



Technical Guidance for Oyster Mushroom Baglog Production Using a Semi-Mechanical Baglog Pressing in Poktan Turi Sidomulyo

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Abstract. The Turi farmer group is located in Sidomulyo Village, Tuntungan, Medan. One of the businesses run by this group is the cultivation of oyster mushrooms. However, this poktan has not been able to produce oyster mushroom baglog independently. Thus, greater capital is needed to buy baglog from the manufacturer. Basically, the process of making oyster mushroom baglog is quite simple and can be conducted manually, but the common problems encountered are the long baglog production time, non-uniform quality and high number of workers. In addition, the production of oyster mushroom baglog can be used as another business by partner groups in an effort to increase the income of group members and cut production costs for oyster mushrooms in partner groups. The purpose of this activity was to improve the insight and skills of the community in the Turi Poktan to be able to produce the oyster mushroom baglog by utilizing a simple technology in the form of a baglog presser to cut the production costs and open up new business opportunities in order to improve the welfare of the community in partner Poktans. The expected results from this community service activity were products in the form of oyster mushroom baglog and the formation of a new business by the turi group as a producer of oyster mushroom baglog so as to increase the welfare of the community in partner groups.

Keyword: Baglog Presser, Oyster Mushroom Baglog, Producer

Abstrak. Kelompok tani (POKTAN) Turi berada di Kelurahan Sidomulyo, Tuntungan, Medan. Salah satu usaha yang dijalankan oleh poktan ini adalah budidaya jamur tiram. Namun, poktan ini belum dapat memproduksi baglog jamur tiram secara mandiri. Sehingga, modal yang lebih besar diperlukan untuk membeli baglog dari produsennya. Pada dasarnya, proses pembuatan baglog jamur tiram cukup sederhana dan dapat dilakukan secara manual, namun kendala yang umum ditemui seperti waktu produksi baglog yang cukup lama, kualitas yang tidak seragam dan jumlah tenaga kerja yang tinggi. Selain itu, produksi baglog jamur tiram dapat dijadikan usaha lain oleh poktan mitra dalam upaya meningkatkan pemasukan anggota poktan serta memangkas biaya produksi jamur tiram di poktan mitra. Tujuan dari kegiatan ini yaitu untuk meningkatkan wawasan dan keterampilan masyarakat di poktan turi

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untuk dapat memproduksi baglog jamur tiram dengan memanfaatkan teknologi sederhana berupa alat pres baglog untuk memangkas biaya produksi dan membuka peluang usaha baru dalam rangka meningkatkan kesejahteraan masyarakat di poktan mitra. Hasil yang diharapkan dari kegiatan pengabdian kepada masyarakat ini yaitu produk berupa baglog jamur tiram dan terbentuknya usaha baru oleh poktan turi sebagai produsen baglog jamur tiram sehingga membuat adanya peningkatan kesejahteraan pada masyarakat di poktan mitra.

Kata Kunci: *Alat Pres Baglog, Baglog Jamur Tiram, Produsen*

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1 Introduction

Turi farmer group is located in Sidomulyo Village, Medan Tuntungan, about 15 km from downtown Medan. The community has great potential to develop entrepreneurial aspects considering that the land is still large and the location is strategic enough to develop a business. One of the businesses run by the community is oyster mushroom cultivation.

Oyster mushroom production is carried out in the oyster mushroom barn to meet the growing requirements of the plant [1]. To carry out the production of oyster mushrooms, partners need funds that are used to make oyster mushroom planting media (baglog). The production of baglog is generally conducted manually, but there are obstacles such as a long time to make, the quality of the baglog is not uniform, the baglog sterilization process is needed and the number of workers needed is high [2].

In addition, apart from cultivating and marketing oyster mushrooms, partners also have plans to become oyster mushroom baglog producers and distributors in an effort to increase the profits and to expand the market [3]. Baglog production per day is around 200 baglogs manually. By increasing the number of baglogs produced, partners can generate larger profits and can cut the oyster mushroom production costs. The limited knowledge to produce the baglog and to obtain agricultural tool was the basis for carrying out community service activities in the Turi Farmers Group.



Figure 1. Team from USU with representatives of Turi farmer group

The problems faced by the farmer group is at the baglog production stage, especially at the stages of filling, pressing and sterilizing baglogs, where baglog production per day is very low. This condition could affect the profit earned by the farmer group. Limited knowledge in increasing baglog production per day needs to be overcome with a touch of engineering, such as using a press and sterilizing oyster mushroom baglog, then analyzing whether the results obtained are on target or not, so that the baglog production per day at the Turi Farm can run as it should and keep increasing [4].

2 Method

This community service activity was carried out by the Universitas Sumatera Utara Community Service Institute (LPPM) Team for the Turi farmer group on Jl. Bunga Turi I, Medan Tuntungan, North Sumatra from June to November 2022.

The approach method used during the program implementation was through a survey of potential/problems in the Turi farmer group. Then, continued with the focus group discussion (FGD) program, training and assistance. The team socialize the program through counseling and discussions with the community. The socialization included knowledge of oyster mushroom cultivation and continued with technical guidance on making oyster mushroom baglogs by operating an oyster mushroom baglog presser.

The approach method used during the implementation of the community service program was through a potential/problem survey at the Turi Sidomulyo Farming Group, Medan Tuntungan. After that, continued with fieldwork activities by the community service team which were divided into several stages of activities and visits. On the second visit an FGD, handing over a oyster mushrooms baglog press tool, technical guidance and assistance in producing baglog which were ready for cultivation were conducted.

3 Result and Discussion

The implementation of the activities was carried out by means of socialization, technical guidance in the field and discussions, by the teaching staff of the Faculty of Agriculture USU. The socialization included several matters such as the business opportunities by producing oyster mushroom baglog, materials, equipment and methods for making oyster mushroom baglog as well as the technical guidance on baglog production using an oyster mushroom baglog press.

During the second visitation, there were several activity conducted such as FGD, handing over a set of baglog pressing tools for oyster mushrooms as shown in Figure 3.1., as well as technical guidance on making oyster mushroom baglogs by the USU LPPM community service team together with the Turi Poktan community were also attended by the regional government of Sidomulyo Village as shown in Figure 2.



Figure 2. FGD and handing over a set of baglog press tool and a set of tissue culture tool



Figure 3. Technical guidance on making oyster mushroom baglog

The materials used to produce oyster mushroom baglog are also simple and easily accessible, such as bran, sawdust, lime, water and oyster mushroom mycelia. The process of making baglog includes sifting sawdust, mixing sawdust with bran (8:1) and lime (pH regulator) as a source of nutrition for the growth and development of oyster mushrooms until harvest (moisture content 60-65%), curing for 1 night to decompose complex compounds with the help of microbes to produce simpler compounds so that they are easily digested by mushroom plants for more optimal growth. Next, it was followed by the process of filling the planting medium into polypropylene (PP) plastic and pressing it using a baglog press tool, then closing it. After that, the sterilization process could be conducted using temperature of 70°C for 12 hours, continued with cooling, inoculation and incubation followed by watering in order to maintain the humidity of the mushroom curd. Figure 4. shows the baglog produced at the activity and the transformation until ready to harvest.



Figure 4. From right to left, Baglog oyster mushrooms each process until they are ready to harvest

Moreover, the activity continued with training and field practice, namely training or technical guidance on the use of an oyster mushroom press which was donated to the Turi farmer group. This was conducted because even though this technology is widely available, its application at the home industry level was still not optimal. Where the main obstacle is the ignorance of the community about technology, which can be caused by a lack of knowledge and capital, no rental services for agricultural tools and machinery and the inability of the community as well as the farmer group or pioneering home industries in procuring these tools and machines (Swastika, 2012).

Supporting factors in the implementation of community service that really helped the realization of this activity were the positive responses from the community at the locations, starting from surveys of service locations, making proposals, sending equipment during community service, until the socialization activities, FGDs and assistancing process. A positive response was shown by a good reception when the team from USU arrived at the location and the enthusiasm of the community during both the FGD activities and when the technical assistance was carried out.

Beside that, the regional government of Sidomulyo Village was also very enthusiastic and gave a positive response starting from surveying partner problems to preparing for the FGD during the first visit of the USU LPPM community service team.

Apart from that, the activity also went well considering that the location of the farmer group was not far from the center of Medan city so that shortcut access to the location can be said to be quite good and there is also smooth access via the main road.

Likewise, the inhibiting factors in the implementation of community service did not exist; however, even though oyster mushrooms are not seasonal like other agricultural products, baglog production management to support the availability of baglog and oyster mushrooms needs to be done. This can be seen during the first visit to the location of partner farmer groups, the oyster mushrooms have not yet entered the harvest period, so the product has stopped being marketed. In addition, the sustainability of baglog production activities must be fully managed properly.

4 Conclusion

Community service activities ranging from surveys, socialization, discussions until the technical guidance in the field have been carried out well and received positive responses from farmers in partner villages.

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