

Conference Paper

## Development of Snakefruit Innovation Products as Part of the Development of the Kramat Tourism Area Bangkalan

Dedin Finatsiyatull Rosida<sup>1,3\*</sup>Fetty Tri Anggraeny<sup>2</sup>

<sup>1</sup>Department of Food Technology, Faculty of Engineering, Universitas Pembangunan Nasional Veteran, Jawa Timur, Surabaya, Indonesia

<sup>2</sup>Department of Informatics, Faculty of Computer Science, Universitas Pembangunan Nasional Veteran, Jawa Timur, Surabaya, Indonesia

<sup>3</sup>Center Innovation of Appropriate Technology for Lowland and Coastal Food, Surabaya, Jawa Timur, Indonesia

\*Corresponding author:

E-mail:

dedin.tp@upnjatim.ac.id

### ABSTRACT

As an agricultural area with a relatively productive agricultural culture, it is a promising potential for the growth and development of rural economic businesses, especially at the farm level. Some of the main commodities of food crops in Bangkalan Regency such as corn, soybeans and cassava as well as plantation products such as snakefruit should be developed into various processed food and beverage products that can be enjoyed by everyone as snacks or as a substitute for rice. Some snakefruit-based food products are already quite widely marketed, but it is necessary to innovate more modern products with packaging that can better compete with imported products. Since 1996, a number of farmer groups in Murkola, Kramat Village, Bangkalan District, have developed snakefruit plants with high productivity. The persistence of the snakefruit farmers has yielded brilliant results. The potential of the snakefruit plantation needs to be developed as an agro-tourism area. Kramat Village is famous as the center of Bangkalan snakefruit. There are several snacks created by Poktan Ambudi Makmur, including dates, raisins, dodol and syrup, snakefruit juice marketed under the name of typical souvenirs of Madura has decreased after the Covid-19 pandemic. The harvest of snakefruit is still abundant and still scattered in the snakefruit garden during the harvest season, it is necessary to develop other products that are more modern and according to the needs of modern society such as fruit leather, snack bars and other types of snakefruit drinks. For this reason, it is necessary to provide assistance for snakefruit diversification products, product branding to improve marketing.

*Keywords: Snakefruit, product innovation, branding, agro-tourism, marketing*

### Introduction

The agricultural sector contributes significantly to the gross domestic product and job creation. However, this sector faces various challenges, including low productivity, limited access to technology and markets, the impacts of climate change, and the conversion of agricultural land into non-agricultural areas. To address these challenges and advance the agricultural sector, the Indonesian government has implemented various strategies and regulations. These strategies include increasing productivity through the adoption of modern technology and sustainable farming practices, strengthening farmers' access to technology, capital, and markets, enhancing resilience to climate change, protecting agricultural land, and developing agro-industry and agricultural product diversification (Hasibuan et al., 2024).

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Bangkalan, a regency located on Madura Island, has rich natural potential and local wisdom that has not been fully utilized. One of the emerging tourist attractions in this area is Kramat Village, known for its natural beauty and well-preserved culture. One of the leading commodities that can be developed in this area is snakefruit, a tropical fruit long known for its distinctive taste and health benefits.

Kramat Village, located in Arosbaya District, Bangkalan Regency, Madura, is one of the areas with rich natural beauty and cultural potential. Located about 30 kilometers from the center of Bangkalan City, this village is known for its natural charm, which remains pristine and far from the crowds. The existence of a tourist area in Kramat Village has great potential to be developed into an attractive tourist destination, given its strategic location and the uniqueness of its culture and nature.

The development of tourism in Bangkalan Regency must consider several important criteria, including the uniqueness of the region or geography, the social conditions of the community, and the availability of facilities and infrastructure. Tourism development must place tourism facilities and infrastructure as the key to regional development. Bangkalan Regency has three potential tourism destinations: nature tourism, culinary tourism, and religious tourism (Rasyid, 2020).

One of the prominent natural potentials in Kramat Village is the presence of snakefruit plants, which thrive in this area. Kramat snakefruit has unique characteristics that differentiate it from snakefruit in other regions, both in terms of its sweeter and fresher taste and its crispier texture. The presence of snakefruit can become one of the main pillars in developing the tourist area in Kramat Village.

The development of snakefruit-based innovation products can be an effective strategy to introduce Kramat Village to tourists and boost the local economy. Through innovations in processed snakefruit products—such as snakefruit chips, snakefruit jam, and snakefruit juice—this tourist area can not only attract tourists but also add value for local farmers and businesses. Additionally, the development of snakefruit-based products will encourage the preservation of snakefruit plants, which have ecological benefits, and raise community awareness about the importance of local agricultural product diversity.

By integrating the development of snakefruit innovation products into the concept of tourism area development, Kramat Village has the potential to become a tourist destination that combines natural beauty, cultural richness, and economic strength based on local commodities. This article will further discuss the potential of snakefruit as a leading commodity in the development of the Kramat Village tourism area, as well as the various opportunities and challenges in achieving this goal.

## **Material and Methods**

The development of snakefruit innovation products as part of the development of the Kramat Village tourism area in Bangkalan involves the following stages:

### ***Feasibility Study and Potential Identification***

- ✓ Field Survey: Identifying the number and types of snakefruit available, the quality of the plants, and the condition of the snakefruit plantation.
- ✓ Market Analysis: Analyzing the demand and market interest in processed snakefruit products, both locally and regionally.
- ✓ Social and Economic Study: Assessing the readiness of the community to participate in this program, including workforce capabilities, human resources, and potential economic benefits.

### ***Capacity Building and Training***

- ✓ Snakefruit Processing Training: Conduct training on how to process snakefruit into various products, such as snakefruit chips, jam, juice, and other processed products.

- ✓ Marketing and Branding Training: Providing training to the community on the importance of branding, packaging, and marketing strategies for snakefruit-based tourism products.
- ✓ Business Management Training: Providing basic knowledge on business management, finance, and sustainable business practices.

#### ***Tourism Development***

- ✓ Development of Tourist Routes and Location Promotion: Organizing tourist routes in Kramat Village so that tourists can enjoy the snakefruit plantation views, as well as providing signs and information related to processed snakefruit products.
- ✓ Marketing and Promotion of the Tourism Area: Promoting through social media, tourism brochures, and collaboration with travel agencies to introduce Kramat Village as a local product-based tourist destination.

#### ***Strengthening Marketing and Distribution***

- ✓ Product Branding and Packaging: Designing attractive branding and environmentally friendly, informative packaging that highlights the uniqueness of Kramat snakefruit products.
- ✓ Development of Distribution Channels: Building distribution channels for snakefruit products, both directly in the tourist area and through online platforms and local souvenir shops.

#### ***Evaluation and Mentoring***

- ✓ Assessing the results of the program and planning improvement steps for the continuation of the program. This includes evaluating the success and challenges faced during the program's implementation, including market response to processed snakefruit products. Based on the evaluation, plans for product improvement and diversification are made to expand the market and enrich the tourist experience.

### **Results and Discussion**

Kramat Village, located in Bangkalan Regency, Madura, has great potential that has not been fully utilized, both in terms of tourism and local agricultural products. One of the leading commodities that can be developed in this area is snakefruit, a tropical fruit known for its unique taste and abundant health benefits. Given the growing tourism sector in Madura, the development of snakefruit innovation products as part of the Kramat Village tourism area can be an effective strategy to enhance tourism appeal and local economy.

In recent years, the development of agricultural-based products as tourist attractions has become a trend in many regions. This approach not only helps boost the tourism sector but also strengthens the local economy by creating new jobs and utilizing local products with high market value. This article will discuss the potential of snakefruit as a leading commodity in the development of the Kramat Village tourism area, as well as the strategic steps needed to achieve this development.

Business tourism can be a model for this development. This type of tourism is conducted by businesspeople or industrialists, but it also includes visits to exhibitions and technical institutions that attract people outside these professions (Susilawati & Mappamiring, 2016).

One of the efforts to increase regional revenue is optimizing the potential in the tourism sector (Katarina & Fithriana, 2017). Tourism itself is a service industry classified as a tertiary industry, and its role is quite important in policies to increase employment opportunities (Harahap, 2018). With the rapid growth of tourism in Indonesia, it is essential to utilize all available potential to stimulate and invigorate domestic development. The significant potential of the tourism sector is expected to boost economic growth, including in relatively underdeveloped regions (Sugiyarto & Amaruli, 2018). Tourism-based regional development is expected to increase the added value of development (Khotimah et al., 2017), making it easier to optimize the tourism sector (Prasodjo, 2017).



Figure 1. Location of activities and tourism in Bangkalan region

### **Potential of Kramat Snakefruit in Bangkalan**

Kramat snakefruit has excellent quality, with a sweet and slightly sour taste that is favored by many. The snakefruit from this region has a crispy texture and thick flesh, which are its distinctive characteristics. Historically, snakefruit has been one of the main agricultural products in Madura. However, the great potential of snakefruit as a leading tourism commodity has not been fully utilized. Therefore, innovative snakefruit-based products, such as snakefruit chips, jam, and juice, can become new tourist attractions that introduce the uniqueness of Kramat Hamlet to the outside world.

In addition to the quality of the fruit, the soil and climate in Kramat Hamlet also support optimal snakefruit growth. Processing snakefruit into various innovative products will not only increase its market value but also help promote the snakefruit plantation and local products to visiting tourists. This is crucial for increasing the income of the local community and raising awareness about the importance of preserving local agricultural product diversity.

The Processing Industry is the sector that showed the highest growth during the period 2019-2022, with an average growth rate of 19.29%. Agriculture, Forestry, and Fisheries came in second with an average growth rate of 13.02%, followed by Wholesale and Retail Trade; Repair with an average growth rate of 12.93%. Additionally, the Ministry of Agriculture of the Republic of Indonesia noted that in 2023, the agricultural sector absorbed 28.21% of the total workforce in Indonesia, confirming that nearly one-third of Indonesia's labor force depends on this sector for their livelihoods (Ministry of Agriculture RI, 2024).

Several efforts to develop the agricultural sector in Indonesia focus on increasing Agricultural Productivity. Access to low-interest capital loans can help farmers scale up their businesses (Wahab, 2023). Programs such as the People's Business Credit (Kredit Usaha Rakyat) and other agricultural credit schemes provide the necessary financial support for investments in technology and farming equipment.

The development of infrastructure, such as farmers' markets and online platforms, can help farmers market their products more easily and obtain better prices. The development of effective distribution and marketing networks is crucial for increasing farmers' income (Hakim, 2021).

Farmers need to be equipped with knowledge and skills to adapt to climate change, such as proper planting patterns and effective fertilizer use. Training and outreach on climate adaptation are essential in this context. Additionally, protecting agricultural land and encouraging optimal land utilization are critical (Rachman, 2023).

### **Stages of snakefruit innovation product development**

To maximize the potential of snakefruit as a leading commodity in the Kramat Hamlet tourism area, several structured and sustainable stages are carried out:

**Training for Farmers and Local Communities.** Training on how to process snakefruit into various high-value derivative products is essential. This training includes the development of processed snakefruit products such as chips, jam, and beverages, as well as effective marketing strategies. Additionally, training on branding and packaging techniques is important to enhance product appeal in the market.

Innovative snakefruit-based products such as snakefruit chips, jam, and juice need to be developed and tested in the market. Attractive and environmentally friendly packaging is also crucial in attracting consumer attention. With diverse product development, Kramat Hamlet can become a center for unique souvenirs that attract both local and international tourists. Marketing can be done through various channels, including direct sales in the tourist area, souvenir shops, and online platforms.

Collaboration between local governments, communities, and tourism industry players is crucial in developing a tourism area based on local products. Government support in terms of infrastructure and promotion, as well as cooperation with hotels, restaurants, and travel agencies, will strengthen the distribution network of processed snakefruit products and enhance the appeal of Kramat Hamlet as a tourist destination.

Knowledge of public perception is also important to understand, as it can inform managers in developing ecotourism management plans. Some issues that should be considered by managers in ecotourism development include access to the area, local government support, benefit distribution, and community empowerment (Sayektiningsih et al. 2019).

### ***Benefits of developing snakefruit innovation products***

The development of snakefruit innovation products in Kramat Hamlet offers various benefits:

a. **Increased Local Economy**

By utilizing snakefruit as a leading product, the Kramat Hamlet community can gain additional income through the sale of processed snakefruit products and tourism. Empowering the local community in snakefruit processing and tourism area management will create new jobs and reduce dependence on other less stable sectors.

b. **Agricultural product diversification**

Diversifying agricultural products will open new market opportunities for snakefruit. Additionally, processed snakefruit products have the potential to be sold outside Madura, both in national and international markets, which will introduce Kramat snakefruit to a broader market.

c. **Environmental and Cultural Preservation**

The development of snakefruit-based products will also have a positive impact on environmental preservation, as snakefruit is a plant that is friendly to the local ecosystem. Moreover, these products can represent the culture and local wisdom of Kramat Hamlet, which can be promoted as part of the tourist attraction.

In addition to training, another need of the community is a platform that facilitates product marketing through information systems and social media, such as sales websites, Facebook, Instagram, and Twitter. The outreach materials provided in this community service activity include motivation and entrepreneurial mindset, product innovation and packaging, online marketing, food safety awareness, and the procedure for applying for P-IRT certification. The key factors driving the program's success are the support of village officials and the active participation of community members (Djuwendah & Karyani, 2020).

### **Conclusion**

The development of snakefruit innovation products as part of the Kramat Hamlet tourism area in Bangkalan has great potential to boost the local economy and introduce Kramat Hamlet as a unique

tourist destination. Through structured stages, from feasibility studies to marketing strengthening, processed snakefruit products can become tourist attractions that are not only economically beneficial but also preserve local wisdom and the environment. With strong collaboration between the community, government, and tourism industry players, this development will create sustainable positive impacts.

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