



UTILIZATION OF COW'S MILK IN MAKING MILK DODOL AS AN ALTERNATIVE BUSINESS DEVELOPMENT FOR BERMI VILLAGE COMMUNITY

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Abstract:

Bermi Village has abundant dairy farming resources, resulting in large amounts of milk production. However, milk utilization is still limited to sales in fresh form, so farmers face challenges due to market price fluctuations. This article explores the innovation of processing cow's milk into milk dodol as an alternative business that can improve the economy of the Bermi Village community. This research uses the Asset Based Community Development (ABCD) method, which is an approach to community empowerment that focuses on the potential of assets as a strength that can be explored in the development of the community. the potential of cow's milk, the stages of milk dodol production, and the economic and social impacts of its development. The research findings show that milk dodol has various advantages, such as longer shelf life, high nutritional content, and more stable selling value compared to fresh milk. The production process includes several stages, from milk heating, mixing ingredients, cooking, to packaging, with success depending on the quality of ingredients and production techniques used. From an economic perspective, the milk dodol business offers promising profit opportunities, especially if supported by effective marketing strategies, such as product branding, utilization of digital platforms, and cooperation with the tourism sector. In addition to increasing farmers' income and supporting the growth of local MSMEs, the development of milk dodol can also strengthen the culinary identity of Bermi Village. To maximize this potential, training for the community, support from various parties, and innovation in developing flavor variants are needed. With a sustainable approach, milk dodol has the potential to become a superior product that encourages broader village economic growth.

Keywords: Milk dodol, Dairy farming, Business development, Bermi village

INTRODUCTION

In many rural areas, including Bermi Village, the existence of natural potential and local resources is often not fully explored. Bermi Village, as one example of an area with high cow's milk production, has natural and cultural wealth that can be used as capital for local economic development. However, the reality on the ground shows that despite the relatively abundant milk production, the dominant sales are in the form of fresh milk. This creates several problems, especially dependence on unstable market price fluctuations. When the price of milk decreases, farmers are threatened with losses that affect the welfare of their families and the sustainability of their farming businesses.

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To overcome these problems, product innovation is a strategic step that needs to be taken. Innovation in milk processing into derivative products, such as milk dodol, offers a solution that not only increases the selling value of the product, but also provides assurance against price fluctuations. Milk dodol processing can produce products with longer shelf life, high nutritional value, and wider market opportunities. This milk dodol product has the potential to change the paradigm of milk sales from a fresh commodity to a value-added product that can be enjoyed by consumers in a longer period of time.

Furthermore, product innovations such as milk dodol have a significant impact in the context of village asset development. This innovative approach not only focuses on economic aspects alone, but also integrates social values, culture and local wisdom. By utilizing traditional recipes and techniques. With the existing processing in the community, milk dodol can be used as a symbol of local culinary identity. This local wisdom-based product development not only increases the income of farmers and micro, small and medium enterprises (MSMEs), but also strengthens the sense of community pride in the potential and uniqueness of their region.

The research developed in this context aims to find and develop milk dodol products with advantages in terms of shelf life and nutritional value, so as to improve community welfare through optimization of local resources. To achieve this goal, this research integrates the Asset-Based Community Development (ABCD) approach. The ABCD method focuses on identifying and utilizing existing assets in the community- be it natural resources, traditional skills, or social networks between residents-so that product innovation can be developed in a participatory and sustainable manner.

The ABCD approach in this research was carried out through several stages, including:

1. Local Asset Mapping

Identify the potential for high-quality milk, local wisdom in dodol making, and supporting infrastructure in Bermi Village. This includes an inventory of natural resources, local labor capabilities, and product distribution networks.

2. Community Participation

Involve farmers, MSME players, and community leaders in the planning and product development process. This involvement not only improves the accuracy of the data obtained, but also creates a strong sense of ownership towards product innovation.

3. Capacity Building

Organizing training and workshops on standardized and hygienic milk dodol processing techniques. This capacity building aims to ensure consistent product quality, while improving the community's skills in modern processing and packaging.

4. Evaluation and Feedback

Establish a regular evaluation mechanism to measure the effectiveness of product innovation in increasing added value and community welfare. Feedback from consumers and businesses is the basis for making adjustments and product improvements.

With the development of this material, milk dodol product innovation is not only seen as a short-term economic solution, but also as a comprehensive community development strategy. Expected benefits include increased income for farmers,

diversification of village flagship products, and strengthening of local cultural identity. In addition, with an innovative product based on village assets, opportunities to build partnerships with the tourism sector are also available. and creative industries are opening up, which in turn can stimulate the growth of the village economy as a whole.

Overall, this research suggests that utilizing the potential of cow's milk in Bermi Village through the development of milk dodol is a strategic step in turning market challenges into economic opportunities. The ABCD approach ensures that the product innovation is developed inclusively, involves all levels of society, and is rooted in the strength of local assets. Thus, milk dodol is not only a superior product that has competitiveness in the market, but also a symbol of sustainable and participatory village development.

This material is expected to provide a comprehensive overview of how product innovation and the ABCD approach can be used to optimize the potential of local resources and improve community welfare in Bermi Village.

RESEARCH METHODS

The research used the ABCD (asset based community development) method, an approach that focuses on community empowerment by utilizing the assets they already have. This method aims to explore local potential and make the community the main actor in innovation and sustainable development. The ABCD approach in this study is based on the principle that every community has resources and potential that can be maximized to improve their welfare. Therefore, this method emphasizes the importance of community empowerment through the process of identifying, utilizing, and effectively managing local assets.

The stages in applying the PKM ABCD method in this research include:

1. Identification of Local Assets

The first step was to recognize the potential of the Bermi Village community, especially in the dairy farming sector. Cow's milk was identified as a key asset that could be processed into value-added products. In addition, the ability of residents in the field of food processing and the facilities available in the village were also mapped to support the development of this innovation.

2. Aset Development of Asset-Based Innovation

Once key assets have been identified, the next step is to design local resource-based innovations. In the context of this research, innovation developed is milk dodol as an alternative business for the community. The product formulation process was carried out with the aim of producing high-quality milk dodol that has a wider market appeal.

3. Community Engagement

The ABCD method emphasizes active community involvement in every stage of innovation. Therefore, a series of socialization and training was conducted to the community on how to make milk dodol, from processing raw materials to more attractive packaging techniques. In addition, this research also encourages collaboration with youth groups, farmers and local businesses to increase product marketing opportunities.

4. Implementation and Market Trial

This stage involved the initial production of milk dodol and marketing trials on a limited scale. The product was introduced to the public as well as potential consumers to obtain feedback regarding the taste, texture and attractiveness of the product. The feedback obtained in this stage was used as a basis for refining the innovation before it was produced in larger quantities.

5. Evaluation and Sustainability

The final step in this research is to evaluate the effectiveness of the innovations developed, both in terms of technical and economic impacts on the community. In addition, this research also designed a sustainability strategy for the milk dodol business so that it can become a flagship product of Bermi Village. Further analysis was conducted to measure the extent to which this innovation can contribute to improving community welfare and creating new business opportunities in the dairy processing sector.

By applying the ABCD method, this research not only focuses on the creation of new products, but also aims to build community economic independence through the optimization of local assets. This approach is expected to produce sustainable innovations and have a positive impact on village economic development.

RESULTS AND DISCUSSION

1. Cow Milk Potensial in Bermi Village

Based on field observations, Bermi Village has an abundant supply of cow's milk, making it one of the areas with great potential in dairy farming. This abundant milk availability reflects the high productivity of local farmers and opens up vast opportunities for diversification of dairy-based products. However, without innovation in processing, excess milk production often becomes a problem, especially when market prices are unstable or when supply exceeds demand.

In this regard, the processing of milk into milk dodol emerges as an innovative solution that not only provides value added to milk, but also maximizing local potential. Milk dodol, which has the advantage of longer shelf life compared to fresh milk, can be a superior product that can create income stability for farmers. In addition, the development of milk dodol in Bermi Village also has the potential to create a new economic network involving various parties, ranging from farmers, micro, small, and medium enterprises (MSMEs), to the tourism sector that can make milk dodol as a regional souvenir.

More than just product innovation, the utilization of milk to make milk dodol is also in line with the Asset-Based Community Development (ABCD) approach, which focuses on village economic development through the utilization of existing potential within the community. With the right strategy, milk dodol can develop into a signature product of Bermi Village and become a symbol of community empowerment in optimizing local resources to create wider and more sustainable economic opportunities.

2. Milk Dodol Making Process

a. Material Used

In making milk dodol, main ingredients and additional ingredients are used which play a role in improving the taste and quality of the final product.

The ingredients used in making milk dodol are as follows:

- 1) Fresh cow's milk 2 liters As the main ingredient, it gives a creamy taste and is rich in nutrients such as protein, calcium, and vitamins
- 2) The 250 grams of rice flour serves as a thickening agent that helps create the chewy texture typical of dodol.
- 3) 500 grams of palm sugar is used as a natural sweetener that gives a golden brown color and a delicious aroma.
- 4) 3 pandan leaves as a natural fragrance that adds a distinctive aroma to the milk dodol.
- b. Stages of Making Milk Dodol
 - 1) Material Preparation

Fresh cow's milk is strained to ensure there are no impurities or cream residue that can interfere with the processing. Pandan leaves are washed and tied in a knot to make it easier to lift after the cooking process. Palm sugar is cut into small pieces or combed to dissolve faster when cooked. Rice flour is dissolved in a little water to avoid clumping when mixed into the dough.
 - 2) Mixing and Preheating

Fresh cow's milk is heated in a large pan over low heat until warm, without boiling.
Pandan leaves are incorporated into the milk to give it a distinctive natural aroma.
Palm sugar is added little by little while stirring continuously until it is fully dissolved.
 - 3) Rice Flour Addition

The rice flour solution is slowly incorporated into the milk and palm sugar mixture while stirring constantly so that it is evenly mixed without clumping.
 - 4) Cooking Process

The mixture is cooked over medium heat while stirring continuously to prevent clumping and avoid burning the bottom. Over time, the dough will thicken and turn golden brown due to the caramelization process of palm sugar. Stirring should be done continuously for about 2-3 hours until the batter is completely thick, elastic, and no longer sticks to the pan.
 - 5) Consistency Testing

To make sure the dodol has reached the right texture, take a small amount of dough with a spoon and let it cool for a while. If the dough is not sticky to your hands and has good elasticity, then the dodol is done and ready to be cooled.
 - 6) Cooling and Packaging

The cooked milk dodol is poured into a baking sheet that has been lightly oiled to prevent sticking. Allow the dodol to cool completely before cutting it to the desired size. The cut milk dodol can be wrapped using plastic or banana leaves to maintain its freshness before being packaged in larger containers for sale.

3. Product Innovation and Excellence of Milk Dodol

Milk dodol is a form of development of traditional dodol by adding milk as the main ingredient. This innovation results in a product with a softer texture, distinctive flavor, and better nutritional content. Here are some of the advantages of milk dodol compared to dodol in general:

a. Longer Shelf Life

One of the main advantages of milk dodol is its ability to last longer than fresh milk. The long heating and cooking process causes the water content in the dodol to decrease significantly, thus inhibiting the growth of bacteria and mold.

In addition, the use of palm sugar as a sweetener also contributes to product durability. Palm sugar has hygroscopic properties, which means it can absorb moisture, thus helping to maintain the stability of the dodol without the need for additional preservatives. With proper storage in a sealed container at room temperature, milk dodol can last for more than a month. This makes milk dodol a more durable dairy alternative to fresh milk or its derivative products such as cheese and yogurt, which tend to have a shorter shelf life.

b. Nutritional Content

Compared to sticky rice flour-based dodol, milk dodol has a higher nutritional content thanks to the use of fresh cow's milk as the main ingredient. Some of the key nutrients in milk dodol include

- 1) Protein plays an important role in the growth and repair of body tissues.
- 2) Calcium Helps maintain healthy bones and teeth and reduce the risk of osteoporosis.
- 3) Vitamins (A, B2, and D) Supports body functions, improves eye health, and maintains metabolism.

Despite the long cooking process, the calcium and protein content in milk remains intact, making milk dodol a nutritious snack suitable for all ages. Compared to candy or other sweets, dodol susu is healthier because it uses natural ingredients such as fresh milk and palm sugar, without the addition of artificial sweeteners or synthetic colors.

4. Promoting Local Wisdom in the Manufacturing Process

Milk dodol is not only an innovative product, but also reflects the value of local wisdom in the utilization of raw materials and traditional processing methods that have been passed down from generation to generation. Utilizing Local Potential Regions such as Bermi Village which is a producer of fresh milk can utilize this raw material to be processed into value-added products. This will not only help increase farmers' income, but also reduce dependence on the sale of fresh milk whose prices often fluctuate.

Traditional Processing Methods Milk dodol is still made using traditional methods, such as cooking over low heat and stirring continuously until it reaches the desired texture. This technique not only maintains the distinctive flavor of milk dodol, but also preserves the cultural value of the manufacturing process. Using natural ingredients such as palm sugar. The main sweetener reflects the natural approach in making milk dodol, resulting in a more natural and healthy sweetness. addition, pandan leaves are used as a

natural fragrance that provides a distinctive aroma without the need for additional artificial chemicals.

Opportunities as a culinary tourism product along with the increasing public interest in local wisdom-based products, milk dodol has great potential to be a typical souvenir from milk-producing areas. Its unique taste can attract



Figure 1. The Process of Making Milk Dodol

Tourists who want to taste traditional milk-based foods with an innovative touch. With these various advantages, milk dodol can be further developed as a superior product that is not only of high economic value, but also reflects local cultural heritage.



Figure 2. The Result of Making Milk Dodol

CONCLUSION

The utilization of cow's milk for milk dodol production in Bermi Village has proven to be a potential alternative business to improve the economic welfare of the community. By applying the Asset-Based Community Development (ABCD) approach, this innovation not only increases the selling value of milk, but also helps

farmers deal with market price instability. The advantages of milk dodol, such as The longer shelf life, high nutritional content, and more stable price make it a highly competitive product. In order for milk dodol to be increasingly recognized as the village's flagship product, support from various parties is needed, including the provision of training for the community as well as innovation in the development of flavor variations. Effective marketing strategies, such as strong branding and collaboration with the tourism sector, can also help increase the appeal of this product. With the right approach, dodol susu has the potential to become a culinary icon of Bermi Village and encourage more sustainable economic growth.

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