



Condition of swine livestock business in Cemarajaya village, Cibuaya Subdistrict, Karawang Regency, Indonesia

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Abstract. The research aimed to determine the condition of the swine livestock business in Cemarajaya village, which is increasingly declining. In the past, this village was known as a center for swine livestock in Karawang Regency. The research method operated qualitative descriptive analysis, relying on primary data sourced from informants robustly familiar with the development of swine livestock in the village. The results indicate that the swine livestock business in the village faces a bleak future due to the threat of disease affecting swine, high feed prices, and declining interest in swine livestock among the population.

Key Words: animal husbandry, coastal area, pork, qualitative descriptive analysis.

Introduction. Swine livestock is one of the suppliers of animal protein for human consumption (Patel et al 2025). Global pork demand continued to rise by 77% between 1990 and 2022, in line with the drastic increase in demand for the meat from the world's population. Aggregately, China is the world's leading pork supplier, with the largest pig population in the world, roughly 450 million pigs (Kim et al 2024).

In Indonesia, swine livestock has been around for a long time, and it is generally still based on small and medium-scale farms (Wenda et al 2019). The distribution of swine livestock in the country aligns with the swine population, which is concentrated in several regions, including Bali, Sumatra, Java, Kalimantan, East Nusa Tenggara, Sulawesi, and Papua (Dewantoro et al 2015). Although not as large as other regions on the island of Java or in Indonesia, West Java Province had a substantial swine population of 1,022 head in 2024 (The Statistics Indonesia 2025). Karawang Regency is one of the regions contributing to the swine population in West Java Province, with 227 swine in the same year (The Central Statistics Agency of West Java Province 2025). The quantity of the swine population in Karawang Regency indicates the continued existence of swine livestock in the area hitherto.

The Cemarajaya village has long been known as one of the villages in Karawang Regency that has a local swine livestock business. This village stands in stark contrast to the life of people in more villages in Karawang Regency, including those surrounding Cemarajaya village, whose population is predominantly Muslim people, among others, who maintain a clean environment free from the waste of highly impure animals. Meanwhile, swine livestock farmers in this village have long supplied swine or pork, both for consumption within the village itself and other regions.

However, based on current field observations, swine livestock in this village appears to have declined in line with changing times. The swine population, once abundant in almost every part of the village, is no longer seen, primarily on the streets and other public places. Swine livestock were common in the past, just as sheep, goats, and chickens are today. According to this, the research aims to determine the condition

of the swine livestock business in this village, including the problems underlying its current decline.

Material and Method. This research was conducted in August 2025 in Cemarajaya village, Cibuaya Subdistrict, Karawang Regency, West Java Province, Indonesia. This village is located north of the capital of Karawang Regency, in the coastal area of the regency (Figure 1).

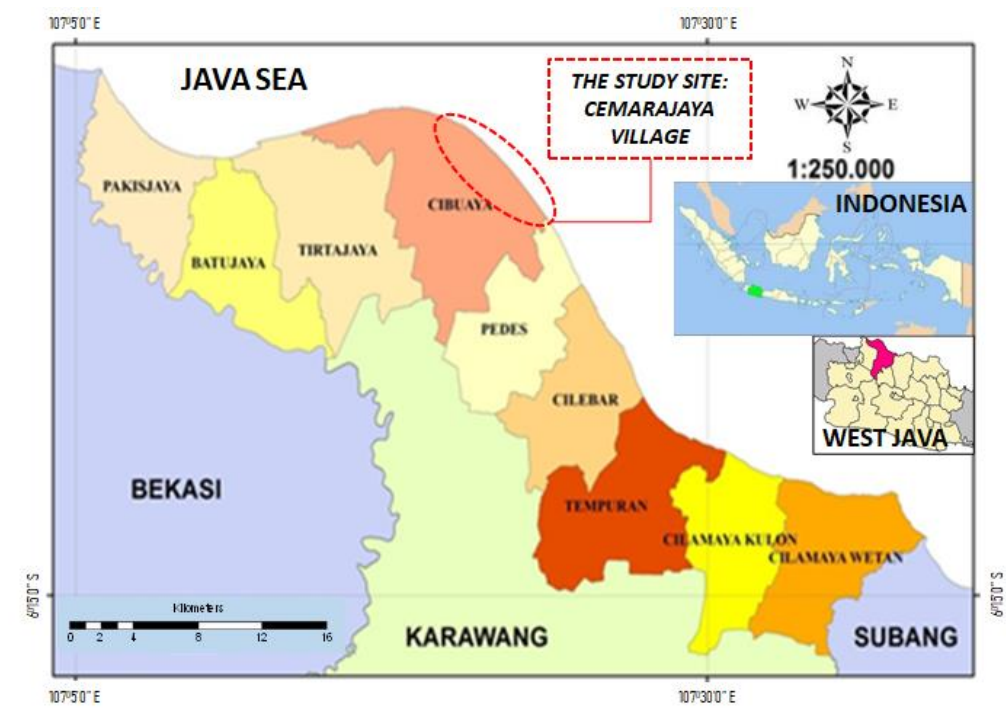


Figure 1. Research location.

The research method employed qualitative descriptive analysis, relying on primary data as the analytical strength. Primary data were collected through observations and in-depth interviews with various sources, including representatives from the Cemarajaya village government, one of whom was represented by Mr. Fendy Aryanto. Other source persons included swine livestock entrepreneurs in the village, namely Mrs. Hayati and Mrs. Kiwang. The selection of source persons was based on a non-probability sampling method, namely purposive sampling. The use of this method is employed as a basis for ensuring that the selected source persons are taken from people who truly understand the development of swine livestock in the village.

Results and Discussion

History of swine livestock in Cemarajaya village. The community swine livestock business in Cemarajaya village has been passed down through generations since the time of their ancestors (Figure 2). This activity is primarily carried out by Chinese descent residents who have long resided in the village. For them, the tradition of swine livestock holds not only economic value but is also closely linked to cultural and religious aspects. In the 1990s, the swine population in Cemarajaya village was still very abundant. In fact, many swine were often seen roaming the streets, around residential areas, and even along the coastal boundaries, coexisting with the community. This situation persisted until around 1999-2000, when the village government finally issued a policy prohibiting the turn loose of swine. Since then, any swine found roaming outside the farm area have been subject to fines, forcing farmers to keep their swine in pens.



Figure 2. Condition of swine livestock in Cemarajaya village.

In the early 2000s, Cemarajaya village saw the arrival of the swine farmer from Jakarta, who opened a larger-scale swine livestock operation than local farmers. In contrast to the generally simple traditional farming practices of residents, the Jakarta swine farmer used a permanent pen system with cement floors and more stringent hygiene procedures. The pens were cleaned at least twice a day, ensuring a relatively well-maintained environment and preventing the pungent odors that disturb residents. Furthermore, their presence has attracted the attention of the Agriculture Office, and the farmer likely had extensive connections with that local government office. They occasionally conduct animal health checks through vaccinations, blood sampling, and water quality testing to ensure the animals are free from bacteria and infectious diseases. However, Cemarajaya village government itself lacks a specific oversight mechanism, so primary control remains with the farm owner and the related local government office. The existence of the Jakarta swine farmer served as a model for more hygienic swine livestock, although in the long run, local farmers did not adopt it due to limited capital and a lack of business regeneration. However, swine livestock were short-lived, as the farm owner eventually ceased operations after a few months and left Cemarajaya village.

Entering a transitional period around 2003-2006, the swine population declined drastically due to coastal erosion that wiped out a hutment area of the village (Nopiana et al 2020a, b), as well as the simultaneous emergence of a viral disease. As a result, many farmers lost their entire herds. Some farmers tried to purchase pigs to resume livestock, while others have chosen to abandon their farm operations altogether.

In 2021, there was a plan by a farmer from outside the village (the Jakarta and Bekasi areas) to establish a large-scale swine livestock on approximately one hectare of land. However, local non-muslim leaders rejected the plan out of respect for the Muslim community.

Swine livestock operations in this village. In its heyday, almost every family in Cemarajaya village raised a significant number of swine, sometimes even dozens. This high swine population made them a common sight in the village. However, as previously described, finally, the swine population declined drastically due to two main factors. First, a contagious disease (virus) spread simultaneously, causing numerous swine deaths. Second, severe coastal erosion in the village area at that time resulted in the loss of a residential area and potential swine livestock land in the region. Since then, the swine population in the village has dwindled to near extinction. Currently, only one family, Mr. Kapo's family, remains active in maintaining the tradition of swine livestock. The livestock management is divided into three households. First, Mrs. Hayati keeps four swine livestock (sows all). Second, Mrs. Kiwang keeps three swine livestock (one sow, one male hog, and one female pig). Third, Mrs. Warung keeps two swine.

The breed of pig currently raised is predominantly from the Lampung region, namely the Berkshire pig (Figure 3). This breed was chosen because the local Karawang pig has become extinct. Physically, Berkshire pigs are characterized by small heads, short, erect ears, a weak and elongated spine, a large belly that almost touches the

ground, short legs, and black and white striped coloration. The costs of raising the livestock are largely borne by the principal owner, who lives in the Tangerang area, while daily management is left to the farmer's family. This pattern demonstrates the existence of a cross-regional family economic network in maintaining the swine livestock business.



Figure 3. Types of swine in Cemarajaya village.

Swine feed generally comes from easily accessible local ingredients, such as rice bran, tofu dregs, leftover vegetables from the market, kale, carrots, and dried rice (Figure 4). A swine is usually fed two to three times a day, each serving two to three large basins. However, limited feed is often a constraint due to the high cost. For example, 20 kg of bran is only sufficient to feed for three days. This indicates that the cost of feed is a major factor limiting the scale of this swine livestock business.



Figure 4. Swine feed in Cemarajaya village.

In terms of health, swine often experience illnesses with symptoms such as refusal to eat, vomiting, and white diarrhea. Treatment is usually self-administered with traditional remedies, such as herbs or antacid solutions, and deworming. Occasionally, the Agriculture and Food Security Office, in conjunction with the Cibuyaya Subdistrict Community Health Center, conducts checks, including vaccinations and blood sampling. However, these checks are not routine but rather sporadic, so the primary responsibility for livestock health care remains with the farmers.

The swine are marketed not only for local consumption but also outside the region, particularly to large distributors in the Bekasi area, who then supply them to restaurants. Currently, the price of live swine at the farmer level is around IDR 75,000 per kilogram. After slaughter, the meat price reaches IDR 180,000 per kilogram, bones IDR 90,000 per kilogram, offal IDR 75,000 per set, and heads IDR 200,000 per piece. Other parts, such as the skin, are also utilized, for example, to produce crackers. Hence, all parts of the swine's body can be optimized to increase its economic value.

The economic value of swine livestock in this village. Swine livestock still has significant market value for some people in Cemarajaya village, although its income contribution is not as significant as that from the fisheries sector, which is the primary source of income for the majority of the village. In other words, swine livestock has economic value, albeit not significantly. The income from swine livestock is often saved by the villagers, despite the high risk; for example, if a swine dies, the farmer incurs a loss.

Swine sales typically increase during traditional and religious celebrations of the Chinese ethnic group, such as Chinese New Year, Cheng Beng (ancestral pilgrimage), and the Seventh Month (prayer to ward off disaster). Furthermore, swine play an important role in various traditional rituals, including weddings and funerals, so their presence is always needed. The profit-sharing system in swine livestock between the owner and manager is simple. The owner obtains the main profit from the sale, while the manager (the farmer's family) receives a feed fee of approximately IDR 10,000 per kilogram, and a bonus of one piglet if the sow gives birth. Meanwhile, the slaughtering process for pork sales is carried out by specially hired butchers, who charge around IDR 100,000 – IDR 200,000.

The existence of swine livestock does not directly impact employment opportunities for the surrounding community. This is because swine livestock is not a primary source of income, but rather a side business. Most residents of Cemarajaya village earn their living as fishermen and aquaculture laborers, considering that part of the village area, covering 1,308 hectares, is utilized for brackish aquaculture.

Socio-cultural aspects of swine livestock in this village. During the period 1975 to 2000, swine livestock was the economic activity practiced by almost all villagers. Limited livestock land forced most residents to build pens around their homes, even on porches. The livestock pattern created various problems, including an increased risk of theft. It was further complicated by the abundance of swine at the time, making it common to find pigs roaming the streets and along the coastal boundaries.

Socially, the presence of swine livestock in Cemarajaya village did not create conflict with the predominantly Muslim community. The local community has long been known for upholding a tradition of tolerance, allowing for the coexistence of different cultural and religious practices. However, to build a new swine pen, farmers were required to first obtain permission from their neighbors to preserve social harmony.

Interestingly, during this period, not only non-muslims but also some Muslims raised swine. However, the swine they raised were not for personal consumption, but purely for economic purposes. Over time, this tradition has changed, and today, Muslim residents are no longer involved in swine livestock.

By law, there are no specific requirements regarding the distance between swine livestock and residents' homes. The most important thing is agreement and permission from neighbors. To date, there have been no conflicts between residents related to swine livestock in this village.

In the past, swine were often let loose, resulting in poor environmental hygiene. However, this is different now, as village government regulations stipulate that swine must be penned and that roaming the village will be subject to fines.

The value of tolerance among community groups has long been a legacy of the Cemarajaya village community. To date, there have been no ethnic, religious, racial, or intergroup conflicts related to swine livestock or spiritual activities in Cemarajaya village. This tradition of tolerance continues to be preserved through various activities. For example, during Christmas celebrations, Islamic religious leaders are invited, and vice versa, creating a family atmosphere. Cemarajaya village is even known as the "Moderation Village", with Mr. Fendy Aryanto as the village leader who strives to pass on these values of tolerance to the younger generation. On the commemoration of Indonesian Independence Day on August 17, 2025, he gathered youth from various faiths to maintain the tradition of togetherness. Furthermore, the "Bebedah" (cleaning up houses of worship) program is a program that cleans houses of worship across various faiths, such as mosques, temples, and, in the future, including Islamic boarding schools.

Currently, the majority of the population in Cemarajaya village is Muslim. There are also Christians, Hindus, and Confucians. Religious facilities in the village include four churches, one temple, and one Chinese temple (which collapsed due to coastal erosion and has not yet been rebuilt).

Challenges of swine livestock in this village. In general, swine livestock in Cemarajaya village currently faces significant challenges, including population limitations, the threat of disease, increasing feed costs, and declining interest from the younger generation (particularly the Z generation) in continuing this livestock business. Despite this, Mr. Kapo's family strives to maintain swine livestock as part of their ancestral heritage, steeped in cultural significance. Although the potential for future development is considered slim, the livestock remains important as historical evidence and a source of local identity, affirming the character of the Cemarajaya village community as an inclusive, tolerant, and tradition-based community.

Echoing this sentiment, Mr. Fendy Aryanto stated that the prospects for swine livestock are pessimistic, specifically in the era of the younger generation (particularly the Z generation), who are increasingly difficult to direct into this swine livestock business. Furthermore, there is no specific government support for the sustainability of swine livestock in Cemarajaya village. Nevertheless, he hopes that the tradition of swine livestock will continue to be maintained as part of their ancestral heritage, even if it is less active than in the past.

Conclusions. The swine livestock in Cemarajaya village faces a bleak future. It is due to various technical, economic, social, and cultural factors. Technically, swine livestock is plagued by the spread of diseases that infect pigs, increasing the risk of swine mortality. Meanwhile, from an economic perspective, high feed prices increase the total operational costs of swine livestock, resulting in reduced profits, especially for managers. Socially and culturally, the profession of swine livestock has been abandoned by most residents in this village, including the younger generation.

Conflict of interest. The authors declare that there is no conflict of interest.

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