

PROCESSING PRODUCTS USING CATFISH AS RAW MATERIAL TO ENHANCE THE VALUE OF CATFISH IN THE SARIWANGI VILLAGE

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Abstract

The activity aims to provide training related to the production of processed food using catfish meat as the main ingredient. Catfish meat has a fine texture and a slightly pale color, allowing it to be categorized as white meat, similar to chicken. Its high protein content and unsaturated fatty acids make catfish meat beneficial for maintaining tissue health, cellular formation, and brain intelligence. Catfish meat is highly recommended for consumption by children in the growth phase, especially toddlers. With its high protein content, low cholesterol level, tender muscle fibers, and more affluent organoleptic properties, catfish meat is preferred by consumers. Efforts to utilize catfish meat have included training on diversifying food products made from catfish meat. Since 2021, the Sariwangi Village Government has collaborated with the Faculty of Engineering at Pasundan University, starting from developing nanobubble technology for catfish farming and focusing more on training for processing products using catfish meat by the year 2023. The intended outcome of this activity is processed food products made from catfish meat that are ready for the market. The products developed are expected to serve as the foundation for a village-owned business unit.

Keywords: Diversification, Food, Catfish.

INTRODUCTION

The Parongpong Subdistrict is one of the administrative regions within West Bandung Regency, with a land area of 4,515 hectares. It is situated at coordinates 108°05'11" E (longitude) and 7°19'34" S (latitude), at an elevation of 600 meters above sea level. In the course of governance, the Parongpong Subdistrict is divided into seven villages: Cigugur Girang, Cihanjuang Rahayu, Cihanjuang, Cihideung, Ciwaruga, Karyawangi, and Sariwangi. The population density of the Parongpong Subdistrict is 909 individuals per hectare, and looking at population growth, its intensity is expected to continue increasing over time (BPS, 2023).

Sariwangi Village, which will be the location of community service, is the southernmost

village in the Parongpong Subdistrict. A portion of its residents are catfish farmers, cut flower cultivators, and artisans engaged in woodworking/bamboo crafts, which serve as their primary sources of income. The location map of Sariwangi Village in the Parongpong Subdistrict of West Bandung Regency can be seen in Figure 1 of the map.

Figure 1. The Map of Parongpong Subdistrict and Sariwangi Village

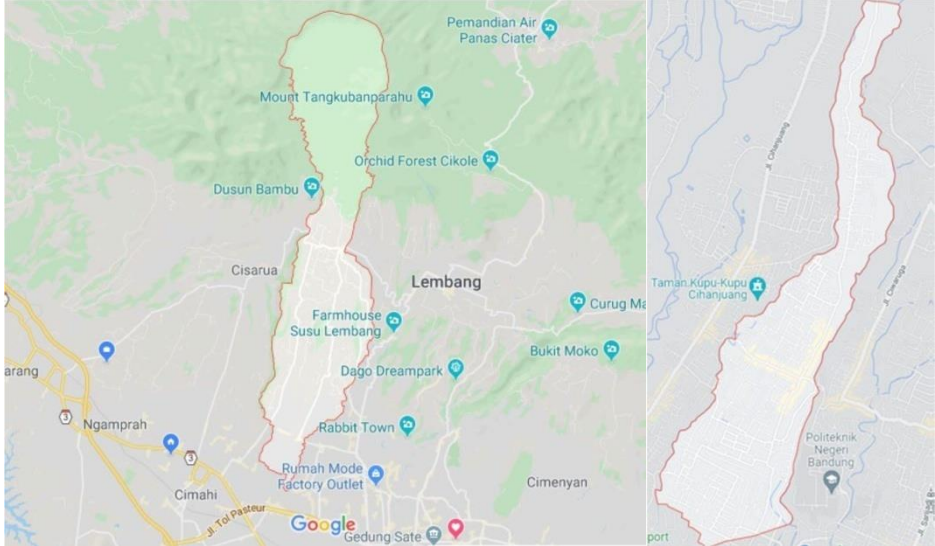


Table 1. The Population Data of Parongpong Subdistrict

Number	Village	Male	%	Female	%	Total	%
1	Karyawangi	5018	0.6	4774	0.6	9792	0.6
2	Cihanjuang	10501	1.2	10300	1.2	20801	1.2
3	Cihanjuang Rahayu	6041	0.7	5728	0.7	11769	0.7
4	Cihideung	8159	0.9	8028	0.9	16187	0.9
5	Ciwaruga	8023	0.9	7784	0.9	15807	0.9
6	Cigugur Girang	8328	0.9	8055	0.9	16383	0.9
7	Sariwangi	8831	1	8578	1	17409	1
Kecamatan Parongpong		54901	6.2	53247	6.3	108148	6.2

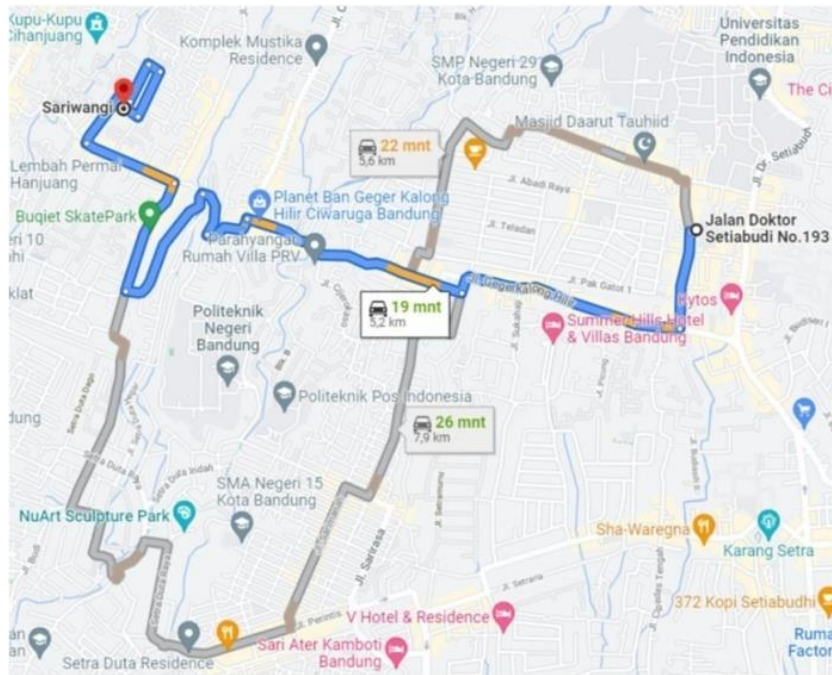


Figure 2. The distance from Unpas Campus to Sariwangi Village is 5,2 km

In its central mission, the West Bandung Regency Medium-Term Development Plan 2018-2023 states: "Building an Independent, Strong, and Just Economy." This aims to make "West Bandung Regency a service city, fostering equal and just societal well-being through labor-intensive economic growth and local micro, small, and medium-sized enterprises (MSMEs)." The objectives include "Economic Growth Enhancement for West Bandung Regency, Reduction of the Number of Impoverished Residents, and Increase in Job Opportunities." Based on these missions, goals, and objectives, the planned Community Service Program (PPM) is designed to support labor-intensive local MSMEs in Sariwangi Village, Parongpong Subdistrict, West Bandung Regency. The performance indicators include achieving an economic growth rate of up to 7.00 and a Gini index of 0.40 by 2022.

A survey in Sariwangi Village has been conducted to map the village's potential and gather the issues that will be addressed during the Community Service Program (PPM). The collected possibilities include catfish farmers, a majority of whom still consider it a part-time occupation on the land around their residences. Other data reveals that cut flower farmers have limited land, hindering their growth and causing their quality to lag behind the neighboring village of Cihideung within the same subdistrict. Additionally, artisans specializing in woodworking/bamboo crafts face marketing difficulties due to the ongoing pandemic. There is also an issue with uncontrolled waste disposal, exacerbated by the growth of housing in Sariwangi Village, which requires creative management solutions.

Community service activities are carried out to resolve the issues in Sariwangi Village, involving community groups formed and guided by faculty members and students from the Food Technology Study Program at Pasundan University. These activities also include initiating creative endeavors that can enhance the welfare of the Sariwangi Village community.

The development and empowerment of the community in Sariwangi Village,

Parongpong Subdistrict, West Bandung Regency, are hindered by the following factors:

- 1) The creative and innovative ideas from the village community have yet to materialize into tangible products.
- 2) More facilities and infrastructure must be needed to realize creative and innovative ideas.
- 3) The quantity and quality of human resources need improvement.
- 4) The managed budget is limited.

The issues revealed from the survey in Sariwangi Village include the need for more communication among community members engaged in similar activities. For instance, catfish farmers individually produce and sell their resulting products, so the price is inconsistent. Furthermore, post-harvest catfish production must be developed to enhance the value-added output. Wood/bamboo artisans have yet to form groups, making market penetration difficult due to inconsistent quality. Cut flower farmers need more standardized flower sizes due to varying planting and harvesting times. An appropriate solution for waste-related problems must also be found to prevent environmental pollution.

IMPLEMENTATION METHOD

Community service activities have been carried out through lectures, discussions, demonstrations, hands-on practices, and observations. The lecture method was employed for delivering training content. Additionally, it was used to motivate catfish farmers to persist and enhance their entrepreneurial spirit as the main asset for improving their productivity. The discussion method facilitated two-way communication between trainers and catfish farmers during the training sessions. The demonstration method provided examples during each training, making it easier for catfish farmers to understand the presented material. The hands-on practice method allowed participants to apply the acquired knowledge under the guidance of trainers. The observation method assessed participants' abilities during and after training. Post-training observations were conducted to ascertain the impact of the activity on participants' productivity progress (Enser et al., 1996).

RESULTS AND DISCUSSION

The results obtained from the community service program are as follows:

1. Doing Coordination of Operational Activity Plans: In this phase, team coordination meetings were held, correspondence was organized, criteria were identified, the number of trainers, mentors, and facilitators was determined, module preparation was undertaken, activity schedules were established, training program implementation was carried out, mentorship and guidance were provided, monitoring and evaluation were conducted, and plans for activity reporting and the writing of scientific articles for National Journals/Mass Media were developed.

2. **Implementation Team Coordination Meeting:** In this phase, tasks were assigned to the team, coordination meetings for preparation, implementation, monitoring, and evaluation were scheduled, and efforts were made to ensure that the reporting process proceeded according to plan.
3. **Preparing Prospective Partners and Trainers, Mentors (Training of Trainers), and Facilitators:** In this phase, prospective partners are prepared. Prospective partners consist of one group with five members. The facilitators for this program involve assistants or students who have been previously trained.
4. **Creating an Activity Schedule:** The program schedule is established at this stage. The program will run for four months, considering activities from preparation, implementation, and facilitation to publication.
5. **Implementation of Activities:** During the implementation phase, training, mentoring, facilitation, and mediation activities are conducted at the partners' business locations.
6. **Implementation Monitoring and Evaluation:** The monitoring and evaluation phase is carried out by the activity implementation team, observing and monitoring the execution of activities by measuring success indicators, identifying potential weaknesses, and determining causal factors. This phase also contributes to the preparation of activity reports and recommendations, as well as the formulation of a plan for sustainable actions.



Figure 3. The Documentation of Community Service Activities

The community increasingly favors' processed foods, especially among the middle to upper classes. One processed food that can be developed is baby fish crispy, made from catfish. It is called "baby fish" because the raw material for this processed product consists of young fish that are only about 5-7 cm in size. Various types of fish can also be used for this purpose. The characteristic of ready-to-eat and long-lasting crispy baby fish makes it a popular choice among consumers.

Catfish, belonging to the freshwater fish family, are easy to identify due to their smooth and somewhat elongated flat bodies and extended "whiskers" that protrude around their mouths. These fish are widely consumed because of their delicious taste when cooked, usually fried or

grilled (Ginting & Umar, 2005). In producing processed foods, attention must be paid to food safety aspects to ensure that the processed food is safe for consumption by everyone (Muchtadi & Sugiyono, 2010). According to Sugiono in 2013, efforts to implement a food safety system in food production are necessary.

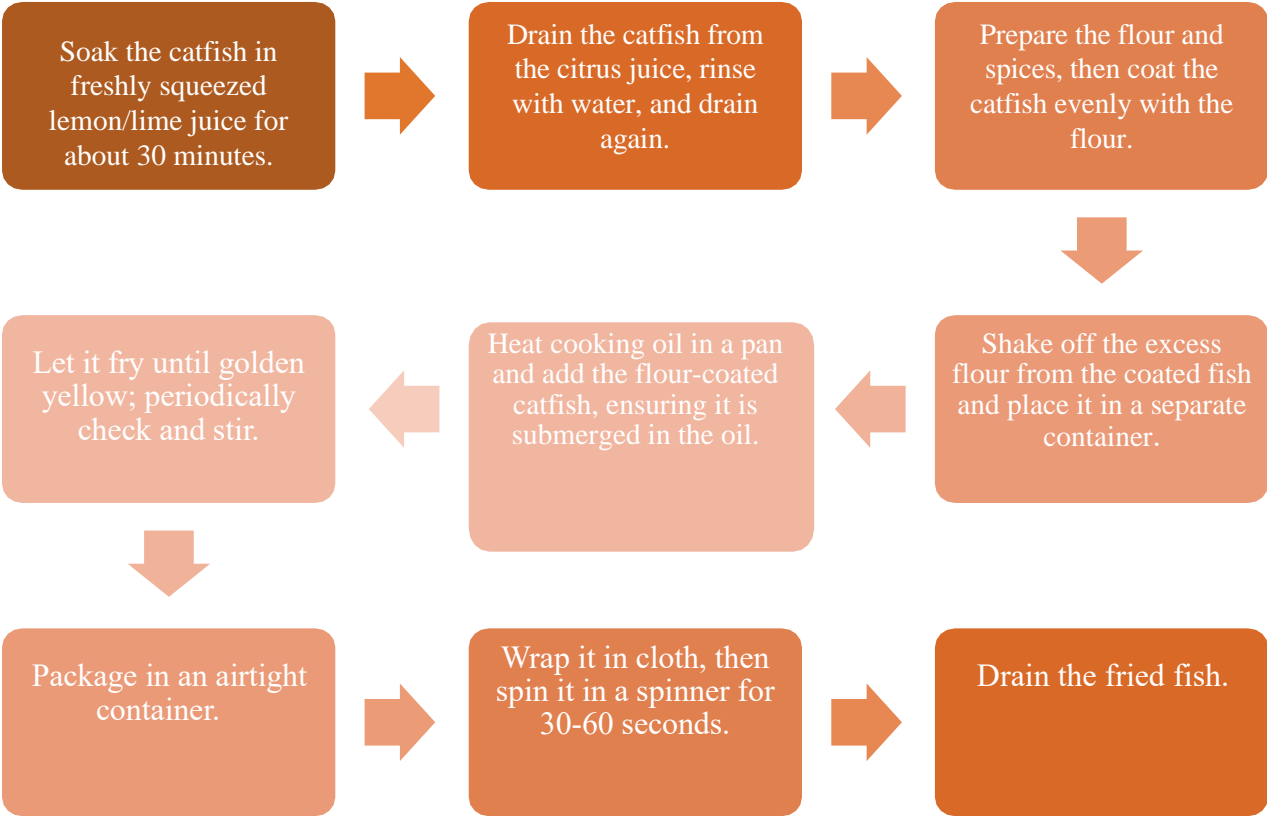


Figure 4. The Diversification of Baby Catfish Crispy Processed



Figure 4. The Diversification of Baby Catfish Crispy Processed

CONCLUSION

Product quality has been improved through the implementation of technology and the diversification of processed products using catfish as the main ingredient. The resulting products now have a clear identity.

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