

Improving the Nutritional Status of Stunted Toddlers by Utilizing Local Food in Coastal Labu Beach, Deli Serdang Regency

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Abstract. Pantai Labu sub-district is one of the sub-districts located on the coast but has a high number of stunting cases, stunting cases in Paluh Sibaji village are 5 toddlers. Health problems in Paluh Sibaji village have stunting cases that are very concerning even though it has marine potential with protein sources from fish. The village has a variety of abundant fisheries and marine resources. Local food diversity has the potential to be utilised as a source of cheap and easily available nutrition. The village has an abundant variety of fisheries and marine resources. The existence of tamban fish as a local food product has a low selling price and is underutilised as a source of animal protein. This community service aims to utilise local food ingredients as a source of protein for the community. The methods used are atmosphere building, socialisation, community empowerment and the formation of family groups concerned about stunting. This community service activity produced two local food innovations, namely characterised spinach tamban fish balls and moringa leaf tamban fish sticks. Both products are processed from cheap and easily available local raw materials in the village, namely tamban fish and moringa leaves.

Keywords: local food, coastal, stunting.

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1. Introduction

The government has set stunting as a national priority issue in the 2020-2024 National Medium-Term Development Plan (RPJMN) with a target of reducing the prevalence of stunting from 24.4 percent in 2021 to 14 % in 2024 [1]. North Sumatra Province with 33 districts/cities has made every effort to achieve the target of reducing stunting cases. North Sumatra Province is included in 12 provinces as a priority locus for reducing the incidence of stunting. One of the districts in North Sumatra Province is Deli Serdang district, which experienced a decrease in stunting of only 0.5% from 2022 to 2023 [2]. Deli Serdang Regency has 22 sub-districts and 34 health centers spread across each sub-district. Since 2020 until now, it is one of the 15 districts and cities prioritized by the government to combat stunting. Based on the results of the Indonesian Nutrition Status Survey (SSGI) in 2022, the prevalence of stunting in Deli Serdang Regency was 13.9 percent [2]. Pantai Labu sub-district is one of the sub-districts located on the coast but has a high number of stunting cases, one of which is Paluh Sibaji village with 4 hamlets having a total of 60 stunting cases in Pantai Labu sub-district in 2023 [3].

Risk factors for stunting include direct factors such as consumption patterns, personal hygiene, and history of infectious diseases. Indirect factors include environmental sanitation, drinking water quality, and availability of clean water at home. Poor hygiene can increase the risk of infectious diseases [4]. Other contributing factors are parenting, child health, prevalence of infectious diseases, socioeconomic conditions, environment, and lack of clean water. Handling stunting is in accordance with the indicators of Sustainable Development Goals (SDGs) target number 3 on healthy and prosperous life, and number 6 on clean water and proper sanitation [5]

Based on the above background, a community service was carried out to improve the nutritional status of toddlers by utilizing local food on the coast of Pantai Labu. This community service was carried out by the PPK ORMAWA (Student Organization Capacity Strengthening Program) GEMASTU (Movement Against Stunting with Accurate Data and Local Food) team in Paluh Sibaji Village consisting of students from the Nutrition Science and Public Health Science programs at the University of North Sumatra.

2. Methods

This community service activity goes through the stages of the approach, namely:

a. Formation of atmosphere

Community development is carried out through discussions with village government officials, posyandu cadres, and community leaders related to the objectives of community service activities.

b. Socialization

The socialization of activities was carried out by the PPK ORMAWA team to the community through group meetings of posyandu cadres, PKK cadres and mothers who have stunting toddlers.

c. Community empowerment

This community service activity involves PKK cadres in making innovative local food sources of protein from tamban fish caught by fishermen.

d. Formation of a stunting care family group

The stunting care family group consists of PKK cadres, and mothers who have stunted toddlers as an effort to contribute to handling stunting problems, and as a communication tool to follow up on the progress of programs that have been implemented to deal with stunting.

3. Results and Discussion

Community service was carried out in Paluh Sibaji Village involving the PPK ORMAWA Team consisting of 13 students. The location of the service in hamlets I, III, and IV, the stages of implementing the service are as follows:

1. Building an atmosphere

Building harmonious cooperation with the Head of Paluh Sibaji Village, Heads of hamlets 1, 3, and 4, cadres, and the community in an effort to deal with the incidence of stunting.



Fig 1. Formation with the village head.

2. Situation analysis

Conduct a direct review of the location where the GEMASTU Team will conduct ORMAWA activities.



Fig 2. Review of the location of service activities.

3. Socialization of the GEMASTU project at the sub-district office

Building harmonious cooperation and socializing the GEMASTU program at the Pantai Labu sub-district office regarding efforts to deal with stunting in Paluh Sibaji Village.



Fig. 3. Socialization of the GEMASTU project at the Sub-District Office.

4. Socialization and Local Food Making with Cadre Mothers

The GEMASTU team together with cadre mothers made local food such as moringa leaf tamban fish sticks and spinach leaf tamban fish meatballs and tamban fish dim sum for PMT for children with stunting and local food products.



Fig. 4. Socialization and Local Food Making Cadere Mothers.

5. Socialization of GEMASTU Local Food Program in Paluh Sibaji Village

The GEMASTU team socialized the GEMASTU local food program at the Village Office Hall in Paluh Sibaji Village, which was attended by the Village Secretary, cadres, and parents of stunted children.



Fig. 5. Socialization of the GEMASTU Local Food Program in Paluh Sibaji Village.

4. Conclusion

Community service activities in Paluh Sibaji Village have succeeded in developing two local food innovations, namely characterized spinach tamban fish meatballs and moringa leaf tamban fish sticks. Both products are processed from cheap and easily available local raw materials in the village, namely tamban fish and moringa leaves. This product development aims to increase the added value of tamban fish, diversify food products, and increase public consumption of healthy and nutritious food. This activity has also improved community knowledge and skills in processing local food ingredients and developing food businesses. The community's enthusiasm for these two products is quite high, and is expected to increase community income and the village economy.

More socialization and promotion is needed to increase public awareness about the benefits and availability of fish balls and fish sticks made from tamban spinach and moringa leaves. Establish cooperation with related parties, such as fisheries and food security agencies, to assist product marketing and community business development. Conduct further training and mentoring for the community to improve product quality and diversify processed tamban fish products. Improve access to capital for the community to develop food processing businesses. Conduct further research to develop other processed tamban fish products that are economically valuable and highly nutritious.

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References

- [1] Bappenas, Rencana Pembangunan Jangka Menengah Nasional (RPJMN) 2020-2024. Jakarta, 2020.
- [2] [2] Kemenkes RI, "Buku Saku Hasil Survei Status Gizi Indonesia (SSGI) 2022," 2023. [Online]. Available: <https://kesmas.kemkes.go.id/assets/uploads/contents/attachments/09fb5b8ccfd088080f2521ff0b4374f.pdf>.
- [3] [3] S. M. Indirawati, U. Salmah, T. Ashar, A. M. Panjaitan, R. F. Ropita, and A. R. Lestari, "Analysis of Fulfillment of Four Aspects in Drinking Water and Incidence of Stunting in Coastal Areas: Case Study of Paluh Sibaji Village, Pantai Labu Sub-district," *Contag. Sci. Period. Public Heal. Coast. Heal.*, vol. 6, no. 1, 2024, doi: <http://dx.doi.org/10.30829/contagion.v6i1.19143>.
- [4] [4] A. Hasan and H. Kadarusman, "Akses ke Sarana Sanitasi Dasar sebagai Faktor Risiko Kejadian Stunting pada Balita Usia 6-59 Bulan," *J. Kesehat.*, vol. 10, no. 3, pp. 413–421, 2019, doi: 10.26630/jk.v10i3.1451.
- [5] [5] United Nations, *The Sustainable Development Goals Report 2023*. United States of America, 2023.