mindset towards stereotypes of the agricultural world, so as to change ideals closer to the world of agriculture.

Keywords: kids farming, love agriculture, love the environment

INTRODUCTION

Indonesia is an agricultural country. The Indonesian population mostly works in the agricultural sector, where about 75 percent live in rural areas and more than 4 percent depend on the agricultural sector. Jobs in agriculture belong to the older generation, which has been engaged in agriculture since the beginning, while the younger workforce prefers to work as industrial workers rather than agricultural workers. Youth in rural areas avoid working in the agricultural sector because they see it as dirty, tiring, close to poverty, and a last resort. The waiting period for land inheritance reaches an average of 40 years. The reduction in farmer regeneration will result in a decrease in the number of farmers, which has implications for decreasing the amount of domestic food production and the sustainability of the agricultural sector (Koalisi Rakyat untuk Kedaulatan Pangan, 2018).

The difficulty of regenerating young farmers is a global phenomenon. Overall, both globally and regionally in Asia, there is a decline in interest in becoming workers in the agricultural sector, even though agricultural land area tends to be stable. In the last two decades, issues related to the regeneration of young farmers have included access (including limited land), poverty, family, and education. The phenomenon of difficult regeneration for young farmers is not solely related to the reluctance of peasant children but is also shaped by the values that prevail in families and communities. Some of these values include stereotypes that the agricultural world is close to the world of men, poverty, low levels of education, and high dropout rates in farming families. Farming families need to convince their children that higher education is needed so that young farmers are able to innovate. The community also plays an important role in building optimism for the future of agriculture if children are interested in contributing to the sector (Oktafiani et al., 2021).

The character of caring for the environment cannot be obtained instantly; it requires a long process and a relatively long time. Someone will have an attitude of caring for the environment because of the habits that take place continuously. These habituations that take place continuously will be firmly embedded in his subconscious mind (subconsciousness), so that later his actions will be expressed in everyday life (habits) as character values that he already has. A child who has a character that cares about the environment will have a positive impact on the survival of the surrounding environment (Jayawardana, 2016).

The introduction of the world of agriculture if started in college seems to be very late. The younger generation should begin to be made aware of the importance of the agricultural sector from an early age, namely in basic education. Early agricultural education becomes essential for a country, especially for Indonesia, which is an agricultural country. Agricultural education should be introduced early on to children. There needs to be an emphasis that there are various sectors that are able to build a country's economic growth and agriculture is one of them (Oktyajati & Rachmawatie, 2020).

Kids Farming activities are expected to also affect the minimization of gadget use in children. The use of gadgets has an impact on the psychological development of elementary school children. The impact caused is a positive impact, children easily find information about learning, and make it easier to communicate with friends. However, the negative impact caused by gadgets affects the development of children's psychology, especially aspects of emotional growth and moral development. In emotional growth, children who use gadgets become irritable, like to disobey, imitate behavior in gadgets and talk to themselves on gadgets. While the influence on moral development, has an impact on discipline, children become lazy to do anything, abandon their obligations to worship, and reduced learning time due to too often playing games and watching YouTube (Syifa et al., 2019).

Muhammadiyah Perumnas Elementary School is one of the elementary schools in the middle of Makassar City, with 115 students, and a number of teachers consisting of 8 women and 1 male teacher. SD Muhammadiyah Perumnas has a fairly adequate land area, and it still looks partially underutilized and well organized. The habits of elementary school children in the middle of the city after school hours are certainly different from those in rural areas. In this era of technological sophistication, most children are addicted to playing gadgets, and it is not easy to restore and persuade again to minimize their use. The effort to add extracurricular programs in schools with the Kids Farming Program is one of the efforts to bring elementary school children closer to the world of agriculture and the environment, so that children unwittingly begin to reduce addiction to holding gadgets. Kids Farming is also expected to better support the health of students, because in addition to fostering the spirit of togetherness, it also makes body movements healthier and stronger. The priority of problems in SD Muhammadiyah Perumnas Makassar City is focused on programs related to kids farming, namely agricultural and environmental programs as an effort to minimize addiction to gadgets in students.

METHOD

The implementation of this service program is in partnership with SD Muhammadiyah Perumnas Makassar City, located on Jalan Bonto Dg. Ngirate No. 22/77, Bonto Makkio Village, Rappocini District, Makassar City, South Sulawesi Province. This activity involved teachers and students at the school, especially grade IV students who were taking subjects on agriculture and farming.

Based on the problems and program objectives that have been formulated, the approaches taken to solve these problems are through fun learning methods through training and mentoring students. This program has stages in the implementation of activities, including: preparation, interactive learning, planting, mentoring, and follow-up. In each stage of implementation, in addition to being carried out by the implementation team, students are also accompanied by students.

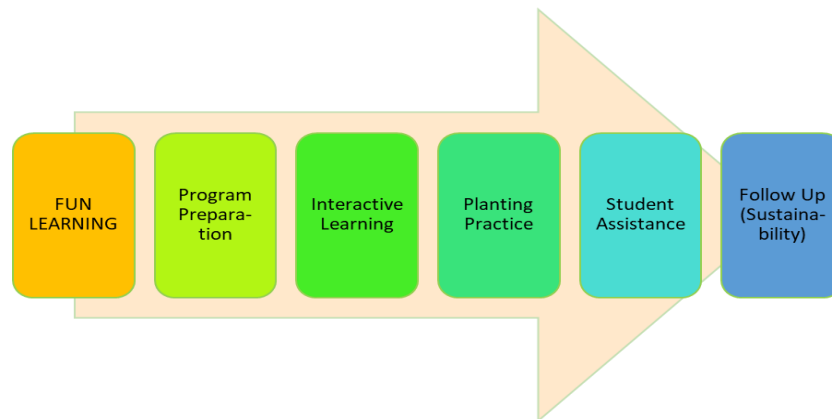


Figure 1. Flowchart of Community Service Program Implementation

The preparation stage begins with observation and data collection at school, preparation of agricultural materials and tools, adjustment of implementation time, and so on. The planting stage is a stage in the implementation of agricultural and environmental learning. The mentoring stage is a stage that is implemented in each stage of program implementation. The follow-up stage is the stage carried out after this service activity ends because the most important achievement of this program is the follow-up or sustainability of the Kids Farming Program.

RESULTS AND DISCUSSION

Agricultural Learning

In this activity, interactive learning of students is carried out using fun learning methods, both inside and outside the classroom. In this learning the students begin to learn fully to understand about the importance of agriculture and the environment, understand how to grow crops, and picture the future of agriculture. The Kids Farming program is also supported and facilitated by the principal, teachers, and education staff at SD Muhammadiyah Perumnas Makassar City. Teachers and education staff are expected to continue to act as facilitators who support the sustainability of the program.

The early agro education program is one of agricultural learning for elementary school children from an early age. Elementary school children are introduced and taught how to cultivate the land, plant, weed the grass, fertilize, and how to harvest well. Then provide training to children to garden or plant starting from nurseries, tillage in small pots and training to care for plants. The purpose of this activity is to open the horizons of elementary school-age children about agriculture, so that their love for agriculture emerges (Handayani, 2022).

Agricultural education activities to students begin with strengthening knowledge about the importance of agriculture, which is carried out in the classroom through the display of material enriched with various images, animations, photos, and videos related to future agriculture and modern agriculture. Learning materials about agriculture include various types of plants, cultivation techniques, and agricultural benefits in the short and long term. All learning materials delivered to students are carried out with fun learning techniques, so that students are more enthusiastic, focused, easily absorb knowledge, and not easily bored.

Farming is an outdoor activity that aims to introduce the process of planting to children. Farming is an activity that is liked by early children. Farming activities in children are expected to stimulate the development of children's bodies, encourage children to like healthy foods, improve children's fine motor development, introduce scientific concepts, namely introducing children to know the world of science (botany, biology, chemistry), strengthen family relationships, teach responsibility, make children aware of caring for the environment, develop math skills, teach patience, support children's ability to design and organize (Nasution et al., 2021).

In the early stages before doing farming practice, students are directly introduced to various agricultural materials and tools, techniques for using agricultural tools, and planting methods carried out. The farming materials demonstrated include planting media (soil, compost, charcoal, husk), plant seeds, plant seeds, organic fertilizers, inorganic fertilizers, organic pesticides, and so on. While the agricultural tools demonstrated include polybags, plant pots, seedbed shelves, sprayers, plant sprinklers, soil forks, soil shovels, and so on.

Planting is a core stage in the implementation of agricultural learning, especially farming. At this stage the students can directly apply the learning material obtained from the previous stage. Before this stage is carried out, students in groups are free to choose one of various types of vegetable or fruit plants that are possible to be planted in the school environment. This is done so that students have a responsible and happy attitude towards their choice decisions. The planting carried out by the students includes ornamental plants, chili plants, tomatoes, mustard greens, kale, and so on.

Assistance is basically a stage that is implemented in each stage of program implementation. However, after passing the planting stage, the mentoring stage for students is carried out more intensively, considering that the plants that have been planted really need proper maintenance so that the expected results are achieved. When the plants planted by students are running the maintenance period, students are advised to be able to do the same planting in their home environment so that they can be accompanied by their families.



Figure 2. Student Learning Activities on Agriculture

Follow-up is a stage carried out after this service activity ends and / or the cultivated plants have produced. After the Kids Farming program is complete, it does not mean that there is no follow-up, because the most important outcome of this program is the follow-up or sustainability of the program. Students in groups and accompanied by teachers can continue this program through extracurricular activities. The service team is always ready to monitor and assist indirectly with program sustainability efforts. This program will certainly continue to be more enjoyable if the plants planted have produced and are able to meet the daily needs of students and teachers, especially the needs of organic vegetables such as lettuce, kale, mustard greens, spinach, pakcoy, tomatoes, and the like. In the follow-up stage, it is expected that students will already have a higher level of awareness to love agriculture and the environment, so that students' aspirations to build the nation through agricultural progress can later be realized.

Agricultural crop education activities and training on horticultural cultivation with modern techniques were successfully carried out by involving children and their managers. These

activities have increased children's knowledge about agricultural crops and cultivation techniques vertically and in polybag media. These activities can also improve the skills of partners in the cultivation of horticultural crops in a modern way. In addition, the partners have an educational learning garden and become a means for children to stay active and productive in filling loose time (Ismiasih et al., 2021). By inviting directly in gardening activities, it will be very memorable and provide longer memory in children. By introducing the farmer profession from an early age to children from an early age, undoubtedly the farmer profession remains in demand by children in this agrarian country. So that Indonesia remains an agricultural country that has farmers. Modern farmers who manage mother earth (Mavianti dan Ananda, 2020).

Environmental Learning

Learning about the environment for students is also carried out through fun learning methods. At each stage of learning in material about agriculture, students are also given an understanding of the interrelationship between the agricultural sector and the environment. The main emphasis in learning about the environment is an environmentally friendly lifestyle. Green life style starts from the implementation in the school environment and the families of the students. According to Nurmahmudah et al. (2018), clean and healthy living behavior is a set of behaviors that are practiced on the basis of awareness as an effort to make themselves healthy and active in helping the health of the surrounding environment. Clean and healthy living behavior at an early age is very good for educating and instilling awareness of the importance of cleanliness as an effort to maintain personal health and the environment.



Figure 3. Student Learning Activities on the Environment

Environmental education activities for students are carried out by strengthening knowledge about the importance of the environment. Learning materials about the environment are given in students' classes, through the display of material enriched with various images, animations, photos, and videos related to the importance of preserving the environment and an environmentally friendly lifestyle. Learning materials about the environment include climate change, the impact of climate change on agriculture, the impact of environmental damage on human life, green life style, and several other short materials. The implementation of environmental care or environmentally friendly lifestyle is directly carried out by students when the students have completed the stages of activities in farming practice. Things that have been done by students in implementing an environmentally friendly lifestyle include sorting and disposing of waste according to its place, maintaining the

cleanliness of the school environment, water-saving behavior, caring for plants at school, and so on.

According to Handari et al. (2022) the Farming Gardening Project is a learning and action activity, where children are given the opportunity to experience the application of topics and content of learning materials in real situations. Learning gardening with direct sources from the surrounding natural environment will provide real experience for children. By seeing and experiencing firsthand how the process, digging, irrigating, until plants grow and provide benefits to other living things will make children care and appreciate the environment well, responsibly, cooperation, dependence and there is a willingness to maintain the environment from an early age. The cultivation of character values given through farming gardening project activities needs to be created in the process of instilling character values. Instilling character values in children is not just hoping for obedience, but must be realized and believed by children so that they feel that these values are true and beneficial for themselves and their environment.

CONCLUSIONS AND RECOMMENDATIONS

The implementation of the PKM Kids Farming Program as an initiation of love for agriculture and the environment at SD Muhammadiyah Perumnas Makassar City resulted in conclusions, including: (1) the formation of teamwork in students to strengthen togetherness and erode individualism; (2) the formation of student character expression by loving the world of agriculture and environmental conservation more through a green lifestyle; (3) the formation of concern for the surrounding environment; and (4) a change in mindset towards stereotypes of the agricultural world so as to change ideals that are closer to the world of agriculture.

The Kids Farming program in elementary schools is expected to have sustainability, namely through extracurricular activities. The teachers are expected to be able to motivate the students to continue and improve their skills in the application of urban farming activities.

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