# Adaptive Efforts and Implementation of The Penahelix Model in The Development and Sustainability of MSMEs in Penglatan Village During the Sars Cov-2 Pandemic

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### Abstract

The decline in the productivity level of MSMEs is caused by the global impact of the Covid-19 pandemic, the MSME sector most affected is MSME engaged in the food industry. The purpose of this mini research is to examine how the adaptive efforts and implementation of the pentahelix model are carried out by MSME engaged in the food industry in Penglatan Village to survive and develop businesses sustainably in the midst of a pandemic situation. The research method used is descriptive qualitative method by conducting separate interviews with MSME owners. This study uses the concept of the pentahelix model with the results of the analysis of adaptive efforts and the implementation of the pentahelix model. MSMEs that are able to survive and are still producing in the midst of a pandemic make various efforts that are adapted to the situation and market demand, adaptations made by several MSMEs are starting to sell by utilizing information technology and selling and promoting products online.

### Introduction

In the economic order, Cooperatives and MSMEs are one of the pillars of the economic strength of the Indonesian people by providing and expanding employment opportunities and economic equity. Since the Covid-19 pandemic hit Indonesia and other countries in the world, various sectors in Indonesia began to be affected, including cooperatives and MSMEs. Based on data from the Ministry of Cooperatives and SMEs, it is stated that as many as 1,785 cooperatives and 163,713 MSME actors have been affected by the Covid-19 pandemic (Amri, 2020). There are three groups of cooperatives affected by the Covid-19 pandemic, namely Savings and Loans Cooperatives (41%), Consumer Cooperatives (40%) and Producer Cooperatives (10%) with the main problem being in capital (47%), declining sales levels (35%)) and production delays (8%) while the MSME sector most affected is food and beverage accommodation providers (35.88%) wholesale and retail trade (25.33%), manufacturing industry (17.83%), service activities (11 .69%), and agriculture, forestry and fisheries (5.6%). The main causes of the MSME sector being significantly impacted are the decline in sales levels, difficulties in meeting raw materials, capital that is difficult to obtain, distribution and production being hampered.

Especially for MSMEs in Penglatan Village which play a role as a center or center for dodol, coffee and palm sugar products, with a total of 60 business groups who are members of the Penglatan Village dodol business forum or community. With a large number of entrepreneurs and workers, the Covid-19 pandemic conditions that have an impact on the sustainability of MSMEs in Penglatan Village need to be addressed properly. Sustainability of efforts to deal with the impact of the pandemic is very necessary because it is the main factor for businesses to survive or not. The problems faced by several MSMEs in Penglatan Village, Kab. Buleleng, namely the decline in production levels and monthly sales levels during the Covid-19 pandemic based on research that has been carried out previously by (Luh Putu Swastini, 2020), what are the adaptive efforts that have been made for the sustainability of

SMEs in Penglatan Village to survive, and how is the implementation of Pentahelix a model in developing MSMEs in Penglatan Village during the current Covid-19 pandemic. This research is important to do to examine how MSME actors in Penglatan Village who are engaged in the food industry (Traditional Snacks) can adapt and survive the blows and impacts of the pandemic. Although the impact of the Covid-19 pandemic has caused the MSME sector to be badly hit, on the other hand, there are opportunities provided by the government in the form of various injections of funds and credit loans to MSME actors.

In addition, MSME actors are expected to be able to take advantage of various training and government programs and take advantage of information and communication technology that is growing in the industrial era 4.0, namely automation of production and marketing systems by utilizing technology and big data. Based on the above background, there are two problems in this research. First, how is the implementation in developing the creative economy through MSMEs. Second, how to implement the pentahelix model in the development of the creative economy through MSMEs.

# **MSMEs**

MSMEs or often translated as Micro, Small and Medium Enterprises are the largest and largest group of economic actors in Indonesia, as well as the key to safeguarding the national economy in the face of the economic crisis. Apart from being a pillar of the economy, MSMEs are a tangible manifestation of economic development by providing employment and helping to meet the income needs of the community. According to the Ministry of Cooperatives and Small and Medium Enterprises based on Law No. 9 of 1995, SMEs are small businesses, including micro companies, business entities with assets of at least IDR 200,000,000 excluding land and buildings for business premises, and annual sales of IDR 1,000. 000000 maximum. Meanwhile, medium-sized businesses are in the form of business entities operated by Indonesian citizens with net assets of IDR 200,000,000 – IDR 10,000,000,000 excluding land and buildings. In addition, SMEs can also be seen based on the number of workers involved in their business, small businesses have 5-19 workers and medium businesses have 20-99 workers. (Desiyanti, 2020)

Various situations and conditions that have shifted during the COVID-19 pandemic require MSME actors to continue to adapt to the situation. MSME actors must make adjustments to the conditions faced by increasing competence and innovation, this aims to maximize the competence of their human resources. To survive during the pandemic, MSME actors must develop an adaptive culture, namely an organizational culture in which every human resource can accept change by utilizing technological developments. Adaptive efforts are accompanied by the ability of MSME actors to solve a problem that occurs, and the speed in responding to circumstances or changes. According to (Stam, Arzlanian and Elfring. 2014) there are three characteristics that describe the adaptive capabilities possessed: (1) Organizational ability in terms of identifying and having sensitivity to opportunities that are around, (2) Ability to follow up or respond to these opportunities, (3) Ability to respond appropriately to opportunities.

### Pentahelix Model

In the theory of development there is the concept of pentahelix, penta has the meaning of five and helix has the meaning of interweaving or bonding. In the pentahelix concept it is explained that a development cannot be carried out by one element, but must be assisted and encouraged by other elements by means of mutual cooperation and collaboration between the five elements (stakeholders), both academics, business people, communities, government and media. (Setiawan, Kurniawan, Komara, Prabowo, & Sucahyo, 2020). The type of research used in this study is a qualitative descriptive method by conducting in-depth interviews with MSME owners engaged in the food sector (traditional snacks). Sources of data in this research process using primary data and secondary data:

1. Primary Data, is data collected directly by researchers from the object or place of research, namely interviews.

2. Secondary data, is data in the form of articles, journal literature and several sites on the internet related to this research.

### Methods

The type of research used in this study is a qualitative descriptive method by conducting in-depth interviews with MSME owners engaged in the food sector (Traditional Snacks). Researchers chose to use this method with the aim of describing more clearly and in detail about the problems faced based on facts supported by interviews and supporting documentation. Researchers collect and describe all phenomena that occur due to the Covid-19 pandemic and have an impact on MSME actors in Penglatan Village. (Sugiyono, 2003). Researchers collect information in the field by taking samples that can represent the population of respondents who are willing to be interviewed. The data taken is data before the pandemic and during the pandemic.

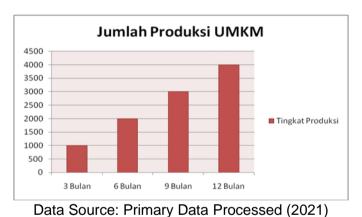
This research is located in Penglatan Village, Buleleng Regency with the target of MSME businesses producing processed foods (Traditional Snacks) with the following research focus:

- 1. Analyzing the adaptive efforts that have been made by MSMEs to survive and continue their business in the midst of the Covid-19 pandemic
- 2. Analyzing MSME Development in Penglatan Village with Pentahelix Model

## **Results and Discussions**

Respondents' response when MSMEs have not been affected by the Covid-19 pandemic

Respondents' responses to MSME production activities during the Covid-19 pandemic have not threatened the MSME sector, starting from the number of products made, product marketing areas and income levels. The data obtained is the result of interviews with informants, then the data is processed so that it displays the graph below:



1 MSMEs Production Amount Refere the Pandem

Figure 1. MSMEs Production Amount Before the Pandemic

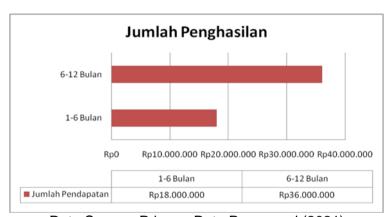
Before being affected by the Covid-19 Pandemic, the production level of MSMEs engaged in food production (traditional snacks) in Penglatan Village was quite high within 6 months, MSME owners could produce as much as 2,000 Kg of Dodol because of the large market demand coupled with the needs of the Hindu community in Bali in using traditional snacks (dodol) as a complement to banten (ceremonial means). In addition to a fairly high level of production, the marketing area for MSME products in Penglatan Village is also widespread in almost all regions in Bali with the distribution data in the following graph:



Data Source: Primary Data Processed (2021)

Figure 2. Percentage of Marketing Area Before the Pandemic

The distribution of MSME products before the Covid-19 pandemic was almost all over Bali. Not only in the area of production and sales in stores, these MSME products are also marketed in several souvenir shops in Bali, for example, the Joger Souvenir Center, and traditional markets in the Pancesari, Baturiti, Mengwi, Kintamana, etc. Around 50% of MSME products are collected and marketed through central souvenir shops.



Data Source: Primary Data Processed (2021)

Figure 3. Income Before the Pandemic

While the level of income that can be obtained by MSME actors before being affected by the Covid-19 Pandemic can be seen in the graph above, MSME actors can earn Rp. 3,000,000 per month so that per year they can earn approximately Rp.26,000,000.

Respondents' response when MSMEs have been affected by the Covid-19 Pandemic
Respondents' responses to MSME production activities when affected by the Covid-19
Pandemic, ranging from the number of products made, product marketing areas and income levels.



Data Source: Primary Data Processed (2021)

Figure 4. Production Level During the Pandemic

The impact of the COVID-19 pandemic on the MSME production process is quite significant, when compared to the production level before the Pandemic, the number of MSME production levels in Penglatan Village that produce food ingredients (traditional snacks) has fallen drastically. Before the pandemic, every 6 months MSME actors produced 2,000 kg of data while this could only produce 200 kg due to a declining demand level because product distribution was hampered because some partners to distribute products were not operating. In addition, the process of minimizing religious ceremonies also has an impact on decreasing the need for traditional snacks to complement the ceremonial facilities (banten) so that it has an impact on decreasing market demand.

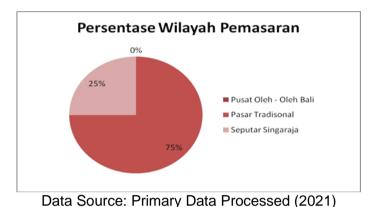


Figure 5. Percentage of Marketing Area During the Pandemic

The production level, which according to him, is due to the narrowing of the marketing area and reduced demand, due to the pandemic, the souvenir center is no longer operating, so product distribution is stopped. MSME owners only depend on local market demand in several areas in Bali and some buyers who have subscribed and bought products directly at the store.



Data Source: Primary Data Processed (2021)

Figure 6. Income During the Pandemic

The level of production and marketing areas that decreased drastically during the COVID-19 pandemic had a direct impact on the income level of MSME actors, before the pandemic, MSME owners could earn a turnover of approximately Rp. 3,000,000 per month, while currently it is Rp. 1,000,000 per month. The condition of MSMEs which was quite hit by the impact of the COVID-19 pandemic required MSMEs to be in a difficult position, besides that the existence of PPKM (Restrictions on Community Activities) further worsened the situation of MSMEs. From several samples of MSMEs that the researchers interviewed, there were several MSMEs who chose to temporarily close because there were no orders, but most chose to stay and produce because they already had regular subscriptions so they could still sell. MSMEs that choose to stay afloat are dominated by voters who dare to take advantage of digitalization to market and offer their products. MSME owners who implement sales through e-commerce and social media have a fairly stable level of sales and every

month they still earn income, even though it is not the same as before being affected by the pandemic. The following are some of the adaptive efforts that have been carried out by MSME actors during the COVID-19 pandemic in order to survive and produce:

Table 1
Adaptive Efforts by MSME Actors During The COVID-19 Pandemic

No.	Name of	Adaptive Effort
	Business/MSME	·
1		Marketing products through social media Creating innovations by adding variants of traditional snacks such as: gipang, iwel, kaliadrem, reta, and cacalan. Attend marketing and marketing trainingproduct packaging at the Village Head's Office
2		Marketing products on the social media platform facebook. Participate in MSME seminars at the Office to the Village Innovate by adding various cakes other traditions such as: Iwel, satuh and cacalan.
3	Dodol Bu Erna	Take in-office marketing training village head.

Some of the most dominant adaptive efforts carried out by MSME actors are participating in training organized by Penglatan Village officials assisted by several academics who voluntarily conduct seminars on how to market products correctly and how to make product packaging more attractive. And streng then online marketing capabilities by leveraging digitalization.

# MSME Dodol Riska (business age 13 years)

The dodol riska business is a business that was pioneered by Mrs. Ketut Somarika since 2008. She carries out the production process in her backyard which is quite spacious even though she only graduated from elementary school level, with strong determination and capital she was able to develop her business from scratch. For the workforce, he deliberately recruits women who need work when orders are increasing, the number of workers needed also increases, in this risky dodol business, Mrs. Soma has 5 permanent employees and other employees are only called in when snack orders are busy. The marketing area for Ms. Somarika's MSME products is not only in the Singaraja area but has been marketed in several areas in Bali, before being affected by the COVID-19 pandemic she was able to produce 2,000 kg of dodol to meet customer demands. In addition to marketing themselves, sometimes there are several salespeople who come and buy Ibu Soma's lunkhead to resell.

When most sectors were affected by COVID-19, Ibu Somarika's Dodol business was also affected. The problem he feels is that the level of orders and market demand has decreased dramatically, production levels have decreased, and income has also decreased. Even so, the dodol riska business did not suffer losses, because he only produced when there was an order so he didn't lose money. The sales transaction process continues to occur because most people need traditional dodol snacks for their complementary needs for ceremonial facilities. Due to seeing this opportunity, Mrs. Somarika made several innovations in the products that were sold not only providing dodol snacks, but also selling various other snacks such as gipang cakes, reta, iwel, and kaliadrem, this was felt as the right strategy because every month during religious ceremonies the snacks This tradition is quite popular.

To deal with the new normal later when the pandemic starts to decline, Ms. Ketut Somarika has formulated a strategy by continuing to sell online through social media (Facebook). This is considered practical and does not cost much but is very effective in reaching buyers inside and outside the area. In addition, Mrs. Somarika is also diligent in participating in training organized by the Penglatan village government as a provision to make business progress.

# MSME Dodol Bu Mawar (business age 13 years)

Similar to Dodol Riska's business, Ibu Mawar's Dodol business is a food business (traditional snacks), this business was initiated by Ibu Mawar since 2008 and has been running for about 13 years and is still operating well. Initially this business was handled by Mrs. Mawar herself, but because of her age, she gave this business to her son and daughter-in-law so that they could continue to operate. Outside the Penglatan Village, Ibu Mawar is well known by the public because it has a distinctive taste. Before the Covid-19 pandemic had an impact on his business, he was able to produce around 450 kg of lunkhead every time there was a religious ceremony with a turnover of IDR 2.5 million per month.

The impact of the COVID-19 pandemic did not have much of an impact on Ibu Mawar's dodol marketing process because she continued to distribute to traditional markets even though the quantity of marketing had decreased. During the pandemic it can only produce approximately 400kg and depends on available stock.

In the future, Ibu Mawar's Dodol business will improve the distribution process through online sales because this is considered quite promising when viewed from the current situation, where the level of online shopping in the community is increasing. In addition, Baliau also joins the dodol training business community and shares with each other in order to survive in the current situation. In addition to opening a dodol business, he also opened a food stall to keep it alive and operating.

# MSME Dodol Bu Erna (11 years of business age)

Bu Erna's Dodol business is a side business carried out by a housewife named Kadek Erna Rianti, she sells groceries and vegetables, and side dishes for daily needs. His dodol business has been initiated since 2010 and has been running for approximately 2011 and is still running today. Ibu Erna only sells lunkhead to a few people who have become her subscribers and distributes it in the Klungkung area. Every month she can produce 200 kg of lunkhead and is assisted by her family, for her income, Mrs. Erna can earn 1 million per month from her dodol business.

Due to the pandemic, Bu Erna's distribution of lunkhead has decreased, which usually produces around 200 kg, currently only producing 10-20 kg. However, he continued to run his business and did not choose to close because, some of his customers still made purchases for religious ceremonies, especially during the full moon and tilem holidays.

To stay afloat and increase the number of productions he plans to carry out online promotions using social media platforms. And he is also registered as a member of the dodol training business through the community. He will learn how to package and market a good and attractive dodol so that he hopes that his business can continue to run.

## Implementation of the Pentahelix Model

Based on the results of interviews with several MSME owners who are engaged in the dodol food sector, the following is a presentation of data viewed based on variables that affect business development by looking at indicators from the pentahelix model:

# 1. Academics

Several academics from various teacher circles provide training to all dodol MSME owners in the Penglatan village through routine training held at the Penglatan Village Office. These academics provide training in the form of how to package products so that they are not monotonous and how to do online marketing. Viewed from this point of view, the role of academics is very influential in contributing their ideas and knowledge, but it is necessary to know the role of academics in the financial sector such as lecturers and students is very necessary because most MSME owners are still constrained in the process and standards in preparing financial statements.

### 2. Business Sector

A promising and appropriate marketing strategy in the development of the Penglatan Village dodol business is marketing by utilizing technology, namely digital marketing. By following the digitalization trend, the opportunity to expand marketing reach will be

wide open. Almost all dodol business owners in Penglatan village have implemented this, so that during the pandemic their businesses can still operate.

### 3. Communities

Dodol business actors (traditional snacks) in Penglatan Village already have their own community which contains approximately 60 members, namely all owners of dodol SMEs, this community is an association of Penglatan village dodol entrepreneurs. Through this community they share their knowledge and tricks with each other.

### 4. Government

In addition to academic support, support from the government is one of the important things for MSME owners. The role of the village government in helping develop MSMEs is to provide business permits and open a village office as a place for seminars and training that is carried out regularly to broaden the knowledge of MSME owners. In addition, the Penglatan village government also collaborates with the Department of Trade and Industry to help develop MSMEs by providing assistance in the form of tools for operational processes such as (pans, basins, coconut grater machines, etc.). In addition to this assistance, the Industry and Trade Department also provides counseling in the form of how to adjust the selling price for each dodol entrepreneur in Penglatan Village so that there is no price competition and jealousy from each seller.

# 5. Media

Various activities carried out by the Dodol MSME owners in Penglatan Village have been covered by various media, the element of publication is one of the supporting facilities that is quite good and important in increasing promotion. Most of the Dodol SMEs in Penglatan Village have been covered by the media, namely Bali TV, TVRI and Nirwana TV and several newspapers such as Nusa Bali etc.

# **Conclusions and Suggestions**

The adaptive efforts of the Dodol MSMEs in Penglatan Village have been going quite well, this can be seen from the number of MSMEs that are still surviving despite being affected by the COVID-19 pandemic, and only 1-3 MSMEs have closed their businesses. MSMEs have made good use of technological developments so that they survive by doing online marketing. The manufacture of new products in the form of product innovation is also very influential on the level of sales by adding types of traditional snacks, the buyer's interest will increase because the level of public spending, especially the Hindu community during religious holy holidays, is very high in buying snacks to complement ceremonial facilities.

Implementation of the Pentahelix Model contains five elements, namely academia, business, community, government, and media. In its implementation, it has not been seen as a whole, especially in terms of academics, the role of academics is still lacking. However, the other four components have been able to support the dodol UMKM activities in Penglatan Village.

Academics are expected to pay more attention to and assist MSME actors by providing training in the preparation of good financial reports according to Financial Accounting Standards, so that MSME actors are able to apply it in preparing financial reports every year and make it easy to apply for business capital loans.

For business owners, it is hoped that they will further strengthen online sales in order to be able to create interesting content so that buyers are interested in shopping. MSME actors are expected to improve their online marketing strategy capabilities in accordance with market demand and trends. Suggestions for further research are to expand the research location and population so that it is not only at the village level.

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