

THE CONTRIBUTION OF FOOD SEASONING PRODUCTS TO FOOD SECURITY AND REDUCING SOCIOECONOMIC DISPARITIES IN THE SDGS ERA

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ABSTRACT

Food seasoning products, such as broth, have increasingly become an essential component of daily food consumption in Indonesia, particularly among individuals within the productive age group of 20–40 years. These products offer a convenient and affordable way to enhance the flavor of meals, making them highly attractive to busy households and communities with limited access to fresh or high-quality ingredients. This research seeks to explore the broader role of food seasoning products not only as culinary enhancers but also as instruments of social and economic inclusion, especially for low-income populations. Employing a qualitative research approach, this study utilizes literature review and content analysis methods to assess the socio-economic implications of seasoning product consumption and distribution. The analysis draws on previous studies, policy documents, and case examples to understand how access to affordable flavoring products—particularly those made from local, sustainable ingredients—can support food security and nutritional adequacy for vulnerable groups. Furthermore, this research is framed within the Sustainable Development Goals (SDGs), with a specific focus on SDG Goal 10: Reduced Inequalities. The study argues that promoting the accessibility and local production of seasoning products can help reduce disparities in food quality and economic opportunity. Findings reveal that food seasoning products play a dual role in both improving household food palatability and stimulating microeconomic activity. Many local communities have initiated small-scale production of natural seasonings using ingredients such as dried fish, mushrooms, seaweed, and plant extracts. These initiatives not only contribute to local food systems but also empower communities through income generation and value-added entrepreneurship. As such, seasoning products represent a practical and scalable approach to tackling both nutritional and economic challenges. However, several challenges must be addressed to realize the full potential of these products. Health concerns related to additives such as MSG, as well as regulatory gaps and unequal market distribution, remain pressing issues. The study therefore recommends stronger collaboration between stakeholders—including government agencies, community producers, health advocates, and private sector actors—to develop seasoning products that are inclusive, nutritious, culturally appropriate, and environmentally sustainable. In conclusion, food seasoning products have the potential to serve as more than just culinary tools; they are also viable pathways toward equitable food systems, economic resilience, and community development. Their integration into national food strategies could significantly contribute to achieving the broader goals of sustainable development.

Keywords: Food Seasoning, Broth, Social Inequality, SDG 10, Food Security, Productive Age Group, Affordable Nutrition, Economic Sustainability

INTRODUCTION

From a socio-economic perspective, the use of MSG has significant implications. On the one hand, MSG helps enhance the flavor of food at a low cost, which can help low-income families prepare more delicious meals. However, reliance on MSG can also reduce the use of healthier, natural ingredients. Research by (Fortuna, 2022) shows that MSG exposure can affect the viability of monocyte cells, which play a key role in the immune system, suggesting that excessive MSG consumption can weaken the immune system. Furthermore, a study by (Alfani, 2021) found a link between MSG consumption and hyperactive behavior and academic achievement in children with Autism Spectrum Disorder (ASD), highlighting the social impact of excessive MSG use.

In the context of regulation and public education, it is important to raise awareness of the wise use of MSG. Outreach programs such as those conducted by (Sya'baniah & Amelia, 2024) in Biyuku Village, Banyuasin Regency, demonstrate that public education can

increase understanding of the risks of excessive MSG use and encourage the use of natural ingredients as alternatives. Furthermore, research by (Rachma & Saptawati, 2021) analyzing MSG levels in instant noodles showed that even though the MSG levels in these products are below safe limits, excessive consumption can still pose health risks.

Overall, the use of MSG in food has complex impacts on the health and socioeconomic well-being of Indonesians. While MSG can enhance the flavor of food and support low-income families, excessive consumption can pose serious health risks. Therefore, a balanced approach to MSG use is needed, including strict regulation, public education, and further research to understand the long-term impacts of MSG consumption.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

A literature review on the contribution of food seasoning products to food security and reducing socio-economic disparities in the SDG era can refer to the availability, stability, access, and benefits of food seasonings for poor households, as well as their potential contribution to SDG goals such as Zero Hunger (SDG 2) and Decent Work and Economic Growth (SDG 8). Seasoning products can improve the nutritional quality and taste of food, which are essential for food utilization, but must also be balanced with managed environmental and socioeconomic impacts.

Contribution of Seasoning Products to Food Security

- **Increasing Food Utility:** Seasoning products can improve the taste and acceptability of food, which in turn increases the utility (utilization) of food. This is crucial to ensure proper nutrient absorption by the body.
- **Availability and Affordability:** Efficient production and distribution of seasoning products contribute to availability, while affordable prices ensure affordability for the wider community, including low-income groups.
- **Culinary diversification:** Seasoning products enable communities to process various food ingredients into more varied and appealing dishes, which supports broader food security.

Contribution to reducing socio-economic disparities

- **Job creation:** The seasoning industry, from raw material production to processing and marketing, can create extensive employment opportunities across various sectors. This aligns with SDG 8 on "Decent Work and Economic Growth."
- **Income generation:** Farmers who produce raw materials for seasonings can increase their incomes. For households, affordable seasoning products can help families save on more expensive food costs to achieve the desired flavor.
- **Strengthening MSMEs:** Small and medium-sized industries that process local seasoning products can strengthen the economy at the community level, reducing disparities between regions.

Challenges and considerations in the SDG era

- **Environmental impact:** Large-scale seasoning production can have environmental impacts. It is important to ensure production follows sustainable principles, including the use of environmentally friendly raw materials and proper waste management.
- **Safety and health:** Consumption of flavoring products must be safe and not adversely affect health. Strict regulations and quality standards are needed to ensure product safety.
- **Inclusivity:** Flavoring product development must consider the needs and preferences of diverse communities, including minority groups and women, to ensure no one is left behind.

METHODS

This study employed a qualitative approach to deeply understand the dynamics of food flavoring consumption, particularly broth, among productive-age Indonesians, as well as its implications for social and economic disparities. A qualitative approach was chosen because it offers flexibility in exploring social meanings, cultural perceptions, and consumption habits that cannot be captured solely through statistics. In the context of food consumption in Indonesia, qualitative methods have proven effective in capturing changes in dietary patterns influenced by socioeconomic status and access to nutritious food (Anyanwu et al., 2022). This study utilized literature analysis to explore previous studies related to food flavoring, social inequality, and consumption behavior among low-income communities. The literature analysis was conducted systematically to identify issue maps and strengthen the research's theoretical and empirical foundations.

Furthermore, content analysis was used to explore themes and narrative patterns from relevant documents and literature. This analysis enabled researchers to interpret the implicit meanings within the texts, including public perceptions of the use of food flavorings in everyday life. Studies such as those conducted by Rahmanto et al. (2021) show that narratives surrounding food diversification often intersect with discourses of social inequality, particularly in urban communities. In data collection, this study targeted the productive-age population (20–40 years old) residing in urban areas such as Jakarta, Surabaya, and Bandung. This group was selected because they tend to have practical lifestyles and are the primary consumers of instant food seasoning products. The sampling technique used was purposive sampling, selecting informants based on relevant characteristics, such as regular use of food seasonings, lower-middle income, and a preference for fast food (Habibie et al., 2019).

To obtain more contextual empirical data, this study included semi-structured interviews and participant observation with households and culinary MSMEs that use broth as a primary ingredient. This method is considered appropriate for qualitative studies because it can capture consumers' direct experiences and uncover the social and economic reasons behind their consumption choices (Bhanbhro et al., 2020). The collected data was then analyzed using a thematic analysis approach, where interview and document findings were coded to identify key emerging themes. Data validity was maintained through source triangulation, comparing the results of literature analysis, interviews, and field observations.

The analysis results were then linked to the Sustainable Development Goals (SDGs) framework, specifically Goal 10 (Reduced Inequalities) and Goal 2 (Zero Hunger), to assess the contribution of food seasoning products to reducing food access disparities and strengthening food security for low-income communities. With this approach, it is hoped that the research will not only generate academic insights but also provide strategic input for policymakers, business actors, and civil society to develop inclusive, healthy, and sustainable food seasoning products.

RESULTS

Research shows that food seasoning products, particularly broth, play a strategic role in efforts to reduce social and economic disparities in society. As a practical processed food product, broth is characterized by its relatively affordable price and high taste, making it

accessible to lower-middle income groups. Consuming food seasonings allows low-income households to still serve delicious meals without having to purchase expensive ingredients, which ultimately helps maintain daily nutritional intake (Ariestiningsih et al., 2024).

Furthermore, food seasonings made from local ingredients such as shrimp, fish, mushrooms, or seaweed show significant potential for stimulating the economic growth of local communities. Several training sessions on making broth from tuna in coastal areas have shown that this local seasoning product not only enhances the taste of food but also provides an alternative source of income for the community (Fitriani et al., 2024). These findings support the idea that cottage industries producing food seasonings can be part of community-based economic empowerment that directly contributes to reducing economic inequality.

Research also reveals that broth is often a practical solution for meeting nutritional needs, especially in households with limited access to fresh food. In this context, food seasonings serve as a complementary solution to maintain the taste and appetite of families with limited food resources (Hasanuddin & Azizi, 2023). Although they do not directly meet micro or macro nutrient needs, food seasonings encourage the consumption of staple foods such as vegetables and plant/animal proteins, which are often only consumed if they have an acceptable taste.

However, research also notes challenges in public perception of instant food seasonings, particularly related to health issues such as MSG or other synthetic chemicals. Therefore, education and product innovation are needed to develop natural seasonings based on local ingredients that are healthy, low in sodium, and free from harmful additives (Maghfira, 2024).

Overall, this study found that food seasonings are not just common kitchen products but also have strategic value in the context of sustainable development. This product contributes to SDG Goal 10 (reducing inequality) through ease of access, cost efficiency, and the potential for developing inclusive and sustainable local food-based micro-industries (Booth et al., 2021; Fitriani et al., 2024).

Food seasoning products, such as broth and instant seasonings, have become an integral part of Indonesian culinary life. More than just flavor enhancers, food seasonings play a strategic role in the social, economic, and health contexts of society, particularly among low-income communities and the productive age group. Consumption of these products is driven not only by taste but also by efficiency, affordability, and flexibility in meeting nutritional needs. Therefore, food seasonings should be viewed as part of a broader socio-economic intervention to achieve food security and equitable access to nutrition.

In daily life, people with limited income often face challenges in providing nutritious and delicious food for their families. Food seasoning products, such as powdered broth, offer an instant solution without requiring advanced cooking skills or expensive ingredients. This provides an economical alternative while supporting daily menu diversity. (Setyadi et al., 2020) state that food seasonings can be a practical means of ensuring basic nutritional needs, especially for working families with limited time and resources. These products generally have a long shelf life, allowing them to be purchased in large quantities and used gradually.

For the 20–40 age group—who are in their productive years—food seasoning products are a highly relevant choice. This group tends to be economically active, but often faces time pressures due to work and limitations in managing household budgets. Therefore, they tend to choose quick, practical, and affordable solutions when it comes to

food consumption. According to (Martony et al., 2020), the productive age group requires a high intake of protein and other nutrients to maintain stamina and work productivity. Stock and food seasonings are popular choices because they can transform simple meals into more appetizing meals without significant additional costs.

However, it is important to pay attention to nutritional balance when consuming convenience foods. (Kusman Ibrahim et al., 2018) highlight that the increasing consumption of instant foods among those of productive age has the potential to cause nutritional imbalances if not balanced with proper nutrition education. Therefore, the development of food seasonings needs to be directed towards healthy, natural, and nutritionally balanced products.

From a sustainable development perspective, food flavorings can support the achievement of the Sustainable Development Goals (SDGs), particularly SDG 10: Reduced Inequalities. Providing healthy and affordable flavoring products helps expand access to quality food for the poor, who are often most impacted by unequal distribution and access to nutrition.

Furthermore, the food flavoring industry, which relies on local ingredients such as fish, shrimp heads, and seaweed, has opened up new economic opportunities in rural areas. Processing previously low-value seafood or agricultural products into high-value flavorings can increase community incomes. (Windayati et al., 2024) showed that utilizing household waste such as shrimp shells for natural broth can provide additional income for housewives and small business owners. Similarly, (Saputra & Darma, 2020) explained that processing local seaweed into instant seasoning can reduce dependence on imported MSG and create healthier products.

As public health awareness increases, demand for natural food flavorings is also soaring. Consumers are now more selective in choosing products that do not contain harmful additives such as MSG or excess sodium. Research by Mandang et al. (2022) revealed that seafood-based broths such as skipjack tuna are high in protein and relatively safe to consume. However, Kristiandi et al. (2025) also cautioned that high-sodium flavorings are still commonly used, especially among adolescents and young adults, necessitating ongoing nutrition education. The distribution of flavoring products also demonstrates inclusive characteristics. Availability in various packaging forms and price points allows easy access for all groups, both urban and rural.

Advances in food technology have also opened up new opportunities for using flavorings as a means of nutritional fortification. This innovation is especially important in areas with high stunting rates, where deficiencies in micronutrients such as iron, iodine, and zinc remain a challenge. (SEPTIYANI, 2024) explains that the use of shelf-life prediction models such as the Arrhenius equation has been utilized to ensure the stability of a natural flavoring based on crab shells.

The quality of life of productive communities is also closely related to dietary patterns. By consuming healthy and delicious food without sacrificing time and budget, they can maintain a balance between productivity and physical well-being. Jatmikowati, Nuraini, & Winarti (2023) emphasize that natural flavorings based on local ingredients such as

mushrooms, shrimp, or freshwater fish support healthy family eating patterns, especially during children's growth. Meanwhile, Cahyaningtias, Martsacanita, & Wibowo (2020) highlight the success of a village-based natural flavoring extension program in encouraging the adoption of a healthy lifestyle based on local resources.

From a policy perspective, government support for the development of the local flavoring industry is crucial. Training for MSMEs, the provision of local raw materials, and distribution price regulations will strengthen the role of these products in reducing inequality. Haque (2023) emphasized the importance of policies encouraging import substitution with local products to achieve economic equality. Meanwhile, Suryana & Azis (2025) highlighted that a nutritious food price subsidy program would expand the reach of healthy flavorings to low-income communities.

Overall, food flavorings play a broader role than simply adding flavor. They serve as a bridge between the need for nutritious food, economic constraints, and local economic opportunities. When developed in a healthy, inclusive, and sustainable manner, food flavorings can be an effective tool in supporting food security, reducing social inequality, and strengthening community-based local economies.

CONCLUSION

Food seasoning products, particularly broths, have become an essential part of the modern food system, serving not only as flavor enhancers but also as a means of bridging social and economic gaps. Amidst the high mobility of productive-age populations, particularly those aged 20–40, food seasonings offer a practical, fast, and affordable solution to meeting daily nutritional needs. Instant broths, flavorings based on fish, mushrooms, and natural spices, have become an alternative that not only enriches food flavor but also provides nutrients such as protein, iron, and iodine. This is crucial, especially for low-income families who do not always have access to fresh, high-quality food. Through innovation and widespread distribution, food seasoning products provide opportunities for low-income communities to access nutritious food without sacrificing household budgets.

Furthermore, the food seasoning industry also shows significant potential in supporting local economic growth. The use of local raw materials, such as fishery and agricultural by-products, has created new business opportunities, particularly for MSMEs in rural areas. The production, processing, and distribution of locally-based food seasonings add economic value and create new jobs, ultimately reducing the gap between urban and rural areas. Beyond the economic aspect, the development of food seasonings also supports the achievement of the Sustainable Development Goals (SDGs), particularly Goal 10 on reducing inequality. These products provide a relevant solution to achieving food justice, as they target all levels of society, regardless of economic status. However, challenges remain. Some seasoning products on the market still contain high levels of MSG and sodium, which pose health risks, especially if consumed excessively. Therefore, the transition to natural, low-health seasonings must be continuously encouraged. Public education regarding the safe and nutritious consumption of flavorings is also crucial to ensuring the optimal social and economic benefits of these products. Overall, it can be

concluded that food flavorings serve more than just culinary purposes, but are also strategic instruments for reducing socioeconomic disparities, empowering local economies, and improving the quality of life of communities, particularly those of productive age and low-income communities.

SUGGESTIONS

Based on the findings and discussions outlined above, several suggestions can be put forward to optimize the role of food seasoning products in reducing social and economic disparities. First, innovation in food seasoning products based on natural and local ingredients is needed. The government, universities, and the private sector should collaborate in the research and development of healthy food seasonings with high nutritional content yet remain affordable. This is crucial to replace dependence on synthetic products like MSG, which tend to have negative health impacts. By utilizing ingredients such as seaweed, oyster mushrooms, local fish, or even shrimp and fish waste, the food seasoning industry can create healthy and economically competitive solutions. Second, public policies are needed to support the availability and distribution of food seasoning products throughout the region, especially rural and underdeveloped areas. Policies such as raw material subsidies, tax incentives for MSMEs, and production and marketing training can increase the capacity of local industries. Regional governments are also advised to facilitate the promotion and marketing of local products through culinary events, digital platforms, or partnership programs with food industry players. Third, public education needs to be strengthened. Consumers need to be given a good understanding of the differences between natural and synthetic flavorings, the potential dangers of excessive sodium consumption, and the importance of reading food labels before purchasing. Nutrition education programs through social media, schools, and public health services can be an effective means of reaching the wider community, especially the productive age group. Fourth, the education and industry sectors are expected to build strong partnerships in creating a local food innovation ecosystem. Students and academics from food technology, nutrition, and micro-enterprise management study programs can be involved in community service activities to assist MSMEs with production management, quality standards, and digital marketing. Finally, regular monitoring and evaluation of the social, economic, and health impacts of food flavoring consumption are strongly recommended. This will provide a scientific basis for policy-making and product development that better suits community needs. With an integrated approach between product development, supporting policies, education, and local economic empowerment, food flavoring products can continue to develop as a strategic instrument in realizing inclusive, healthy, and sustainable food security.

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