

## **SoHor (Sosog Horticulture) as a Food Sustainability in the New Normal Period in Tanjungsari Village, Rajadesa District, Ciamis Regency**

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### **ABSTRACT**

The Covid-19 pandemic has caused a decline in people's purchasing power, especially for household consumption. Therefore, to alleviate the impact of the Covid-19 pandemic, the community is directed to be able to meet food needs through food security. The purpose of this service is to provide training on horticultural crop cultivation using sosog to the people of Tanjungsari Village, Rajadesa District, Ciamis Regency. The method used is by way of material presentation, question and answer and guided training. After the training activities were carried out, there was an increase in community knowledge and skills both in terms of knowledge about the types and benefits of horticultural plants and how to grow horticultural crops using sosog along with how to care for them. The community gave a positive response to the activities carried out. This activity is considered useful by the community and is a form of optimizing the potential of the Tanjungsari Village community, most of which are farmers and woven bamboo craftsmen to be able to meet food needs through sosog as a planting medium.

**Keywords:** Covid-19, Tanjungsari Village, Horticulture, Food Security, Sosog

### **INTRODUCTION**

The Covid-19 pandemic has a major impact on various aspects of Indonesian society, one of which is in the economic sector. Predictions of some national economic experts to the world state that the economic sector is one of the sectors that are experiencing quite severe impacts (Sina, 2020). The Finance Minister stated that the Covid-19 pandemic could slow the pace of Indonesia's economic growth because it caused a decrease in people's purchasing power, especially in household consumption. The community is expected to be able to meet all their needs during the COVID-19 pandemic (Miftahudin, Randy, Dede, & Tio, 2021). Therefore, to alleviate the impact of the Covid-19 pandemic, people are directed to be able to meet food needs through food sustainability.

Food sustainability is a situation where all households have physical and economic access to food for all their family members, and are not at risk of losing both access (FAO, 1995). Physical and economic access is expected by the community to be able to obtain food for all members of his family so that healthy living conditions are achieved. Physical access to achieve food sustainability can be done if the community conducts food self-sufficiency. Food self-sufficiency means that people are able to hold their own food needs with various activities so as to produce needs that are in accordance with the needs, abilities and knowledge possessed by the community. One way that people can do to meet their food needs is by cultivating horticultural crops.

Horticulture is a branch of agricultural science that studies the cultivation of fruits, vegetables and ornamental plants (Pitaloka, 2020). In terms of needs, horticultural plants can meet physical needs as a source of vitamins, minerals and proteins (from fruits and vegetables), and meet spiritual needs because it can provide a sense of peace, tranquility of life and aesthetics (ornamental plants / flowers). Horticultural crops have the following functions: a) improve the nutrition of the community, b) increase the foreign exchange of the country, c) expand employment opportunities, d) increase farmers' incomes, and e) meet the needs of beauty and environmental sustainability. However, in we discuss the issue of horticulture it is also necessary

to note the characteristic properties of horticultural products, namely: a) can not be stored for long, b) need a place (voluminous), c) perishable in transportation, d) abundant / meruah in one season and rare in another season, and e) fluctuations in the price sharply (Notodimedjo, 1997). Horticulture development in order to succeed well by knowing its benefits and characteristic properties and understanding strategies and deep knowledge of horticultural products.

One of the planting media that can be used for the cultivation of horticultural plants is by using *sosog*. *Sosog* or better known as *tabulasong* is a piece of bamboo tree with a length of about  $\pm 1.5$  meters whose ends are woven to form cones as storage of soil media. *Sosog* can be shaken anywhere around the house and on the surface *sosog* can be planted with all kinds of vegetables or other horticulture. *Sosog* can be used as a medium to grow any useful plants. *Sosog* is safe and unreachable for livestock such as chickens or ducks. In addition, *sosog* can add aesthetics around the page.

Tanjungsari Village, Rajadesa District, Ciamis Regency has fertile land and the majority of its people work as farmers. The village community has a large yard so that it can be used for farming. However, the community has not maximized the use of these land to grow crops that can improve food security during the Covid-19 pandemic. In addition, Tanjungsari Village has abundant bamboo and some of its people are bamboo woven craftsmen so it has good potential for the cultivation of horticultural plants using *sosog*. Based on these conditions, the cultivation of horticultural plants using *sosog* in Tanjungsari Village can be done to improve the food security of the community in meeting daily food needs. Cultivation of horticultural plants using *sosog* is also done to utilize the potential of Tanjungsari Village area that has abundant bamboo and can be used as one of the planting media. Therefore, it is necessary to hold community service that can provide an understanding of it.

Based on the results of the analysis of the situation of Tanjungsari Village obtained the following partner problems:

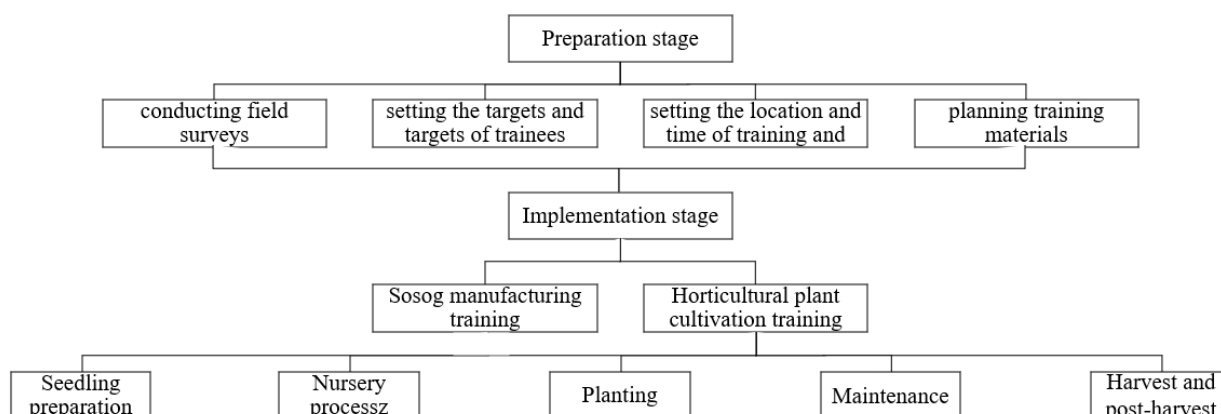
1. Lack of maximum utilization of bamboo as one of the *sosog* planting media.
2. There is no counseling for farmers about horticulture cultivation.
3. Tanjungsari Village people are the majority of farmers and bamboo woven craftsmen and on average have a large yard to grow crops but have not maximized the use of the land to grow crops that can improve food security during the Covid-19 pandemic.

This community service activity is expected to contribute to efforts to improve the food security of the people of Tanjungsari Village, Rajadesa District, Ciamis Regency in order to meet their own food needs in the era of the Covid-19 pandemic.

## METHOD

This community service activity was carried out in Cipinang Village RT 02, Tanjungsari Village, Rajadesa Subdistrict, Ciamis Regency. This service was held on April 29-October 23, 2021. The target of this activity is the people of Cipinang Hamlet. This activity is a form of follow-up of the results of field studies and interviews with partners and found problems that need to be addressed immediately. Based on the results of the problem study, the priority of the partner's main problem is how to use bamboo to be used as a planting medium in the form of *sosog* for the cultivation of horticultural crops in an effort to improve food security so that the community can meet their own food needs in the era of the Covid-19 pandemic.

To achieve the expected target, this partnership program is carried out through the implementation method as shown in Figure 1.



**Figure 1.** Flowchart

### 1. Preparation stage

The preparation stage is the planning of a devotion program that includes: (a) conducting field surveys, (b) setting the targets and targets of trainees, (c) setting the location and time of training and (d) planning training materials.

### 2. Implementation stage

The implementation stage is in the form of sosog manufacturing training activities and horticultural plant cultivation training to increase public knowledge about the use of bamboo as one of the planting media, increase public knowledge about horticulture planting procedures in an effort to improve food security so that the community can meet their own food needs in the era of the Covid-19 pandemic. Horticultural plants are plants that are needed by the community to meet the needs of vitamins and minerals. Green vegetables are useful as a source of vitamins and minerals that are important for the fulfillment of community nutrition (Ervayenri & Siswati, 2016).

The implementation of Sosog Horticulture service as a food sustainability in the new normal in Tanjungsari Village, Rajadesa District, Ciamis Regency consists of material exposure activities, Q&A and guided training. In detail, these activities are described as follows:

#### 1. Sosog manufacturing training

Sosog is one of the crafts of bamboo tree pieces with a length of about 1.5 meters whose ends are woven to form cones as a storage of soil media. The basic material for making sosog is bamboo which is one of the natural resources that are widely utilized because it has beneficial properties. Sosog manufacturing training begins with material delivery activities by speakers. After the presentation of the material, continued with a question and answer session and sosog making practices.

#### 2. Horticultural plant cultivation training

Horticultural plant cultivation training is carried out through the provision of materials by the speaker. After the presentation of the material, continued with question and answer sessions and guided training related to the cultivation of horticultural plants. The implementation of horticultural plant cultivation consists of (a) seed preparation, (b) the breeding process, (c) planting, (d) maintenance, (e) harvesting and post-harvest (Widodo, S.E., Hadi, S. Nurmauli, 2019) . In detail these stages are described as follows:

##### a. Seedling preparation

The first stage is the selection of the type of plant to be cultivated. The thing to note is the size of the plant and the age of harvesting the plant. In addition, the needs of seedlings must also be adjusted to the available land area.

##### b. Nursery process

Breeding is done to get plants to be cultivated. Breeding is also called plant propagation. This nursery is done by considering the way of breeding different plants, such as kale with seeds and ginger with rhizomes.

##### c. Planting

Planting is done after the breeding process is completed. Planting should be done in the morning or evening when the hot sun is not too hot. After that, watering is done sufficiently, because the plants are not resistant to drought and excess water.

d. Maintenance

Maintenance carried out on horticultural plants should be extra and require more attention, namely in terms of fertilization, weeding and prevention from disease pest attacks. The process of fertilization and maintenance will vary depending on the characteristics of the plant planted. Maintenance is done by spraying pesticides. In the early days of seedling growth, spraying is done 2 times a day, then done 1 time a day.

e. Harvest and post-harvest

The last process that will be done is harvesting. Crop harvest is tailored to the characteristics of the harvest for each plant.

## RESULT AND DISCUSSION

This community service activity can be described through two stages of activities, namely the preparatory stage and the implementation stage. The preparation stage is the planning stage of the devotion program, which consists of:

1. Conduct field surveys

The field survey was conducted to coordinate with tanjungsari village of Rajadesa district of Ciamis regency. Coordination was carried out with Mr. Ending and Mrs. Nurul Hikmah who were willing to become partners. The village supports the devotional activities carried out by the devotional team.

2. Setting the targets and targets of trainees

From coordination with the village, it was decided that the target of Sosog Horticulture training was the residents of Cipinang Village RT 02 Tanjungsari Village, Rajadesa District, Ciamis Regency, namely with a target of 40 trainees.

3. Location determination and training time

Based on the results of coordination with partners, the implementation of Sosog Horticulture training was conducted on Sunday, August 29, 2021.

4. Training material planning

Training materials are socialized by experts from the agricultural service. Training materials planned by the devotional team include knowledge of what horticulture is as well as horticultural functions and benefits, knowledge of sosog and horticultural sosog.

After the preparation stage, then followed by the implementation stage. The implementation stage consists of material delivery activities from the agricultural service accompanied by Q&A and guided training related to the cultivation of horticultural crops using sosog. The training was conducted on Sunday, August 29, 2021 in the yard of Mrs. Nurul Hikmah's house. The devotional activity was attended by 40 participants who were invited based on directions from partners. Activities at the implementation stage can be spelled out as follows.

### 1. Provision of materials related to the cultivation of horticultural plants using sosog

Sosog Horticulture devotional activities run smoothly by applying fairly strict health protocols. The devotional team provides masks and hand sanitizers for trainees. This certainly aims to provide a sense of security in following the activities.

Materials related to the cultivation of horticultural crops using sosog are delivered very well by experts from the agricultural service. The provision of materials related to the cultivation of horticultural plants using sosog is needed with the aim of providing knowledge to participants of the activity. The knowledge obtained is expected to be used as a guide to perform an action. In this case, of course, the action in question is the practice of cultivating horticultural plants using sosog. Before the practice activities are carried out, participants are expected to have an understanding related to sosog, horticulture and horticultural sosog.



**Figure 2.** Exposure of materials from the agricultural service

Material exposure activities from the agricultural service can be seen in Figure 2. Participants of the activity gave a positive response to the exposure of the material delivered. This is seen during the question and answer session, participants are active and do not hesitate to ask the source. Some participants asked questions to the source, where one of the questions was: what to do so that horticultural plants can grow well and not get diseased.

## **2. The practice of cultivating horticultural plants using sosog in a guided manner**

After the community obtains material related to the cultivation of horticultural plants using sosog from sources, then continued with the practice in a guided manner to implement the knowledge obtained.

The first activity is the making of sosog. The community has prepared in advance bamboo that will be made into sosog so that when the implementation of sosog making practices as a planting medium is more effective. The height of the sosog made in accordance with the direction of the source is 1.5 meters. This is so that the planted crops are safe from the interference of livestock. The manufacture of sosog takes place smoothly and does not experience many obstacles because the participants of the activity are indeed partly bamboo woven craftsmen. After the sosog is finished, then the sosog is installed along the yard of the people's house to be used as a planting medium from horticultural plants.



**Figure 3.** Installation of sosog along the yard of the people's homes

The next activity is the preparation of seedlings and the breeding process. The purpose of this devotional activity is for the food self-sufficiency community by holding activities to get results in accordance with the needs, abilities and knowledge possessed by the community. In accordance with these goals, the community in preparing the seeds to be planted also adjusts to the needs of the community. People choose plants that they often consume every day such as kale, pakcoy, spinach, chili, tomatoes, leeks and others. The process of breeding of horticultural plants to be planted on sosog media is first sown in polybags. This aims so that when the planting media in the form of sosog is ready to be used, the plant is ready to be moved.



**Figure 4.** Seedling of horticultural plants

After the plant seeds grow in polybags and are old enough to be moved, planting activities are carried out on sosog media. Sosog that will be planted is certainly filled first with soil and fertilizer from animal feces with a certain composition. The planting process is carried out in the morning and evening. This of course aims so that plants can adapt well in the new planting media with the support of sun conditions that are not too hot at that time so that the possibility of plants being planted successfully is greater.



**Figure 5.** Horticultural plants on sosog media

The next activity after planting is maintenance activities. Maintenance activities here certainly include the maintenance of plants and maintenance of planting media, namely sosog. Plants that have been planted and grown in the sosog media are then treated according to the needs of different plants depending on the characteristics of the plant. The needs here include several things, including the frequency of plant watering, pesticide spraying or weeding from weeds. In addition to plants, sosog that becomes a planting medium also needs to be considered in order to last a long time and can be used many times as a planting medium after harvesting. Sosog made from bamboo is quite resistant to hot and rain. However, in order to last longer when installing sosog, the bottom of the sosog planted into the ground is coated with plastic with the aim of not being easily porous. In addition, to be stronger and also at the same time add to the aesthetics of the stem of the sosog coated with paint.

Each plant has a different time to reach the harvest. There are plants that take a few days, but there are also those that take up to weeks. Post-harvest treatment of plants also varies. There are plants that can be harvested many times such as chili, there are also plants that after harvesting must be replanted like pakcoy. People understand this well and feel enthusiastic in cultivating hortikultura plants because they can meet their own needs, especially during the Covid-19 pandemic.

The devotional team from Siliwangi University conducted an investigation into the field 3 times to monitor the development of horticultural plant cultivation using sosog. Residents are always welcoming friendly whenever the team comes to visit to make observations. Some of the residents encountered were invited to discuss related to the plants they planted. From the

discussion, the team got information related to the development of plants planted up to the harvest that had been obtained.

To find out the level of satisfaction of partners towards implementers and activities carried out, satisfaction analysis is carried out by spreading questionnaires to participants of devotional activities. The questionnaire consists of 5 statements with a choice of answers following the Likert scale of 4 categories namely Strongly Agree (SS), Agree (S), Disagree (TS), and Strongly Disagree (STS) and 2 other questions are open questions about opinions related to the activities carried out and suggestions for subsequent activities. Distribution of the results of partner satisfaction with implementers and activities carried out can be seen in Table 1.

**Table 1.** Results of The Satisfaction Analysis of Devotion Partners

No.	Statement	Value	Category
1.	I am satisfied with the devotional activities organized by the devotional team from Siliwangi University.	84	Good
2.	Devotional activities organized by the devotional team of Siliwangi University in accordance with my expectations.	84	Good
3.	Personnel/members involved in service activities provide services in accordance with my needs.	83	Good
4.	Every my complaint/question/question/problem, follow up well by the source/member involved.	83	Good
5.	If this activity is held again, I am willing to participate/ get involved.	83	Good

Based on the table above, overall both in terms of readiness and performance of the service team, activity materials and the implications of activities on knowledge and skills, the community is satisfied. This is because the devotional activities carried out in accordance with community expectations can help the community in meeting daily food needs through the cultivation of horticultural crops using sosog. In addition, this activity can also be a solution to community problems. With this activity, the community can maximize the use of bamboo as one of the sosog planting media. The community gained knowledge related to the types and benefits of horticultural plants, knowledge of horticultural planting procedures using sosog, as well as the skills of planting and maintaining horticultural plants. This activity is considered useful by the community and is a form of optimizing the potential of the people of Tanjungsari Village, most of whom are farmers and bamboo woven craftsmen to be able to meet food needs through sosog as a planting medium.

This devotional activity can be said to be successful because it can overcome the problems faced by partners and get a positive response proven by the willingness of the community to participate again if the activity is held in the future. The community hopes that there are further activities both in the form of counseling and training that can be carried out in their villages as a follow-up to the activities that have been carried out. From the results of this activity, making Cipinang Village Tanjungsari Village earned the nickname "Kampung Sosog Horticulture" and is expected to be an example for other villages or hamlets to be able to meet food needs by cultivating horticultural crops using sosog. In addition to food security efforts, the utilization of sosog also aims to support the agricultural service program are KRPL (Kawasan Rumah Perkarangan Lestari) dan PPL (Perkarangan Pangan Lestari).

### **CONCLUSIONS AND RECOMENDATIONS**

Overall, SOHOR (Sosog Horticulture) training as a Food Security Effort in the New Normal Period in Cipinang Village Tanjungsari Village, Rajadesa District, Ciamis Regency can increase public knowledge about the types and benefits of horticultural crops, increase knowledge about horticultural planting procedures using sosog, and improve the skills of planting and maintaining horticultural crops. In addition, sosog can add aesthetics around the page.

This service program is expected to be followed up elsewhere in the following year to be able to meet food needs through food security. In addition to food security efforts in the new normal, the use of sosog can also support agricultural service programs. yaitu KRPL (Kawasan Rumah Perkarangan Lestari) dan PPL (Perkarangan Pangan Lestari).

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