



Training on Making Vegetable and Fruit Noodles, and Assessing Their Business and Economic Value for Households in the Kembangan Subdistrict

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ARTICLE INFO

Article history

Received : 10-7-2025

Revised : 26-8-2025

Accepted : 27-8-2025

Keywords

entrepreneurship,
MSMEs, healthy noodles,
housewives, cost of
goods sold

ABSTRACT

This Community Service activity aims to empower housewives and PKK members in Kembangan Subdistrict through entrepreneurship training based on healthy food. According to data from the Ministry of Cooperatives and SMEs, Micro, Small, and Medium Enterprises (MSMEs) contribute 60.5% to the national GDP, indicating their great potential in supporting economic growth. In addition, Indonesia ranks second in the world for instant noodle consumption, and the rising public awareness of healthy eating presents a promising business opportunity. The main problems faced by the partners include a lack of knowledge and skills to start a business and difficulties in calculating the cost of goods sold and setting selling prices. This program offers solutions through: (1) socialization on the importance of entrepreneurship, (2) training in the production of vegetable- and fruit-based noodles, and (3) training in cost calculation and pricing. The activity is expected to improve the entrepreneurial capacity of the partners and foster the development of sustainable home-based businesses.

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A. INTRODUCTION

MSMEs are currently experiencing positive growth and continue to increase in number every year. This trend will also have a positive impact on the Indonesian economy. According to data from the Ministry of Cooperatives and SMEs, MSMEs currently contribute 60.5% to the national GDP. This demonstrates the significant growth potential of MSMEs in Indonesia, suggesting they could contribute even more to the economy. However, many small business owners face challenges relating to limited capital, production methods, marketing systems and business management. To support these business owners, the Jakarta Provincial Government has launched the Jakpreneur programme, which is designed to promote the economic development of the community. The Jakarta Provincial Government hopes that Jakpreneur will provide a platform for creativity and community collaboration, enabling



business owners to develop their skills and independence and grow their businesses (Hendro & Arlinda S, 2020).

Kembangan Subdistrict comprises six villages and has a population density of 74,438.72 people per km². The subdistrict has a total population of 314,699, consisting of 157,699 males and 157,000 females. 70% of the population are of productive age, while the remaining 30% are of non-productive age (BPS, 2023). The Community Service Team at Mercu Buana University observed that many households in the Kembangan sub-district have become small business operators. These business operators fall into two categories: Those supported by Jakpreneur, and those not yet supported by Jakpreneur. Those in category 2 are still classified as household businesses that are not productive in running their home-based enterprises. They have not focused sufficiently on their businesses yet, leaving them with spare time to enhance their productivity. Therefore, during this community service activity, the community service team from Mercu Buana University provided a basic training course in making vegetable noodles to help them develop a business idea. This initiative focused on SMEs that have not yet received mentoring from Jakpreneur.

According to data from the World Instant Noodles Association (WINA), Indonesia ranked second in the world for noodle consumption in 2023, with 14.54 billion servings (WINA, 2023). The high level of public interest in noodle consumption, coupled with the growing trend towards healthy eating, presents an opportunity for entrepreneurship in the form of vegetable- and fruit-based noodles. Suitable vegetables for noodle production include carrots, pak choi, cabbage and spinach. Fruits that can be used include dragon fruit and beetroot. The competitive advantages of vegetable noodles include inexpensive raw materials, ease of availability, a high fibre content and health benefits. Adding vegetables or fruits results in colourful noodles. As well as being more appealing, this type of noodle has better nutritional content, which helps to meet the nutritional needs of children who dislike vegetables. Vegetable noodles are a way to increase children's vegetable intake by incorporating vegetables into noodles, and consumers will be reassured by the natural colouring from the vegetables or fruits used (Susilowati et al., 2022).

This community service activity is a training programme that provides households in the Kembangan sub-district with alternative business ideas. It is hoped that this activity will help the community to increase their household income and ultimately improve their well-being.

B. METHODS

The Community Service Programme in the Kembangan subdistrict was implemented over a period of four months. The programme aimed to encourage housewives and non-productive PKK members to become productive and improve their families' welfare, particularly that of housewives.

1. The stages and methods used in the training were as follows:

a. Social issues

Housewives who are still unproductive may face issues related to a lack of motivation to start a business. Therefore, the first stage of the programme involves socialisation around the importance of entrepreneurship and provides explanations of tips and tricks for entrepreneurship. This aims to foster motivation and enthusiasm for entrepreneurship and starting a business.



b. Production-related issues:

Limited skills in using technology to process vegetables and fruits into noodles. The production process for vegetable and fruit noodles consists of three stages: mixing, pressing and slitting. Machines are used to assist in the noodle-making process during the mixing, pressing, waving, and slitting stages, enabling faster and more hygienic production.

c. Management issues:

To generate economic value, participants are provided with training on calculating the cost of goods sold and determining the selling price.

2. Partner participation in PKM activities

The community service programme organised by the Mercu Buana University Community Service Team targets housewives and PKK members in the Kembangan subdistrict of West Jakarta. This community service activity is planned to be conducted in two sessions on 29 April 2025. The venue is Mercu Buana University and participants will be selected in collaboration with sub-district officials, including RTs, RWs and village heads, who will act as community service partners of Mercu Buana University. Partner participation in programme implementation includes providing the venue, sound system equipment, and an LCD projector.

3. Evaluation of Programme Implementation and Sustainability

The PKM team will conduct the first evaluation by preparing a questionnaire to assess participants' feedback during the activity. This evaluation aims to compare participants' situations before and after the activity. This will determine whether the programme outcomes align with the intended targets. Once the training has been completed, a further evaluation will be conducted to provide feedback and ensure the sustainability of the partnership.

Table 1. Achievement Targets

Tahap I	Tahap II	Tahap III
Partners are able to make vegetable noodles	Improving deficiencies/weaknesses in the vegetable noodle production process	Partners are able to calculate the cost of goods sold and determine the selling price.

C. RESULTS AND DISCUSSION

Training on the production of vegetable- and fruit-based noodles and their business-economic value was held for Households in the Kembangan Subdistrict was held on:

Day, date : Tuesday, 29 April 2025

Time : 08:00–12:00

Location : Mercu Buana University

This activity was attended by 30 small business owners. It aimed to provide training on processing vegetable and fruit noodles, as well as calculating the cost of goods sold (COGS) and determining profit margins. The Community Service Programme (PKM) was organised by the Faculty of Economics and Business Lecturer Team at Mercu Buana University and was attended by small business owners from the Kembangan subdistrict. The event began with

participant registration. It was then opened with a welcome speech by the Chair of the PKM Implementation Team from Mercu Buana University. The service team then delivered a presentation on making noodles from vegetables and fruits, as well as calculating COGS and determining selling prices.



Figure 1. Welcome to participants and presentation of material on noodle making

To help people understand the message and the important steps involved in making noodles from fruit and vegetables, the material was presented using PowerPoint techniques. Participants were also encouraged to ask questions about the material and the noodle-making process that would be demonstrated. Next, the noodle-making process was demonstrated, with participants actively involved. The participants were highly interested as they had never previously used fruit and vegetables in noodle production.



Figure 2. Demonstration of noodle making



The necessary tools and ingredients are: high-protein wheat flour; salt; eggs; vegetable or fruit starch water; a container or bowl; a noodle machine; a set of scales; and measuring cups. To make wet noodles from fruit or vegetables, you will need 1000 grams of high-protein wheat flour, 300 ml of fruit or vegetable starch water, two eggs and one tablespoon of salt. The dough is then rolled out using a noodle machine until it forms sheets of noodles.

It is hoped that, through this noodle-making training, small business owners will gain ideas to increase their sales and ultimately improve the welfare of the community in Kembangan Subdistrict. Based on the questionnaire distributed to participants, they understood the material and training provided, and found it beneficial for developing business ideas. Small and medium-sized enterprises (SMEs) also expressed hope that such activities could be conducted in the future.

D. CONCLUSION

This community service activity successfully increased the motivation and entrepreneurial skills of housewives and PKK members in the Kembangan subdistrict by providing training in making noodles from vegetables and fruit. The training also covered how to calculate production costs and determine selling prices, both of which are important aspects of running a household business. Evaluation results showed that participants understood the material presented, considering the activity useful and worth continuing in future. This activity has supported the achievement of key performance indicators (KPIs) and contributed to strengthening family finances and empowering women through healthy, food-based entrepreneurship.

E. ACKNOWLEDGEMENTS

We would like to express our deepest gratitude to all those who supported the implementation of this community service activity. We would particularly like to thank Mercu Buana University for providing the opportunity, financial support and guidance for this activity.

F. AUTHOR CONTRIBUTIONS

As described in this article, all team members actively contributed to every stage of the Vegetable and Fruit-Based Noodle Making Training Programme and its business-economic value for households in the Kembangan subdistrict. As team leader, Retno Puji Astuti oversaw coordination with partners, activity planning, needs assessment and the practical demonstration of making vegetable and fruit-based noodles. Fitri Indriawati coordinated activity implementation with partners. This collaborative effort ensured the programme's success, from identifying needs to evaluating impact, as detailed in this article.

G. REFERENCES

- BPS. (2023). *Kecamatan Kembangan Dalam Angka* 2024. <https://jakbarkota.bps.go.id/id/publication/2024/09/26/4ce94c2c41a0a1544f3148e6/kecamatan-kembangan-dalam-angka-2024.html>
- Hendro, J., & Arlinda S. (2020). Pengaruh Program Pengembangan Kewirausahaan Terpadu (Jakpreneur) Terhadap Omset Penjualan UMKM di Masa Pandemi COVID 19 di Wilayah Kecamatan Grogol Petamburan Jakarta Barat. *Jurnal STEI Ekonomi*, 31–43.



Susilowati, E., Masykuri, M., & Ulfa, M. (2022). *Pendampingan Produksi Mie Sayuran Kekinian sebagai Upaya Meningkatkan Penghasilan UMKM Makanan di Karanganyar Jawa Tengah*. 2(3), 1091-1098.

WINA. (2023). *Noodle Demand Ranking*.
<https://instantnoodles.org/en/noodles/demand/table/>