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Local Wisdom Of Corn In Maintaining Food Security

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Abstract

This research was conducted to find out what local wisdom exists in Nusiata Village in maintaining food security and the values of local wisdom in Nusiata Village. The sample taken in this study was 20 respondents using the simple random sampling method. The analysis method used in this study uses qualitative analysis obtained from primary data and secondary data. The results of this study explain the local wisdom that occurs in Nusiata Village in maintaining food welfare through the consumption of corn (Zea mays) as the staple food of the people of Nusiata Village, this habit is carried out for generations as the staple food of the people of Nusiata Village. This tradition of consuming corn is proven to make the people of Nusiata Village independent and not dependent on rice which is the staple food of the Indonesian people. The values in maintaining food security in Nusiata Village are that the community still maintains traditions such as helping each other (narera) in clearing land, continuing to plant corn and consuming corn as a staple food.

Keywords: Local wisdom; Corn; Food Security

INTRODUCTION

Maluku is one of the provinces located in the eastern part of Indonesia that has a lot of local wisdom that deserves to be developed. Southwest Maluku district (MBD). This regency is a regency located far from the capital city of Maluku Province, and has geographical conditions consisting of islands so that the process of economic growth in this area becomes hampered. Because of its remote location, one of the problems is the distribution of food (rice). For the people of Southwest Maluku Regency (MBD), corn is a staple food crop that is always cultivated in the field or in the garden along with other food crops such as field rice, sweet potatoes, and beans

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in a *mixed-cropping system.*

Nusiata Village is one of the villages in Southwest Maluku Regency that has its own way of processing local food. This tradition has become a strategy in maintaining food availability throughout the year. One of the local wisdom of Nusiata Village is processing corn into natuta (tumbu corn). This process has been born and developed from generation to generation as if it survives and develops on its own. These values have become norms that govern how every member of society should behave well towards fellow humans, plants and animals as well as environmental natural resources, (Pattinama 2013). In addition, the ever-changing climatic conditions also make the people of Nusiata Village must be able to maintain their food availability at all times, with traditional processing technology.

According to Zamroni in Sumedi and Jhauhari (2010), the factor of inadequate infrastructure, especially transportation *in* remote areas is an obstacle to the distribution of foodstuffs. This is certainly a big problem for food on small islands. On the other hand, the climatic conditions in MBD Regency consist of rainy season and summer. However, because the summer is longer (8 months) than the rainy season (4 months) causes problems for local food availability in the local community. This coupled with the perishable nature of agricultural products, makes people must have knowledge in processing local food (corn) so that it can survive for a longer time. People's habits in processing food are based on local knowledge.

Table 1. Area of area, harvest area, and corn production by sub-district in Southwest Maluku district, 2020

Year	Area (ha)	Harvest Area (ha)	Production (tonnes)
2020	57	46	161,0
2019	11	11	39,0
2018	61	50	145,0
2017	96	54	189,0
2016	155	155	542,0

Table 1 explains the area of corn harvest and production in the last five years in Pulau Wetang District. In 2020 it increased more than in 2019.

The community in Nusiata Village, P.Wetang District, Southwest Maluku Regency, is one of the communities that still uses stones as a tool for preparing or making local food. This is still done by the community because making local food using stones is easier and does not take long enough, besides that the dregs from the collision are used by the community as animal feed. The activity of pounding corn

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using the stone is a hereditary activity inherited by the ancestors of the community there. Due to the nature of stone is an easy, cheap and fast tool in pounding corn, this activity is still often carried out and is considered as one of the traditions in this village. Therefore, there is a need for knowledge about the stages and techniques of traditional stone use carried out by farmers or communities there.

Nusiata Village has a tradition of making local corn that needs to be maintained, the local wisdom of Nusiata Village is an asset in maintaining community food security in P.Wetang, Southwest Maluku Regency. In its development, local wisdom is not always rigid. As a tool and concept of local wisdom, it is inherent in line with the process of human social development according to the socio-cultural context behind it, especially historical factors. So that local wisdom is actually always present in every reality of society, inherent in the value system of local tradition norms, (Sutarto, et al. 2013).

Based on these thoughts that have been explained above, researchers are interested in seeing more about local wisdom that affects the food security of the community in Nguita Village, with the title: "Local Wisdom of Corn in Maintaining Food Security".

RESEARCH METHODS

The sampling used is a *simple random sampling* method. Withdrawal from a population in such a way that every member of the population has an equal chance of being elected or taken (Kerlinger 2006). Therefore, researchers chose corn farmers as informants as many as 20 people. Informants are randomly selected with a minimum consideration of 5 years as farmers who cultivate corn.

The data collection method uses primary data and secondary data, namely research data sources that directly provide data to data collectors, and not through intermediary media (Sugiyono, 2008). The primary data in this study were observations and interviews with garden owners. While secondary data are research data sources that do not directly provide data to data collectors (Sugiyono, 2008). Secondary data is carried out at related offices or agencies to collect more detailed information to support the primary data that has been collected.

The data analysis method to be used in this study is using qualitative analysis methods. Moeleong (2010), defines qualitative methodology as a research procedure that produces descriptive data in the form of written or spoken words or from the form of policy actions.

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RESULTS AND DISCUSSION

Farmer characteristics

Age Level

Age is one of the factors that affect a person's skills at work. The longer a person's age, the more work experience they have so that a person's skills at work are also better.

Table 2. Distribution of farmers according to age categories

Age category (Year)	Number (of people)	Percentage (%)
25-46	15	75
47-67	4	20
68-88	1	5
Total	20	100

Based on the results of table 2 research above, it shows that the average age of farmers ranges from the age of 25-46 years as many as 15 people (75%). Respondents involved in corn processing are classified as proactive and who are still strong at work.

Farmer Education

Mosher in Louk (2017) said that education is needed so that farmers can act rationally, can build community beliefs and traditions that support development and vice versa try to reduce the influence of beliefs and traditions that hinder development. To learn more about the characteristics of respondents, see table 3.

Table 3. Peasant education level

Education level	Number (of people)	Percentage (%)
SD	5	25
JUNIOR	2	10
SMA	13	65
Total	20	100

Based on the results of the research in table 3 above, it can be seen that the largest level of education in Nusiata Village is Senior High School (SMA) with 13 people (65%). This is because at that time there were limited educational facilities at the research location so that people chose to go to school only in the village.

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Another factor that affects the level of education is because the distance between the research location to the education center is so far that it becomes one of the obstacles for respondents in attending higher education. Because they did not continue their education after graduation, respondents chose to help their parents in gardening.

Number of Family Members

The classification of the number of family members according to BKKBN in Look (2017) says that the number of family members consists of 3 parts, namely small families that have children ≤4 people, medium families have 5-7 family members, and large families have ≥7 people. To find out the number of family members of each respondent farmer can be seen in table 4.

Table 4. Distribution of the number of farmers by the number of family members

Categories of family members	Number (of people)	Percentage (%)
2-4	17	85
5-7	3	15
≥7	-	-
Total	20	100,00

Based on table 4, the category of the number of farm family members is more included in small families as many as 17 people (85%) and 3 people (15%) belong to medium families. From this explanation, it can be seen that the number of family members is not influencing the behavior of farmers in producing local food (corn).

Farm Experience

The length of farming experience determines the quality of respondents in corn processing performance skills. The higher the level of business experience, the higher the effectiveness and efficiency of the work done in corn processing. The experience of corn business can be seen in the following table.

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Table 5. The distribution of the length of experience is based on the number of farmers

Business experience (yr)	Number (of people)	Percentage(%)
5-25	8	40
26-45	11	55
≥45	1	5
Total	20	100,00

Table 5 shows that the experience of farming farmers is more classified as experience aged 26-45 years, which is as many as 11 people with a percentage of 55 percent, while in the category of business experience under 25 years as many as 8 people or 40 percent. Cepriadi (2012) said that farming experience also affects business success. So it is explained that more processing skills are found in 26-45 years of experience so as to achieve effectiveness and efficiency in corn processing.

Agricultural Land Area

The area of land and the number of crops owned are very influential on income, so the larger a land is, the greater the income received by a farmer.

Table 6. Area of farmland

Land Size (Hectares)	Number (People)	Percentage (%)
≤ 1	7	35
≥ 1	13	65

From the table above, it is explained that those who have land for gardening with an area of less than 100m2 are 35 percent or seven people, the area of land cultivated according to the ability of farmers. Most farmers who manage more than 100m2 of land are farmers under Fifty Years Old (50), have children who help and do mutual assistance

History and Biography of People in Nusiata Village

History of Nusiata Village

The history of Nusiata has no concrete evidence and is written only a hereditary story. Because the culture there is stronger speech culture than written culture. Nusiata is thought to have existed since 1800 BC. Nusiata Village was formed based on the mutual agreement of seven villages on Mount Soklai. Nusiata village was built during the Portuguese colonial period, which

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was marked by the unification of seven small villages on Mount Soklai under the rule of King Keniala Watrimny, the name of his village Pupyeni. After that during the Dutch colonial period there was a process of descending the mountain from Pupyeni village and building a new village at the foot of Mount Soklai with the name Nerkuki and during the reign of King Koekmali Watrimny built the current Nusiata Village. (the interview was conducted at Mr. M.T.'s house on Friday, October 15, 2021 at 16.00WIT) The statement from Mr. R.U was also recognized by other informants, namely Mr. Y.A, Mrs. O.T, Mr. Y.W, Mr. Z.W, Mr. M.T, Mr. J.K, and other repondents.

Local Wisdom of Nusiata Village

The values of local wisdom of Nusiata Village are well maintained and preserved by the community. The local wisdom of Nusiata Village includes community beliefs, traditional ceremonies and staple foods.

a. Community Trust

Most of the people of Nusiata Village uphold a belief called Narera. This teaching has existed for a long time.

This belief of the people of Nusiata Village teaches moral teachings about how to carry themselves in life, live side by side and work together. Until now, the people of Nusiata Village are still steadfast in embracing these teachings even though they have been decades old, they have always been obedient to practice them in their daily lives.

b. Traditional Ceremonies

1) Customary Marriage

In the traditional wedding procession of this religious religion, they use the term Ikral, which is a statement of promise by both parties of the bride and groom as a legal condition of marriage for followers of the religious belief. The bride and groom cannot be said to be married before performing the ikral. After that, continued with the village wedding custom.

c. Customary Regulations

The people of Nusiata Village still maintain and follow the rules of their ancestors, in terms of farming they are not careless. The purpose of preserving the tradition they believe in is so that in living their daily lives in terms of food they are always fulfilled.

d. Staple foods

The staple food of the people of Nusiata Village is corn. The beginning of the habit of consuming corn as a staple has occurred for generations from the ancestors of the Nusiata people.

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Local wisdom

Overview of Maize Cultivation

Corn is the mainstay food of the people of Nusiata Village. In corn processing, there are no special skills needed and the steps in the processing process do not change from generation to generation. The stages in corn processing are.

a. Location Determination

Location determination is carried out by deliberation between the community in terms of determining garden land and garden type. After the placement is carried out, it is in land clearing (washing kabong), this activity is carried out one month before land clearance.

b. Land Clearing

In the stage of land clearance, there are those who make groups to work together (narera) or in other words, gotong royong, narera aims to complete work in the form of land clearing, planting, grass cleaning and harvesting.

c. Land burning

This burning is carried out when the mowed grass has dried for 1-2 months, this burning is carried out individually. But it must be at the same time that land burning is carried out by fathers by clearing the boundaries of business land.so that there is no fire that spreads to other people's land. After the land is clean, it is ready for planting.

d. Planting

Planting is done by mothers using wood or iron as a tool to make planting holes, planting is done by the triangular method, namely left right and front with a distance of 50x50 cm with the number of seeds perlobang amounting to 3-4 seeds. Planting is carried out in November by predicting rainfall so that corn seeds are not damaged (rotting) or eaten by pests.

e. Plant care

Plant care is carried out by removing weeds and wood shoots, this is done twice, the first time is on plants aged 2 weeks and the second stage is plants aged 6 weeks. The care of this plant is carried out by the family, it can also be done with mutual assistance (narera). Eradication of pests and diseases is carried out in a traditional way such as by expelling pig pests using hanging clothes.

f. Harvesting

After the plants are four months old, the corn is ready to be harvested and put into the *barn, but over time there is a new innovation to be used as a corn shelter*, *namely blong, because the risk of damage is smaller than the barn, usually* the *first harvest must be given to the church (solar yield), after*

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that separate the seeds and the next harvest can be processed into food. (the interview was conducted at Mr. L.L.*'s house on Friday, October 15, 2021 at 07.00WIT) The statement from Mr. L.L was also acknowledged by other informants, namely Mr. J.W, and other repondents.*

Forms of Local Wisdom

As an effort to maintain food security of the people of Nusiata Village. The in-depth interviews that have been conducted are intended to show in more detail that all informants in this study have generally been in accordance with the original plan of the researcher. Based on research that has been conducted on several residents, it was revealed that local wisdom can maintain the food security of the people of Nusiata Village.

Local wisdom in Nusiata Village in improving food welfare through the consumption of corn as a staple food is useful as an example and socialized to the people of Indonesia. So that the expectations of the food security program can be realized. Nusiata Village teaches us Indonesians about the values of local wisdom through their philosophical lives. They teach us about our undependency nature and always look for alternatives through their staple foods. This can be used as an example that can be implemented in other regions as concrete evidence of the Food Security Program.

Not every month the people of Nusiata produce corn. Some of the corn is used for daily food and some is used for sale, both raw and in processed form such as cakes and other foods. When viewed in terms of health, the carbohydrate content in corn is not inferior to rice. Corn can be a source of energy that the body is strong can withstand hunger longer than rice. 100g of rice has calories of 130 cal with a carbohydrate content of 28.73 g. Not much different from rice, 100g of corn has 366 cal calories with a carbohydrate content of 69.1 g and corn also contains vitamin C of 30mg. In addition, the fiber content of corn is higher compared to rice.

Social Life that Occurs in the People of Nusiata Village

The people of Nusiata Village, from their customary habits to food problems that have been carried out for generations by their people, one of which is the Nusiata people who still consume corn as their staple food. This tradition of consuming corn is proven to make the Nusiata people independent and not dependent on rice which is the staple food of the Indonesian people. This is where the social capital of the Nusiata people is very visible. The scarcity and scarcity of rice supply in Indonesia is a big problem for the majority of Indonesians who consume rice. However, corn as the daily staple food of the Nusiata people will not affect the lives of the Nusiata people.

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Over time, corn products are processed into various processed foods. These processed foods have been processed using more modern and sophisticated equipment to support production. The majority of the people of Nusiata Village have a minimum education at the elementary level. It can be concluded that although Nusiata Village is one of the traditional villages in MBD, they have never closed themselves from technological developments. You could say Nusiata Village is a flexible and open traditional village.

Implementation of Local Wisdom in Maintaining Food Security of Nusiata Village Community

Through the interview process, it was revealed that some forms of local wisdom will produce a form of implementation in maintaining food welfare and the way the people of Nusiata Village maintain food. The results of the interview concluded that local wisdom in maintaining food security in Nusiata Village is quite good, but today there is a tendency to fade cultural values in terms of community life, especially culture in the people of Nusiata Village.

This change is natural considering that culture is not static, even always changes without interference caused by the entry of foreign cultural elements even though a culture will change with the passage of time. One of the efforts to reduce or overcome the negative impacts of socio-cultural change is by exploring, studying, fostering, and redeveloping noble cultural values.

The Values of Local Wisdom in Maintaining Food Security of the Nusiata Village Community

It is also ironic if we see the current government's food policy which still depends on imported products, without the seriousness of fixing the domestic agricultural sector for the realization of food sovereignty. It is fitting that we learn from those who have been tested through the dynamics of history without neglecting their rights to a better future, a sovereign future.

The way to maintain food in Nusiata Village is very good. The people of Nusiata Village obey the existing regulations of Nusiata Village, eating rice from rice but also consuming corn as the staple food of corn rice.

There is no competition that shows wealth, profession, and position. Every society always has a certain appreciation for certain things in the society concerned. A higher appreciation of certain things, will put them in a higher position and other things. Based on what has been explained, Nusiata Village is thick with local wisdom and local wisdom must be maintained and preserved and must be maintained by Nusiata Village.

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Local Wisdom as an Effort for Food Security

Local wisdom as a source of carbohydrates for the people in Nusiata Village that is commonly consumed is corn. While as a source of protein, people have also been accustomed to eating various types of fish and meat derived from their own cultivation. As for the source of minerals and vitamins, obtained from fruits and vegetables available in the garden that they work on themselves.

This local wisdom is a very important fortress in increasing the role of the business world in the field of food crop agriculture. The role of the business world in producing food commodities is difficult to avoid, on the contrary, this role needs to be encouraged. Meanwhile, the role of the government is more focused on regulation and provision of agricultural infrastructure. However, the role of the business world must still be in line with local wisdom that has grown and developed in the lives of rural communities so far. That way, national food security will be realized by diversifying food consumption based on local wisdom.

CONCLUSION

Based on the results of research in the field, the following conclusions can be drawn:

1. The social life that occurs in Nusiata Village primarily aims to achieve harmony between stability and changes in society. A system of social control in the form of a local wisdom aims to achieve a state of peace through harmony between certainty and justice in society. Nusiata society and culture have a distinctive feature, namely corn as a staple food. With the existence of customs and culture as well as local wisdom, the nature of mutual cooperation, politeness and cooperation is clearly visible in Nusiata Village. The influence of these traditions or habits has a very big influence so that they can become smart citizens in thinking and behaving.
2. The value of local wisdom in Nusiata Village in consuming corn as a staple food is useful as a form of effort in improving food welfare in the community. So that the expectations of the food security program can be realized. The form of local wisdom in Nusiata Village in improving food welfare through the consumption of corn as a staple food is useful as an example and is disseminated to the general public throughout Indonesia. The forms of local wisdom that exist in society can be in the form of: values, norms and beliefs. The form of local wisdom will produce a form of implementation in maintaining food welfare.

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