

Comparative Analysis of Bird Nest Wallet Production Quality In Rural and Urban Areas on Lombok Island

Nurul Imam Muzakir^{1*}, Budi Indarsi², Soekardono Soekardono³

¹⁻³ Faculty of Animal Husbandry, University of Mataram, Mataram, Indonesia

Author correspondence: mujaimam8@gmail.com*

Abstract. This study analyses the production and quality of nest Bird swallows (SBW) in rural and urban areas of Lombok Island, as well as the level of income of SBW breeders. Survey and purposive sampling techniques: this study involved 20 respondents, 10 of each rural and urban. Data was collected through interviews, observation field, and documentation, then explained in a way. Research results show that SBW production and quality in urban areas are taller compared to rural areas, supported by policies and modern technology such as the arrangement of temperature and humidity. Total production in urban areas reached 55,25 kg, while in rural areas, it was 23,8 kg. Feed becomes the primary determinant of This difference. In rural areas, constraints such as predator disturbance and dependence on natural conditions influence production results. Meanwhile, quality urban nests are superior. This research provides recommendations for improving the management of SBW cultivation in rural areas through technology transfer, training, and optimal environment management. It can increase the productivity and income of SBW breeders in general and be sustainable.

Keywords: Bird's nest swallows, roduction, quality, rural and urban

1. INTRODUCTION

Indonesia is a tropical country with a vast natural landscape. The forest is vast and tropical, and the diversity of birds is pretty high. One of them is Bird Indonesia, which has 12 types of wallets (MacKinnon et al., 1992). The types are wallet nest white (Kallokalia Fuciphaga), wallet nest black (Callocalia Maxima Hume), and swiftlet cows (Callocalia Esculenta), which produce nests that can consume humans (Bambang et al., 2005).

White-nest swiftlets (*Collocalia fuciphaga*) are highly regarded for their edible nests, which are among the most expensive natural products in the world. These nests are primarily composed of the birds' hardened saliva, which is carefully harvested from the walls of caves or specialised swiftlet houses. Their exceptional value stems from a long-standing belief in their health benefits, particularly in traditional Chinese medicine, where they are consumed as a delicacy and a remedy. Studies suggest that these nests may contain bioactive compounds that improve skin health, boost the immune system, and promote respiratory health. However, further scientific evidence is needed to confirm such claims definitively (Jordan, 2004). As a result, white-nest swiftlets' nests hold a revered place in culinary traditions and health-conscious markets across Asia and beyond.

The economic significance of swiftlet nests cannot be overstated, as their demand continues to drive a thriving global trade. By the mid-1990s, the market price for swiftlet nests had already reached Rp. 60,000 per kilogram, a substantial sum at the time. Over the next decade, this price skyrocketed, with reports indicating that by 2005, it had risen to between Rp

4-5 million per kilogram (Author, Year). This remarkable increase reflects both growing consumer interest and limited supply, as the harvesting process is labour-intensive and requires careful maintenance of swiftlet habitats. Indonesia, Malaysia, and Thailand are among the leading producers, with farmers adapting to the soaring demand by building swiftlet farming structures to supplement natural cave harvesting (Dai et al., 2021).

Despite its profitability, the swiftlet nest trade raises concerns about sustainability and ethical harvesting practices. Overharvesting in natural caves can threaten swiftlet populations by disrupting their breeding cycles, leading to calls for stricter regulation and sustainable practices. Additionally, there is a growing focus on ensuring that swiftlet farming aligns with environmental and ethical standards, such as providing safe nesting environments and preventing habitat destruction. As prices continue to rise, the swiftlet nest industry offers an intriguing intersection of cultural tradition, health-focused consumerism, and economic opportunity, making it a subject of both fascination and scrutiny in global markets (Chua et al., 2015).

In 1995, the production of swallow nests was estimated to reach 75 tons; 35% came from natural caves, and 65% came from swallow houses that were deliberately built (Mardiastuti, 2011). From year to year, it has increased; in Java, it has reached 6500 houses. (2001) imagined that around 5.5 million pairs of white swallow nest birds were ready to mate in Indonesia, while Mardiastuti (2011) imagined that there were around 8 million white swallow nest birds in Indonesia. Lombok Island is one of the tropical forest areas that has a relatively high diversity of birds, one of which is the swiftlet. The Swiftlet business is one of the businesses that has bright prospects for development in Indonesia. Geographical and environmental conditions are in accordance with the resources available to support the life of the wallet and can be found in certain areas.

Swiftlet farming has emerged as a highly profitable and promising business sector, especially in regions such as Southeast Asia, which have environmental conditions that support the growth of swiftlet populations. Several key factors, including location, climate, and ecological conditions, greatly influence the success of this business. According to Nurhamidin et al. (2019), these elements are essential to ensure a supportive habitat for swiftlets to breed and produce edible nests. The potential of this industry is supported by the high demand for edible swiftlet nests, which are considered a luxury commodity in traditional Chinese medicine and the global health market. Entrepreneurs often consider urban and rural environments for swiftlet farming, each of which offers unique advantages and challenges depending on the local

climate and resources. The natural habitat of swiftlets plays a significant role in determining their nesting behaviour and productivity (Sullivan et al., 2021).

Environments such as humidity, temperature, and proximity to water sources are critical to swiftlet health and nesting success. In rural areas, swiftlet farms benefit from quieter and less polluted environments that resemble natural cave habitats. In contrast, urban swiftlet farms must account for higher noise levels and potential human disturbance but can benefit from proximity to markets and infrastructure. These variations in conditions between rural and urban areas require a tailored approach to farm management to maximise yields and ensure the sustainability of swiftlet populations.

Swiftlets' adaptability to managed environments has allowed swiftlet farming to expand to a variety of locations, but it remains essential to maintain ecological balance and ethical practices. Site-specific strategies that address the unique needs of swiftlets are crucial. For example, rural areas often provide abundant insects for swiftlets to eat, while cities require artificial supplements to compensate for the lack of natural food supplies. Additionally, climate-controlled husbandry techniques, including the use of humidifiers and thermostats, are increasingly being used to recreate the optimal conditions found in natural habitats. As swiftlet farming continues to expand, understanding and respecting the ecological requirements of these birds will be critical to ensuring economic success and environmental sustainability.

2. METHOD

The research was conducted using a survey method. This data collection technique involves looking directly into the field to determine feasible factors supported by interviews and analysing the production and quality of swallow nests (Sugyiono, 2016). The survey was conducted in two areas: urban and rural.

Sampling was done using the purposive sampling technique. The purposive sampling technique is a data source sampling technique with specific considerations; the reason for using the purposive sampling technique is that not all samples have the appropriate criteria (Sugyiono, 2016). The phenomena studied include (1) SBW farmers who live in rural areas and (2) SBW farmers who live in urban areas. In this study, the sample taken was 20 people. Ten people are in rural areas, and ten people are in urban areas. The respondent groups can be seen in the table below:

Table 1. Respondent Groups

| City Respondents | Village Respondents |
|---|---|
| City of Mataram | West Lombok |
| 1. Bertais Village, Sandubaya District | 1. Gontoran Village, Lingsar District |
| 2. Sweta Village, Sandubaya District | |
| 3. Sweta Village, Sandubaya District | |
| 4. Selagalas Village, Cakra District | |
| Central Lombok | East Lombok |
| 1. Batu Nyale Village, Central Praya District | 1. Sambelia Village Subdistrict Sambelia |
| 2. Burika Village, Central Praya District | |
| 3. The Pujut District Firefighters | North Lombok |
| 4. Blibante Village Praya District | 1. Silelos Village Subdistrict Algae |

3. RESULTS AND DISCUSSION

Conditions of Swallow Bird Business on Lombok Island

Swallow nest farming is a type of food business that is very promising and has many benefits for human health. Swallow nests have excellent prospects and trade potential to be developed. According to the Directorate General of Customs and Excise (PEB and PIB) documents, Indonesia is one of several countries that exports the most enormous swallow nests in the world (Central Statistics Agency, 2024).

Indonesia, as the world's largest exporter of swallow nests, has been able to develop this business in an effort to improve people's welfare. World market supply because of its cleaner, whiter, and not too thick shape (Aidil, 2017). Indonesia was able to export 405.3 tons of swallow's nests; in 2013, it was 536.7 tons; in 2014, it was 636.1 tons; in 2015, it was 761.2 tons; in 2016, it was 992.1 tons; in 2017, it was 1286.7 tons, and in 2018 it was 1291.9 tons.

Lombok Island is one of the areas in Indonesia that has excellent potential in the swallow business. West Lombok Regency produces 364.50 kg, Central Lombok 4,399.05 kg, East Lombok 1,619.60 kg, North Lombok 5.00 kg, and Mataram City reaches 6,676.50 kg (Ashari, 2020).

The great potential of this business is supported not only by the high economic value of the swallow's nest but also its ecological value. Swallows play an essential role as natural controllers of insect pests, which are caught while flying (Arifin et al., 2012). In recent years, the price of swallow's nest on Lombok Island has fluctuated. In 2021, the price reached IDR 12,000,000 per kilogram. However, in 2022, the price dropped to IDR 10,000,000 per kilogram, and from 2023 to 2024, it fell again to IDR 8,000,000 per kilogram. The following is data on the price of swallow's nest per kilogram in rural and urban areas of Lombok Island:

Table 2. Price of Swallow Nests Each Year in Rural and Urban Areas on Lombok Island

| Rural and Urban Areas | | |
|-----------------------|------|----------------------------|
| NO | Year | Nest Wallet Price (Per Kg) |
| 1 | 2021 | Rp.12,000,000.00 |
| 2 | 2022 | Rp.10,000,000.00 |
| 3 | 2023 | Rp. 8,000,000.00 |
| 4 | 2024 | Rp. 8,000,000.00 |

Source: Processed Primary Data, 2024.

Based on table 2. Fluctuation price nest Bird swallows that occur on Lombok Island over a number of years finally apply throughout the region, including rural and urban areas. This condition reflects market challenges that farmers' wallets must face, although This business has the potential for a big economy. In 2021, the price of the Nest Bird wallet peaked at Rp. 12. 000,000 per kilogram, reflecting height market demand. However, it decreased significantly, starting in 2022, when the price went down to Rp. 10,000,000 per kilogram. Until 2023 and 2024, at a price stable at Rp. 8,000,000 per kilogram.

Nevertheless, the price of the Bird swiftlets on Lombok Island has become a challenge; the prospects of this business remain in the home market Because the nest is used in industry culinary, health, and beauty, especially in the international market, for example, China and other Asian countries. This condition provides. It is significant for breeder swallows in Lombok to continue contributing to fulfil global demand. In addition, the demand for Nests Bird wallets tends to be stable in the long term, mainly because the belief in the benefits of health is getting worse and widespread among consumers.

To face the price and maintain a sustainable business, good management becomes the key to quality nests; for example, it can give a mark. The breeder needs to ensure the resulting nest is clean, intact and free from a mixture that can lower quality. In addition, management of the optimal environment, such as guarding temperature, humidity, and cleanliness of buildings, is critical to creating a comfortable habitat for Bird Wallet. With a supportive environment, the productivity of Bird Wallet will be increased so that it can balance declining prices through an increase in production volume.

Market diversification is also an effective strategy to deal with it. Challenges appear, and breeders cannot only rely on traditional export markets but must also Explore new markets at home and abroad. For example, marketing directly to premium consumers or collaboration with industry food and health local can open. New. With this strategy, farmers in Lombok can expand their market reach, increasing Power and making sure to endure business Bird Wallet in the middle market dynamics that continue to change.

Swiftlet Cultivation in Rural and Urban Areas on Lombok Island

Cultivation Bird Wallet in Lombok Island is one of the agroindustries that provide significant contributions to the economy. This business focuses on the utilisation of the Nest Bird wallet, which has a high-mark economy and considerable demand in the local market and also internationally (Chua & Zukefli, 2016). With promising prospects, the cultivation of Bird Swiftlets in Lombok still faces various challenges. The challenge is characteristic of Bird swallows that remain liars, though it has been cultivated for years (Adiwibawa, 2000). Success cultivation Swiftlets are very dependent on the presence of birds in buildings' captivity, so this business is neat and considered a high-level area (Anonymous, 2001).

Studies show the existence of significant differences in the management cultivation of Bird wallets between rural and urban areas on Lombok Island. We tend to adopt modern and structured systems, such as the arrangement of temperature and humidity, including system water vapour, to create an optimal environment in building captivity. This approach has been proven to increase the quality of nests. Bird wallets are used because comfortable conditions encourage birds to make a nest better; on the other hand, farmers in rural areas still depend on methods that are entirely traditional depending on the conditions of nature. The results show that the productivity and quality of the Bird Wallet are often lower than those of urban farmers (Abd Rahman et al., 2019).

To ensure the desire and improvement of productivity cultivation of Bird Swiftlets on Lombok Island, the transfer of knowledge and technology from urban livestock farmers to rural becomes step important. This transfer can cover training about election location strategy, technique fishing Bird wallet, maintenance buildings, and methods of efficient harvest. With the approach based on this knowledge, farmers in rural areas are expected to be capable of increasing quality and quantity production nest Wallet.

This increase not only Strengthens the Power of said product nest swiftlets in the market but also provides a positive impact on the well-being of the economy and the public. Thus, the cultivation of Bird Wallet can develop into a source of sustainable and inclusive income for all areas on Lombok Island. Based on the description of the characteristics of the environment, there are advantages and disadvantages to eligibility locations for this business in each region.

Table 3. Physical Conditions in Rural and Urban Areas on Lombok Island for Swiftlet Cultivation Businesses

| NO | Business Location Requirements Nest Cultivation Bird Wallet | Characteristics Cultivation | | Land Suitability | |
|----|--|--|---|------------------------------|------------------------------|
| | | Rural | Urban | Rural | Urban |
| 1 | Areas far from the reach of the influence of technological progress and community development. | Most of the is an area of agriculture with density level the residents who low | Densely populated area and trade centre so many vehicles and activities public | In accordance | It is not in accordance with |
| 2 | Areas far from disturbance by predatory birds that eat food meat. | Still many there is a forest is a habitat birds of prey, such as eagles and hawks | There are no animal liars all around the environment because most of it is an area of trading | It is not in accordance with | In accordance |
| 3 | Local area wallet looking for food | Still many there is an area plantations and the rice fields is an area which is suitable for hunting swallows insect | Only a few areas rice fields or plantation so that brutal for the wallet to look for food | In accordance | It is not in accordance with |

Source: Processed Primary Data, 2024

Based on Table 3, in rural areas, the level of disturbance in the resulting progress of technology and activities is relatively low because of density. Density, low population, and dominant land agriculture rural a suitable location for cultivation Bird swallow urban areas dense with activity trade, vehicles and disturbances not ideal because can bother to comfort Bird Wallet.

Rural areas, of course, own superior in matter environment naturally supportive life Bird wallet. Still, there is a challenge related to the existence of bird predators, such as eagles and hawks. The forests that are still lots located in the countryside have become a natural habitat for this bird of prey, which can threaten the existence of Bird Wallet. Attack Bird predators can cause stress in birds' wallets, even at risk-reducing of birds that nest in the area. These conditions are comfortable for successful cultivation because wallets tend to be more sensitive to predator threats and can choose not to nest in areas considered dangerous. In addition, disturbance from bird predators can also cause bird wallets to fly away, avoid regions, and reduce the productivity of their nests.

On the other hand, urban areas offer profit in light of the lack of threat from bird predators. In the urban environment, there is little or even No. There is a widespread bird of prey that can bother stability, such as the popular bird swallow. This makes urban become more

choices safe for cultivation wallets because Bird wallets can freer to grow breeds without Predator disturbance. This bird's safety wallet feels comfortable and more comfortable to live in and creates a nest in the building that has been provided.

Rural areas are superior in the availability of food because there are still many plantations and rice field areas that provide insects as food, leading to Bird Wallet. Temporarily, in urban areas, the limited availability of land and greenery makes food sources for the wallet challenging to find. This environment is less than ideal overall; rural areas have a superior aspect of a naturally supportive ecosystem Bird swallow. Meanwhile, urban areas are exceptional in the element of security from disturbance birds of prey. However, the challenge still exists in both areas, so the right management strategy is necessary to maximise the potential cultivation of Bird swiftlets in each location.

Production Good Nest Group Wallet Rural Either Urban

Production nest wallet is a series of processes that include meeting nests made by birds wallet and processing further to ensure the quality meets standards. These swallow nests are produced in various locations, either in rural areas with conditions of beautiful nature or in urban areas with technology and modern cultivation. The results of the production nest wallet that comes from both regions can seen in the table below:

Table 4. Rural and Urban Nest Production

| Regency | Rural | | | Urban | |
|----------------|-------------|--------------------|---------|-------------|--------------------|
| | Respondents | Production (Kg/Gr) | | Respondents | Production (Kg/Gr) |
| Lobar Attic | A | 2.35 | Mataram | A | 6.00 |
| | A | 3.00 | | B | 3.25 |
| | B | 2.5 | | C | 2.00 |
| | C | 0,5 | | D | 1.00 |
| | D | 2.2 | Pray | A | 1.5 |
| | E | 55 | | B | 5.00 |
| | F | 1.50 | | C | 5.50 |
| East Lombok | G | 1.75 | | D | 5.00 |
| | A | 2.00 | | E | 15.50 |
| KLU | A | 2.50 | Selong | A | 10.50 |
| Total | 10 | 23,8 | | 10 | 55,25 |

Source: Primet Data processed, 2024

Based on data from Table 4. nest swiftlets in rural areas show enough variation in significant respondents; for example, Respondent A produces very high production (3.00 kg), while others only create more amount small, for instance, Respondent F with 1.50 kg. This reflects the existence of differences in the management business, condition environment, and experience of rural livestock breeders overall; the total production of nest swiftlets in rural areas is 23,8 kg, which shows that although There are successful breeders produce large numbers, some big production Still relatively Low.

On the contrary, production nest swiftlets in urban areas tend to be taller overall, with a total reaching 55,25 kg. More modern and structured management, as well as advantages from side security and technology used (such as arrangement temperature and humidity), can produce more stable and high production. Respondents in urban areas, for example, Respondent E's urban area attic as much as (15.50 kg) and surfing area of (10.50 kg), indicating results far away production is more significant compared to farmers in rural areas.

Comparison between the total production of Swiftlets in rural areas (23,8 kg) and the urban regions (55,25 kilograms) shows that urban areas, in a way, overall own potential far away production high. This is due to better management. A good and better environment is safe and stable, which provides comfort for Bird swallows. On the other hand, although rural areas own a number of breeders with results in production, dependence on factors such as nature and the presence of predators can hinder potential output in a way that is maximum.

Effect of Temperature and Humidity

Based on observations of temperature and humidity in each area, which is the location of the study, this data was obtained by referring to official reports issued by the Meteorology, Climatology, and Geophysics Agency (BMKG). The details of the observation results are as follows:

Table 5. Temperature and Humidity

| Instrument | Area | | | | |
|-------------|--------------|--------------|--------------|--------------|--------------|
| | Lobar | Attic | East Lombok | KLU | Mataram |
| Temperature | 29 °C -32 °C | 29 °C -32 °C | 27 °C -30 °C | 27 °C -30 °C | 30 °C -32 °C |
| humidity | 80%-90% | 80%-90% | 80%-90% | 80%-90% | 80%-90% |

Source: BMKG, NTB Climatology Station 2023

Based on the data presented in Table 5, the temperature and humidity conditions at each research location show relatively similar values, which can affect the final results of swallow nest production. The optimal humidity is in the range of 70% to 90%. The species prefers placement in special buildings or houses that have an ideal room temperature in the range of 26°C to 29°C and a humidity level between 75% and 95% (Hara, 2021).

The temperature in the West Lombok (Lobar), Central Lombok (Loteng), East Lombok (Lotim), and (KLU) regions is 27°C–30°C. In urban areas such as Mataram City, Praya, and Selong, the temperature is generally more uniform, ranging from 30°C–32°C, with an average humidity in all regions reaching 80%–90%. Loteng, Lotim, and Klu generally rely on natural conditions to manage temperature and humidity, which tend to be traditional and without the help of modern technology. Temperature and moisture still depend on natural environmental factors without systematic intervention.

On the other hand, in urban areas such as Mataram City, Praya, and Selong, temperature and humidity management is carried out with the help of tools such as *hygrometers*. Research conducted by Sholihin (2020) also supports this approach, stating that the ideal room temperature in a swallow farming building ranges from 25°C–27°C, with stable humidity at 80%–90%. Rural and urban areas, where metropolitan areas have advantages in terms of more measurable and modern environmental control, have the potential to produce more optimal production compared to traditional methods in rural areas.

Apart from production factors, the size of buildings in urban areas is also more prominent than in rural areas. The results of observations of the swallow population in urban buildings are more significant than in rural areas. This is in line with the opinion of (Purnama, 2021), who said that the size of the building allows the swallow nest population in it to be quite large. In the study (Taufiqurohman, 2019), it was stated that the higher the room, the more air it will accommodate, and the swallow population in the building will be from rural areas.

Table 6. Experience of Rural and Urban Swiftlet Breeders

| Rural | | | Urban | | |
|-------------|-------------|--------------------|---------|-------------|--------------------|
| Regency | Respondents | Experience (Years) | City | Respondents | Experience (Years) |
| Lobar | A | 8 | Mataram | A | 3 |
| | Attic | A | | B | 10 |
| | B | 15 | | C | 10 |
| | C | 3 | Praya | D | 15 |
| | D | 4 | | A | 10 |
| | E | 9 | | B | 10 |
| | F | 6 | | C | 17 |
| East Lombok | G | 5 | D | 15 | |
| | A | 6 | E | 15 | |
| KLU | A | 7 | Selong | A | 10 |

Source: Processed Primary Data, 2024

Based on table 6. The level of experience in raising swiftlets in urban and rural areas has a variety of business experiences; in urban areas, the level of experience in raising them is between 10 and 17 years. However, there is an exception for farmer Mr A in the metropolitan area, who has just started a swiftlet business with a maintenance period of 3 years. On the other hand, rural areas show varying periods, with the length of swiftlets raised in West Lombok Regency (Lobar) reaching 8 years for Mr A. Meanwhile, in the rural area of Central Lombok (Loteng), there are various levels of maintenance experience, namely Mr A for 5 years, Mr B for 10 years, Mr C for 3 years, Mr D for 4 years, Mr E for 9 years, Mr F for 6 years, and Mr G for 5 years. In the rural area of East Lombok (Lotim), Mr A has 6 years of maintenance experience, while in the rural area of KLU Regency, Mr A has been raising swiftlets for 7

years. This variation in the length of maintenance reflects the differences in the level of experience and challenges faced by farmers in various regions. Meanwhile, the city of Mataram has been raising swiftlets for a long time, consecutively including Mr A, Mr B, Mr C, Mr D, and Mr E for 3 years, 10 years, 10 years, and 15 years. Meanwhile, the city of Praya has been raising swiftlets for a long time, consecutively including Mr A, Mr B, Mr C, Mr D, Mr E, and Mr F for 10 years, 10 years, 17 years, 15 years, and 15 years. Then, the city of Selong has been raising Mr. A for 10 years.

Quality of Rural and Urban Nests in Lombok Island

The quality of swiftlet nests produced in rural areas varies significantly, depending on environmental factors such as climate conditions, temperature, humidity, and the type of natural food available to swiftlets. Conversely, nests of lower quality are fetched at lower selling prices, which can ultimately affect the economic stability of farmers in the area.

Quality A has a bowl shape, no defects, and is white (Muliati, 2022). Quality A is the best and most expensive quality. The price range is IDR 12,000,000 / Kg. Quality B has triangular characteristics because it is usually located in the corner. This quality is usually not only produced. The price range for quality B nests is IDR 9,000,000 / Kg. Quality C is a damaged swallow's nest, usually a poor harvesting process; the market price is IDR 6,000,000 / Kg.

Nevertheless, the temperature inside the building is set up according to its natural habitat and swallows; other factors, such as disturbances and the environment around it, can influence the form and quality of bird nest wallets. Tend to choose a location that provides a sense of security and comfort. If there is part of the building that feels more strategic, the wallet will adapt from nesting them to accommodate the condition mentioned. In addition, the behaviour experience of Bird Swallows also plays a role. Wallets often start nesting in the corner to get support addition or feel more protected, which produces a nest corner. The nest fracture usually happens because the nest experiences damage, which results in disturbance, errors, technical moment harvest, or humidity that is not evenly around the nest (Nasir Salekat, 2010).

Table 7. Nest Details Based on Quality 1,2,3 Per Harvest Time 10 Respondents from both Rural and Urban Groups

| Respondent / District | Rural | | Respondent / District | Urban | |
|-----------------------|--------------------------|-------------------|-----------------------|---------------------|---------------------|
| | Nest Quality | Income IDR | | Nest Quality | Pen acquisition IDR |
| Response | Bowl (1) | 8,750,000 | Resp. A Mataram | Bowl (1) | 14,000,000 |
| | Corner (2) | 4,300,000 | | Corner (2) | 1,000,000 |
| | Fracture (3) | 750,000 | | Fracture (3) | 600,000 |
| | Total | 13,000,000 | | Total | 26,600,000 |
| Response | Bowl (1) | 6,500,000 | answer | Bowl (1) | 18,000,000 |
| | Corner (2) | 4,000,000 | | Corner (2) | 7,000,000 |
| | Fracture (3) | 800,000 | | Fracture (3) | 700,000 |
| | Total | 11,300,000 | | Total | 25,700,000 |
| Answer | Bowl (1) | 7,500,000 | answer | Bowl (1) | 13,500,000 |
| | Corner (2) | 6,000,000 | | Corner (2) | 2,800,000 |
| | Fracture (3) | 650,000 | | Fracture (3) | 1,000,000 |
| | Total | 14,100,000 | | Total | 17,300,000 |
| Answer | Bowl (1) | 1,500,000 | answer | Bowl (1) | 6,750,000 |
| | Corner (2) | 600,000 | | Corner (2) | 1,500,000 |
| | Fracture (3) | 300,000 | | Fracture (3) | 1,000,000 |
| | Total | 2,400,000 | | Total | 9,250,000 |
| Answer | Bowl (1) | 6,000,000 | Resp. Praya City | Bowl (1) | 4,500,000 |
| | Corner (2) | 4,500,000 | | Corner (2) | 3,000,000 |
| | Fracture (3) | 500,000 | | Fracture (3) | 1,000,000 |
| | Total | 11,000,000 | | Total | 8,500,000 |
| answer | Bowl (1) | 29,000,000 | answer | Bowl (1) | 30,000,000 |
| | Corner (2) | 12,000,000 | | Corner (2) | 14,000,000 |
| | Fracture (3) | 1,500,000 | | Fracture (3) | 1,000,000 |
| | Total | 42,500,000 | | Total | 45,000,000 |
| Resp. F | Bowl (1) | 5,000,000 | answer | Bowl (1) | 20,000,000 |
| | Corner (2) | 4,000,000 | | Corner (2) | 14,000,000 |
| | Fracture (3) | 500,000 | | Fracture (3) | 1,000,000 |
| | Total | 9,500,000 | | Total | 35,000,000 |
| answer | Bowl (1) | 9,000,000 | answer | Bowl (1) | 25,000,000 |
| | Corner (2) | 4,000,000 | | Corner (2) | 14,000,000 |
| | Fracture (3) | 500,000 | | Fracture (3) | 1,000,000 |
| | Total | 13,500,000 | | Total | 44,000,000 |
| Answer | Bowl (1) | 9,000,000 | answer | Bowl (1) | 100,000,000 |
| | Corner (2) | 5,000,000 | | Corner (2) | 35,000,000 |
| | Fracture (3) | 500,000 | | Fracture (3) | 1,000,000 |
| | Total: 14,500,000 | | Total: | 136,000,000 | |
| Answer | Bowl (1) | 7,000,000 | Answer | Bowl (1) | 60,000,000 |
| | Corner (2) | 5,500,000 | | Corner (2) | 28,000,000 |
| | Fracture (3) | 500,000 | | Fracture (3) | 1,000,000 |
| Total Average | Bowl (1) | 89,250,000 | | Bowl (1) | 291.750,000 |
| | Corner (2) | 49,900,000 | | Corner (2) | 131.30,000 |
| | Fracture (3) | 6,500,000 | | Fracture (3) | 9,300,000 |

Primary Data Processed, 2024

Based on table 7. Income obtained by swiftlet breeders in rural and urban areas is based on the quality of the harvested nests. The quality of rural swiftlet nests with bowl quality shows a mean value of Rp. 49.900,000 and the mean value of the broken quality is Rp. 6.500.000. Meanwhile, the quality of urban swiftlet nests with bowl quality shows a mean value of Rp. 291.750.000, while the corner quality shows a mean value of Rp. 131.300.000, and the mean value of the broken quality is Rp. 9.300.000.

Overall, farmers' incomes in urban areas are higher than in rural areas. Urban respondents earn a higher income, some reaching IDR 136,000,000, compared to rural areas whose incomes are smaller, such as IDR 2,400,000 or IDR 9,500,000. The highest income in urban areas is generated from the quality of Mangkok (Quality 1), which far exceeds the income of farmers in rural areas.

Income Rural and Urban Farmers

Income is income from implementing entity activities that are commonly known by different names, such as sales, compensation, interest, dividends, royalties and rent (Sodikin et al., 2014). Income in farming can be distinguished as gross income and net income. The gross income of agriculture can be defined as the total product value of farming in a certain period, both sold and unsold. The results of rural and urban livestock farmers' income can be seen in the table below.

Table 8. Income of Rural and Urban Livestock Farmers

| N O | Respondent s | Rural | | | Urban | | |
|--------|-----------------|------------------|---------------------------|-------------------------|-------------------|---------------------------|----------------------|
| | | Receipts (Rp) | Cost Variables (Rp) | Income Clean (Rp) | Reception (Rp) | Cost Variables (Rp) | Income Clean (Rp) |
| 1 | Resp.A | 13,800,000 | (600,000) | 13,200,000 | 26,600,000 | (4,900,000) | 21,700,000 |
| 2 | answer | 20,700,000 | (1,000,000) | 19,700,000 | 25,700,000 | (3,100,000) | 22,600,000 |
| 3 | answer | 14,100,000 | (500,000) | 13,600,000 | 17,300,000 | (1,500,000) | 15,800,000 |
| 4 | answer | 2,400,000 | (180,000) | 2,220,000 | 9,250,000 | (750,000) | 8,500,000 |
| 5 | answer | 11,000,000 | (800,000) | 10,200,000 | 8,500,000 | (500,000) | 8,000,000 |
| 6 | Resp. F | 42,500,000 | (3,100,000) | 39,400,000 | 45,000,000 | (3,000,000) | 42,000,000 |
| 7 | answer | 9,500,000 | (1,000,000) | 8,500,000 | 35,000,000 | (2,000,000) | 33,000,000 |
| 8 | answer | 13,500,000 | (700,000) | 12,800,000 | 44,000,000 | (3,000,000) | 41,000,000 |
| 9 | answer | 14,500,000 | (1,000,000) | 13,500,000 | 136,000,000 | (5,000,000) | 131,000,000 |
| 10 | Resp.J | 13,000,000 | (1,200,000) | 11,800,000 | 89,000,000 | (6,000,000) | 83,000,000 |
| | | Unit Amount (Rp) | | 144.920.000 | Total Unity | | 406.600.000 |

Primary Data Processed, 2024

Based on the results, see the analysis in Table 8. Income made by ten respondents from rural and urban areas saw a significant difference in matter income between the second group, which said farmers in urban areas own far away high incomes, with an average reaching IDR. 406,600,000, while rural livestock farmers only obtain an average income of IDR. 144.920,000.

This difference indicates a significant economic gap between the two regions, which is influenced by various structural and contextual factors.

4. CONCLUSION

This study shows the existence of a significant difference between the production and quality of nests on Bird Lombok Island. Nest Bird urban swiftlets (55,25 kg) are taller than those in rural areas (23,8 kg), as well as the quality of its nest is superior in urban areas. These differences include the implementation of modern technology in urban areas, for example, the arrangement of temperature and humidity, as well as more environmental conditions safe from nuisance predators.

On the other hand, farmers in rural areas still depend on traditional methods and conditions of nature, which causes productivity and quality to decline more. Rural areas provide more natural abundance and source feed, but predator threats and dependence on environmental factors become the main constraints.

In terms of income, urban livestock farmers profit more economically, with an average income reaching Rp. 406.6 million, far beyond breeders in rural areas, who, on average, earn Rp. 144.920 million. This requires technology transfer, training, and management—a more competitive environment in rural areas. The approach said it is expected to increase productivity, quality, and income, sustainably breeding Bird Wallet.

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