Development of food security applying women's entrepreneurship in South Sulawesi

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Abstract. Food is a basic human need that is most essential. Food security is very important and strategic. One of the efforts of the government to realize food security is by diversification of food is the effort to provide and consume non-rice food with a diverse and varied menu. As one of the national food granaries, the government of South Sulawesi realize the diversification of food by cooperating with the community through large industries and household industries in the small industry or women's household industries that have a role in food processing starting from the preparation of raw materials, production process and sales. The method used in this paper is the method of Literature Studies. The study of literature is the solving of problems by tracing the sources of writing ever made before. The analysis of this paper is that food security in South Sulawesi is very closely related to economic stability and one of the strategies developed by the government is by product diversification. Agroindustrial diversification products become an opportunity for small industry women to be employed for them. This gets a positive response from the Government in South Sulawesi with the active participation of the government to participate and facilitate the entrepreneurship of women in South Sulawesi. In addition, food diversification is needed as one of the pillars for the stabilization of food security in South Sulawesi province because food diversification can contribute in increasing the production capacity of food and improvement of people's income in South Sulawesi.

Keywords: Food Security, Entrepreneurship, South-Sulawesi

1. Introduction

Food is a basic human need that is most essential. Food security is very important and strategic. Therefore, the government continues to strive to increase food security at various levels of the region, ranging from national level to household and even individual in accordance with the concept of food security in Law No. 18 of 2012 on Food stating that the implementation of food is done to meet basic human needs benefit equitably, equitably and sustainably based on (i) food sovereignty, (ii) food self-sufficiency, and (iii) food security. Food security is expressed as "the condition of the fulfillment of food for the state up to individuals, which is reflected from the availability of adequate food, both quantity and quality, safe, diverse, nutritious, equitable, and affordable and not contrary to religion, belief, and culture of the community, to be able to live healthy, active, and productive in a sustainable manner".

One of the efforts of the government to realize food security is by diversifying food namely the effort to provide and consume non-rice food with diverse and varied menu. Various means that the
menu consists of various kinds of food so that it is not dominated by only one or a few types of food alone. Variable means that the kinds of food presented from time to time are not the same, alternating and diverse, thus avoiding "boredom" for those who consume them.

South Sulawesi has a variety of agro-industries and has a variety of local food. The manufacture of agro-industrial products in various forms, flavors and from various origins has been in existence since the hereditary and continues to be inherited. This is of course an asset for people in Sulawesi South.

As one of the national food granaries, the government of South Sulawesi realize the importance of the diversification of food by cooperating with the community through large industries and home industries. Household industries are mostly controlled by women who have an important role in the processing of non-rice food starting from the preparation of raw materials, production and sales process. Entrepreneurship in households other than employment can also increase income for the household. This paper will discuss the Development of Food Security in Women's Entrepreneurship Sector in South Sulawesi.

2. Problems and research questions
Based on the above backgrounds, the paper discusses the questioning of food security and women entrepreneurship in South Sulawesi with three research questions:
(1) Is there any relationship between food security and food diversification?
(2) How is food diversification strategy in Sulawesi South?
(3) How the role of women entrepreneurship in food diversification in South Sulawesi?

3. Method
The method used in this paper is the method of Literature Studies and Document Review. The study of literature is the solution of the problem by tracing some related writings that come from various sources.

Examples are from agencies such as the Central Bureau of Statistics in South Sulawesi. In addition, there is also literature from journals, scientific papers that are related to food security, food diversification and women entrepreneurship in South Sulawesi. Literature and documents are obtained from various sources such as internet, books, reports, and so forth. Documents and literature collected are then reviewed and analyzed to answer the problems and research questions that have been described previously.

4. Analysis and discussion
The results of the document and literature analysis show three main issues related to food, namely food security and its relationship with food diversification, food diversification strategy in South Sulawesi, and the role of women entrepreneurship in food diversification in South Sulawesi. These three problems are described in the discussion below.

4.1. Food security and its relationship to food diversification
[1] argues that food diversification is one of the pillars of community food security. This step only takes a shorter time when compared to other programs, such as extensification and intensification. Diversification also encourages farmers to be more creative in utilizing the existing land by planting crops that can be a staple food other than rice, namely palawija crops such as corn, beans and tubers. Diversification of non-rice foods can also raise local food prestige as a substitute for rice or at least side by side with rice into the main menu and generate food security of each family, which leads to increased national food security. In addition to consumption of a variety of production patterns will also be diverse. Thus, if at any time there is a shortage of one of the staple foods such as rice, we will not be burdened with rice imports that could lead to political-economic exploitation by exporting countries.
The Government of South Sulawesi supports local food-based diversification of food as the main pillar of development and as a welfare network node. The diversification of non-rice food includes the increasing variety of food in the form of semi-finished food and ready-to-eat food. South Sulawesi as the largest rice crop and non-food rice producing province in eastern Indonesia is regarded as the national food gateway in Eastern Indonesia[2].

Table 1. Number of rice production and Palawija in South Sulawesi.

| Crop types | 2012    | 2013    | 2014    |
|------------|---------|---------|---------|
| Rice       |         |         |         |
| Harvest area (thousand hectares) | 981.4   | 983.1   | 1,040.0 |
| Production (thousand tons) | 5,003.0 | 5,035.8 | 5,426.1 |
| Corn       |         |         |         |
| Harvest area (thousand hectares) | 325.33  | 274.05  | 289.74  |
| Production (thousand tons) | 1,515.3 | 1,250.2 | 1,491.0 |
| Soybean    |         |         |         |
| Harvest area (thousand hectares) | 20.0    | 30.9    | 36.4    |
| Production (thousand tons) | 29.9    | 45.7    | 54.7    |
| Peanut     |         |         |         |
| Harvest area (thousand hectares) | 23.4    | 18.8    | 24.4    |
| Production (thousand tons) | 274     | 28.4    | 34.5    |
| Green bean |         |         |         |
| Harvest area (thousand hectares) | 17.1    | 14.2    | 20.3    |
| Production (thousand tons) | 22.6    | 18.3    | 27.6    |
| Cassava    |         |         |         |
| Harvest area (thousand hectares) | 31.5    | 24.7    | 22.1    |
| Production (thousand tons) | 683.0   | 433.4   | 478.5   |
| Sweet potato |       |         |         |
| Harvest area (thousand hectares) | 6.8     | 4.8     | 5.1     |
| Production (thousand tons) | 94.5    | 70.8    | 78.3    |

Source: BPS Data, South Sulawesi 2014

From the table above can be seen as much as 73 percent of the total agricultural households in South Sulawesi to do food utilities with added value of Rp23.22 trillion in the Year 2014. Main commodities are rice and non-rice food such as corn, soybeans, peanuts, cassava and sweet potatoes.

According to [3], the Government of South Sulawesi supports and participates in food diversification by:

1. Optimizing the use of yard to bring food and nutrition closer to household level and until now has formed 1120 women farmer groups that use their home yard for planted tubers, vegetables and fruits also cultivate fresh fish and raising livestock.
2. Local basic development model is to develop SMEs that will process non-local food into semi-finished or ready-to-eat.
3. Socialization activities and promotion of processed SMEs are routinely conducted in each district and in the city of Makassar.

4.2. Food diversification strategy in South Sulawesi

In line with the problem of pagan resilience, new opportunities and paradigms of food security have been set forth in a strategy developed by the government in efforts to strengthen food security in South Sulawesi, which is divided into:
1. The South Sulawesi government's commitment to food security
2. Availability of adequate food
3. Socialization of optimal food security
4. Infrastructure condition is adequate
5. The existence of food security institutions

1. Strategic location of South Sulawesi Province
2. Development of technology for local food processing
3. There is a legal and policy basis on improving food security in Indonesia
4. Maintaining political conducive situation in South Sulawesi

These internal and external strategies are expected to provide opportunities that will ultimately address the threat to food security in South Sulawesi.

Diversification of food (in the context of food consumption) is an effort to diversify food consumption consumed by the community that includes food as a source of energy and nutrients so as to meet the needs and nutritional adequacy both in terms of quantity and quality [11]. This diversification of food is a great opportunity for women's entrepreneurship to create a variety of non-processed rice products to supplement household income and help the household economy. This of course requires continuous product innovation, skills in managing finances and the courage to take risks.

This diversification of food is a great opportunity for entrepreneurship in South Sulawesi. This is in line with the development of small industries in recent years in the form of micro, small and medium enterprises or MSMEs [2]. This small industry began to grow because people are aware of the difficulty of finding a job so one way that they work is to create their own jobs. In addition, the economic difficulties make people forced to innovate, and creativity to create opportunities in generating income [4]. The government has also been instrumental in encouraging the creation of small industries with the emergence of NGOs and organizations that encourage the community in the form of capital provision. Not only in the form of issued capital, to encourage the development of small industries, the government also issued a policy through the law that is Law No. 20 of 2008 on micro, small and medium enterprises.

Processing Industry is an economic activity which undertakes the activity of converting a basic material mechanically, chemically, or by hand into a finished / semi-finished product, and / or of a less valuable item into a higher value item, and is closer to the end user [5]. One form of processing industry is household processed food.

Home-scale food processing (home industry) is one of many food businesses. According to the statistical center business entity, a household business is a business run by 1–4 people. The defining as a food company that has a place of business in residence with manual food processing equipment until semi-automatic.

4.3. The role of women entrepreneurship in food diversification In South Sulawesi

Although the entrepreneurship of this small industry is dominated by men, the role of women in this field is beginning to show improvement. The life of Southeast Asian society, women are the rulers of the kitchen. That is, women control financial management, income redistribution, and allocation of consumption. This socio-cultural background can answer the question of the relationship of women to small businesses. Women's involvement in small businesses is driven by a variety of reasons. 80 percent of women surveyed reasoned to help their husbands and households, and more than 56 percent mentioned that obtaining additional income as an excuse to enter a small business, and the rest answered to be independent. The legacy of parents is also the reason behind the involvement of women.
According women are human beings who have the potential to grow and develop [14]. As a human being he was born with the instinct to succeed and move forward in his life. The position of women who have been number two (women is second sex) will castrate and oppress women. Socioculturally, women are limited by a strong patriarchal culture and are not easy to break down.

Entrepreneurship has three dimensional foundations: innovation ability, risk-taking, and proactive nature [1]. Entrepreneurship is a creative and innovative ability that is used as a basis, tips and power to seek opportunities for success.

The required entrepreneurial capability is the ability of female entrepreneurs to generate business ideas, describe entrepreneurial ideas, and make products or services that have market value. According to [6], entrepreneurs are closely related to innovation. Furthermore, [6] discloses that innovation is a self-employed tool, a tool for leveraging change as an opportunity for different businesses or different services. Entrepreneurs need to deliberately seek out sources of innovation, change and symptoms that suggest an opportunity for successful innovation and women entrepreneurs need to know and apply the principles of successful innovation.

The existence of entrepreneurial women is motivated by the desire to open a business on the basis of achievement and desire to show the development of female talent. There are three factors that support the development of women entrepreneurship. The first factor is that they have a feminine instinct that works more carefully, intelligent anticipation of the future, maintaining harmony, cooperation in the household that can be applied in business life. The second factor relates to their role in educating family members to succeed in the future that can be developed in relation to company management personnel. The last factor is customs, for example in Bali and Sumatera Bara where women play a role in regulating the household economy.

Living necessities such as sewing, embroidery, baking, cooking, cosmetics, encouraging the birth of a woman entrepreneur who developed the commodity. The advancement of the world of women's education strongly encourages the development of career women, become employees, or open their own businesses in various fields of business.

Diversification of non-rice food will automatically open jobs for housewives. The production process done at home without having to leave the main task as a housewife who started from the process of selecting raw materials to the production and marketing process. There are many kinds of processed food of women originating from non-rice food products such as corn processed food (e.g., vermicelli, corn dodol, corn marning), soybean (tempe, tofu, soy milk, and soy sauce), peanuts, disco beans, green beans (bakpia, and green bean porridge), cassava (cassava crackers) sweet potato (jalangkote stuffing and janda sanggara).

The food industry is one of the relatively dominant industries but still growing positively despite the relatively slow rate, the growing industry is food industry (food and beverage) especially in small industry. Industrial products have also been quite diverse (variatif) because any non-food raw materials can produce several types of products. However, the development of local food processing industries, especially rice substitutes, in medium and large scale is relatively small and mostly done in micro and household scale only.

In terms of consumption, demand for (market) products of local non-rice food industry is relatively undeveloped because it is generally still as "snack food" or "snack" only, so the quantity and frequency of purchase is also relatively "small". The pattern of local food demand is relatively varied between regions, classes, and types of local processed food products. Not all local food products receive the same market response.
Table 2. Development of entrepreneurial number of small and micro enterprises in South Sulawesi in 2013–2016.

| Years | Micro Units | Micro % | Macro Units | Macro % |
|-------|-------------|---------|-------------|---------|
| 2013  | 94537       | -       | 7949        | -       |
| 2014  | 100526      | 6.3     | 5893        | -25     |
| 2015  | 112896      | 11      | 5577        | -5.3    |
| 2016  | 114656      | 1.5     | 117841      | 95      |

Source: BPS data, reanalyzed

The results show that the Government of South Sulawesi provides support in the formation, regulation, guidance, control and supervision. While the role of women entrepreneurship is mostly involved in the production, supply, trade and distribution of food products. In addition, the South Sulawesi government plays a role in increasing the availability of agro-industry commodity stocks, provision of facilities, guidance and assistance for women entrepreneurs, and giving capital assistance for entrepreneurship built.

5. Conclusions and suggestions
The conclusion that can be drawn from the above discussion is that food security in South Sulawesi is very closely related to economic stability. One of the strategies developed by the government is by way of product diversification. Diversification of agro-industry products becomes an opportunity for small industry women to serve as jobs. This has received a positive response from the Government of South Sulawesi with the government actively participating and facilitating the entrepreneurship of women in South Sulawesi. In addition, food diversification is needed as one of the pillars for stabilizing food security in South Sulawesi Province because food diversification can contribute to increasing food production capacity, improving people's income in South Sulawesi.

The writer's suggestion is that the Government of Sulawesi should continue to increase the opportunities and open up more markets for women entrepreneurs in marketing the results of food processing because it has made a real contribution to the food security of the community.

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