Food security among pandemic covid 19

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Abstract. Covid 19 which occurred around the world has brought great sacrifice to humanlife, including changes in the natural order of the human life style. While, new normal or new life has been harded following application doesn’t mean this deadly virus is able to blocked at terminated. It’s impact even goes everywhere bringing is one risk to another one of them was about food. People getting worried about having enough to eat. It is possible to continue in the habit it consuming imported foodstuff does the diet still important from the island continue mainly for people in small islands such the Moluccas that have grown accustomed to eat. The decision can give the answer that 1) local food become very urgent for to survive life in pandemic 2) Woman as food supplier for the families still keep a lot of local wisdom of local food as for production as for keeping food during pandemic

1. Introduction

The pandemic of covid 19 has become a major problem for the world, if it is not resolved quickly and appropriately, then the danger of extinction awaits. The cause is still unknown but what we know for sure is that the virus has become very viral, and it always attacks the body’s resistance. One of the patented antidote strategies is to increase the endurance of the body. That means that the food and drink is very important for the immunity system. Therefore, it has to be available continuously, and also the habit of keep things sanitized and clean is a part of life insurance.

This paper aims to reveal the importance of food security amid the Covid 19 pandemic. The Covid 19 pandemic is not only threatening human lives but also, can lead to the danger of hunger due to limited activities to work outside the home, increased unemployment, reduced supply of outside food which has been the main food source. There is no other way but to go back to local food and preserve it, which means being independent on one's own feet. The development of local food as a source of food as well as a source of household livelihood is a strategy that prevents the danger of hunger or reducing the economic crisis due to unemployment. Women as housewives have a big role in this. Empowering and providing opportunities for them to work more, so that the production and vertical diversification of local food will increase. The source of livelihood is increasingly open. A number of traditional culture possessed by women are part of their working capital as well as their social capital. The people of Maluku Province spread out and live on small islands. In the midst of the pandemic, food security is an important thing that
needs to be addressed and anticipated. Brainstorming about this issue is carried out using a qualitative descriptive approach.

The impact of the pandemic of covid 19 seems to have contributed to burdening women's work in preparing household food. Usually she works together with her friends, but now it is limited (keep the distance). The garden where women work while strengthening family social relations is rarely or no longer used. Also, the habit of eating local non-food foods (rice, noodles, flour etc.) at increasingly expensive prices. Not only that, another question that arises, can these materials continue to be supplied? If the pandemic of Covid 19 continues, what will happen eventually? Starvation threatens! Even though Maluku has so much wealth of plants and animals in the sea, on land, and in the mountains. There are various types of endemic food plants such as sago, tubers (purple sweet potato, white sweet potato) hotong, banana, corn and so on. There is a saying that says "where there is sago, there is no one ever going hungry". It is undeniable that the Covid 19 currently happening is actually an opportunity to strengthen local food security. The most appropriate and easy strategy is to continue to maintain and produce it. Producing also means preserving nature with all its biological resources as well as being a form of respect and glorification to God the Life-Giver. It is possible that women in the city can invite their families to use the yard to become small gardens by planting various vegetables, herbs and others.

Methodology

This paper uses methodology by Analysis Discription with data collection techniques are carried out through in-depth interviews, observation, participation and documentation.

Results and discussion

3.1 The Urgency of Local Food Security in the Middle of the Pandemic of Covid 19

People in Indonesia, including Maluku, have felt the impact of the pandemic for almost 1 year. One of them can cause a local food security crisis. Talking about local food, it is a food produced by the local community which is the result of adaptation to the environment as well as learning outcomes from one generation to the next. Food such as okuwaku, sukun santan, papeda, dried sago, tutupola sago, arwan sirisir and so on are local foods which has been consumed long ago, as well as corn, sago, tubers and nuts. Women process it into food every day and strong work ethic. Women realize that without working, household members will not eat. In any culture, she always serves her household [1].

Currently, the traditional food consumption pattern is experiencing degradation. Boiled sweet potatoes, okuwaku, plate sago, hotong, papeda and others were displaced by the growing interest of the people in consuming rice, bread, instant noodles, pizza and so on, (felt in rural areas). How to solve it? As a housewife who is responsible to fulfill the food and nutritional needs, she is in a difficult position. Consuming local food is cheaper than rice, french fries, fried chicken, and others. for that she then participated in various vertical diversification activities [2] carried out by the government, community organizations, or by trying various recipes through printed media, online media etc. In this way, she can make various types of food and cakes from local ingredients which taste just as good as non-local food. Local food continues to be sovereign at its own home.

Covid 19, which is currently hitting Maluku, where we have to stay at home is an opportunity to build a sense of pride, love for local food, as well as report the identity of the people of Maluku, for example by supplying local food, listening to regional songs (Pohon Sagu, Papeda Dingin) or local food-based traditional expressions (e.g. Sagu salempeng Dipatah Dua, “sago tree philosophy”) and folk tales. Through religious education at home, children are given the understanding that nature with all the richness
and biodiversity that exists in Maluku is a gift from God to us. Therefore, protecting and preserving nature with all its biological resources is a form of respect and glory to God.

3.2 Local Culture in Maintaining Food Security

Women in Kisar Island realize that their area has a short rainy season (4 months) and a relatively long summer (8 months) with dry, rocky soil conditions, so the ideal crops to cultivate are corn and beans which are grown using itawase/hapa technique. [3] All seeds (corn, red beans, green beans, wood beans) are inserted into one planting hole with the number of seeds between 3 to 5 seeds, where the corn seeds are deliberately exaggerated with the assumption that if there are corn seeds that die / are damaged because the ants still eat it, there's another corn seed. Corn as the main food must still be available in the barn so it has to become a priority. It is certain that the plants will continue to grow simultaneously and in time will be harvested together.

If corn and beans are grown using the itawase / hapa cropping system, women will apply the relay planting system for tubers by preparing live food barns. Root crops such as taro, petatas, and kumbili which are planted at harvest time (summer), although they will die, during the rainy season they will grow back. It can be said that in the cultivation process, almost no seeds fall to the earth without the touch of a woman's fingers [4]. Relay planting is generally implemented by female farmers in Maluku [5]. These planting methods do not cause damage to the natural environment, otherwise its adaptation and improvisation make the work become more easier and efficient [6]. In line with that, the itawase / hapa planting system can be an example for people on other small islands that have the same natural conditions as on the island of Kisar.

It is realized that the activity of caring for and maintaining various kinds of food plants using traditional methods is far more successful, therefore, mostly the use of pesticides is currently avoided. Some female farmers on the island of Kisar feel sad because nowadays, the Kisar lemons which are one of the endemic plants no longer have a sweet taste and even the pulp of the lemons has dried up due to the emergence of diplodia due to using pesticides, whereas according to them, by moving up a special group of ants to trees that get a diplodia can be ascertained that within one or two weeks the diplodate on the lemon tree has disappeared because it has been eaten by these special ants. This actions are very profitable, effective and efficient and not have a detrimental impact on the environment.

Regarding obedience and respect for supernatural powers, rural women / female farmers tend to believe in this. They always try to protect and maintain places that are considered sacred and have magical powers such as big trees, springs, small rivers. even if there were dry leaves or twigs that fell around the place, women often didn't dare touch them. The agricultural pattern in small islands is without burning and without chemical fertilizer input, but recycling leaves and manure [7]. The habit of carrying out special ceremonies before carrying out activities to open the garden or planting, so that their work is successful and while working, all family members are protected from danger. It makes them work carefully, quietly, seriously even calmly and not doing other activities that can damage natural environment because they believe there are supernatural powers around the place. Without realizing it, the behavior of female farmers has supported and improved the environment that stores a lot of biological resources in the area such as water and other environments.

4. Conclusion

This is the time for the government to make revitalization of local food maps according to the availability (Nahosi) of each island cluster. Therefore, if it is developed appropriately, the richness of local food diversity will be relied upon as a potential for food security towards food self-sufficiency during the pandemic of covid 19. The hope is it can open the way for improving community welfare.

The work ethic and local culture owned by women will make it easier for them to work as agents of reform in supporting government programs to achieve food security during the pandemic of covid 19.
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