

Factor Analysis of Banjarmasin Community Rice Selection Towards National Food Sustainability

¹Sofia, ²Mohdari, ³Penta Lestari Budiarti, ⁴Lisawanto

¹Manajemen, STIE MUARA TEWEH, Banjarmasin, Indonesia

^{2,3} STIE Nasional, Banjarmasin, Indonesia

⁴ STIE Dahani, Dahanai Buntok, Indonesia

ABSTRACT

Indonesian society is a society whose staple food is rice. Rice derived from rice is the primary commodity which is the measuring point for the success of national food. Banjarmasin is the capital of South Kalimantan Province, with a population of 667,489, and 99% eat rice as a staple food. This study aims to analyze the factors that are the reasons for choosing rice in Banjarmasin residents. The population in this research is Central Banjarmasin, with 99 respondents. The population size is the benchmark for rice consumption, and the factors that encourage respondents to choose this rice are described. This study uses a descriptive quantitative method to provide an overview of data processing results. The results of this study indicate that the factors that form the basis for choosing rice for daily consumption are price, shape of rice, packaging, availability of rice, brand and reputation, cleanliness, and nutritional content. These factors can be a benchmark for rice entrepreneurs to fulfill consumers' wishes to realize national food sustainability.

Keywords– Rice, National Food Sustainability, Banjarmasin.

1. INTRODUCTION

Regional Original Income (PAD) is one of the crucial points for the independence of a region to fulfill regional autonomy and decentralization (Lili, 2017). From PAD, it can show the purchasing power of the people of an area; high purchasing power will support food security. A country's food security can be good if all its inhabitants can access food at any time in the volume and quality appropriate for a productive and healthy life. Banjarmasin is the capital of the province of South Kalimantan, located in the southern part of the island of Borneo, and is one of the largest cities in the province (Sanistasya et al., 2019). Banjarmasin is located about 0-1 meter above sea level and in the delta of the Barito and Martapura rivers. Population: Banjarmasin is one of the most populated cities in South Kalimantan. The population consists of various ethnicities, including Banjar, Javanese, Bugis, and other ethnicities. Besides being a trade and economic center, Banjarmasin is also a center for agriculture, fisheries, and other service sectors. Transportation in Banjarmasin includes roads, rivers, and public transportation. The city's rivers are important transportation routes and are the city's hallmark (Nurhamidah, 2016).

Banjarmasin residents with an income rely on tourism and have several exciting tourist objects, such as the Floating Market on the Barito River, Kuin Market, Sultan Suriansyah Mosque, Flower Island, and others. One of the famous festivals in Banjarmasin is the Banjarmasin Festival which is held annually. The total population of Banjarmasin in 2022 is recorded at 667,489 people, with a distribution:

Table 1: Distribution of the Total Population of Banjarmasin

Subdistrict	Total Population	Remark
South Banjarmasin	167.928	
East Banjarmasin	119.847	
West Banjarmasin	137.113	
Central Banjarmasin	87.574	
North Banjarmasin	155.027	
Total	667.489	

Source: BPS South Kalimantan, 2023

The leading food of the people of Banjarmasin is 99% rice and 1% consuming tubers. Many Banjarmasin residents choose to make rice as a staple food. It can be proven by looking at the relatively high rice consumption level (Susanti, 2017). The annual demand for rice in Banjarmasin is 391,416 tons or 33,096 tons per month (Suci et al., 2017). The need for rice is met from agricultural products in South Kalimantan itself as much as 40%, while the rest must be met from outside due to the low yield productivity of both prime and unique rice (R et al., 2021). Rice production in South Kalimantan has decreased due to poor irrigation, pest attacks, and reduced agricultural land (Khairuddin; Masyhuri Machfudz; Farida Syakir, 2019). Consumption of rice in Banjarmasin has increased from year to year, in line with the increase in population (Muchlis, 2011). This higher level of rice consumption can result in high demand for rice and can lead to an imbalance in the availability of rice (Khairuddin; Masyhuri Machfudz; Farida Syakir, 2019).

Food sustainability is the ability of a country to provide sufficient, stable, and sustainable access to food for its people. It includes food availability but also physical and economic access, and adequate and nutritious utilization (Ade, Parlaungan, 2019). Many factors influence the selection of good rice for consumption. Based on the requirements of the National Standardization Agency SNI 6128:2008, the general quality of rice consists of the following four things: (1) Free from pests and diseases. (2). Free from sour, musty, and other odors. (3) Free from mixing rice bran and bran as well as chemicals, and (4) Free from using products/chemicals that are harmful or that can cause harm to consumers (Alam, 2019). Rice Considering that rice is a staple food, it can be used as a benchmark for the stability of the food security of the Banjarmasin population. This study aims to analyze the factors that can influence the purchase of rice types in Banjarmasin towards national food sustainability.

2. METHODS

This writing uses a descriptive quantitative method to describe and analyze data quantitatively without manipulating variables. This method provides a clear picture of the characteristics, distribution, and relationships between variables in the population or sample studied (Sugiyono, 2017). This research was conducted in the City of Banjarmasin, taking a population of Central Banjarmasin, which totaled 85,874 people, starting from June to September 2022. Data collection was carried out using a survey method. The data collected is in the form of primary data and secondary data. Preliminary data is data obtained through interviews with respondents based on a list of questions prepared beforehand, while secondary data is data obtained by related agencies. The sample was taken based on the calculation of the Slovin formula so that 99 respondents were obtained.

Observations and measurement concepts used include 1) identity of the respondent, including age (years), level of education (elementary, junior high, high school, bachelor's degree); 2) number of family dependents (people); 3) daily food consumption (person/kg); 4) food availability of rice. The data to be obtained are the type of rice, the price of rice, and the qualifications of rice that Banjarmasin residents want for their daily consumption.

3. RESULTS AND DISCUSSION

3.1 Respondents Identity

3.1.1 Age

Age is an indicator that shows a person's maturity in thinking. General indicators help identify a particular age group's characteristic behaviors, habits, and preferences. Generational differences tend to show different patterns of consumption, habits, and responses to specific issues and understandings so that they can help determine the factors that influence the selection of rice in Banjarmasin. Based on the results of the study, it was found that the ages of the respondents varied, ranging from 21-60 years. Classification of respondents based on age group can be seen in Table 2.

Table 2. Distribution of Respondents by Age Group

No	Age Variation of Respondents (years)	Total
1	21 – 30	18
2	31 – 40	24
3	41 – 50	32
4	51 – 60	25
	Total	99

Source: processed by the author (2022)

Table 2 shows the respondents are 21 – 30, 18 people; ages 31 – 40, 24 people; ages 41 – 50, 32 people and ages 51 – 60, 25.

3.1.2. Number of Dependents

The number of dependents describes the number of family members or individual's dependent on or dependent on someone who is the head of the family or the primary source of income in a household. The number of dependents includes people who are economically dependent on the head of the family, our children, or other family members who do not have income or have limited income.

Table 3. Number of dependents in the family

No	Number of Dependents	Total
1	2	48
2	3	28
3	4	19
4	5	1
5	6	1
6	7	1
7	8	1
Total		99

Source: processed by the author (2022)

Based on Table 3, it is known that some farmers have dependents of 2 people, as many as 48 people, three people, as many as 28, 4 people, 19, 5 people, as many as 1, 6 people, as many as 1, 7 people as many as 1, and 8 people as much as 1. This data shows that Banjarmasin residents have few families in one house.

3.1.3. Education Level

The level of education describes the level of education achieved by individuals or groups of respondents in a study. This education indicator includes information about the status of education that the respondent has passed. The following is the education level of the respondents.

Table 4. Educational Level

No	Education Level	Total
1	Junior High School (SMP)	18
2	Senior High School (SMA)	34
3	Diploma (D3)	21
4	Bachelor (S1)	23
5	Master's degree (S2)	2
6	Others	1
Total		99

Source: processed by the author (2022)

The education level of the respondents was divided into 18 Junior High School graduates, 34 Senior High School graduates, 21 D3 graduates, 23 Bachelor (S1) graduates, 2 (two) master's degree (S2) graduates, and one other person. These others are taking the equality exam.

3.1.4 Income

This income indicator describes the level of income or the amount of money earned by individuals or groups of respondents in this study. This indicator includes information on the following:

- Monthly total income
- Type of work is permanent/non-permanent
- Income Source

Table 5. Income

No	Income	Total
1	Income:	
	2.000.000 – 4.000.000	23
	4.000.100 – 6.000.000	37
	>6.000.000	39
2	Job Type	
	Permanent	34
	Non-Permanent	65
3	Income Source	
	Salary	41
	Entrepreneur	58
Total		99

Source: processed by the author (2022)

The number of respondents with an income of 2,000,000-4,000,000 is 23 people, between 4,000,100 – 6,000,000 37 people, and 39 people have income above 6 million. Thirty-four people have a regular income, and 65 people do not have a steady income. Source of income 41 people stated the salary received each month, and 58 people noted the results of entrepreneurship.

1.2. Respondents' Rice Consumption Pattern

The pattern of rice consumption is the pattern or habit of the people in consuming rice as a staple food. This consumption pattern includes aspects of rice consumption per individual or household, consumption frequency, processing method, and changes in rice consumption trends from time to time.

The following is the result of the rice consumption pattern of the Banjarmasin population:

Table 6. The Pattern of Rice Consumption

No	Consumption Pattern	Total
1	The amount of rice (kg/month)	
	0 – 20 kg	13
	21 – 40 kg	57
	41 – 60kg	24
	>60 kg	5
2	Purchase Frequency	
	Daily	14
	Weekly	25
	Monthly	55
	Others	5
3	Rice price (IDR/kg)	
	IDR 10.000 – IDR 12.500	21
	IDR 12.501 – IDR 15.000	68
	>IDR 15.000	10
Total		99

Source: processed by the author (2022)

3.3 Factors driving rice selection

Respondents are given the breadth to determine what factors are the reasons for choosing rice, and the factors obtained from respondents are:

1. Price

Price is essential in determining which rice will be the primary consumption. Based on Table 6, residents of Banjarmasin buy rice at prices between IDR 12,501 – IDR 15,000/kilo. The main reason for choosing that number is because it fits their budget.

2. Quality of rice

Respondents chose rice with whole grains, not mixed with other grains or sand in the rice. White color is the primary choice of respondents, and the initial smell of rice needs attention.

3. Availability of rice stock

Respondents chose rice with safe stocks over rice with uncertain stocks. Because rice is a staple food, the stock is highly considered by respondents.

4. Rice type

Several respondents chose brown rice and black rice as their daily consumption. This selection is because respondents feel a different taste and texture, creating a sensation when eating it.

5. Packaging

Attractive packaging makes respondents interested in choosing rice and makes it the leading choice in buying. Attractive packaging is designed in such a way has features and elements that make it stand out and invite consumers to buy the product.

6. Nutritional Content

Respondents paid attention to the nutritional content of rice, such as fiber, vitamins, and minerals. Some respondents chose brown rice because it is rich in fiber compared to white rice.

7. Origin of rice

Currently, 60% of the rice available in the Banjarmasin market is from outside South Kalimantan due to a lack of local rice production. The origin of rice is one of the main things in choosing rice. The origin of the rice in question can come from the area where it is produced or the rice production method. Rice products that are grown organically or with specific production standards are of interest to some consumers.

8. Rice brands

Respondents trust brands that are known and have a good reputation. Brands of rice in the market will differ in different regions in Indonesia. Each brand of rice has its characteristics and uniqueness.

9. Cultural and traditional preferences

Respondents chose rice based on cultural and traditional preferences. It plays an essential role in determining rice in the Banjarmasin population; several cultural and traditional factors in choosing rice include (a) type of rice, (b) aroma and taste, (c) rituals and ceremonies, (d) unique cooking ingredients, (e) presentation in special events, (f) eating habits, (g) quality perception, (h) taste and texture preferences.

10. Environmental awareness

Respondents are looking for information on rice that is produced sustainably and environmentally friendly.

11. Availability of variety or shape

Respondents preferred several types of rice, such as caked rice, powdered rice, or packaged rice.

4. CONCLUSION

The rice consumption of Banjarmasin residents, especially Central Banjarmasin, is 21-40 kilos per month, taking the price of rice at IDR 12,501-IDR 15,000 with monthly purchases. Factors that influence the selection of rice are price being the first order in choosing, then rice quality, rice stock availability, rice type, packaging, nutritional content, rice origin, rice brand, cultural and traditional preferences, environmental awareness, and availability of varieties and forms. These eleven factors are very influential in determining the selected rice type. The fulfillment of these factors will make it easier for Banjarmasin residents to buy rice as a staple food to create national food sustainability.

5. ACKNOWLEDGMENTS

We want to thank the residents of Central Banjarmasin who have helped with this research, to fellow lecturers at STIE MUARA TEWEH Banjarmasin, STIE Nasional, Banjarmasin, and STIE Dahani Dahanai Buntok who have participated in taking samples in this writing. Students from all study programs helped spread the survey in Central Banjarmasin.

REFERENCES

1. Ade, Parlaungan, N. P. (2019). Antisipasi Ketahanan Ekonomi Keluarga Di Kabupaten Labuhan Batu Selatan. *Ecobisma*, 6(1), 90–97.
2. Alam, S. (2019). Higher Order Thinking Skills (Hots): Kemampuan Memecahkan Masalah, Berpikir Kritis Dan Kreatif Dalam Pendidikan Seni Untuk Menghadapi Revolusi Industri 4.0 Pada Era Society 5.0 | Prosiding Seminar Nasional Pascasarjana (Prosnampas). *Pascasarjana Unnes*, 2(1), 790–797. <https://proceeding.unnes.ac.id/index.php/snpsca/article/view/372>
3. Khairuddin; Masyhuri Machfudz; Farida Syakir. (2019). Faktor-Faktor Yang Mempengaruhi Fluktuasi Harga Beras Di Kota Malang (Factors That Influence Rice Price Fluctuations In The City Of Malang) 1. *Jurnal Pertanian*.
4. Lili, M. (2017). Meningkatkan Ketahanan Ekonomi Nasional Melalui Pengembangan Ekonomi Kreatif. *Cakrawala*, Xvii(2).
5. Muchlis. (2011). Analisis Elastisitas Permintaan Beras Di Kabupaten Bireun Provinsi Aceh. *Jurnal Ekonomika Universitas Almuslim Bireun Aceh*.

6. Nurhamidah, S. (2016). Penerapan Model Gallery Walk Dalam Pembelajaran Geografi Di Sma Negeri 6 Banjarmasin. *Jurnal Pendidikan Geografi*, 4(1), 1–23.
7. R, S. P., P, W. E., Fharditiawan, R., Yusri, J., Septya, F., Andriani, Y., Studi, P., & Universitas, A. (2021). Analisis Strategi Pemasaran Dalam Usaha Beras Buana Pangan Wongiri. 4(3), 169–174. <https://doi.org/10.37637/Ab.V4i3.789>
8. Sanistasya, P. A., Raharjo, K., & Iqbal, M. (2019). The Effect Of Financial Literacy And Financial Inclusion On Small Enterprises Performance In East Kalimantan. *Jurnal Economia*, 15(1), 48–59. <https://doi.org/10.21831/Economia.V15i1.23192>
9. Suci, Y. R., Tinggi, S., & Ekonomi, I. (2017). Perkembangan Umkm (Usaha Mikro Kecil Menengah) Di Indonesia. *Jurnal Ilmiah Fakultas Ekonomi*, 6(1), 51–58.
10. Sugiyono. (2017). *Metode Penelitian Kuantitatif Kualitatif Dan R&D*. Alfabeta.
11. Susanti, I. (2017). Faktor-Faktor Yang Mempengaruhi Volume Beras Impor Di Jawa Timur. *Jurnal Penelitian Ekonomi Dan Akuntansi*, II(1), 295–319.