

Socio-Cultural Nutrition Analysis in Jatisura Village, Indramayu Regency, West Java, Indonesia

Analisis Sosio Budaya Gizi di Desa Jatisura, Kabupaten Indramayu, Jawa Barat, Indonesia

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Abstract: *Jatisura Village is located in Cikedung District, Indramayu Regency. Most of the residents earn a living as agricultural workers. The village boasts various tourism opportunities, such as Situ Bolang Agrotourism, which serves to retain water for irrigating the fields of local farmers and can also yield freshwater fish that can be consumed or transformed into products for Micro, Small, and Medium Enterprises. The aim of the research is to assess the socio-cultural nutrition aspects, including economic conditions, educational levels, knowledge, and the nutritional status of school-aged children and adolescents in Jatisura Village. Method: mixed method approach. incorporating both qualitative explorative and quantitative techniques. A total of 12 participants were involved, including village officials, integrated health post cadres, adolescents, community leaders, traditional leaders, village midwives, and representatives from Islamic elementary and high schools. For the quantitative portion, purposive sampling was applied, comprising 18 health cadres, 32 adolescents from high schools, and 60 children from elementary schools. This study was carried out between September 2022 and March 2023. Results: The majority (90.1%) of residents in the village earn incomes below the Minimum Wage set by Indramayu Regency. Jatisura Village is home to Micro, Small, and Medium Enterprises that have the capacity to export their products internationally, such as Rolisa Food, which produces mango crackers, mango seed coffee, mango preserves, mango juice, orange leaf nuts, and cow skin crackers. The understanding of nutrition among less than 33% of community leaders, 28.1% of teenagers, and 88.7% of school-age children is limited. In terms of nutritional status, 28.2% of teenagers are classified as underweight, and 16.7% of elementary school children show signs of stunting. Conclusion: The tourism opportunities in Jatisura Village can be enhanced by utilizing local food resources to create distinctive souvenirs, thereby boosting the income of the villagers. There are still adolescents experiencing inadequate nutritional levels and elementary school children facing stunting issues related to nutrition. It is essential to offer nutrition education and healthy food management training to the villagers to elevate their purchasing power for nutritious food and enhance education and health for the entire community.*

Key word: Tourism village; Nutritional status; Local food

1. INTRODUCTION

The nutritional status of communities, especially in rural areas, is a multidimensional issue influenced by various factors, ranging from food availability, economic conditions, to socio-cultural aspects inherent in daily life (Dewey & Aduayom, 2003). Although nutrition interventions often focus on improving food access and nutrition education, socio-cultural factors such as traditional beliefs, social norms, religious practices, and local knowledge about food play a significant role in shaping

consumption patterns and nutritional status of individuals and communities (Sobal & Nelson, 2003). In rural areas, limited access to modern health information and services often reinforces the role of traditional practices and knowledge in family food and health management. Beliefs about certain foods as bringing blessings or food taboos for certain age groups or health conditions can directly affect nutritional intake (Khusun et al., 2019). In addition, social systems and family structures in rural areas can also affect food distribution within households and nutritional priorities among family members.

Jatisura Village is situated in the Cikedung District of Indramayu Regency. Most of the residents earn their living as agricultural laborers. The village possesses various tourism opportunities, including the development of Situ Bolang agrotourism, which can positively impact the sustainability of nature, culture, and the income of farmers. Situ Bolang also serves as a water reservoir for irrigating farmers' rice fields, and due to its stunning and appealing scenery, this lake has become a popular tourist destination. In addition, Jatisura Village is home to UMKM (Usaha Mikro Kecil dan Menengah) or Micro, Small and Medium Enterprises (MSMEs) that have the capability to export their products internationally. For instance, UMK Rolisa Food produces a range of items including mango crackers, mango seed coffee, mango sweets, mango juice, orange leaf nuts, and cowhide crackers. The village promotes agrotourism and various processed mango products along with other local ingredients to boost the income and economy of its residents. The educational aspect is highlighted through the various schools situated in the village, while the health-related aspect is evaluated by examining the nutritional status and knowledge of students in Elementary School (SD) and High School (SMA), as well as the nutritional understanding of local health cadres.

2. METHODS

This study uses a mixed method design, qualitative explorative and quantitative, to investigate aspects of economy, education, knowledge, and nutritional status in Jatisura Village, Indramayu Regency. The trial ran from September 2022 to March 2023. The first stage of qualitative data collection involved in-depth interviews and Focus Group Discussions with 12 informants, including village officials, integrated health post cadres, teenagers, Jatisura Village community leaders, Jatisura Village traditional leaders, village midwives, and school representative teachers (Islamic Elementary and High School). Purposive sampling was used to collect quantitative samples of elementary school children, high school youths, and cadres, and school assignments were made based on village officials' suggestions. Data analysis for qualitative data was conducted by thematic coding and for quantitative data analyzed using univariate data with WHO Antro and IBM SPSS Statistics applications.

3. RESULTS

Socio-Cultural and Economic Aspects

According to informants, the population of the residents of Jatisura Village are mostly rice and mango farmers, this work is usually hereditary. There is one tourist spot, namely Situ Bolang agrotourism, which is one of the tourist attractions that can increase the income of the local community, but when the research team arrived, the road access to Situ Bolang was damaged and difficult to pass by vehicles, although there have been some improvements on some roads, but the road to the tourist spot is still not good. Situ Bolang can be one of the local livelihoods if the surrounding environment is cleaned and maintained properly, and of course the road access is repaired.

Figure 1. Road conditions to Situ Bolang agrotourism



Tugu Market is the nearest market to Jatisura Village; the distance is roughly 1.3 km, which takes 4 minutes by car and 14 minutes on foot. According to our observations and interviews with dealers, the market is most active between 5 and 7 a.m. and 18 and 20 p.m. This market is merely a short alley or road that sells various vegetables, animal and vegetable protein, furniture and culinary equipment, and house cleaning supplies. In Tugu Market there are also several places to eat such as soto, lotek bongko, fried foods from uli, tofu, tempeh, and vegetable fritters which are usually consumed for breakfast.

Figure 2 Typical food from Jatisura Village "Lotek Bongko"



The survey found that 54.5% of villages had incomes below 1 million, 36.4% had incomes between 1 and 2 million, and just 9.1% had incomes exceeding 2 million. It is demonstrated that the majority of villages continue to have very low incomes. As a result, it is necessary to develop residents' skills in order to increase income by developing local products, Situ Bolang tourism, or trading in staple foods such as rice, or developing local foods such as processed fish and mango products, which are one of the local seasonal fruits, to become a mainstay product that can be made, cheap, and affordable for the community to use as souvenirs.

Table 1. Income of residents of Jatisura Village, Indramayu Regency

Income	Frequency	
	n	%
Below 2.541.996	20	90,9
Above 2.541.996	2	9,1
Total	22	100

*Indramayu Regency Minimum Wage (UMK) in 2023 Rp. 2,541,996

Educational Aspect

According to observations and discussions with informants, there is a Madrasah in the heart of the village where schoolchildren continue to learn Islam and recite the Koran. This Madrasah is open from 13:30 into the afternoon. There is only one elementary school or SD in Jatisura Village, and no SMP or SMA; if village youngsters wish to continue their education to the SMP and SMA levels, they must attend schools in Cikedung District or outside of the area. There is no public transit from the village to outside the community, thus students typically walk or drive to school.

. According to the findings of informant interviews, a significant number of villagers are currently pursuing higher education. Village communities have begun to recognize the relevance of education in developing and building villages that are more advanced and successful. Even one of the informants, a community leader in the field of education, stated that the school has special class facilities that are planned on Saturdays and Sundays; this class program is intended for villagers who wish to continue their education and obtain a certificate. This is one of the solutions for Indramayu inhabitants who dropped out of school owing to early marriage, could not continue due to lack of cash, or had to work on weekdays (Monday to Friday).

Nutrition Knowledge Aspect

A questionnaire was distributed to cadres, high school students, and elementary school students to collect nutrition knowledge data. According to the findings of this survey, there are still cadres (33.3%), high school students (28.1%), and elementary school children (88.7%) who lack adequate nutritional understanding.

Table 2. Nutritional Knowledge of Cadres, Elementary School Students, and High School Students

Nutrition Knowledge of Cadres	Frequency	
	n	%
Less	6	33,3
Good	12	66,7
Total	18	100
Nutrition Knowledge of adolescent	Frequency	
	n	%
Less	9	28,1
Good	23	71,9
Total	32	100
Nutrition Knowledge of School Children	Frequency	
	n	%
Less	47	88,7
Good	6	11,3
Total	53	100

Nutritional Status Aspect

The health aspect of this study was demonstrated by measuring the weight and height of adolescent and elementary school children respondents and then calculating their nutritional status based on the BMI/Age indicator of adolescent nutritional status, whereas the nutritional status of school children was calculated based on the height/Age and weight/height indicators. The study's findings revealed that 28.2% of teenagers had a thin nutritional status, while 9.4% were obese. According to the nutritional status of primary school students based on height/age, 10% have severe stunting, 16.7% stunting, and 41.7% are at risk of stunting. Furthermore, the nutritional status of elementary school children based on weight/height showed results of 3.3% wasting, 6.7% at risk of wasting, and 8.3% overweight.

Table 3. Respondents' Nutritional Status

Adolescent Nutritional Status (BMI/A)	Frequency	
	n	%
Thin	9	28,2
Normal	20	62,5
Overweight	3	9,4
Total	32	100
Nutritional Status of Elementary School Children (Height/A)	Frequency	
	n	%
Severe Stunting	6	10
Stunting	10	16,7
Risk of Stunting	25	41,7
Normal	19	31,6
Total	60	100
Nutritional Status of Elementary School Children (Weight/Height)	Frequency	
	n	%
Wasting	2	3,3
Risk of Wasting	4	6,7
Normal	49	81,7
Overweight	5	8,3
Total	60	100

4. DISCUSSION

Socio-Cultural and Economic Aspect

Damage to the route to the tourist destination can have a detrimental influence on both visitors and local inhabitants, as well as the development of the agro-tourism industry. A decline in the number of tourists because they believe that getting to the tourist destination is difficult and inconvenient. This can lower the number of visits and have an influence on revenue generated by entrance tickets, parking, and other tourist expenses such as purchasing souvenirs, food, and so on. Poor infrastructure conditions can have an impact on the image of a tourist destination, giving the impression that it is poorly maintained and unsafe. This can dampen the attraction of new tourists and make those who have already visited unwilling to return.

Educational Aspect

Education in Indramayu Regency, West Java, is facing challenges and developments, according to information from (source: <https://indramayukab.go.id/disdikbud-lakukan-pembinaan-untuk-tingkatkan-kualitas-pendidikan-di-indramayu/>) that many schools have been successfully rehabilitated through the repair and development of school infrastructure. This infrastructure takes the shape of adequate classroom, laboratory, and technological facilities. Not just that, but boosting educational quality through teacher instruction and access to quality training. Teachers' ability to use modern technology requires ongoing assistance in terms of training and tool availability. The dropout rate is also a serious worry, since it has been claimed that children in numerous areas of Indramayu continue to drop out of school due to economic factors in low-income families. However, the Indramayu Regency Government's Excellent Program "Kejar Paket" (Ja-Ket) provides the opportunity to continue education or participate in a school equivalency program. Ja-Ket is a program that recruits persons from Indramayu Regency who have not completed formal education at SD/MI, SMP/MTs, or SMA/SMK/MA to become Package A, B, and C students for free. According to data from Indramayu Regency's Education and Culture Office (Dikbud), the total number of students is 4,972 from 2021 to 2023. (source: <https://data.kemdikbud.go.id/dataset/pendidikan-2>). According to the study's findings, the number of schools in Jatisura Village remains low, implying that access to education is more difficult in rural areas than in metropolitan ones. The quality of schooling in remote places varies from that in the district center. The local government must work to close this gap by offering scholarships and developing schools in rural locations.

Education plays an important role in determining the nutritional status of individuals and communities. Level of education, especially maternal education, has consistently been found to be positively associated with the nutritional status of children. Mothers with higher levels of education tend to have better knowledge about nutritional needs, proper feeding practices, and the importance of hygiene and health care, which can prevent malnutrition problems such as stunting and wasting (Agho et al., 2019). In addition, education improves a person's ability to access health information, understand nutritional messages provided in intervention programs, and make better decisions about food consumption patterns. A study in Indonesia found that low maternal education levels were significantly associated with high prevalence of stunting in toddlers (Titaley et al., 2019).

This relationship can also be seen at the community level. Communities with higher average levels of education tend to show more diverse and quality food consumption patterns, contributing to better overall nutritional levels (Popkin et al., 2020). Therefore, increasing access to education, especially basic education and nutritional health, is an important strategy in efforts to improve the nutritional status of the community, especially in rural areas.

Nutrition Knowledge Aspect

Nutrition education is critical for rural people since it directly affects their health, quality of life, and production. However, possibilities for villages to get nutrition education are quite limited. As a result, a consistent program is required that focuses on nutritional information, training, and best practices for all age groups. Village leaders, health centers, and health cadres collaborate to create and implement health initiatives that enhance the health and nutritional status of villagers. According to the findings of this survey, the majority of primary school students still do not understand

the concept of balanced diet. The findings of this study are consistent with a study by (Kurniasari et al, 2021), which found that 65% of primary school kids lacked nutritional awareness prior to the intervention. This could be due to a lack of frequent exposure to balanced nutrition education or counseling at school or in the community, resulting in most elementary school students acquiring insufficient information about balanced nutrition. The results of this study are in line with the results of a study by (Fitriani et al. 2020; Sagala et al. 2021) which stated that there were still adolescent respondents with nutritional knowledge in the less category, namely (40.7% and 46%), so routine nutritional education is needed for respondents. This recommendation is in accordance with the results of a study by (Lendra et al. 2018) which stated that there was an increase in adolescent student knowledge before the intervention by 58.5% to 81.1% after being intervened with nutritional education using booklet media. Similarly, for cadre respondents, the study (Hositanisita et al. 2024) revealed that there is still a problem in which cadres lack knowledge and skills in the field of nutrition, so it is critical to provide education and training, as well as appropriate skills related to knowledge of balanced nutrition and anthropometric measurements.

5. CONCLUSION

Jatisura Village has potential for tourism development, which could raise villagers' income through the use of local food resources for unique souvenirs. A significant portion of adolescents in the village have inadequate nutrition, and elementary school children are experiencing stunting. There is a need for increased nutrition education and improved food management skills within the community. This findings suggest that policies aimed at developing local tourism and supporting micro, small, and medium enterprises (MSMEs) could have positive economic impacts. The prevalence of undernutrition and stunting indicates a need for public health policies focused on nutrition interventions, particularly for children and adolescents. The need for nutrition education implies that educational policies should include programs to improve nutritional knowledge and food management practices. Therefore the recommendations are to implement programs focused on skills training to help villagers increase their income, provide nutrition education to the community to improve their understanding of nutritional needs, and conduct training on healthy food management to improve the villagers' ability to purchase and utilize nutritious foods.

CONFLICT OF INTEREST

No conflicts of interest in this study.

ACKNOWLEDGEMENT

Thank you to LPPM UPN "Veteran" Jakarta for supporting the funding of this research.

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