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Community Rice Consumption Level On Small Islands: A Case Study Of Booi And Paperu Villages, Saparua Sub-District, Central Maluku Regency

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Abstract

Food is the most important basic need for humans to live productively. As a staple food, rice is a very important food considering that rice consumption tends to increase along with the increasing population. This research aims to determine the level of rice consumption and the factors that influence rice consumption in Negeri Booi and Paperu, Saparua District, Central Maluku Regency. The research method used a simple random technique by taking 30 household respondents. Data were analyzed using simple tabulation and multiple linear regression analysis. Based on the research results, what can be obtained is that rice consumption is higher compared to local food consumption (sago and tubers) with a total food consumption of rice, sago and sweet potatoes of 0.305 kg/capita/day. This is shown by the value of rice consumption of 0.187 kg/capita/day, sweet potato consumption of 0.116 kg/capita/day and sago consumption of 0.002 kg/capita/day.. The results of the regression test show that the factors that influence the level of rice consumption in Booi and Paperu are sago consumption, income and number of dependents.

Key words: food security, rice, food consumption.

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INTRODUCTION

Food is the most important basic need for humans to live productively. As a staple food, rice is a very important food considering that rice consumption tends to increase along with the increasing population.Based on Law No. 18 of 2012 concerning Food, it is explained that imports are carried out if production and availability are not sufficient to meet consumption needs.

The Central Maluku Regency Central Statistics Agency (2021) shows that expenditure on grain is greater than expenditure on other food. This indicates that there is quite a high increase in consumption of grains, especially rice compared to consumption of tubers. Food consumption patterns, especially rice, need to be looked at further down to the village level. The problem is, the small islands in Maluku are not rice producing areas, but are producing sago and tubers, so it is feared that increasing rice consumption will create dependence on rice imports and local food security. This condition is increasingly exacerbated by the increase in population which is increasingly dependent on rice for its staple food. It is thought that dependence on rice will not only threaten the local food security system because it can result in expensive rice prices due to expensive logistics costs, weaken purchasing power, and ultimately result in nutritional deficiencies and an increase in the number of poor people. Therefore, it is important to carry out this research regarding the level of rice consumption and the factors that influence it among the population living in countries in small island regions.

Two countries that are interesting to research regarding rice consumption levels are Booi and Paperu. These two countries are the countries with the second and third smallest populations after the Kulur country in Saparua District. The relatively small population should prioritize local food, but it is not yet known the extent of rice consumption at the household level in the country. These two countries were chosen as locations for research because Paperu Country is close to Booi Country, has a relatively similar sex ratio but the population in Paperu Country is much larger and the country's level of development is more advanced. Even though the food potential in Booi and Paperu Country is tubers and sago, it is suspected that the people of the country have been consuming rice for a long time. It is not yet known what factors influenced the shift in population consumption patterns from sago and tubers to rice. According to Sianturi (2019), the increase in the amount of rice consumption in households is influenced by several factors including income level, population, gender, the amount of rice available

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and the price of rice itself, the price of tubers, the price of sago, rice assistance to the poor (raskin) , taste and culture.

RESEARCH METHODS

This research was conducted in Negeri Booi and Paperu, Saparua District, Central Maluku Regency. The data collected in this research is in the form of primary data and secondary data. Primary data was obtained through observation and interviews using questionnaires. Meanwhile, secondary data was obtained through references (articles, journals, theses) and agencies related to this research. Sampling in this research was carried out by a simple random technique. The number of samples in this research was 30 households.

The data collected in this research was then analyzed using simple tabulations and explained descriptively using the percentage and average consumption of rice and local food and to determine the factors that influence the level of consumption of rice and local food (sago and tubers).) that is:age, land area, sago consumption, and rice pricequantitative analysis is used. The following equation is used:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5$$

Where, Y: Rice consumption, a is: Constant value, b is: Regression coefficient value, X1 :Consume sago, X2 :Income, X3 :Number of dependents, X4 :Age, X5 :Price of rice.

RESULTS AND DISCUSSION

Respondent Characteristics

Age

Age is one of the factors that influences human life activities both physically and non-physically. In general, age is divided into three groups, namely young age or unproductive age (0-14 years), adult age or productive age (15-64 years), old or unproductive age, namely 65 years and over (Chaniago, 2002).

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Table 1. Distribution of family heads by age

Age (Years)	Boo Country		Paperu Country	
	Number of people)	Percentage (%)	Number of people)	Percentage (%)
26-35	8	53.33	7	46.67
36-45	3	20.00	7	46.67
46-55	4	26.67	1	6.67
Amount	15	100.00	15	100.00

Based on the age grouping of household heads in Negeri Booi and Negeri Paperu, they are of productive age with a dominant age group of 26-35 years and that is 8 people in Negeri Booi and 7 people in Negeri Paperu. Meanwhile, the lowest number of respondents was in the 36-45 year age group, 3 people in Negeri Booi and 1 person in the 46-55 year age group in Negeri Paperu.

Level of education

According to the National Education System Law no. 20 of 2013, education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, noble morals, and the skills needed by themselves and society.Based on the research results, it can be seenthat the highest level of education for heads of families is at high school level, 11 people in Booi Country and 7 people in Paperu Country. Meanwhile, the lowest level of education was at junior high school level with 1 person in Negeri Booi and 2 people in Negeri Paperu.

Table 2. Distribution of family heads according to education level

Education	Boo Country		Paperu Country	
	Number of people)	Percentage (%)	Number of people)	Percentage (%)
JUNIOR HIGH SCHOOL	1	6.67	2	13.33
SENIOR HIGH SCHOOL	11	73.33	7	46.67

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College	3	20.00	6	40.00
Amount	15	100	15	100

Type of work

There are various types of work, there are jobs that produce goods and there are also jobs that provide services. Based on the research results, you canIt can be seen that the work of the head of the family varies greatly. The most common jobs in Booi Country are motorbike taxi drivers with 5 people, followed by 4 private employees, 2 farmers, 2 honorary employees, 1 civil servant and 1 village staff. Meanwhile in Paperu State the most jobs are 4 private employees, followed by 3 farmers, 3 civil servants, 2 honorary employees and the fewest are 1 fisherman, 1 motorbike taxi driver and 1 laborer.

Table 3. Distribution of family heads by type of work

Work	Boo Country		Paperu Country	
	Number of people)	Percentage (%)	Number of people)	Percentage (%)
Farmer	2	13.33	3	20.00
Fisherman	-	-	1	6.67
Honorary Employees	2	13.33	2	13.33
Village Staff	1	6.67	-	-
Civil servants	1	6.67	3	20.00
Private employees	4	26.67	4	26.66
Motorcycle taxis driver	5	33.33	1	6.67
Laborer	-	-	1	6.67
Amount	15	100	15	100

Income Level

The Central Statistics Agency (BPS) states that the source of family income comes from the income of the husband, wife, combined income of husband and wife or from other family members. Apart from that, family income depends on the type of work done

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by each family member. A person's income level can be influenced by the type of work they do.

Based on the research results, it can be seen that the majority of family heads from both countries have a moderate income of IDR 1,000,000 - IDR 3,500,000, 11 people (73.33%) from Booi Country and 12 people (80.00) from Paperu Country. Meanwhile, a minority of family heads have incomes greater than IDR 3,500,000.

Table 4. Distributionhead of familyaccording to income level

Household Income (Rp/month)	Boo Country		Paperu Country	
	Number (Households)	Percentage (%)	Number (Households)	Percentage (%)
Low <Rp 1000000	3	20.00	-	-
Medium IDR 1000000-3500000	11	73.33	12	80.00
High >3500000	1	6.67	3	20.00
Amount	15	100.00	15	100.00

Number of Family Members

According to BKKBN (1998) the number of family members can be defined as the number of people living together, consisting of the head of the family, wife and children, so the number of family members can be grouped into three groups, namely the number of family members 1-4 people (small) , 5-7 (medium), and ≥ 7 (large).Based on the research results, it can be shownthat the number of household members in Negeri Booi and Negeri Paperu is at most a group of 1-4 people or is still relatively small.

Table 5. Distributionhead of familybased on the number of family members

Number of Family Members	Boo Country		Paperu Country	
	Number of people)	Percentage (%)	Number of people)	Percentage (%)
1-4	11	73.33	12	80.00
5-7	4	26.67	3	20.00

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Amount	15	100	15	100

F Household Food Frequency

The frequency of food consumption is several times a day, including breakfast, lunch, dinner and snacks (Ministry of Health, 2013. Based on the research results in table 6, it can be seen that in the frequency of eating three times a day, tubers are the most common commodity for breakfast. consumed by households, namely 16 households for the reason that they consume tubers because they are used to it. Apart from that, tubers can also be processed by boiling or frying so that they can be adjusted to the tastes of family members and 14 other households consume rice in the morning because it is more filling to eat. activities outside the home and are used to eating rice before activities. During the day, the dominant household consumes rice, namely 27 households. The reason why households consume rice is because they are used to it and consume rice, while the consumption of sago is not as much as households that consume rice. The reason 3 households consume sago is because Apart from being filling, sago is also easy to get at a cheap price. In the evening, 21 households continued to consume previously cooked rice, while the other 9 households chose to have dinner with sago, this was because they were bored of consuming rice, so they chose sago as a substitute food.

Table 6. Household Distribution Based on Frequency of Eating Three Times a Day

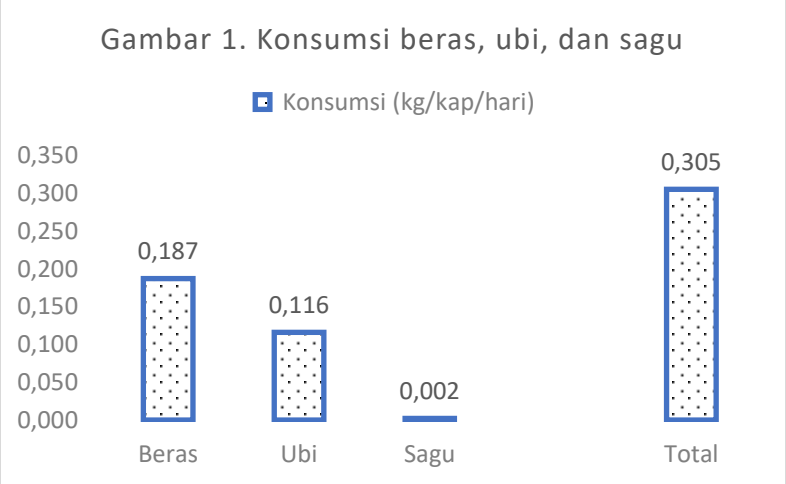
Type of Food	Frequency of Eating in a Day		
	Breakfast (Number of Respondents)	Have lunch (Number of Respondents)	Dinner (Number of Respondents)
Rice	14	27	21
Sago	-	3	9
Tubers	16	-	-
Total	30	30	30

Consumption Levels of Rice and Local Food (Sago and Tubers)

To determine the level of consumption of rice and local food in this study, the researchers calculated the consumption of rice, sago and tubers per capita/day. Which can be seen in the image below

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In the picture above, it can be seen that the total consumption of people in Booi and Paperu is 0.305 kg/capita/day. With rice consumption of 0.187 /capita/day, sweet potato consumption of 0.116 /capita/day and sago 0.002 /capita/day. This shows that the people in Negeri Booi and Paperu, in meeting their daily food needs, consume more rice than sago, which is the original local food in Maluku.

Factors Affecting Rice Food Consumption Levels

Coefficient of Determination Test (R Square)

Based on the results of the regression test, the coefficient of determination (R Square) value was obtained at 84.8 percent (0.848). This means that 84.8 percent of rice consumption can be explained by sago consumption, income and number of dependents. Meanwhile, 15.2 percent of rice consumption is influenced by other factors that are not included as variables in this research, such as age and price of rice, because rice is a staple for people who inevitably have to buy it for consumption.

Simultaneous Test (F Test)

The F test is used to determine the effect of independent variables together on the dependent variable. The results of the regression test obtained an F-calculated value of 22.90 while the F-table value obtained was 1.70 (F-calculated value>F-table value). This means that simultaneously or together, rice consumption is influenced bysago consumption, income and number of dependents.

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Partial Test (Significance Test and T Test)

The purpose of the partial test is to find out how much influence each independent variable has, namely sago consumption (X1), income (X2), number of dependents (X3). Based on testing on SPSS, the t test results are seen in table 7.

Table 7. Multiple Linear Regression Analysis of Rice Food Consumption

Variable	Regression coefficient	T-count	T-Table	Sig
Consume sago	-15,060	-4,586	1,703	,000
Income	3,284	5,496	1,703	,000
Number of dependents	2,192	3,124	1,703	,004

Processed Sources

Based on the results of the regression test at a confidence level of 95 percent (0.05%) a significant value of 0 is obtained.00(>0.05). Partially there is an influence between sago consumption and rice consumption. This is indicated by the T-count value of negative 4.58 The T-table value is 1.70 (T-count<T-table). This value has a regression coefficient of negative 15.06. This value indicates a negative relationship. It meansIf there is an increase in sago consumption of 1%, it will reduce rice consumption by 15%. So the higher the sago consumption, the lower the rice consumption. Consuming sago is not only filling but also easy to get at a cheap price. Taste is also one of the causes of a person's consumption. This is because there are differences in the tastes of each individual, the higher a person's taste, the more consumption will increase.

Based on the results of the regression test at a confidence level of 95 percent (0.05%) a significant value of 0.00 (>0.05) was obtained. Partially there is an influence between income and rice consumption. This is shown by the T-count value of 5.49, the T-table value of 1.70 (T-count<T-table). The regression coefficient value is 3.28, this value shows a positive relationship. This means that an increase in income of 1% will affect rice consumption by 3.28%. This is because with increasing income, families will be better able to buy rice and make choices about what food they can consume.

Based on the results of the regression test at a confidence level of 95 percent (0.05%) a significant value of 0.00 (<0.05) was obtained. Partially there is an influence between the number of dependents and rice consumption.This is shown byThe T-calculated value is3.12The T-table value is 1.70 (T-count>T-table), the regression

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coefficient value is2.19This value indicates a positive relationship. This means that if there is an additional family member, rice consumption will increase by2.19kg. The number of dependents greatly influences the amount of food consumed and the fulfillment of needs because when there is an addition of one family member, the amount of food needs provided in the family will also increase.

CONCLUSION

The results of the research show that food consumption in Negeri Booi and Paperu is more towards rice. This can be seen from the higher food consumption of rice, namely 0.187 kg/capita/day, while the lowest food consumption is 0.002 kg/capita/day. With a total consumption of rice, sago and tubers of 0.305 kg/capita/day. The results of the research show that three factors or variables have a significant influence on rice consumption in Booi and Paperu, namely: sago consumption, income and the number of household/family dependents.

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