



Print ISSN: 1738-3110 / Online ISSN 2093-7717
JDS website: <http://www.jds.or.kr/>
<http://dx.doi.org/10.15722/jds.21.10.202310.21>

Enhancing the Distribution of Community Enterprise Entrepreneurs through Product and Packaging Development of Klong Kone Shrimp Paste (Mesopodopsis) in the Post-Pandemic Era of Samut Songkhram Province

Panida NINAROON¹, Cholpassorn SITTHIWARONGCHAI², Chumpol RODJAM³, Preecha KHAMMADEE⁴,
Pawintana CHAROENBOON⁵

Received: August 03, 2023. Revised: September 24, 2023. Accepted: October 05, 2023.

Abstract

Purpose: The current study focused on developing Klong Kone Shrimp Paste (Mesopodopsis) products and packaging, aiming to enhance the capabilities of entrepreneurs with cultural capital in post-pandemic Samut Songkhram Province. **Research design, data and methodology:** This study sought to analyze product and packaging issues and examine packaging expectations for Klong Kone shrimp paste. A combination of quantitative and qualitative methods was used, including a questionnaire administered to a sample of 400 individuals who purchased community enterprise products. Descriptive analysis, involving percentage, mean, and S.D., along with qualitative analysis through phenomenological methods, such as in-depth interviews and focus groups, were conducted with community enterprise entrepreneurs, experts, and customers. **Results:** The findings indicate that addressing product conditions and packaging issues with Klong Kone shrimp paste can be achieved by incorporating an attached label on the community product packaging. **Conclusion:** This approach is necessary due to the lack of community identity reflection and unattractive design, which currently deter customers from considering the products as souvenirs. Additionally, diversifying product offerings is recommended to better align with consumer needs. In terms of packaging expectations, a majority of respondents expressed a strong preference for an attractive appearance.

Keywords : Product and Packaging Development, Packaging Distribution, Shrimp Paste

JEL Classification Code : M10, M20, F10

1. Introduction

In the current era of technology and globalization, businesses confront intense competition in the economic

and market spheres, resulting in "hyper competition" (Davini Richard, 2004). Consequently, manufacturers on a global or local scale are compelled to differentiate their products by emphasizing their distinctive qualities.

* This study was supported by Suan Sunandha Rajabhat University

1 First Author. Lecturer, Innovation in Human Capital and Entrepreneurship Management, College of Innovation and Management, Suan Sunandha Rajabhat University, Thailand. Email: panida.ni@ssru.ac.th

2 Second Author. Lecturer, Management Innovation in Human Capital, College of Innovation and Management, Suan Sunandha Rajabhat University, Thailand. Email: cholpassorn.si@ssru.ac.th

3 Third Author. Lecturer, Management Innovation in Human Capital, College of Innovation and Management, Suan Sunandha Rajabhat University, Thailand. Email: chumpol.ro@ssru.ac.th

4 Fourth Author. Lecturer, Business Administration, College of Innovative Management, Valaya Alongkorn Rajabhat University Under the Royal Patronage, Thailand. Email: preecha.kham@vru.ac.th

5 Fifth Author. Lecturer, Business Administration, School of Interdisciplinary Studies, Mahidol University Kanchanaburi Campus, Kanchanaburi. Email: pawintana.cha@mahidol.ac.th

© Copyright: The Author(s)

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/4.0/>) which permits unrestricted noncommercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

Entrepreneurs must also focus on enhancing the value of their products through branding, packaging, and other strategies. One of these challenges is the development of marketing strategies that accurately assess consumer requirements, allowing for the expansion of both domestic and international markets. Also, it is essential to improve access channels via electronic media, utilizing them as platforms for business promotion and consumer engagement. To extend product expiration life, guarantee product usability, and protect product quality, it is necessary to develop and certify products and offer a variety of packaging options. Attractive packaging is essential for communicating product identity and maintaining local contextual relevance. To support the growth of community enterprises, the government is dedicated to promoting and developing them gradually, with a particular focus on elevating standards (Parinyasutinun, 2017).

Through consumer utility, brand equity creates brand value, while competitiveness (market share) is dependent on product characteristics that influence brand value. (Winzar et al., 2018) Branding and packaging are universally acknowledged as integral aspects of any product's manufacturing process. Developing these characteristics is essential for distinguishing a product from competitors. When a consumer purchases a product or service, he or she receives both tangible and intangible elements, such as trademark characteristics, physical appearance, packaging, and labeling. These elements connect the product with the consumer, generating value and enhancing the overall product experience (Kotler & Armstrong, 2014). Packaging is an effective means of communicating with consumers, subtly conveying messages and functioning as a "silent salesman" (Sara, 1990). The proprietor of a product can effectively reach consumers through packaging, as packaging can serve as advertising or a persuasive sales representative to attract consumers to the product.

The expansion of the global environmental conservation movement has increased the importance of paper packaging made from readily biodegradable plant materials. As the demand for paper increased, however, it became evident that the unsustainable use of timber resources would lead to depletion. To ensure a sustainable future, it is essential to adopt sustainable development principles and prioritize tree planting initiatives. Packaging functions not only as a means of product containment, but also plays a crucial role in establishing the product's unique, recognizable, and marketable characteristics. The packaging should reflect the lifestyles of consumers, offering convenience and meeting their preferences. Consumers typically favor unique products or brands (Zhou, 2010). Consumers have diverse ideas, perceptions, and methods for gaining access to products, each with a distinct perspective. However, consumers' purchasing decisions are significantly

influenced by their desire for uniqueness and compatibility with their own preferences. Packaging can influence consumers (Butkevicien, 2008) by communicating persuasive messages, news, and labels that leave an enduring impression. This ability to distinguish itself from competitors distinguishes the product on the market.

The former mangrove forest of Ban Klong Kone experienced human encroachment spurred by the search for employment opportunities, particularly in shrimp farming and other industries. As a result, the region experienced a decline in fertility, which depleted coastal marine resources and rendered coastal fisheries unsustainable. This circumstance compelled the local populations to migrate in quest of employment elsewhere. In 1991, however, Paiboon Ratanapongthara, also known as Headman 'Chong,' and a group of local residents collaborated to restore the mangrove forest to its original condition. Initial restoration efforts encountered a number of operational obstacles, which hindered the project's success. Subsequently, the community began collaborating with the government on the preservation of natural resources, recognizing their significance. The commitment of Her Royal Highness Princess Maha Chakri Sirindhorn, who personally replanted the Klong Kone mangrove forest for five consecutive years (1997, 1998, 1999, 2002, and 2004), added to the significance of the mangrove forest. As a result of these conservation efforts and the ensuing resurgence of aquatic life along the coast, the mangrove forest gradually regained its abundant natural resources, allowing fishermen to resume their occupation.

The abundant natural resources of the community paved the way for the growth of ecotourism, prompting the villagers to establish specialized groups based on their skills and knowledge. These groups included boat crews, culinary teams, Krateng groups, and artisans who created one-of-a-kind souvenirs. Among these disparate offerings, Klong Kone shrimp paste stood out as a product that exemplified the community's character and utilized its local resources. Crafted with care using traditional techniques, the shrimp paste displayed the culinary heritage of the community and the flavors of the marine environment. By embracing the production of Klong Kone shrimp paste, the community not only generated income and sustained their way of life, but also shared their story and flavors with tourists, thereby creating a treasured souvenir. This product exemplifies how the community utilized its natural resources, cultural heritage, and expertise to create a sustainable and distinctive offering that demonstrates their tenacity and creativity in the face of ecotourism opportunities.

Given the aforementioned factors, which indicate a growing demand for community products, the research team undertook a study to enhance the capacity of community enterprise entrepreneurs in post-pandemic Samut

Songkhram Province through product and packaging development of Klong Kone Shrimp Paste (Mesopodopsis). The purpose of this study was to investigate various aspects of community enterprise products, concentrating on product development, branding, and packaging. To accomplish this, a combination of mixed-methods research, research, and development (R&D), and participatory action research (PAR) approaches were utilized, with a focus on the active participation of local stakeholders and deriving inspiration from successful community practices. The packaging played a crucial role in influencing consumers' purchasing decisions by effectively communicating the value proposition of the product.

Furthermore, it is essential to note that packaging has a substantial impact on the price of the product. It is essential to design visually enticing packaging that reflects both the unique qualities of the product and the local characteristics. This involves the development of innovative and eco-friendly packaging solutions. In addition, the brand design should effectively incorporate the brand name, wordmark, and symbol, ensuring a visual representation that is cohesive and harmonious. Strong brand identity distinguishes the product from competitors and establishes a distinct market presence. Branding that is effective leaves an enduring impression on consumers, fostering a connection with the product and influencing purchasing behavior. This is especially pertinent in the context of community products, where positive attitudes, repetitive purchases, and brand loyalty can be fostered, ultimately benefiting community enterprise entrepreneurs by generating sustainable income and influencing future consumer choices.

2. Literature Review

Shrimp paste, a staple of Southeast Asian cuisine, has achieved international acclaim for its distinct flavor and adaptability. This review of the literature goes into the complex world of shrimp paste, looking at both product development and novel packaging options. The assessment focuses on the issues of keeping product quality, safety, and shelf-life while retaining its genuine flavor. It also investigates the sustainability of packaging materials, highlighting their environmental impact follow;

2.1. Product and Packaging Issues of Shrimp Paste

Mahayothee found that the active packaging effectively extended the shelf-life of shrimp paste by inhibiting microbial growth and delaying the onset of spoilage. This is particularly important for products like shrimp paste, which are susceptible to microbial contamination. Moreover, a key component of the active packaging, is derived from seafood

waste, making it a sustainable and environmentally friendly choice for packaging materials. This aligns with the growing emphasis on sustainable packaging solutions in the food industry. (Mukem, 2017) The production techniques of modern shrimp paste production methods. These methods involve improvements in hygiene, processing, and packaging to enhance the product's safety and shelf-life while preserving its authentic taste. (Boonkong et al., 2021) Packaging is critical in the distribution of shrimp paste, assuring product quality, safety, and attractiveness to customers. Selecting the right packaging for shrimp paste is essential to maintain product quality, safety, and consumer appeal during distribution. The choice of packaging should align with your brand identity, sustainability goals, and the specific needs of your target markets. Additionally, well-designed packaging provides consumers with vital information, including storage instructions, ingredient details, and branding elements, contributing to a positive consumer experience. A useful resource for understanding the many packaging options available for marine goods, particularly shrimp paste. It emphasizes the significance of using proper packaging materials and processes to preserve product quality and extend shelf life throughout distribution. Furthermore, it emphasizes the growing importance of sustainability in seafood packaging, which reflects broader food sector developments (Smith et al., 2018). Garcia and Martinez (2018) provide a detailed examination of innovations in packaging for seafood distribution, shedding light on advancements applicable to shrimp paste and other seafood products. The study explores emerging packaging materials, technologies, and their impact on the seafood industry. The dynamic world of seafood packaging innovations, including those relevant to shrimp paste. It emphasizes the importance of selecting appropriate packaging materials and technologies to ensure product quality and safety during distribution. Additionally, it recognizes the growing significance of sustainability and the potential for packaging to engage consumers and enhance their seafood consumption experiences. So, the innovative packaging approach addresses critical challenges in preserving seafood-based products and aligns with sustainability goals. Food manufacturers and researchers can consider these findings when exploring packaging solutions for extending the shelf-life of perishable food products while minimizing environmental impact.

2.2. The Expectation of Packaging of Shrimp Paste

The future of plastics, it emphasizes the urgency of addressing plastic pollution and promoting sustainable practices while highlighting the potential for economic and environmental benefits through circular approaches. This

report has had a significant impact on global efforts to reduce plastic waste and transition to a more sustainable plastics economy. (Ellen MacArthur Foundation, 2019) The consumer preferences and willingness to pay for sustainable packaging attributes using a choice experiment approach. The increasing relevance of sustainability in consumer decision-making and the possibility for firms to exploit sustainable packaging as a competitive advantage. Understanding consumer preferences and willingness to pay can help companies produce products and packaging that correspond with consumer values and environmental concerns (Herrmann et al., 2022). The urgent need for sustainable packaging materials in the food industry and highlights the specific challenges and opportunities associated with seafood packaging. It emphasizes the importance of considering scientific evidence, environmental impact, food safety, and consumer acceptance in the selection and implementation of sustainable packaging solutions. The study serves as a valuable resource for researchers, policymakers, and industry professionals seeking to make informed decisions about sustainable packaging in the context of seafood and beyond (Janssen et al., 2021).

Branding and packaging are critical in attracting customers and increasing profitability. Local community enterprise entrepreneurs, on the other hand, encounter difficulties in this regard. To address this, the current study focused on developing Klong Kone Shrimp Paste (Mesopodopsis) products and packaging, aiming to enhance the capabilities of entrepreneurs with cultural capital in post-pandemic Samut Songkhram Province.

3. Research Objectives

This study's objective is to investigate the product conditions and packaging aspects of Klong Kone shrimp paste, as well as the packaging expectations for this renowned product. By delving into these areas, the research aims to obtain a thorough understanding of the quality and presentation of Klong Kone shrimp paste, address any potential problems, and identify opportunities for improvement. Considerations such as community identity reflection and aesthetic allure will be factored into the analysis of the current product and packaging conditions. The research will also endeavor to comprehend the preferences and anticipations of consumers regarding the packaging of Klong Kone shrimp paste. By conducting a comprehensive investigation, this study aims to contribute knowledge that can be used to improve the overall quality, marketability, and consumer satisfaction of this unique product.

4. Research Methodology

This research and development study utilized both qualitative and quantitative research methodologies. Quantitative research relied on questionnaires to collect data, whereas qualitative research relied on in-depth interviews and focus groups.

4.1. Population and Sample

4.1.1. Key Respondents for Quality Research

To investigate the issues surrounding Klong Kone shrimp paste, the researcher thoroughly selected 30 influential participants. This heterogeneous group was comprised of community enterprise entrepreneurs, community members, and community leaders from the province of Samut Songkhram.

4.1.2. Quantitative Research Population

The population utilized in this study was a random sampling of 400 consumers of local community products used in quantitative research because a questionnaire was used to collect data for this study. Therefore, the population was used as a sample for the research. Consequently, the sample size was calculated based on the criteria for determining the sample size using the tables of Crazy and Morgan (Krejcie & Morgan, 1970).

4.2. Data Analysis

The quantitative data analysis centered on various characteristics of the sampled population, including gender, age, marital status, level of education, occupation, monthly income, and family size. To synthesize personal data, descriptive statistics such as percentages and frequencies were employed. In addition, descriptive statistics, namely the mean and standard deviation (S.D.), were employed to evaluate the demand for local products. The quantitative analysis findings were then presented in a descriptive format.

5. Results

Based on the research objectives, the findings are reported below.

5.1. Product and Packaging Issues of Klong Kone Shrimp Paste

5.1.1. Community Local Culture

The "Klong Kone Ecotourism Club" collaborated to revive coastal fisheries ecotourism activities, which

included the Krateng group (in the midst of the sea), the boatman group, and the cooking group, among others. The primary objectives were to generate additional income for residents and promote travel opportunities at an affordable price. In addition to providing benefits, entertainment, and education, these events fostered a sense of camaraderie among conservation-minded participants.

The opportunity to explore the ocean, observe nature, experience the local fishermen's way of life, and participate in mangrove planting activities drew tourists to Ban Klong Kone. The highlight was an exhilarating excursion aboard a long-tailed boat, which could accommodate approximately five people per boat. This journey traversed local fishing sites and a captivating mangrove forest. The expansive mangrove forest, which encompassed more than 2,000 hectares, was meticulously planted, and artfully aligned. Mangrove tourism, a form of ecotourism, provided visitors with the opportunity to investigate the canal mangrove forest, which was surrounded by an abundance of natural beauty. Tourists had the opportunity to feed primates and learn about the local fishing practices, including the cultivation of cockles, mussels, and oysters, which could be visited in the evening. Those interested in an intimate encounter with nature could spend the night at Home Krating.

The members of the community took great pride in their environment and had extensive knowledge of its valuable resources. They recognized the significance of developing local resources, whether natural capital, cultural capital, or human capital, in order to generate economic value. Equally crucial was the community's capacity to share its local culture with tourists, thereby guaranteeing its perpetuation and transmission to future generations.

5.1.2. Community Identity

Klong Kone's tourist attractions offer a variety of activities to accommodate the preferences of a wide range of tourists. These include opportunities to explore the fascinating mangrove ecosystem, observe and interact with macaques, gain insights into the local villagers' way of life, engage in mud skiing, collect cockles, participate in shrimp catching using shrimp push netting for the production of Klong Kone shrimp paste, dine on local seafood on a floating basket in the middle of the sea, visit a mussel farm, and contribute to mangrove reforestation. These distinct and enticing activities set Klong Kone apart and attract tourists to this remarkable destination.

5.1.3. Community-highlighted Products

In Thai cuisine, shrimp paste plays a crucial role, and Klong Kone in Samut Songkhram Province is home to the finest variant. This exceptional shrimp paste is prepared with Mesopodopsis harvested from Mae Klong Bay's coast. The preparation of shrimp paste has become a profoundly

ingrained culinary tradition in Thai culture. A plentiful source of Mesopodopsis can be found in Klong Kone. This creature resembles a shrimp and can be distinguished by a minuscule black dot near its eyes.

Mesopodopsis is captured using a traditional instrument known as "lawa" by local fishermen. The lawa consists of a blue net bag with a wide opening and a narrow bottom that is affixed to a drifting wooden trap. During low tide, the entrance of the lawa is oriented toward the shore to facilitate shrimp net shoving. The harvested Mesopodopsis must be meticulously cleaned before being combined with marine salt and then dried. To prevent the shrimp, paste from spoiling before it is available for sale, cleanliness must be strictly adhered to at every step.

Klong Kone shrimp paste is distinguished by its ideal balance of salinity and aroma. True, high-quality shrimp paste is made solely from Mesopodopsis and does not contain additives such as flour or fish, which are less expensive and have distinct flavors. Authentic Mesopodopsis shrimp paste can be identified by its natural reddish hue. When spread, the paste exposes tiny black dots embedded within, along with a pleasant aroma.

5.1.4. Condition of Packaging Design

Furthermore, the business intended to expand its product line to meet consumer demands. This expansion is included in their future plans, which also include the introduction of packaging options for selling products in pairs. Not only should the design of the labels convey the essence of the community's culture, but it should also reflect the nature of the product.

The majority of respondents emphasized the significance of a conspicuously displayed brand name, a phone number, and detailed product information, all presented in a manner that is consistent with the local culture. The use of vibrant colors has the potential to attract the attention of consumers. The proposed new design is an excellent representation of Klong Khon shrimp paste given that the Klong Kone Sub-District Mangrove Forest Conservation Center is frequented primarily by youthful and middle-aged individuals who value conservation efforts.

5.1.5. Goals of Packaging Development

The manufacturers sought to create an appealing label while adhering to their initial budget and assuring the product's appeal to the intended consumer groups. However, because the current label design lacked aesthetic appeal, potential consumers decided not to purchase the product. Additionally, the manufacturers wanted to promote the use of local resources and the cultural significance of the community by incorporating local wisdom into the production process, thus bolstering advertising and public relations efforts for local tourism attractions.

The majority of respondents indicated a preference for the original plastic box packaging due to its affordability, portability, and light weight. As a result, the researcher created an alternative packaging design for future consideration. This design consisted of a round glass container with a 300-gram lid, which would provide consumers with more quantity options. This smaller dimension would also accommodate the majority of respondents who desired a compact souvenir that is easy to transport. Moreover, the glass vessels would aid in preserving the quality of the shrimp paste. After the shrimp paste had been consumed, the glass jars could be reused for other purposes.

5.1.6. Packaging Inserts

The manufacturers of the product recognized the need for meticulous packaging and labeling design. Additionally, they intended to incorporate brand names and names of raw materials that would showcase the local cultural significance, emphasizing quality and property details. They desired an attractive design that would distinguish their product and evoke a sense of community.

Three distinct categories emerged after analyzing label and packaging development guidelines: 1) simple design, 2) credibility design, and 3) contemporary design. These categories provide a framework for decisions regarding packaging design and development.

5.2. The Expectation of Packaging of Klong Kone Shrimp Paste

5.2.1. Demographic Data

Analysis of consumer data for local products, categorized by sample group characteristics, revealed that the majority of consumers were female. Out of the total sample size, 302 individuals, representing 72.50%, were female, while 198 male consumers accounted for 27.50%.

The analysis of local product consumers' age demographics showed that the majority fell within the 21-30 age range, comprising 55.25% of the total. The next significant age group was 31-40, accounting for 12.75%, while individuals over 50 made up 12.00% of the consumer base.

Regarding the educational background of local product consumers, the analysis depicted that the majority, or 74.50%

of the total, held a bachelor's degree. The next significant category consisted of individuals with less than a bachelor's degree, comprising 22.25% of the population. 3.25% of the sample was comprised of consumers with a post-bachelor's degree.

The analysis of the occupations of local product consumers revealed that students made up the largest category, comprising 36.25% of the total. Employees made up the next-largest segment, accounting for 34.75% of the total. The self-employed made up 23.75% of the total consumer population.

Regarding average monthly income, the analysis revealed that 46.75 % of local product consumers fell within the range of 20,001 to 30,000 baht. The group with incomes between 10,001- and 20,000-baht accounted for 22.25% of the population. On top of that, individuals with incomes below 10,000 Thai Baht represented 21.75% of the consumer base.

The analysis of marital status among local product consumers revealed that the majority was single, accounting for 84.00% of the total. The next significant group was comprised of married individuals, accounting for 14.50%. Lastly, there was a small percentage of consumers categorized as "others," accounting for 1.00%.

The local product consumers who participated in the survey were classified based on the type of local product, the price range, and their purchasing intentions. They were given the freedom to choose multiple options. The findings are outlined below:

Type of local product: The majority of local product consumers preferred food products, with a total of 386 people. The second most preferred type of local product was agricultural products, which included ingredients that had undergone basic processing. This category was favored by 374 people. Following that, there was a preference for processed food, convenience food, and delicatessen, with a total of 324 people.

Price range: It was found that there were 356 consumers who bought local products priced 1–199 Baht, followed by the price range 200–399 Baht, with 235 consumers, and 400–599 Baht, with 124 consumers.

Purchasing purposes: 385 consumers bought the products as souvenirs or gifts, and 324 consumers bought the products for personal consumption.

5.2.2. The Expectation of the Packaging of Klong Kone Fermented Shrimp Paste

Table 1: Analysis of packaging expectations for Klong Kone shrimp paste

No.	Questions	Mean	S.D.	Opinion level
1. Main usage benefits				
1	The product has benefits and meet your needs.	4.26	.677	Very high
2	There are various sizes of products, which can be selected based on their use.	4.15	.869	High

No.	Questions	Mean	S.D.	Opinion level
3	The product and packaging have standards that meet product characteristics.	4.05	.820	High
4	The packaging is consistent with the product and convenient to use.	4.34	.661	Very high
5	The packaging helps maintain the quality and integrity of the product.	4.30	.650	Very high
Total: Main usage benefits		4.22	.596	Very high
2. Packaging appearance				
6	The product has a clean and safe appearance.	4.37	.626	Very high
7	The packaging can keep the product safe.	4.26	.677	Very high
8	The packaging structure is standardized and designed for practical use.	4.16	.728	High
9	The packaging can include product information.	4.29	.685	Very high
10	The packaging design is attractive as well as suitable for the product.	4.24	.741	Very high
Total: Packaging appearance		4.26	.549	Very high
3. Response to expectation values				
11	The price is suitable for the quality and quantity of the product.	4.26	.816	Very high
12	Unique product and packaging can enhance your perception of value.	4.15	.790	High
13	The product and packaging are unique.	4.14	.801	High
14	The product and packaging can demonstrate community culture.	4.15	.838	High
15	The product and packaging can demonstrate community participation.	4.19	.773	High
Total: Response to expectation values		4.18	.699	High
4. The potential for further development				
16	The product uses locally sourced raw materials.	4.09	.687	High
17	The product contains natural ingredients.	4.16	.779	High
18	The product and packaging have the potential for further development to adapt to current situations.	4.14	.801	High
19	The product has the ability to generate economic creativity and promote circular economy.	4.12	.744	High
20	The packaging can be designed to reflect the cultural values of the community while also being eco-friendly.	4.14	.768	High
Total: The potential for further development		4.13	.623	High
Total		4.20	.548	High

From Table 1, the expectation level for developing local products and packaging was high ($\bar{x} = 4.20$, S.D. = .548). After considering each aspect, it was found that the packaging appearance had the highest level of opinion ($\bar{x} = 4.26$, S.D. = .549), followed by the main usage benefits ($\bar{x} = 4.22$, S.D. = .596), the response to expectation values ($\bar{x} = 4.18$, S.D. = .699), and the potential for further development (Mean = 4.13, S.D. = 0.548), respectively.

6. Conclusions

This study investigated the product conditions, packaging aspects, and expectations surrounding Klong Kone shrimp paste. By analyzing these areas, the research sought to understand the product's quality, address any issues, and improve consumer satisfaction. The study also considered community identity reflection and aesthetic appeal. Overall, it aimed to contribute insights for enhancing the product's quality, marketability, and consumer satisfaction.

The research findings indicate that the existing packaging for local products encounters various challenges that need to be addressed. Manufacturers recognize the need

for packaging development as the current labels fail to reflect the community's identity. The design is unappealing, which affects its potential as a souvenir item. Manufacturers aim to expand and distribute their products based on customer demands. They desire an aesthetically pleasing label that aligns with their original budget, while ensuring that the product's appearance appeals to the main consumer groups. The unattractive design has deterred potential customers from making a purchase. Additionally, they intend to incorporate information about the community's key raw materials and cultural heritage through the utilization of local wisdom in production, supporting advertising and public relations efforts for local tourism attractions.

In a study conducted by Sumalee Grodangunt (2015) on the design and development of durian packaging in Chonairong district, Narathiwat Province, it was found that strong packaging materials contribute to a high level of consumer satisfaction and create a positive image for the product. Sumalee Thongrunroj (2012) highlighted the importance of durable packaging capable of preserving goods for an extended period, as it significantly impacts consumer satisfaction. Furthermore, a good label should be colorful, visually appealing, attention-grabbing, and memorable.

The label must have the brand name clearly visible, provide a phone number, and disclose information about products with an appealing local identity. Eye-catching colors can attract consumers. There may be a new pattern, but it represents Klong Khon shrimp paste as well. Polanan and Champa (2009) said that the developed packaging is widely accepted for its beauty and creative design. This can be described as a result of blending various elements such as images, colors, lines, and typography, which appropriately combine. This design approach has a positive effect on the human brain's learning and memory development. The human brain is generally divided into two hemispheres: the left hemisphere and the right hemisphere. By designing packaging in this way, both hemispheres are able to collaborate, resulting in improved perception and memory recall.

The original plastic box packaging was necessary because it was easily accessible, inexpensive, lightweight, and convenient to transport. Therefore, the researcher developed an additional packaging design as a future alternative in the form of a round glass jar with a lid, 300 grams in size, to increase the quantity options for consumers, which was consistent with Chankingthong et al. (2014)'s study of the development of packaging and label for homemade curry paste, Ban Tung Chumphon Pattana, Lan Khoi, Pa Phayom, and Phatthalung, formed as a clear plastic to see the products clearly, and a label attached to the package containing the product details. It was found that consumers were satisfied with the packaging and the label at a high level. Chankingthong et al. (2014) also said that consumers were satisfied with packaging in terms of preserving the quality of products at a high level. In terms of product packaging, the use of clear jars to see the products clearly adds more interest.

7. Recommendations

Based on the research findings, it is strongly recommended to prioritize research and development efforts towards eco-friendly packaging solutions. By incorporating sustainable packaging practices, the products can gain added value and appeal to environmentally conscious consumers. Additionally, further research should be conducted to establish connections and insights between different types of food products. These findings can then be applied to enhance the design and packaging of local products in other regions, fostering innovation and promoting product differentiation. Such efforts will contribute to the overall growth and sustainability of the local product industry.

The development of shrimp paste products and packaging solutions is a dynamic field, influenced by

technological advances, evolving consumer preferences, and sustainability imperatives. While significant progress has been made in enhancing product quality and safety, ongoing research is essential to optimize packaging materials for minimal environmental impact. The future of shrimp paste and its packaging will likely focus on reducing ecological footprints while preserving cultural and culinary significance.

Various packaging materials and designs, such as airtight containers and eco-friendly options, address diverse distribution needs and consumer preferences. Sustainable packaging aligns with global trends, allowing businesses to demonstrate environmental responsibility. In preserving shrimp paste's distinct flavor and cultural significance, packaging serves as a vital component of its distribution process.

References

- Boonkong, S., Chunhasuwan, K., Sutthiprapa, B., & Pummarin, J. (2021). Development of Semi - Finish Shrimp Paste Product. *Life Sciences and Environment Journal*, 22(2), 148-157.
- Butkevicien, V., Stravinskien, J., & Rutelion, A. (2008). Impact of consumer package communication on consumer decision making process. *Economics of engineering decisions*, 1, 57-65.
- Chankingthong, W., Kodcharat, Y., Hemman, N., Prommontree, J., Sakunchannarong, N., & Tangrujikul, T. (2014). *Research report development of marketing strategies for Kao Bua dessert products of the Ban Phoh Mor farmer group Ban Phru Town Municipality*. Hat Yai District, Songkhla Province. Bangkok, Office of the Higher Education Commission.
- Ellen MacArthur Foundation. (2019). *The New Plastics Economy Rethinking the Future of Plastics*. Geneva, Ellen MacArthur Foundation.
- Garcia, A., & Martinez, E. (2018) Innovations in Packaging for Seafood Distribution: A Review. *Trends in Food Science & Technology*, 25(2), 92-104.
- Grodgangunt, S. (2015). Principles and methods how to win the primary and target customers. *Princess of naradhiwas University Journal*, 5(2), 137.
- Janssen, M., Chang, B., Hristov, H., Pravst, I., Profeta, A., & Millard, J. (2021). Changes in food consumption during the COVID-19 pandemic analysis of consumer survey data from the first lockdown period in Denmark, Germany, and Slovenia. *Front Nutr*, 8, 1-20.
- Kotler, P., Bowen, J.T. & Makens, J. (2014). *Marketing for Hospitality and Tourism*. 6th ed. Upper Saddle River, N.J., Prentice-Hall.
- Krejcie, R. V. & Morgan, D. W. (1970). Determining sample sizes for research activities. *Educational and Psychological Measurement*, 30, 607-610.
- Herrmann, C., Rhein, S., & Friederike, K. (2022). Consumers' sustainability-related perception of and willingness-to-pay for food packaging alternatives. *Resources, Conservation & Recycling*, 181, 1-13.

- Mukem, D. (2017). Development of the Product Configuration of Dried Shrimp Paste Packaging in Baan Pring, Phangnga Province. *Journal of Humanities and Social Sciences Rajapruk University*, 3(2), 69-79.
- Polanan, T., & Champa, N. (2009). *The mind map book*. Bangkok, Thailand, Millennium Mind.
- Parinyasutinun, U. (2017). Community Enterprise: The paradox of the competition of business. *Silpakorn University Journal*, 37(2), 131-150.
- Richard, L. D. (2004). *Organization Theory and Design*. 8 th Vanderbilt University, RR Donnelly & Sons.
- Sara, R. (1990). Packaging as a Retail Marketing Tool. *International Journal of Physical Distribution & Logistics Management*, 20(8), 29-30.
- Smith, J., Johnson, M., & Anderson, R. (2018). Packaging Strategies for Seafood Products: A Review. *Food Packaging and Technology*, 20(3), 345-362.
- Thongrunroj, S. (2012). *Packaging design*. Bangkok, Thailand, Wadsilp.
- Winzar, H., Baumann, C. and Chu, W. (2018). Brand competitiveness: Introducing the customer-based brand value (CBBV) – competitiveness chain. *International Journal of Contemporary Hospitality Management*, 30(1), 637-660.
- Zhou, Ming; Tian, Ding. (2010). An Integrated Model of Influential Antecedents of Online Shopping Initial Trust: Empirical Evidence in a Low-Trust Environment. *Journal of International Consumer Marketing*, 22(2), 147-167.