A Policy Framework to Support Household-Based Snack Food Industry in East Sumba Regency for Poverty Alleviation

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ABSTRACT

Objective – This research aims to develop a policy framework to support household-based snack food industry in the East Sumba regency for poverty alleviation.

Methodology/Technique – A qualitative method is applied to enable exploration. A benchmarking analysis with the snack food industry in Garut, West Java, also is conducted to gain insights of the success factors and challenges faced by the industry there.

Findings – Most informants say that the East Sumba regency has a high production of food crops and fruit; thus, it has potential to develop a household-based food industry to improve the local economy, i.e., a food and snacks industry based on raw materials such as maize, cassava, sweet potatoes, peanuts, and bananas. The regency also has a long coastline; therefore, coconut, fish, and seaweed-based food industries also are a potential for development in the area.

Novelty – This study findings propose a policy framework for poverty alleviation through the creation of new entrepreneurs producing local snack foods. The creation of new entrepreneurs will increase employment and it should be done by the local government by implementing policies that develop the management skills of people in four functional management aspects, which must be supported by specific policies in community leadership, community culture and mindset, public–private partnerships, government support, and infrastructures.

Type of Paper: Empirical

Keywords: Poverty Alleviation; Household-Based Industry; Food industry; East Sumba; Indonesia.

JEL Classification: L26, P46.

1. Introduction

The Indonesian economy has grown significantly in the recent years. According to data from the Indonesian Statistics Body (BPS), the Indonesian economy has grown an average of 5.42% in the period of 2001 to 2014 (BPS, 2017a). Although the economic outlook is good, the country is still facing problems with eradicating poverty. The number of poor residents in the country was around 27.7 million or 10.70% of the total residents in the month of September 2016 (BPS, 2017b, 2017c). The percentage of poor residents is significantly higher in the eastern provinces of Indonesia, such as in East Nusa Tenggara (22.01%), Maluku (19.26%), Papua (28.40%), and West Papua (24.88%) (BPS, 2017c).

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In the province of East Nusa Tenggara (NTT), in particular, the percentage of poor people is relatively high. Except for Kupang (the capital city of NTT province), the other regencies/districts in the province have more than 40% households that are considered pre-prosperous, for instance, the percentage of pre-prosperous households in the East Sumba regency in 2014 was 48.68% (BPS NTT, 2016).

Thus, the Indonesian government developed the Masterplan for Acceleration and Expansion of Indonesia’s Economic Development (MP3EI). In the masterplan, the NTT province is considered as the national food support corridor due to its high production rate of food commodities, such as maize and fresh roots. Hence, the food sector significantly affects the poverty line. The contribution of food commodities to the poverty line is relatively higher compared with non-food commodities (apparel, housing, education, and health sectors), which was at 79.20% in September 2016 (BPS NTT, 2017). Because the food sector contributes the most to the poverty line, and the production rate of food commodities is high in the region, there is an opportunity to increase the local residents’ level of income by engaging them in a household-based food industry as community-based entrepreneurship (CBE). CBE is an alternative way to develop the impoverished community (Paredo & Chrisman, 2006).

CBE is based on the understanding that collective and individual interests are fundamentally complementary and by regarding communal values and the notion of the common good as important elements in venture creation. The development of local entrepreneurs can help researchers to develop the region’s core competence (Korschning & Allen, 2004), which is defined as the region’s unique advantages; these advantages include people skills, natural resources, environment, culture, and market potential for both primary and processed products (Kurniyati, 2010).

In order to create a conducive environment for CBE, the local government and entrepreneurs should have a good working relationship, the region image should be created by intensively communicating the region’s characteristics and advantages, and the region’s products should possess high quality and the region’s identity (Fink et al., 2013).

In the Asian region, the concept of one village one product (OVOP) or one town one product (OTOP), which was first developed in Japan’s Oita region, is a popular concept related to community development and local industry promotion and has been implemented in several Asian countries such as Thailand, Malaysia, Philippines, People’s Republic of China (PRC), and Indonesia (Igusa, 2006). Outside Japan, the OVOP movement has been adopted as a government-involved policy for poverty alleviation; thus, it is viewed as a way to develop local communities’ entrepreneurial skills through the use of local resources and knowledge, the creation of value-added activities, and branding of local products, as well as developing human resources in the local economy (Natsuda et al., 2012). The main principles of OVOP is that each community should create at least one marketable product, which bears the community’s identity and uses local resources in which to polish the product, perform value-added activity, create one’s own brand, and market the product globally (Igusa, 2006).

According to Igusa (2006), a successful implementation of OVOP can be achieved if there is clear guidance from the local government through knowledge dissemination, such as marketing strategy, innovative thinking, and the education of community leaders. Stenning and Koichi (2008) also explained the important role of knowledge and networking in community-capacity development in the success of the OVOP movement in Oita. Last, Naipinit et al. (2016) investigated community enterprises in northeast Thailand (founded as a result of OVOP policy by the Thai government) and revealed that they face challenges to survive mostly due to problems in marketing, accounting and finances, and production.

In the East Sumba regency, several household-based food processing businesses are run either by individuals or by groups of housewives. Their products are usually snack foods, such as cassava chips, corn and peanut snacks, and local sweets. However, the businesses have not been able to develop optimally, so they have not significantly improved the local economy. Thus, the objectives of the paper are to provide insights of challenges faced by the household-based food businesses in the East Sumba regency and propose a policy framework for optimal development of the household-based snack food industry to reduce the area’s poverty.
level. The remainder of the paper is organized as follows. Section 2 presents research methodology, followed by results in Section 3 and discussions in Section 4.

2. Literature Review

The objective of this research is to gain insights into the existing conditions of household-based food-processing businesses in the East Sumba regency and their challenges to obtain optimal growth. Qualitative methods are used to obtain the primary data to better understand the phenomena. Previous studies indicate that some of the success factors of CBE or OVOP implementation are clear policies from the local government and a good working relationship between the government and community. Thus, we conducted in-depth interviews (IDIs) in May and June 2014 with 13 representatives from the central government, local government (NTT province and East Sumba regency), community leaders, and household-based business community to gain information concerning government policies toward the development of household-based food industries and the condition of the existing businesses (see Table 1 for informants’ institutions).

Table 1. Informants’ Institutions

<table>
<thead>
<tr>
<th>No.</th>
<th>Institution</th>
<th>Number of Informants</th>
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<tbody>
<tr>
<td>1.</td>
<td>The NTT Liaison Office in Jakarta</td>
<td>1</td>
</tr>
<tr>
<td>2.</td>
<td>Ministry of Cooperative and Small and Medium Enterprise (SME)</td>
<td>1</td>
</tr>
<tr>
<td>3.</td>
<td>Division of Cooperative and SME NTT province</td>
<td>1</td>
</tr>
<tr>
<td>4.</td>
<td>Division of Industry and Trade NTT province</td>
<td>1</td>
</tr>
<tr>
<td>5.</td>
<td>NTT Food Agency</td>
<td>1</td>
</tr>
<tr>
<td>6.</td>
<td>Division of Cooperative and SME East Sumba regency</td>
<td>1</td>
</tr>
<tr>
<td>7.</td>
<td>Division of Industry and Trade East Sumba regency</td>
<td>1</td>
</tr>
<tr>
<td>8.</td>
<td>Division of Agriculture East Sumba regency</td>
<td>1</td>
</tr>
<tr>
<td>9.</td>
<td>East Sumba Food Agency</td>
<td>1</td>
</tr>
<tr>
<td>10.</td>
<td>The government East Sumba regency</td>
<td>1</td>
</tr>
<tr>
<td>11.</td>
<td>Community leader (church priest)</td>
<td>1</td>
</tr>
<tr>
<td>12.</td>
<td>Household-based business group members</td>
<td>2</td>
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Benchmarking analysis with representatives from the food processing industry in Garut (West Java province) also was conducted in August 2014 to obtain information about the industry, along with its success stories and challenges. We further conducted focus group discussion (FGD) with five business owners and managers and IDIs with three government officers.

Based on the literature review, IDIs, and FGD results, we propose a policy framework to support the household-based food industry in East Sumba regency.

3. Methodology

3.1 East Sumba Regency

The East Sumba regency of the NTT province is located at the eastern part of the island of Sumba; its capital is Waingapu. It had a population of 246,294 people in 2015 (BPS NTT, 2016); its area of 7,000.5 square kilometers consists of 22 sub districts (BPS Sumba Timur, 2015). Most of the labor force (64.85%) earns its living in the primary sectors, namely, farming, plantation, forestry, hunting, and fishing (BPS Sumba Timur, 2015). The gross regional domestic product of East Sumba in 2015 was around USD 240 million, with the growth rate of 5.04%, and the agriculture sector as the highest contributor (BPS NTT, 2016).
The regency produces crops and fruits, such as rice, maize, fresh roots, peanuts, and bananas (see Table 2). Several household-based food businesses in East Sumba also exist, such as corn-based, banana-based, peanut-based, and seaweed-based snack food businesses.

Table 2. Production of Food Crops in East Sumba Regency in 2015

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Production (Tons)</th>
</tr>
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<tbody>
<tr>
<td>Paddy</td>
<td>81,543</td>
</tr>
<tr>
<td>Maize</td>
<td>50,514</td>
</tr>
<tr>
<td>Cassava</td>
<td>27,420</td>
</tr>
<tr>
<td>Sweet Potato</td>
<td>5,232</td>
</tr>
<tr>
<td>Peanut</td>
<td>1,583</td>
</tr>
<tr>
<td>Banana</td>
<td>14,432</td>
</tr>
</tbody>
</table>

Source: BPS NTT (2016)

3.2 IDI Results

3.2.1 Opportunity to develop household-based food-processing industry

The majority of informants say that the East Sumba regency has a high production of food crops and fruit; thus, it has potential to develop a household-based food industry to improve the local economy, i.e., a food and snacks industry based on raw materials such as maize, cassava, sweet potatoes, peanuts, and bananas. The regency also has a long coastline; therefore, coconut, fish, and seaweed-based food industries also are a potential for development in the area. As savannah also exists in the regency (which is a perfect environment for cattle), it is further possible to develop a meat-based food industry in the area.

3.2.2 Household-based economy development through household-based business group

Government informants stated that they support the household-business groups (for poverty alleviation) in the form of providing education and training (such as for production techniques and packaging), providing access to market through exhibition, as well as providing grants for production equipment. Most of the group members are housewives. Some informants say that it is because housewives have more time to be involved in the business groups; others say that this is due to East Sumba’s culture that fosters women to be the breadwinners of the families. However, only a few groups remain active in business; hence, the activity has not significantly improved the local household’s income. The Division of Agriculture of the East Sumba regency has provided support in the form of training and grants for production equipment to household-based food-processing business groups producing food snacks. The program reached 440 groups in 22 sub districts in 2013. However, due to limited skills of the group members, limited access to market products, and limited working capital, only 18 business groups are still active.

3.2.3 Government Policy

Informants from government institutions say that several government institutions are usually involved in developing the household-based food industries, namely, ministry/division in agriculture, cooperatives and SME, and industry and trade. Each with their own reasons and objectives. The objective of Division of Agriculture is to reduce the dependency on rice, while the objective of Division of Industry and Trade is to improve the local economy, and the Division of Cooperatives and SME is designed to improve household income through cooperatives. These different agendas have caused limited coordination between government institutions. For example, a group that has received support from one institution will not be approached by other institutions, even if these institutions provide different kinds of support. Another informant also claims
that frequent employee rotations and the limited budget of government institutions cause sporadic and unsustainable support. The groups require continued support and guidance, for instance, through mentoring. Due to employee rotations and budget limitations, mentoring and other supporting activities cannot be conducted optimally.

### 3.2.4 Challenges faced by household business groups

In line with Naipinit et al. (2016), the IDIs’ results with informants indicate challenges that the household-based snack food industry in East Sumba face to develop optimally, namely,

- **Low motivation and limited skill of East Sumba’s residents.** Several informants say that residents’ low motivation to increase their household income is due to their myopic view of life. As long as they can afford to eat for today, they are happy with it. Thus, they tend to sell their produce directly to the local market without any added value. Some residents, who are motivated to increase their income, unfortunately have limited skills.

- **Sporadic and unsustainable support from the local government.** Although several government institutions have provided different support and help for the household-based business groups, the informants see that the support is still not optimal, as there is limited coordination between institutions.

- **Limited access to markets.** The household-based business groups only market their products in the East Sumba regency and/or Kupang (the capital city of NTT province). Due to high logistics costs and not having the product certifications (such as PIRT, certification of home industry, and halal certification), they cannot market the products nationwide. Furthermore, the packaging is too simple and unattractive; thus, the products have limited ability to attract customers from outside the NTT province.

- **Limited working capital.** The household-based business groups have limited access to working capital, either from the government or through loans from the cooperatives or private sectors. Hence, it is difficult for them to develop a business and increase the production capacity.

- **Simple production technology.** The household-based business groups are using manual food production technology that causes limited production capacity and unstandardized final products. Therefore, even if they have better access to the market, they may not be able to satisfy customer demand due to limited production capacity.

### 3.3 Benchmarking analysis of result

Based on FGD with the owners/managers of local sweets (called as “Dodol”) production businesses in Garut (West Java province), and IDI with the regulators, the current conditions of the Dodol Garut industry are described as follows. The informants agree that the market for Dodol Garut is segmented into market leaders and small firms. There are about 13,000 micro-producers, 1300 small firms, and 45 medium Dodol firms in the regency of Garut. In total, this industry employs 1250 workers and is located in seven districts.

Results from FGD indicate that all informants agree that the factors affecting the success of the household-based Dodol industry are (1) the government support; (2) support from state-owned enterprises (SOEs); (3) production technology; (4) access to the market; and (5) the history of the industry itself. Continuous government support received by businesses, including mentoring and training activities on production and marketing skills, is one of the key success factors of the industry. In addition, SOEs offer significant support for the SMEs in the form of low cost of capital compared with credit loans from commercial banks. This type of soft loan scheme can be implemented because SOEs use their corporate social responsibility (CSR) funds for helping SMEs to access the capital.

The informants also state that advanced production technology such as electrical dough mixers and automatic wrapping machines also may help household-based businesses to achieve their goals. In addition, support from government, market leaders, and networking and collaboration with other small businesses also
benefits access to the market. The managers and owners of Dodol Garut SMEs also agree that government support in commercialization and packaging improves their ability to sell their products. Last, but not least, another important success factor of the household-based Dodol Garut industry is the history of the industry itself. Dodol is a very well-known manufacturer of heritage sweets in Garut and Indonesia.

Besides key success factors of the household-based Dodol Garut SMEs, we also ask our informants about factors that may cause them to fail. One of them is the limited sources of workers/labors. Furthermore, our informants also agree that the high cost of financing also may affect their business performance and prevent them from expanding their businesses. In addition, they also agree that unstandardized product quality, shortage of raw materials due to diversion of land use, high price of fuels, and high labor cost also are among the significant factors that may affect sustainability of SMEs.

In order to confirm our findings from the FGD, we also conduct in-depth interviews (IDIs) with three officers as representatives of the regulator. In line with findings from the FGD, our informants also agree that one of key success factors of the household-based Dodol Garut industry is the history of local sweets itself; that their product is a well-known heritage food. They also agree that collaboration and networking among the SMEs in selling their products also help SMEs to survive. Our informants from the related government offices further acknowledge the importance of government and SOEs support in terms of providing access to low cost capital as well as training and development to enhance managerial and operational skills of the management and workers of the Dodol Garut SMEs.

3.4 Proposed policy framework

Based on literature reviews, field research, and benchmarking analysis results, the proposed policy framework to develop a household-based food industry in East Sumba is developed (see Figure 1).

In line with Paredo and Chrisman (2006), one way to reduce poverty levels in the region is by implementing a policy that is conducive for the creation of new entrepreneurs, especially in the food snack industry. New entrepreneurs can increase community income levels. In order to do so, the local government’s policy must be able to develop the residents’ skills in four functional management aspects, namely, financial, marketing, human resources, and operations management. In order to support skill improvement in each functional aspect, the local government must specify policies in terms of community leadership, community culture and mindset, public-private partnership, government support, and infrastructures.
3.4.1 Community leadership

The highest rank of leadership in East Sumba communities is the community and religious leaders. They are perceived by the local residents as having higher power than the local government leaders, which usually come from average laymen. Based on this condition, the local government must involve the community and religious leaders and their family members in motivating, educating, and training local residents, along with monitoring the implementation of the policy.

3.4.2 Community culture and mindset

As previously mentioned, the local community in East Sumba tend to think short-term only and are reluctant to process raw materials into final products. Housewives are usually the breadwinners in most families, while husbands usually become the recipients of the housewives’ hard work. They also tend to spend a fortune for local rituals. In order to develop the food-processing industry optimally, all elements of the community must work together hand in hand. Changing the local mindset and culture is a long process and requires a multi-disciplinary approach. The local government can approach higher educational institutions to determine the right approach that may lead to gradually changing the local mindset and culture.

3.4.3 Public–private partnership

Korschning and Allen (2004) states that there should be a community-based coalition that consists of banks, local media, government, and other related organizations, which actively participate and contribute in the development of the local entrepreneurial sector. Based on the experience of implementing OVOP in the Philippines and Nepal, Rana (2008) and Pun (2013) also emphasize the importance of partnerships between the community and private sectors to ensure the success of the program.

Benchmarking analysis with “Dodol Garut” industry also implies the important role of private sectors, such as state-owned entities (SOEs) and other private companies in supporting the local industry. Therefore, the development of a household-based food industry in East Sumba requires a partnership between the local government and SOEs/private companies to provide access to capital and markets, as the local government may not have sufficient resources to help all micro- and SMEs (MSMEs) in the region. The local government may approach SOEs/private companies so that their corporate social responsibility (CSR) can include SMEs in East Sumba. At least companies that operate in East Sumba can provide soft loans with low interest rates and insignificant collateral for a household group producing food products; these companies also can provide access to markets via involving them in exhibitions at the provincial and national levels.

3.4.4 Government support

As emphasized by Igusa (2006), the development of an industry greatly depends on local and central government support. Even though these governments have already provided support for the continuity of the food industry in the regency, the impact does not significantly increase the residents’ income level. To optimally develop a household-based snack food industry, the local government also must develop the supporting industries, such as packaging industry and tourism industry. A very famous tourist destination in NTT province is the island of Komodo. Food products here can be introduced to tourists as the local traditional food and can be taken home as souvenirs.

In addition to the current support (e.g., providing working capital, training, and mentoring), government support in the form of regular training and education of packaging and marketing must be provided for the household groups. The local government also can send representatives from the household groups for internships in similar successful industries in other provinces.
3.4.5 Infrastructure

To provide a conducive environment for the creation of new entrepreneurs, the local government must develop the local infrastructures, especially transportation and telecommunications. According to the explanations from an informant, the main challenge that must be faced by the household groups is high logistics cost that leads to high purchasing cost of production equipment and other raw materials, such as packaging materials. Therefore, the local government policy must include improvement of infrastructures, especially land transportation to connect subdistricts, and waterways transportation by increasing the ships’ frequency of visits; the telecommunication infrastructure also must be included, so that product marketing can be carried out via the Internet.

3.4.6 Human resources management

In order to overcome human resources management problems from a cultural perspective, local government must provide regular and continuous socialization, training, and mentoring to the residents. The local government can have a partnership with higher education institutions in order to determine a practical approach to support the abovementioned programs, including long-term timelines that focus on the vision and mission of the governor, namely, developing cooperatives and MSMEs in the NTT province. Active discussions with local community and religious leaders also must be regularly conducted to find a way to develop the community capacity based on local wisdom. In terms of training and education, divisions within the local government office must coordinate with each other to reduce overlapping programs.

The local government at the province level also must monitor the succession of leaders at the regency level; this will help ensure that the selected heads of divisions come from suitable backgrounds and have working experiences that match with the requirements. This is to reduce the unsustainable public policies that may have created obstacles for the community to run and expand their businesses.

3.4.7 Marketing management

The related divisions at the East Sumba regency, such as Division of Cooperatives and MSMEs, Division of Industry and Trade, should regularly and continuously provide training and education of the importance of commercialization stage of products, especially the importance of 4P in marketing.

a. Product
   - Snack food products must have PIRT (certification of home industry) and halal certifications so that the products can be sold nationwide.
   - Snack food products must have flavours that can be accepted by customers within and beyond East Sumba. Therefore, there should be product variants that can be accepted by people outside the East Sumba regency and NTT province.
   - Product packaging must be attractive and possess high quality to ensure that quality of product itself remains at the same level when it reaches the customer.

b. Price
   - Price must be affordable for the target market.

c. Place
   - Snack food products must be available at souvenirs shops. Therefore, the local government must allocate market space at Kupang (capital city of NTT province) and at tourist destinations, such as Labuan Bajo (near the Komodo island).
Companies owned by the local government can play a role as the partner for household groups to collect and distribute products to the customers.

d. Promotion

- Product promotion to people from outside NTT can be conducted through product exhibition at the provincial and national levels. The local government also can act as a mediator between household groups and the buyer.
- Local government can cooperate with the local and national media to promote the local snacks to the Indonesian people.
- Internet also can be used as a medium for promoting the product.

3.4.8 Finance

Even though the local government has provided working capital to household groups, other sources of funding are still needed to ensure the sustainability of the snack food industry. A partnership with a large corporation can be done to provide the working capital. The local government can provide financial aid in terms of subsidy via cooperation with the local bank, so that the interest rate can be lower. Another alternative is through CSR of SOEs or other large corporations. Furthermore, as the main obstacle for securing the bank loans is the inability of the household groups to develop business proposals, training of proposal writing can be done to help the groups in securing loans via cooperatives.

3.4.9 Operations management

In terms of raw materials, there are no significant problems, as food commodities are abundant in the regency. However, there are challenges that must be faced to optimally develop the industry. First is product standardization; thus, the local government must allocate a budget to help household groups to get product certification, such as PIRT and halal certification. Second is production technology; the local government can cooperate with higher-education institutions to develop suitable technology that can shorten production lead time and increase production capacity. Third is limited supply of raw materials for product packaging; the local government can form a partnership with cooperative or local companies, so that they can become the supplier for the materials and therefore can provide them with lower costs.

4. Discussion

A community-based enterprise, such as the one village one product movement is a promising way to improve the local economy to help alleviate poverty. However, knowledge dissemination and networking and a good working relationship between the government and the residents are required for successful implementation of the concept.

This paper presents insights regarding the conditions, challenges, and opportunities faced by the household-based snack food business groups in the East Sumba regency. Analysis of the interview results with 13 representatives from the central and local government, community leaders, and household-based business group members reveal that the East Sumba regency has potential for the development of household-based food processing industries, as the regency has a high production rate of crops and fruits.

Concerning the government support, several local government institutions have already implemented programs to develop household-based food processing industries in East Sumba for the purpose of poverty alleviation. However, limited government budgets and coordination among the related institutions causing sporadic and unsustainable supports to household-business groups makes it difficult for them to grow optimally. Furthermore, household-business groups face several challenges when expanding their businesses, namely, low motivation and limited skills of the residents, limited coordination among local government
institutions, and limited accesses to market and working capital as well as the use of simple production technology.

Based on the IDIs and FGD results in Jakarta, Kupang, and Waingapu, and also benchmarking analysis with food Industry in Garut, we propose a policy framework for poverty alleviation through the creation of new entrepreneurs producing local snack foods. The creation of new entrepreneurs will increase employment, which typically leads to a higher income level of the residents. In order to create new entrepreneurs, the local government must implement policies that develop the management skills in four functional management aspects, which must be supported by specific policies in community leadership, community culture and mindset, public–private partnerships, government support, and infrastructures (especially transportation and communication infrastructures).

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