DEVELOPMENT OF THE RENDANG INDUSTRIAL INNOVATION SYSTEM IN PAYAKUMBUH CITY

Imelfina Musthafa\textsuperscript{1*}, Firwan Tan\textsuperscript{2}

\textsuperscript{1}Agribusiness Study Program, Payakumbuh State Agricultural Polytechnic
\textsuperscript{2}Faculty of Economics and Business, Andalas University
E-mail: \textsuperscript{1} princejuna101015@gmail.com

Abstract

This research aims to examine efforts to develop an innovation system for the rendang industry in Payakumbuh City. The methodology used in this research is interviews with related parties regarding efforts to develop an innovation system for the rendang industry in Payakumbuh City. The results obtained are that there are various efforts to develop an innovation system for the rendang industry in Payakumbuh City, namely: the establishment of a rendang industrial center, rebranding of Payakumbuh City, the establishment of UPTD P3R, the establishment of the “IKOSERO” cooperative, the establishment of the School of Randang, collaboration and partnerships, technology implementation, marketing, HR training and development, as well as licensing and standardization. Government policy to provide support to the rendang industry in Payakumbuh is very necessary so that rendang in Payakumbuh City is able to have competitiveness in the national market and Payakumbuh rendang can enter the international market and become a food that is in demand by people throughout the world.

Keywords: Innovation, Industry, Rendang, System

1. INTRODUCTION

In 2019, the Mayor of Payakumbuh began building city branding entitled "Payakumbuh, The City of Rendang". The Mayor of Payakumbuh emphasized to the world community that Payakumbuh City is Rendang City with the advantage of having Rendang Village and a modern and standardized rendang processing center. Before Payakumbuh City was given a new brand image as "City of Rendang" or "Rendang City", this city was nicknamed "Batiah City" or "Galamai City". The mention of it as "Batiah City" or "Galamai City" is motivated by the fact that batiah and gelamai are specific types of food that are often found in Payakumbuh City, and have even become one of the traditional foods in various traditional activities in the community (Desfitawarni et al., 2022).

Rendang is a traditional dish which is considered a culinary icon in Payakumbuh City, West Sumatra (Maryetti et al., 2023). It is a local cultural identity and has become a symbol of the city (Desfitawarni et al., 2022). The city has made efforts to promote rendang as its culinary brand, with the Mayor of Payakumbuh leading an initiative to build the city branding “Payakumbuh, Randang City”. The success of rendang MSMEs (Micro, Small and Medium Enterprises) in Payakumbuh is influenced by factors such as self-confidence and willingness to take risks. Social networks and collaboration play an important role in the development and utilization of this culinary business (Putri, 2018).

Online marketing, or marketplaces, offer several benefits for Payakumbuh rendang. First, it allows small businesses to build relationships with customers through direct...
communication on social media platforms such as WhatsApp and Facebook (Basri & Yuswardi, 2023). This direct interaction helps in understanding customer needs and preferences, which leads to improved business performance (Dwita et al., 2020). In addition, online marketing allows promotion of rendang products to a wider audience, outside the local Payakumbuh market (Rahmi et al., 2022). Overall, online marketing increases visibility, reach and customer engagement for Payakumbuh rendang, contributing to its growth and success.

Local people in Payakumbuh have worked to popularize the status of rendang both within the city and outside the city (Verinita et al., 2023). Rendang from Payakumbuh, a city in West Sumatra, is expected to be one of the top three culinary dishes in Indonesia (Putri, 2018). Rendang is one of the traditional food specialties in the city of Payakumbuh (Mary, M. Kom & Mary, 2017). Various innovations have been made to rendang, a new innovation called "kere" which combines rendang with kebab to preserve local culinary delights in Indonesia (Nevriansyah et al., 2022). Innovation of kebab rice with rendang in West Sumatra as an effort to conserve national cuisine (Erwin & Zubaidah, 2015).

Rendang innovation is important for the city of Payakumbuh. This can help popularize the culinary status of rendang both within the city and outside (Maryetti et al., 2023). This innovation has the potential to improve the community's economic situation and contribute to the development of culinary tourism in Payakumbuh (Mary, M. Kom & Mary, 2017). Apart from that, rendang innovation can also benefit small and medium businesses, providing them with an integrated information system and a comprehensive database to map potential areas of culinary tourism (Nevriansyah et al., 2022). Rendang innovation is very important to promote local culinary heritage, attract tourists, and improve Payakumbuh's economy. Therefore, this research aims to examine the development of the Payakumbuh City rendang industry innovation system.

2. LITERATURE REVIEW

Schumpeter's economic growth innovation theory has been widely applied and developed in various fields, including the food industry. This theory emphasizes the role of technological innovation in driving economic competitiveness, development and growth. In the food industry, economic and technical changes have had a significant impact on the entire food supply chain leading to a greater focus on food products that meet consumer needs for a healthier lifestyle (Abdunazarov Saidahmad, 2020). The development of innovation theory has highlighted the importance of open innovation models, which involve active participation and collaboration among various actors in creating cross-organizational knowledge and improving skills (Juchniewicz & Grzybowska, 2015).

Schumpeter's concepts of entrepreneurship, innovation and creativity have played an important role in analyzing and understanding the dynamics of innovation in companies, sectors and the economy as a whole (Westeren, 2015). By operationalizing the idea of creativity, Schumpeter's growth theory provides insight into the microeconomic aspects of the growth process, such as competition, firm dynamics, and firm size distribution, which can be applied to the food industry (Aghion et al., 2015).

Schumpeter's theory of economic growth applies to the food industry by emphasizing the role of innovation and creativity in driving long-term economic growth.
According to this theory, economic growth is driven by the development of high-quality products that replace low-quality products. This creative process, in which new and better products replace old ones, is seen as a major engine of economic growth. This theory also highlights the importance of competition and market structure in promoting innovation and growth (Aghion et al., 2015). In the context of the food industry, this means that the introduction of new and improved food products can lead to increased productivity, efficiency, and overall growth in the sector (Berumen, 2021).

Innovation plays an important role in the food industry. This allows manufacturers to develop new alternatives and reformulate their products to meet the demand for healthier and more sustainable foods (Rabadán et al., 2021). Open innovation strategies can be applied in the food industry to explore unexplored potential and drive growth, especially in countries with limited resources and small market size (Alawamleh et al., 2022). The food industry, once considered mature and slow moving, has now recognized the importance of innovation for success (Bigliardi et al., 2020).

Economic and technical changes have made it necessary for food businesses to focus on developing products that meet consumers’ needs for healthier lifestyles, leading to an extensive inspection of innovation in the industry. Technological innovation in the food industry has gained significant interest due to its impact on competitiveness, and research in this area has grown exponentially (Castillo-Vergara et al., 2021). Innovation plays an important role in the food industry because it is necessary to increase production efficiency, strengthen competitive potential, and overcome global problems of hunger and malnutrition (Belyaev & Donskova, 2021). Innovation is seen as a means to offer healthier choices, improve sustainability, drive growth and increase competitiveness in the food industry.

3. RESEARCH METHODS

The development of the rendang industry innovation system in Payakumbuh City went through several stages, namely:

a. Establishment of the Rendang Industrial Center

The rendang industry in Payakumbuh City began to grow and develop in the Lampasi area. In the initial phase, this business was started by dozens of business actors and continues to develop into a Small and Medium Industry (IKM). In the next stage, this industry continued to grow and experienced a significant increase to 57 SMEs supported by the OVOP (One Village One Product) Program. This OVOP program policy is the basis for establishing industrial grouping clusters by the Payakumbuh City Government, consisting of:

1) Rendang village in Lampasi
2) Food village in Payolansek
3) Weaving village in Balai Panjang
4) Bamboo village in Aur Kuning

This OVOP program is the forerunner to the establishment of the Rendang Small and Medium Industry Center (IKM) by making a proposal to the Ministry of Industry and
receiving approval so that infrastructure development begins with physical construction of the building and is equipped with the necessary facilities and infrastructure through funding from the Special Allocation Fund (DAK).

Industrial centers provide several benefits for Micro, Small and Medium Enterprises (MSMEs). These centers play an important role in promoting and enhancing entrepreneurship in rural areas, providing assistance and schemes for the development of MSMEs (Jayalakshmi & Gayathri, 2016). They also contribute to job creation by small-scale businesses, leading to a significant increase in employment after receiving services from the Industrial Development Center (Puspanantasari Putri & Supardi, 2014). In addition, the development of industrial clusters using a grouping approach can spur the growth of regional excellence and effective Small and Medium Manufacturing Industries (SMMI) (Adejumo, 2011). The implementation of Total Quality Management (TQM) and a quality assurance system, together with the use of technology and digital platforms, can improve the quality of products and services produced by MSMEs, leading to increased efficiency, productivity and customer satisfaction (Aziz, 2019). Industrial centers and related initiatives provide support, resources and opportunities for MSMEs to develop and contribute to economic growth.

b. Rebranding Payakumbuh City

The declaration of the rebranding of the City of Payakumbuh was made on the anniversary of the City of Payakumbuh on December 17 2018 at the plenary meeting of the Payakumbuh City DPRD to become "The City of Rendang" with the slogan Batiah City (Clean, Safe, Orderly, Beautiful, Graceful and Harmonious). City rebranding can bring several benefits to advance Micro, Small and Medium Enterprises (MSMEs). First, city branding can improve the image of local SMEs as consumers and users of city brands, while also highlighting their role as city image producers (Pasquinelli, 2015). Second, rebranding strategies based on local wisdom, such as e-promotion and digital marketing, can help MSMEs overcome marketing challenges and attract customers (Karnawijaya et al., 2022); (Kornita et al., 2023); (Sugiana et al., 2023). Third, the application of digital marketing in MSM marketing activities can strengthen their product branding, increase brand recognition, and reduce hidden marketing costs (Saepuloh et al., 2023). City rebranding efforts that focus on empowering and supporting MSMEs through innovative marketing strategies can contribute to the development of their businesses, increase revenue, and enhance their ability to adapt to technological advances.

c. Establishment of UPTD (Service Technical Implementation Unit) Rendang Service and Development Center (P3R) Payakumbuh City

UPTD P3R is tasked with managing the rendang IKM center under the Payakumbuh City Manpower and Industry Service. UPTD provides various facilities and infrastructure as well as production facilities including raw material processing equipment, sterilization equipment, packaging equipment and other equipment. Establishing a UPTD (UMKM Support System) can bring several benefits to the progress of MSMEs. UPTD can function as an information medium for MSMEs, connecting them with potential supporters such as academics, practitioners and students.
(Sahu et al., 2012). This can provide support to MSMEs in terms of information, expertise and financial resources (Yulistiawan et al., 2022).

UPTD can also help MSMEs increase their competitiveness by adopting information technology and digital marketing techniques (Rerung, 2018);(Murniningsih et al., 2022). By utilizing digital technology, MSMEs can promote their products, interact effectively with customers, and expand their market reach (Prastybudi et al., 2022). UPTD can provide training and assistance in digitizing products, developing business profiles, and using social media platforms for marketing. In addition, UPTD can support MSMEs in improving their business and financial management skills. UPTD can play an important role in empowering and strengthening MSMEs, contributing to their growth and development.

d. Establishment of the "IKOSERO" Cooperative

The Payo Rendang Center Cooperative (IKOSERO) is a rendang production cooperative consisting of rendang IKMs in Payakumbuh City. This cooperative is supported by the Payakumbuh City Government and is a partner of the Payakumbuh City Rendang Service and Development Center UPTD in carrying out rendang production at the Payakumbuh City Rendang IKM Center.

Cooperatives offer several benefits for the progress of SMEs. First, cooperatives provide networking opportunities for SME members to communicate, share information, and build long-term relationships, which increases their power in relationships and develops social capital. Second, cooperatives can contribute to the MSME financing sector, helping them access financial institutions and overcome capital limitations, thereby supporting the continuity and development of MSME businesses (Oktaria & Sari, 2021). Third, cooperation for innovation in cooperatives can increase company innovation, which leads to increased innovation performance in both technological and non-technological aspects. Lastly, SME owners join cooperatives because they provide economic benefits, information, business support, knowledge, and networking opportunities, which help SMEs overcome environmental uncertainties and challenges (Ghauri et al., 2021). Cooperatives play an important role in supporting the progress of SMEs through networking, financing, innovation and collective action.

e. Establishment of the School of Randang

The aim of establishing the School of Randang is to pass it on to the younger generation and introduce rendang to tourists. The School of Randang curriculum includes: a curriculum about getting to know Payakumbuh City, getting to know rendang, getting to know spices, getting to know equipment, getting to know how to cook, getting to know marketing, getting to know innovation and getting to know packaging. The School of Randang is integrated with schools in Payakumbuh City from Kindergarten to High School in local wisdom subjects and even up to university level, namely at Padang State University because it is supported by an independent curriculum with Minang culinary courses. The School of Randang activity is an introduction and learning from an early age regarding the local wisdom of the Minang realm so that wisdom from an early age such as merandang can be maintained and always be preserved forever.
The output of the School of Randang consists of:
1) Business incubator
2) Cultural literacy
3) Gastronomic tourism

Gastronomic tourism has Tri Angle Concepts, namely: culture, history and rendang production process. Rendang IKMs provide gastronomic tourism and provide the opportunity to be directly involved in the production process. Establishing the randang school in Payakumbuh offers a unique educational experience centered around the local culinary specialties of randang, the school contributes to the city's branding efforts and helps create a distinct identity for Payakumbuh as “Kota Randang” (Desfitawarni et al., 2022).

f. Collaboration and Partnership

Collaboration and partnerships are carried out with various related parties, such as: Payakumbuh City Agriculture Service, Payakumbuh City Education Service, Payakumbuh City Tourism Office, Payakumbuh City Cooperatives and Small and Medium Enterprises Service, Andalas University, Padang State University, Food and Drug Monitoring Agency (BPOM) Payakumbuh City. Collaboration and partnerships are critical for small and medium enterprises (SMEs) to drive innovation and improve performance. Research shows that collaborating with various partners, such as suppliers, customers, universities, and competitors, both domestically and internationally, can facilitate innovation in SMEs (Audretsch et al., 2023). Collaborative partnerships with local SMEs in emerging markets can help overcome barriers and create opportunities for European SMEs (Wang et al., 2021).

Collaboration strategies, including expertise and networks, play an important role in mediating the influence of manager qualifications on company performance (Wahyudin et al., 2022). Supply chain collaboration has a positive effect on supply chain capabilities, innovation performance, and overall supply chain performance in SMEs. Different types of R&D collaboration, such as with universities, research centers and other companies, have varying impacts on product innovation and innovation performance in SMEs (D’Angelo & Baroncelli, 2020). These findings highlight the importance of collaboration and partnerships for SMEs in driving innovation and achieving better performance outcomes.

g. Technology Implementation

The equipment used in the production process is high-tech equipment. All equipment for the production process in the rendang IKM center is made in China. Production equipment consists of: Steam Cauldron, Retort, Continues Sealer, Boiler, Wrapping, Freezer, Vacuum Sealer and Meat Cutter. Advanced manufacturing technology (AMT) has been found to have a positive impact on innovation performance in manufacturing firms. Adoption of AMT is very important for small and medium enterprises (SMEs) as it can help them improve their performance and competitiveness (Bhatt, 2017). AMT offers benefits such as flexibility, reduced costs, reduced inventory, reduced lead time, on-time delivery, increased productivity and innovative products (Gill, 2010).
The use of AMT can also enable SMEs to customize their products and achieve economies of scope based on low volume and low cost production (Hewitt-Dundas, 2004). However, the decision to adopt AMT can be challenging for SMEs with limited capital resources. It is important for managers to consider factors such as strategic aspects, organizational structure, hands-on training, and implementation practices when making decisions about adopting AMT. AMT adoption can significantly contribute to innovation and competitiveness in the MSME sector.

h. Training

Various trainings have been attended by Payakumbuh City rendang IKM players, including:
1) Halal certification training
2) Veterinary control number training
3) Financial reporting training
4) Hazard analysis critical control point training
5) Legal counseling
6) Technical guidance on business sector licensing
7) Halal certification technical guidance
8) Packaging training
9) Online marketing training
10) Coaching for one year for export
11) One village one product training
12) One village one business training
13) Tax training for legal entities
14) Content creator training
15) Digital content training

Training for micro, small and medium enterprises (MSMEs) has several benefits for innovation. First, financial management and accounting system training helps MSME entrepreneurs in making accounting-based financial reports and improving their skills in making financial reports (Matthies et al., 2023). Second, training programs that focus on business and financial management can empower and strengthen MSME business management, leading to increased capabilities in planning, business model innovation, and managerial and financial management (Wyati Saddewisasi et al., 2022). Additionally, training in technology and innovation areas, such as automation and Information and Communications Technology (ICT), can increase employees' specialized knowledge and improve internal processes, leading to greater productivity, lower operational costs, and higher revenues for MSMEs (Prastyabudi et al., 2022). Training programs for MSMEs contribute to their innovation potential by improving financial reporting, business management and technological capabilities.

i. Marketing

Rendang marketing is carried out at local, national and international levels. Rendang marketing reaches overseas through rendang exports to Saudi Arabia, countries
in Europe, the United States, countries in Southeast Asia, China, South Korea. Marketing innovation in MSMEs has several benefits. First, improving MSME performance by improving internal processes, customer performance, learning and growth performance, and financial performance. Second, it enables MSME players to effectively manage the marketing of their products through digital media platforms such as Instagram and Facebook (Yuliani et al., 2022). Third, increasing the economic value of MSMEs by providing training in making creative and innovative products and using social media and e-commerce for product marketing (Adi et al., 2022). Fourth, improve market strategies, financial income, incentives and knowledge in MSMEs (Ama, 2017). Lastly, increasing the competitiveness of MSME products by increasing knowledge and skills in utilizing digital technology for product marketing (Wasan & Anita Sariningsih, 2021)

h. Licensing and Standardization

Licensing and standardization owned by the Payakumbuh City rendang IKM center are:

a) Marketing authorization
b) ISO 22,000 Food Management
c) Hazard Analysis Critical Control Point
d) Indonesian National Standards
e) Halal Certificate
f) Veterinary Control Number
g) Waste Water Treatment Plant
h) Risk Management Program
i) Building Standardization

Standardization and licensing offer several benefits for MSME innovation. First, standardization allows businesses to benefit from economies of scale, specialize in their core competencies, and invest in product differentiation (Achsa et al., 2022). It also reduces trade barriers, creates open markets, and promotes competition and innovation. Second, licensing and compliance with standards, such as PIRT and halal certification, increase consumer trust and confidence in MSME product (Eto, 2019). This, in turn, can lead to an increase in sales volumes and consumer interest (Sabattini & Mosca, 2017). Third, standardization activities can help SMEs establish barriers to market entry and secure shares in niche markets (Caetano, 2017). Finally, by using established standards, SMEs can reduce research and development costs, increase innovation capabilities, increase efficiency, and demonstrate the quality of their products to customers.

Licensing and standardization play an important role in promoting innovation in MSMEs. Licensing provides legal protection and assistance, enabling MSMEs to operate legally and access government support, leading to the establishment of a welfare state (Anita & Iznillah, 2023). Standardization, on the other hand, optimizes the knowledge management structure and reduces innovation risks, facilitating the flow of knowledge in the innovation process (Redi et al., 2022). It acts as a carrier of transfer, promoting open innovation and linking it with knowledge management (Ping, 2013). Standardization also improves organizational capabilities, aligns MSMEs with best practices and develops internal competencies that encourage innovation and increase competitiveness (Caetano,
2017). By complying with standards, MSMEs can improve the quality and quantity of their products, compete effectively, and realize value (Mulyadi, 2018). Licensing and standardization provide the support and framework that MSMEs need to encourage innovation and drive their success.

4. CONCLUSION
Various efforts to develop an innovation system for the rendang industry in Payakumbuh City, namely: establishment of a rendang industrial center, rebranding of Payakumbuh City, establishment of UPTD P3R, establishment of the "IKOSERO" cooperative, establishment of the School of Randang, collaboration and partnerships, technology implementation, marketing, HR training and development, as well as licensing and standardization. Government policy is very necessary in developing rendang innovation by providing assistance with modern equipment facilities, periodic training for rendang SMEs and making it easier to obtain export permits so that rendang’s sustainability in penetrating the international market can be met and rendang becomes the most popular food throughout the world.

REFERENCES


Ama, N. O. (2017). Challenges Msmes Face And Benefits In The Adoption Of Open


Nevriansyah, E., Pranata, R. E., Nissa, A. K., Syafika, N., Husna, A., Mey, F., Siregar,
DEVELOPMENT OF THE RENDANG INDUSTRIAL INNOVATION SYSTEM IN PAYAKUMBUH CITY
Imelfina Musthafa, Firwan Tan


Nouvelles, March, 49–50.


Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/4.0/).