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# STRENGTHENING FOOD SECURITY THROUGH THE USE OF YARDS DURING THE COVID 19 PANDEMIC

## PENGUATAN KETAHANAN PANGAN MELALUI PEMANFAATAN LAHAN PEKARANGAN PADA MASA PANDEMI COVID 19

**Scope:** *Applied Sciences* 

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## ABSTRACT

**Background:** This activity was carried out to follow up on the problems and potential that exist in Sukajaya Hamlet, Tanjungjaya Village, the results of field observations found problems during the Covid 19 pandemic regarding the remoteness of Sukajaya Village area to the shopping centers, making it difficult for people to get access to food. **Objective:** This activity aims to increase the knowledge and skills of the community in order to utilize the potential that exists today, namely that almost every house where the Head of the Family lives has a yard that is large enough and can be used for planting vegetables. **Method:** This activity was carried out through outreach activities and training on the importance of using yard land as a family living shop (planting vegetables). Partners of this activity were Paguyuban Silih Asih 1 and 2, totaling 40 people. **Results:** The result showed all participants experienced an increase in knowledge and skills in using home yard land. **Conclusion:** Partners felt very helped by this yard land utilization training. After the activities were carried out, partners felt helped in meeting their food needs and their knowledge about food security increased.

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#### ABSTRAK

Latar belakang: Pengabdian ini dilakukan untuk menindaklanjuti permasalahan dan potensi yang ada di Dusun Sukajaya Desa Tanjungjaya, hasil observasi lapangan ditemukan permasalahan pada masa pandemi covid 19 di wilayah Dusun Sukasenang mengenai jauhnya wilayah Desa Sukajaya ke pusat perbelanjaan sehingga, menyulitkan masyarakat untuk mendapatkan akses pangan yang sulit ditemukan di Desa Sukajaya. Tujuan: Kegiatan Pengabdian pada masyarakat ini untuk meningkatkan pengetahuan dan keterampilan masyarakat agar memanfaatkan potensi yang ada di Dusun Sukajaya saat ini, yaitu hampir setiap rumah yang ditinggali Kepala Keluarga memiliki halaman yang cukup luas dan dapat dimanfaatkan untuk ditanami sayuran. Metode: Pemberdayaan masyarakat kali ini akan dilakukan melalui kegiatan penyuluhan dan pelatihan pentingnya pemanfaatan lahan pekarangan sebagai warung hidup keluarga (ditanami sayur mayur). Mitra pengabdian ini adalah Paguyuban Silih Asih 1 dan 2 yang berjumlah 40 orang. Hasil: Hasil Kegiatan ini menunjukan bahwa 100% peserta mengalami peningkatan pengetahuan dan keterampilan pemanfaatan lahan pekarangan rumah. Kesimpulan: Mitra merasa sangat terbantu dengan pelatihan pemanfaatan lahan pekarangan ini. Setelah kegiatan dilaksanakan mitra merasa terbantu dalam memenuhi kebutuhan pangan dan pengetahuannya mengenai ketahanan pangan semakin meningkat.

**Kata kunci:** PPM; Pekarangan Rumah; Ketahanan Pangan; Sayuran

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#### BACKGROUND

The current Coronavirus Disease 2019 (COVID-19) pandemic has been going on for more than 2 years in Indonesia. During those two years, the government has made every effort to prevent the virus from spreading further. The government has made several efforts to prevent the virus from spreading further. One of the efforts made by the government is to issue a policy of restricting community movement or what is known by the public as Pembatasan Sosial Berskala Besar Large-Scale Social Restrictions. (PSBB) or Economic activities have been greatly disrupted in all business lines, especially small businesses. On the one hand the government wants the spread of the virus to stop but on the other hand this social restriction has hampered the distribution of food supplies and decreased people's purchasing power because economic activities especially for the lower middle class have become very limited which has an impact on threatening people's food security. This has directly threatened community resilience, on the one hand the government wants the spread of this virus to stop but on the other hand, these social restrictions have hampered the distribution of food supplies and decreased people's purchasing power because economic activities, especially for the lower middle class, have become very limited, which has had an impact on threatening community food security.

The government has actually made a lot of efforts so that the PSBB policy does not have a major impact especially on community food security, one of which is that the government has directly provided various assistance to affected communities; this is not only done by the central government but also by local governments. However, in reality what is happening on the site today, after this pandemic has lasted for 2 years it turns out that community food security is still threatened. This is as stated by FAO, Indonesia is one of the countries that is overshadowed by the potential for a food crisis during the Covid-19 pandemic. Responding to this, the government has been quick to control food availability in Indonesia. Anticipation of the food crisis, in addition to collaboration between government and non-government institutions, can also be done by empowering families as the smallest entities. One alternative to overcome the scarcity of agricultural land resources is to utilize yard land (Nurlina et al., 2019).

Many problems occur in people with lower middle economic levels, these people are greatly affected because most of their income is disrupted due to this PSBB policy, resulting in this community group being one of the vulnerable groups in terms of food security (Hermina and Prihatini, 2016). Community Service carried out by our group was carried out in Sukajaya Hamlet, Tanjungjaya Village, Cisaga District, Ciamis Regency. Sukajaya Hamlet is one of the hamlets with a fairly large number of families, namely 95 families with most of the people's livelihoods as farmers and rubber tree sap tappers. Located in an area surrounded by rubber plantations owned by PTPN IV West Java. Currently, many people in Sukajaya Hamlet find it difficult to meet their family's food needs, one of which is the lack of knowledge and desire of the community to meet their food needs independently, one of which is the fulfillment of vegetable needs as one of the foods with high nutritional content and can increase immunity during the Covid 19 Pandemic (Kurniasih and Adianto, 2018). The disruption of food distribution due to social restrictions carried out by the government has resulted in an increase in the price of vegetables. The fairly expensive price makes the need for vegetables during the Covid 19 pandemic even more difficult, the fairly long distance has made vegetables quite expensive. The expensive price of vegetables during this pandemic can actually be overcome if people, especially those who have large yards, want to grow vegetables in their yards. The yard is an open area located around the house environment which can be located in front, beside or behind which is easily cultivated with the aim of improving micronutrition through improving the family menu of the residential house. The yard will become a potential land if it is managed and utilized (Ekawati et al., 2020). But due to the lack of knowledge and limitations in terms of mastery of technology, resulting in the lack of empowerment of the farming community in cultivating and developing home yards as a place to grow vegetable crops. and the high price of seeds makes the utilization of yard land not optimal (Widiastuti et al., 2019).

The high price of vegetables during this pandemic can actually be overcome if people, especially those who have large yards, are willing to plant vegetables in their yards, but due to lack of knowledge and the high price of seeds, the use of yard land is not optimal. In fact, the average house occupied by each family has a large yard that allows for planting vegetables, such as chilies, cayenne pepper, mustard green, pok choy and other vegetables that are easy to grow. However, currently most people only plant cassava trees because they are easy and cheap to grow.

Utilization of home yard land with vegetable plants is one of the urban farming methods to meet daily food needs, during the Covid-19 pandemic, utilization of home yard land can help family food security, can also improve the family economy and be a solution to meet sustainable family food needs. As conveyed by Dwiratna et al (2016) in the article Utilization of home yard land by planting vegetables to improve the economy of the community of Kelenna Bontongape Village, Galesong District, Takalar Regency by Sjahruddin that the community can produce processed household products in the form of vegetables planted in home yard land (Sjaruddin et al., 2020). Types of plants that can be planted in the yard land include vegetables, fruits, medicines, ornamental plants and other similar plants. In addition to being used for daily consumption, the harvest from the yard land can also be sold as a side business for family members (Ayuningtyas and Jatmika, 2019).

The condition of the partner area which is quite far from the center of the economy, such as traditional markets and modern markets, makes it difficult for partners to meet the need for nutritious and cheap food. In addition to empowering housewives who do not work outside the home to be more productive with vegetable gardening activities, it is the right solution in residential housing and villages, at least it can reduce daily budget expenditures, especially for the purchase of vegetables and kitchen spices (Furoidah, 2019). Therefore, there is a need for counseling and training on the use of yard land to strengthen food security for the Silih Asih 1 and 2 community groups in Sukajaya Hamlet, Tanjungjaya Village, Cisaga District, Ciamis Regency.

#### METHOD

The community service team uses a community service implementation method by providing training and counseling to community service partners so that partners have an awareness of the importance of food independence with the aim that partners have the will to utilize their yard land into a living shop that can be used to independently meet their food needs. The counseling and training carried out emphasize the transfer of Science and Technology which is preceded by the transfer of knowledge. The emphasis on starting activities is preceded by the transfer of knowledge to facilitate changes in perception or attitudes and adoption through practice.

The service partners are the Silih Asih 1 and Silih Asih 2 Associations, The associations formed in 2000. Looking at the type of association formed, this association is included in the association based on location. One of the reasons for its formation is because of the sense of mutual need among community members. This association was formed with the aim of empowering the people of Tanjungjaya Village, most of whom are farmers. This association was formed based on the idea of the Head of Tanjungjaya Village. Initially, this association was formed to avoid highinterest loans under the guise of Savings and Loan Cooperatives targeting the people of Tanjungjaya Village. Currently, the members of the Silih Asih One and Two associations consist of 40 members, most of whom are women.

The stages of activities for this science and technology transfer activity are carried out in the following stages :

- 1. Knowledge transfer, which is providing information by listening, paying attention, and responding. The method used at this stage is to show direct evidence of how to utilize the yard as a living shop.
- 2. Changes in perception, through this community service activity, partners can receive information through observation, demonstration, and use of media or props. The method used at this stage is counseling.
- 3. Adoption, through this community service activity, it is expected that partners can receive information by practicing and implementing it. The method used at this stage is training in planting vegetable seeds in the yard of the house, using educational media.

The estuary of information delivery activities at each stage of this information presentation is as follows:

- 1. There is an identification of Partner's needs for food independence during the Covid 19 pandemic.
- 2. The implementation of socialization aimed at providing knowledge and understanding to partners regarding the risk of not meeting family food needs independently during the Covid 19 pandemic.
- 3. Ensuring partners are able to become independent cadre groups in terms of family food security through training.

The stages above are carried out so that the process of transferring science and technology that has been provided in this community service activity can be sustainable, and then become a habit carried out by partners 1 and 2.

#### **RESULT AND DISCUSSION**

#### **Presentation of Counseling and Training Materials**

In the community service activity, it was conveyed that currently, most yards in Indonesia have not received full attention from either the government or the community itself. Meanwhile, during the Covid-19 pandemic, most Indonesian

people, especially the lower middle class, have difficulty in meeting their food needs, they can utilize their yards as an alternative to meet family nutrition needs. The yard can be planted with vegetables and herbs, thus in addition to meeting family nutrition it can also reduce family expenses. One way to improve the immune system during the covid 19 pandemic is through the use of family medicinal plants (TOGA) known as empon-empon as herbal medicine or herbal drinks (Hamsidi et al., 2020). In Tanjungjaya Hamlet, Tanjungsari Village, most houses have large yards and can be used as a living shop by planting vegetables and herbs. However, some houses belonging to the Silih Asih 1 and 2 associations also have houses with narrow yards. These narrow yards can still be utilized as long as there is sufficient air circulation and lighting from sunlight. so that the activity of planting vegetables in the yard can still be carried out using planting media other than soil directly. The activity of planting vegetables in the yard of the house, in addition to being able to produce crops that have high economic and nutritional value, can also be a fun activity.

This community service activity was assisted by Eman Miharja as an agricultural counseling worker who said that yard land, although not too large, can be used to produce vegetables. Eman and the Pengabdian Team said that planting vegetables in the yard can be a good way to get fresh and healthy vegetables for consumption, here are the steps to use the yard to plant vegetables, as follows:

- Choose the right location: Choose a spot in your yard that gets at least six hours of direct sunlight a day and has fertile soil. If your spot only gets a few hours of sunlight, you can grow vegetables that require less sunlight.
- 2. Prepare the soil: Prepare the soil by cleaning out grass and small stones, then add compost or manure to the soil to make the soil more fertile. After that, loosen the soil with a hoe or soil fork.
- 3. Choose the type of vegetables to plant: Choose the type of vegetables that are easy to grow and suitable for the climate where you live. Some types of vegetables that are easy to grow in a yard garden include: tomatoes, chilies, long beans, kale, lettuce, spinach, and carrots.
- 4. Plant vegetable seeds or seedlings: Once you have decided what type of vegetable you want to plant, you can choose between planting vegetable seeds or seedlings. If you choose seedlings, you can buy them at a farm store

or from a gardener. If you choose vegetable seeds, you can sow them directly into the soil.

- 5. Water regularly: After planting your vegetables, be sure to water them regularly to keep the soil moist. Plants typically need about an inch of water per week.
- 6. Fertilize: Give additional fertilizer according to the instructions on the packaging, so that the plants grow well and provide optimal results.
- 7. Maintain garden cleanliness: Clean nutsedge, wild grass and dry leaves from the garden regularly to maintain cleanliness and keep the environment clean.

By following these steps, you can grow vegetables in your yard and get fresh and healthy vegetables to eat. In addition, growing vegetables in your yard can also be a fun activity and beneficial for health and the environment.

In the training activities, it was also conveyed by agricultural counseling workers that the maintenance process is the next stage after plant arrangement, the plant maintenance process is a process that cannot be ignored, even this maintenance process is the most important process so that plants, both vegetables and herbs can grow and produce optimally. In this maintenance process, one of the simplest things that must be done is fertilization and watering which must be done periodically. There are several ways of watering that can be done in the maintenance process depending on where the farming activities are carried out. If the soil media is used in farming activities, the thing that must be considered is to water the plants every day with a reasonable water discharge, watering can be done in the morning or afternoon or done at one of those times, the thing that must be considered is the needs of the plants seen from the weather whether it is hot or not. While fertilization must be done periodically, so that the plant's nutrient needs can be met. In addition, other maintenance that must be considered is the activity of loosening the soil (ploughing) and ploughing by pulling nutsedge between the plants. Do not forget to also control pests and plant diseases so that they are free from caterpillars so that plant productivity can be maintained.

Training on strengthening food security through the utilization of home yards is carried out by agricultural counseling workers who have expertise and skills in farming on narrow land. This training is also assisted by a community service team from the agrotechnology study program. Training activities can be seen in the picture below.



**Figure 1.** Agricultural Counseling Workers Conduct Counseling Source: PPM Results

The skills to farm on limited land are currently very much needed by the majority of Indonesian people, both in rural and urban areas, so it is necessary to increase the curiosity and knowledge of the community to be able to increase interest in carrying out farming activities through training activities on the use of home land to plant vegetables. After having an interest in farming, the community can utilize limited land to increase food security by planting vegetables and spices that are needed every day. So that the complaints that are often conveyed by members of the Silih Asih 1 and 2 associations or even by the majority of Indonesian people about the difficulty in obtaining basic ingredients during the pandemic can be overcome. Increasing farming skills makes people more active in carrying out vegetable planting activities on narrow land. So that it can provide its own satisfaction with the ability to provide delicious and nutritious vegetables during the pandemic.

#### **Discuss and Practice**

Members of Silih Asih 1 and Silih Asih 2 groups were very responsive and active in participating in this PPM activity, one example of which was the many questions asked by participants in the Counseling and training, all questions from participants were answered by agricultural counseling workers and PPM members, then the presenters asked questions to the participants, this was to determine the level of acceptance of the counseling and training participants towards the material on the use of yard land for food security. From this question and answer session, several pieces of information were obtained, including:

- a. Participants in counseling and training during the pandemic experienced difficulties in providing nutritious and affordable food.
- b. Until now, training participants did not know how to use yard land to make it more useful by using vegetable plants that are easy to grow and nutritious.
- c. The participants of the counseling and training were very enthusiastic, especially after they were given plant seeds and poly bags for planting vegetables in the yard.
- d. Participants in the counseling and training have the desire to immediately practice utilizing yard land to plant vegetables.

The community service team in this community service activity also conveyed to the participants that farming activities in the yard are easy and fun, especially since they can produce healthy and nutritious food for the family. The results of vegetables grown by themselves, whether planted using polybags horizontally or vertically, are guaranteed to be healthier because they do not use pesticides and other chemicals to eliminate pests and plant diseases because they use soil, compost and a little water as the main media. The training attended by more than 40 female participants is expected to be implemented in the long term in the Silih Asih 1 and Silih Asih 2 community groups. The use of land to plant vegetables is also expected to be an additional family economy, the target of this community service activity has been achieved, one of which is by increasing the understanding of community service participants about planting vegetables in the yard and its benefits.

#### **Monitoring and Evaluation**

The results of the training conducted by the PPM team with Agricultural Counseling Officer Eman Miharja, the training participants were monitored directly planting the seeds that had been given during the training so that it did not take long to show quite satisfactory results, one of which, when we carried out monitoring and evaluation activities one month after the counseling was carried out, it was seen that several members had started to use their yards as living shops. If the yard is large, some plant it directly in polybags, some also use pots and place them on the terrace of the house because of the minimal yard they have. In addition, because Sukajaya Hamlet is one of the rain-fed areas, so the availability of water is very limited, especially during the dry season, so many of the participants who took part in the training preferred to plant in media such as poly bags and pots, one of the reasons is to save water, because vegetables are one type of plant that must be watered frequently.



**Figure 2.** Utilization of Yard Land Source: PPM Results



**Figure 3.** Utilizing the Terrace of the House with Pots as a Planting Medium Source: PPM Results

The picture above shows the progress of planting vegetables in the yard using polybags, participants of the activity have been facilitated with poly bags and vegetable seeds to be planted. The picture above shows that the plants are one month old and have grown well. The plants have also received care according to what was conveyed during the training activity on the use of home yard land to plant vegetables.

Evaluation was carried out after the service activity was completed, this activity was carried out to assess community knowledge about the utilization of home yards for food security after the Covid 19 pandemic in Tanjungjaya Village, the evaluation was carried out using pre and post tests. Below will be presented the level of community knowledge about the importance of strengthening food security through the utilization of home yards.





#### CONCLUSION AND SUGGESTION

The community service activities that have been completed can be concluded that, during the Covid-19 pandemic, many people (especially) in rural areas need attention from the Government and various related parties so that they are not only given intermittent assistance such as direct cash assistance or assistance in the form of basic necessities, but also sustainable community empowerment assistance in the form of training so that people can be more independent. Counseling and training in utilizing yard land has improved the skills of partners in utilizing yard land to provide nutritious food. This training can also be beneficial for the community not only during the pandemic but also to fulfill the nutritional needs of training participants in the future. The community service team realizes that it is necessary to carry out counseling and training for partners again in larger activities and involve more participants from partners so that knowledge about the use of yard land can be more widely known by the community.

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#### BIBLIOGRAPHY

- Ayuningtyas, C.E., Jatmika, S.E.D., 2019. Pemanfaatan Lahan Pekarangan untuk Meningkatkan Gizi Keluarga. K-Media.
- Dwiratna, S., Widyasanti, A., Rahmah, D.M., 2016. Pemanfaatan Lahan Pekarangan dengan Menerapkan Konsep Kawasan Rumah Pangan Lestari. Dharmakarya Vol. 5(1), Pp. 19-22. https://doi.org/10.24198/dharmakarya. v5i1.8873.
- Ekawati, Rizieq, R., Kurniawan, H.M., 2020. Pemanfaatan Lahan Pekarangan dalam Mendukung Ketahanan Pangan Rumah Tangga melalui Metode Vertikultur. Dinamisia : Jurnal Pengabdian Kepada Masyarakat Vol. 4(3), Pp. 454-460.
- Furoidah, N., 2019. PKM Pemberdayaan Kelompok PKK dengan Model Urban Farming di Desa Dawuhan Lor, Kecamatan Sukodono, Lumajang, Jawa Timur. Jurnal Layanan Masyarakat (Journal of Public Services) Vol. 3(1), Pp. 6-10. https://doi.org/10.20473/jlm. v3i1.2019.6-10.
- Hamsidi, R., Sumardiko, D.S., Ilkafah, Puruhito, E.F., Wahyuni, R., Septriana, M., Adianti, M., Imandiri, A., Sidqi, T., 2020. Training and Assistance An Nisaa' Quran Recitation Group Rungkut in Utilizing Tanaman Obat Keluarga (TOGA) into Herbal Products. Darmabakti Cendekia: Journal of Community Service and Engagements Vol. 2(2), Pp. 76-79. https://doi. org/10.20473/dc.V2.12.2020.76-79.

- Hermina, Prihatini, 2016. Gambaran Konsumsi Sayur dan Buah Penduduk Indonesia dalam Konteks Gizi Seimbang: Analisis Lanjut Survei Konsumsi Makanan Individu (SKMI) 2014. Buletin Penelitian Kesehatan Vol. 44(3), Pp. 205-2018.
- Kurniasih, D.E., Adianto, J., 2018. Kebun Gizi sebagai Strategi berbasis Masyarakat untuk Memenuhi Kebutuhan Konsumsi. BKM Journal of Community Medicine and Public Health Vol. 34(2), Pp. 93-97.
- Nurlina, Adnan, Safrizal, 2019. Pemanfaatan Lahan Pekarangan dalam Meningkatkan Pendapatan Keluarga Pada Desa Blang Batee Kabupaten Aceh Timur. Global Science Society: Jurnal Ilmiah Pengabdian Kepada Masyarakat Vol. 1(1), Pp. 97-107.
- Sjaruddin, H., Subar, M., Aiman, I., Aswar, 2020. Pemanfaatan Lahan Pekarangan Rumah dengan Menanam Sayur Mayur untuk Meningkatkan Ekonomi Masyarakat Desa Kelenna Bontongape Kecamatan Galesong Kabupaten Takalar. Cendekia: Jurnal Pengabdian Masyarakat Vol. 2(2), Pp. 137-143.
- Widiastuti, R., Harjanti, I.M., Siswanto, A.P., 2019. Upaya Pemanfaatan Lahan Pekarangan Agar Bernilai Ekonomi. Jurnal Pengabdian Vokasi Vol. 1(1), Pp. 1-4. https://doi.org/10.14710/ jpv.2019.5051.