



JOURNAL OF COMMUNITY SERVICE IN SCIENCE AND ENGINEERING

P-ISSN: 2962-1003 E-ISSN: 2962-0767

Homepage jurnal: <http://jurnal.untirta.ac.id/index.php/JoCSE/>



Socialization of education and agriculture as a form of active contribution to support the development of independent village communities

Adi Nugraha ¹, Achmad Hafizh

Universitas Sultan Ageng Tirtayasa, Jl. Jenderal Sudirman KM 3, Cilegon, Banten 42435, Indonesia

¹E-mail: adi.n@untirta.ac.id

ARTICLE INFO

Article history:

Submitted 20 February 2024

Reviewed 25 February 2024

Received 1 March 2024

Accepted 15 March 2024

Available online on 1 April 2024

Keywords:

Independent villages, education, human resources, development, socialization.

Kata kunci:

Desa mandiri, pendidikan, sumber daya manusia, pembangunan, sosialisasi.

ABSTRACT

Minimal awareness and knowledge of the importance of education cause a decline in students' motivation and enthusiasm for studying and achieving their dreams, so there is a need for educational outreach and a teaching program in schools and places to study the Koran students. Apart from that, there needs to be more innovation in the agricultural sector, especially regarding food security, and household waste is often thrown away at will. This research aims to conduct community service by conducting outreach in education and agriculture and handling scattered waste. This program runs for one month, starting with observing the community, formulating outreach materials and implementing the program directly. This research program is running smoothly, and the community is enthusiastic about taking part in the outreach and starting to make several changes to the way they clean up rubbish. So that waste can begin to be minimized at specific points.

ABSTRAK

Kesadaran dan pengetahuan yang minim pada pentingnya pendidikan menyebabkan menurunnya motivasi dan semangat siswa dalam menuntut ilmu dan meraih mimpi, sehingga diperlukan adanya sosialisasi pendidikan dan sebuah program mengajar di sekolah dan tempat mengaji bagi para pelajar. Selain itu, belum adanya inovasi di bidang pertanian khususnya terkait ketahanan pangan, dan masih sering membuang sampah rumah tangga seandainya. Tujuan dari penelitian ini adalah untuk melaksanakan pengabdian masyarakat dengan melakukan sosialisasi dalam bidang pendidikan, pertanian dan penanggulangan sampah yang masih berserakan. Program ini berjalan dalam waktu satu bulan yang dimulai dengan melakukan observasi kepada masyarakat, kemudian merumuskan bahan sosialisasi dan melaksanakan program secara langsung. Program penelitian ini berjalan lancar yang dapat dilihat bahwa masyarakat semangat dalam mengikuti sosialisasi dan mulai melakukan beberapa perubahan dalam cara membersihkan sampah. Sehingga sedikit demi sedikit sampah mulai dapat diminimalisir pada titik-titik tertentu.

Available online at <http://dx.doi.org/10.36055/jocse.v3i1.24376>.

1. Introduction

Villages are essential in national development efforts because the Indonesian population tends to live in rural areas, considerably influencing efforts to create national stability [1]. In addition, the position of the village is considered strategic in state development because the village is the basis for identifying community problems and planning and realizing state goals at the village level [2]. An independent village is a village that can meet its own needs without depending on government assistance. Some factors that influence a village towards becoming independent are human resource potential, natural resource potential, buyer potential (market), institutional, and local culture [3].

Village development is to place the village as a means of development to reduce various gaps [4-5]. Development is an effort to improve the welfare of all people, nations, and states and achieve the national goals listed in the preamble of the 1945 Constitution [6]. Development for independent villages can empower the community and provide opportunities for the community to manage natural resources [7]. Village development is carried out comprehensively by involving various stakeholders [8]. A fundamental role in village development can be shown through the involvement of educational



institutions in efforts to encourage the acceleration of village development [9]. The community service program is a form of implementation of the Tridarma of Higher Education [10].

One of the areas targeted in this community service activity is Rajeg Mulya Village. Most of the residents of Rajeg Mulya Village make a living as farmers and labourers, be they farm labourers, factory workers, etc. A small percentage of villagers are civil servants, small traders, and odd workers. Judging from the level of education, the population who received education at universities in this region is relatively minimal, only about 3%. Then, up to the high school level, there are up to 15%. Meanwhile, those who only graduated from junior high school level were 25%. And finally, only at the elementary level are up to 57%.

The lack of awareness and knowledge of the importance of education in the village causes a decrease in student motivation and enthusiasm for studying and achieving dreams, so there is a need for educational socialization, a teaching program in schools and a place to recite for students in Rajeg Mulya Village. In addition, the potential of natural resources and community awareness in reducing waste in the village still needs to be improved. They have yet to create innovations in agriculture, especially related to food security, and still often dispose of household waste arbitrarily. Therefore, the service team should strive to take part in developing potential and helping to minimize waste in Rajeg Mulya Village.

Based on the problems in Rajeg Mulya Village, this is the background in the design of the work program implemented. The team designed two types of work programs: the main and supporting work programs. The main work programs contribute to routine posyandu activities, higher education socialization, socialization about agriculture, and waste management (ecobrick). At the same time, the supporting work programs designed are teaching elementary school children in Rajeg Mulya Village, teaching Al Qur'an, community service work, competitions, and gymnastics. These activity programs, in their implementation, are designed offline.

2. Method

2.1. Time and Location of Community Service

Community service activities will be held from January 11, 2024, to February 12, 2024. The activity was located in Rajeg Mulya Village, Rajeg District, Tangerang Regency, Banten Province.

2.2. Technical Implementation

The technical part of this activity is offline. Activities carried out offline by utilizing social media such as Instagram and YouTube to share information about health, agriculture and others according to work programs.

2.3. Data Retrieval Techniques

Collecting data on Thematic Student Work Lectures (KKM) group 42 Sultan Ageng Tirtayasa University. The data collection technique used interviews to find out the people's perception of Rajeg Mulya Village towards several work programs or activities that have been implemented.

3. Results and Discussion

3.1. Socialization of Higher Education to Support Awareness of Sustainable Education

This socialization activity aims to introduce high school and vocational students to the importance of continuing their education at the university level to increase knowledge and change the mindset of younger siblings on how important education is. The creation of a socialization event about continuing education aims to allow participants to understand the flow of college entry and reduce concerns about the high cost of education in the world of lectures, as well as so that students can know the importance of the role of students to compete in a sustainable world, which can later increase awareness and desire to continue education to a higher level to improve self-quality. Documentation of socialization activities can be seen in Figure 1.



Figure 1. Socialization activities on the importance of education.

In addition, this socialization provides pictures of readiness to students related to the mentality they must have when studying in a place far from their parents and having to travel. The major chosen by students must be liked and, of course, also has its risks, so students must have passion for that major so that in the future, students who will continue their education will be happy with the major they have chosen. It is also associated with the dream campus, which provides an overview and motivation for students to achieve their dream campus and already know where the destination/city they will live in when they enter college. It will also teach students about the competition they will face to enter and study at the dream campus they will fight for, what must be

prepared, and so on. Which in the socialization that we do is related to motivation. The forms of selection for state universities where the forms of selection that we describe are as follows:

- National Selection Based on Merit (SNBP) is an invitation route based on report card scores and other academic or non-academic achievements.
- National Selection Based on Tests (SNBT) is a computer-based written test consisting of a scholastic potential test (TPS) and an academic competency test (TKA).
- Independent selection is a path organized by each university with different criteria and mechanisms.

This socialization also aims to increase the interest of high school students constrained by tuition fees by socializing that the government has provided facilities in the form of KIP scholarships. College is one solution for younger students who feel less able to continue their education in college. The socialization of the importance of entering higher education can increase the interest of Rajeg Mulya Village high school students so that they can follow and receive higher education.

3.2. Agricultural Socialization

Hydroponics is one type of urban farming method that can overcome the lack of agricultural land, but often, this activity is considered too expensive and requires experts to do it. With that, we tried an economical hydroponic method that the people of Rajeg Mulya village can apply. The urban farming program is a modern agricultural method that is utilized. Limited urban land. Urban farming activities can support community food independence efforts. Food independence will reduce the cost of household food, which can help with expenses.

One method of growing vegetables with limited land is a hydroponic system. The hydroponic method does not use a mixture of soil and compost as a growing medium but uses a nutrient solution as a plant food source. The composition of the solution as a growing medium dramatically affects plant growth in terms of the number of leaf blades, leaf area, and plant weight. Good maintenance plays a vital role in success until the harvest period. Maintenance is carried out by ensuring the administration of nutrient solutions at the right time and amount. The advantages of growing with the hydroponic method are guaranteed production, easier maintenance, no use of fertilizers, more controlled pests, and the planting period does not depend on the season. Some common types of hydroponic systems include floating raft systems, NFTs (nutrient film techniques), wick systems, aeroponic systems, and drip systems. Documentation of agricultural socialization activities can be seen in Figure 2.



Figure 2. Socialization of agriculture using the hydroponic method.

This socialization activity focuses on systems that are more economical and easier to implement than systems that require high costs. The wick system is one of many hydroponic systems that is relatively simple and economical. The advantages of this system are that it is low-cost, easy to implement, and suitable for beginners or those with a limited budget. Plants in this system obtain nutrients through wicks or other passive absorbent media, such as coco fibres or cotton, which deliver nutrient solutions to plant roots consistently. However, the disadvantage is the lack of precise control over the provision of nutrients and water, which is only suitable for some types of plants. Despite this, the Wick system remains a good option for many people who want to try hydroponic cultivation without spending much money.

3.3. Waste Treatment

The purpose of this activity is to contribute to the natural action of utilizing plastic waste into valuable goods creatively and economically in Rajeg Mulya village as well as arousing a sense of environmental sensitivity in the Rajeg Mulya village community, which until now, the problem of plastic waste accumulation is still a major worrying problem. The target resulting from this activity is a bench and table products for residents to relax in RT facilities, along with ecobrick-making video tutorials as a reference for residents if they want to use this ecobrick method in the context of efforts to utilize plastic waste.

In its manufacture, namely by collecting plastic waste first then washed and dried; after that, it is put with a wooden stick into a 1.5 L mineral water bottle, then compacting plastic waste with a wooden stick, and filling the bottle to the brim and solid with the plastic waste. Then, prepare several eco brick bottles for the required bench board size. Then, the filled bottles are glued with shooting glue to the plywood and other bottles, and then rebonded foam is attached to the plywood and coated with a cloth. That way, ecobrick benches can be used.

The team hope that in the future, the implementation of this activity, hopefully this activity can be an inspiration and ignite the sense of environmental sensitivity of Rajeg Mulya villagers to care about plastic waste by utilizing it in high-use items, for example as plastic waste which from now on can be separated from organic waste, so that it can be recycled or reused, So that a clean, beautiful, comfortable, and accessible environment from the accumulation of waste can be realized for a better living environment.

4. Conclusion

Community service activities in Rajeg Mulya Village, Rajeg District, Tangerang Regency, Banten Province run well academically and non-academically based on the running of programs that we launched for the local community, we are also welcomed by villagers and policymakers who become village

apparatuses with a positive response, and we can build good communication with residents so that they can get convenience in providing access to trust to be able to offer valuable programs in the future, besides that we can also carry out the role of students in the community which is as an agent of change, to provide change to the local community so that it can become a pioneer to become a civil society. In addition, this activity can establish good relations in the future between students, the Rajeg Mulya village community, and Sultan Ageng Tirtayasa University in helping to advance underdeveloped areas.

Acknowledgement

Thanks are given to the 42 community service student team, Universitas Sultan Ageng Tirtayasa, in 2024, and the parties who have played a role in the research, in the form of financial support, permits, consultants, and assistance in data collection.

REFERENCE

- [1] Nugraha, A., & Pratama, F. A. (2023). Building legal awareness in village communities through the legal literacy program (LLP). *Journal of Community Service in Science and Engineering (JoCSE)*, vol. 2, no. 1, pp. 12-15.
- [2] Agunggunanto, E. Y., Arianti, F., Kushartono, E. W., & Darwanto, D. (2016). Pengembangan desa mandiri melalui pengelolaan badan usaha milik desa (BUMDes). *Jurnal Dinamika Ekonomi dan Bisnis*, vol. 13, no. 1, pp. 67-81.
- [3] Fatmawati, F., Hakim, L., & Mappamiring, M. (2019). Pembangunan desa mandiri melalui partisipasi masyarakat di Kecamatan Pattallassang Kabupaten Gowa. *JPPM: Journal of Public Policy and Management*, vol. 1, no. 1, pp. 15-21.
- [4] Nugraha, A., & Saputra, Y. (2023). Independent creative village program as an effort to prosper the community based on village potential. *Journal of Community Service in Science and Engineering (JoCSE)*, vol. 2, no. 2, pp. 42-44.
- [5] Dewi, Y. C., Afriyanti, A., & Bustian, B. (2023). Pengaruh kinerja badan usaha milik desa dan pengawasan badan permusyawaratan desa terhadap peningkatan pembangunan Desa Tanjung Kecamatan Hamparang Rawang. *Jurnal Administrasi Nusantara Maha*, vol. 5, no. 2, pp. 147-156.
- [6] Warassih, E. (2018). Peran politik hukum dalam pembangunan nasional. *Gema Keadilan*, vol. 5, no. 1, pp. 1-15.
- [7] Suherman, M., & Rohaeni, N. (2023). Efektivitas program desa mandiri dalam mencapai kesejahteraan masyarakat (Studi kasus pada Desa Soreang Kecamatan Soreang Kabupaten Bandung). *REMIK: Riset dan E-Jurnal Manajemen Informatika Komputer*, vol. 7, no. 3, pp. 1534-1542.
- [8] Saputra, P. P., Aisyah, S., & Darmanto, D. (2021). Analisis perencanaan pembangunan partisipatif di Desa Pemekaran sebagai perwujudan demokratisasi ditingkat lokal (Suatu studi pada Desa Pemekaran di Kecamatan Mendo Barat, Kabupaten Bangka). *JWP (Jurnal Wacana Politik)*, vol. 6, no. 1, pp. 74-83.
- [9] Alifa, N. N., Shabihah, U. S., Noor, V. V., & Humaedi, S. (2023). Peran mahasiswa dalam pengembangan desa melalui perspektif community development. *Focus: Jurnal Pekerjaan Sosial*, vol. 6, no. 1, pp. 202-210.
- [10] Suaib, M. S. (2023). *Pembangunan dan Pemberdayaan Masyarakat*. Indramayu: Penerbit Adab.