

## Integration of Tourism Village to Support the Development of Dairy Cattle Farming in Cijeruk District, Bogor Regency, West Java

Yumita<sup>1\*</sup>, L. Cyrilla<sup>2</sup>, & I. Komala<sup>2</sup>

<sup>1</sup>Postgraduate School of Animal Production and Technology, Faculty of Animal Science, IPB University

<sup>2</sup>Department of Animal Production and Technology, Faculty of Animal Science, IPB University

Jl. Agatis, Kampus IPB Darmaga Bogor 16680, Indonesia

\*Corresponding author: [umitaaaayumita@apps.ipb.ac.id](mailto:umitaaaayumita@apps.ipb.ac.id)

(Received 15-05-2025; Revised 05-06-2025; Accepted 18-06-2025)

### ABSTRACT

Tajurhalang Village has the potential to be developed into a tourism village through the integration of the agricultural sector, dairy cattle farming as the main commodity, and natural attractions. Therefore, an analysis was conducted to assess the potential for developing a tourism village based on the support of several stakeholders, namely farmers, village government, related agencies, and visitors to realize tourism village in Tajurhalang, Cijeruk District, Bogor Regency. The parameters assessed include political, economic, sociocultural, technological, legal, and environmental factors. Data collection was carried out using the initial survey method and questionnaire preparation as well as interviews and observations. The prepared questionnaire was tested for validity and reliability prior to data collection. The data obtained were tabulated and analyzed using PESTLE and descriptive analysis. The research result show that all stakeholders strongly agree based on the perception category. The PESTLE analysis indicates that the collaboration of policy, community participation, technological utilization, and effective management significantly supports the development of rural tourism and supported by the strategic roles of stakeholders. This presents a substantial opportunity for the livestock and rural tourism sectors to be developed in the future.

**Keywords:** community welfare, dairy, economy, livestock, PESTLE, tourism village

### ABSTRAK

Desa Tajurhalang memiliki potensi untuk dikembangkan menjadi desa wisata melalui integrasi sektor pertanian, peternakan sapi perah sebagai komoditas utama, dan wisata alam. Penelitian ini menganalisis integrasi pengembangan desa wisata berbasis sapi perah yang dinilai berdasarkan dukungan dari beberapa pemangku kepentingan, yaitu peternak, pemerintah desa, instansi terkait, dan pengunjung, guna mewujudkan desa wisata di Desa Tajurhalang, Kecamatan Cijeruk, Kabupaten Bogor. Parameter yang dinilai mencakup faktor politik, ekonomi, sosial budaya, teknologi, hukum, dan lingkungan. Pengumpulan data dilakukan melalui metode survei awal dan penyusunan kuesioner, serta wawancara dan observasi. Kuesioner yang telah disusun kemudian diuji validitas dan reliabilitasnya sebelum digunakan dalam pengumpulan data. Data yang diperoleh kemudian ditabulasi dan dianalisis menggunakan pendekatan PESTLE dan analisis deskriptif. Hasil penelitian menunjukkan bahwa seluruh pemangku kepentingan sangat setuju berdasarkan kategori persepsi. Analisis PESTLE menunjukkan bahwa kolaborasi antara kebijakan, partisipasi masyarakat, pemanfaatan teknologi, dan tata kelola yang efektif secara signifikan mendukung pengembangan desa wisata dan didukung dengan peran strategis pemangku kepentingan. Hal ini memberikan peluang besar bagi sektor peternakan dan pariwisata desa untuk dikembangkan kedepannya.

**Kata kunci:** desa wisata, ekonomi, kesejahteraan masyarakat, PESTLE, peternakan, sapi perah

## INTRODUCTION

Tajurhalang Village is one of the villages located in Cijeruk District, Bogor Regency, West Java Province. The area of Tajurhalang village covers 390.527 ha, located right at the foot of Mount Salak Bogor at an altitude of about 600-700 m above sea level with temperature ranging from 15-23 °C. This village has abundant natural resources with various sectors that have the potential to be developed, namely agriculture, animal husbandry, and tourism. Tajurhalang Village is a village that supports the development of dairy cattle business because most of the people own dairy cows, with has 4 livestock groups with 45 livestock breeders. The village also has potential from agriculture and existing tourism in the form of fruit plantations, ornamental plants, camping ground locations, waterfalls and others. The existence of these supporting sectors supports Tajurhalang Village to be developed into a tourist village. The development of tourism village activities will directly and indirectly increase the positive perception of the community on the importance of preserving agricultural land resources. The development of a tourist village will build intensive communication between farmers and tourists (Kurniasanti 2019). The development of agricultural areas into tourist village areas will increase tourist visits which will contribute to increasing community income through tourism services (Budiarti *et al.* 2012).

Dairy farming is one of the business activities in the livestock sector that has the potential to continue to be developed. Dairy cattle are one of the large ruminants that produce their main product in the form of milk (Christi *et al.* 2020). The potential to develop dairy farming is supported by the need for national milk consumption and government support towards national food independence (Jaki *et al.* 2023). Indonesia is still in the process of importing milk from abroad due to the unmet need for milk through domestic milk production (Christi *et al.* 2020). Statistical data released by the Indonesian Central Bureau of Statistics in 2022 showed that the dairy cattle population in Indonesia was 507,075 heads (BPS 2022). As much as 21.7% of the national dairy cattle population is in West Java Province.

One of the areas of West Java that has developed a lot of dairy cattle business is Bogor Regency with an area in Tajurhalang Village, Cijeruk District. This area has the potential to develop dairy cattle by integrating several sectors so that it can develop into a tourist village. Integration that can support each other in the formation of tourist villages, namely collaborating between the agricultural, dairy farming and tourism sectors which are developed into tourism packages. Therefore, an analysis of politic, economic, sociocultural, technological, legal, environment aspect, as well as opinions, perceptions, and preferences was conducted to formulate strategies. This PESTLE analysis is suitable for use because it can analyze external factors in the form of opportunities and threats in the future development of tourist villages. This is assessed from the support of several stakeholders such as farmers, village governments, related agencies, and visitors who collaborate with each other and involve the main role of stakeholders

to realize tourism villages in Tajurhalang Village, Cijeruk District, Bogor Regency.

This study presents several key novelties, notably the integration of agritourism with dairy farming. It develops a form of agritourism or rural tourism specifically based on dairy livestock activities an approach still rarely implemented in Indonesia, particularly at the local and community-based level. This integration not only offers educational experiences for visitors but also creates new economic opportunities for local farmers. Another novelty lies in prioritizing community welfare as the primary objective. Unlike many agritourism studies that focus predominantly on tourism aspects, this research explicitly places measurable improvements in social, economic, and environmental well-being at its core. This study aims to identify stakeholders' perceptions of dairy cattle-based village tourism development in Tajurhalang Village. As well as to analyze political, economic, socio-cultural, technological, legal, and environmental factors that support dairy cattle-based village tourism development in Tajurhalang Village. A further innovation is the contextual model tailored to local potential. The model is grounded in local assets and indigenous knowledge (local wisdom), making it more applicable, relevant, and sustainable compared to generic agritourism models. Lastly, the study introduces a data-driven approach to rural tourism development, based on empirical field data, direct observation, and analysis of local needs and potential rather than relying solely on theory or literature. This renders the model more grounded and realistically implementable.

## MATERIAL AND METHODS

This research was conducted from July to December 2024 in Tajurhalang Village, Cijeruk District, Bogor Regency, West Java. The tools used during the research process included stationery, a clipboard, a laptop, questionnaires, forms, Microsoft Word, Microsoft Excel, and SPSS 29 were used as data processing tools media. The materials used were primary data and secondary data. The measurement scale employed in this study utilizes a Likert scale with scores of 1, 2, 3, and 4, with response options as outlined in Table 1. The table also presents the corresponding interval values and percentage scores in accordance with the response categories.

This interval determines the category of the analyzed factor if it is good or not. The following is the interval formula used and the category values obtained in Table 1.

$$\text{Interval formula} = \frac{\text{maximum likert score} - \text{minimum likert score}}{\text{category}}$$

Description :

Maximum score = maximum likert score given by respondents

Minimum score = the minimum likert score given by the respondent

Category = number of categories used

Table 1. Likert scale score, interval values, and category

Likert scale score	Interval value	Percentage value	Category
1	1.00 – 1.75	25% – 44%	Strongly disagree
2	1.76 – 2.50	45% – 63%	Disagree
3	2.51 – 3.25	64% – 81%	Agree
4	3.26 – 4.00	82% – 100%	Strongly agree

The interview method was conducted through site visits to key stakeholders, comprising 45 livestock farmers from four livestock groups in Tajurhalang village, the Village Government, the Department of Fisheries and Animal Husbandry of Bogor Regency, the Department of Culture and Tourism of Bogor Regency, the Office of Cooperatives and SMEs (Diskopukm) of Bogor Regency, as well as visitors who have previously visited or expressed interest in visiting rural tourism areas. The observation method entailed systematic observation and documentation of visible or observable phenomena related to the research subjects.

This study employs a PESTLE analysis, commonly utilized for examining business activities or other economic undertakings, and serves as a conceptual framework for formulating development strategies. PESTLE analysis enables the identification of potential opportunities and threats facing a business (Aguilar 1967). The PESTLE analysis related to the development of a dairy cattle-based tourism village is presented in Figure 1, while the data derived from the Likert scale are interpreted using descriptive analysis. Furthermore, a stakeholder role matrix is compiled according to the PESTLE aspects.

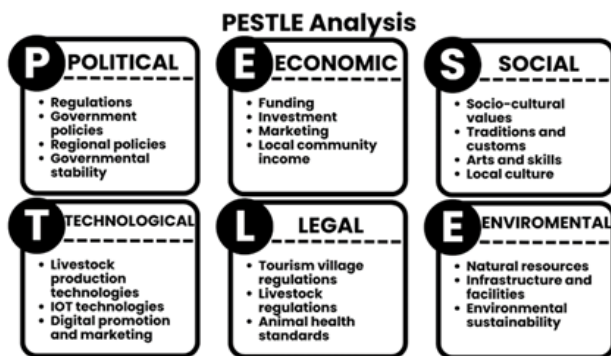


Figure 1. PESTLE analysis diagram

## RESULTS AND DISCUSSION

### General Condition of Tajurhalang Village

Tajurhalang Village is one of the administrative villages located in Cijeruk Subdistrict, encompassing an area of 390.527 hectares at an elevation of 600–700 metres above sea level. The village experiences an average annual rainfall of 3,328 mm and a temperature range of 15–23 °C. A significant portion of the area is surrounded by relatively high hills (Ichdayati 2022). Administratively, the village consists of 3 hamlets, 6 neighbourhood units (RW), and 22 community units (RT), with a total population of 7,623

residents and a population density of approximately 2,088 people per square kilometre (BPS Bogor Regency 2023). Tajurhalang shares borders with Palasari Village to the north, Tanjungsari Village to the east, the Halimun Salak Mountain Forest area to the south, and Sukaharja Village to the west.

### Perception Analysis of Tourism Village Development Factors

The results of the perception analysis regarding the factors supporting the development of a dairy cattle-based tourism village in Tajurhalang Village, Cijeruk Subdistrict, are presented in Table 2.

Table 2. Stakeholders perception of supporting aspects of the tourism village

Factor	Average perception observation score (1-4)	Perception percentage (%)	Perception category
Political	3.37	84.25	Strongly agree
Economic	3.4	85	Strongly agree
Social-cultural	3.37	84.25	Strongly agree
Technology	3.43	85.75	Strongly agree
Legal	3.46	86.5	Strongly agree
Environment	3.47	86.75	Strongly agree
Total	20.5		
Average	3.42		
Percentage (%)		85.42	Strongly agree

Source : Primary data (2025)

Based on the perception analysis involving all stakeholders, an average score of 3.42 was obtained, corresponding to a perception percentage of 85.42%. This indicates a strong consensus and high level of support from all stakeholders for the development of a dairy cattle-based tourism village in Tajurhalang. The highest level of support was observed for the environmental aspect, with a mean score of 3.47 and a percentage of 86.75%, followed closely by the legal aspect, which recorded a mean score of 3.46 and a percentage of 86.50%. These findings suggest that stakeholders place significant importance on ecological sustainability and legal certainty as fundamental components in supporting future tourism and livestock-related activities in the village. The environmental aspect received the highest level of attention, reflecting its perceived critical role in ensuring sustainable livestock-based tourism. All stakeholders strongly agree on and support prioritising an ecotourism approach that incorporates nature conservation, waste management, and environmentally friendly development. This emphasis is also vital for maintaining ecological balance, allowing both livestock farming and

tourism activities to operate harmoniously without causing environmental degradation.

### PESTLE Analysis of Tourism Village Development Factors

**Political Factors.** The development of a dairy cattle-based tourism village in Cijeruk Subdistrict is evidently influenced by political factors, particularly those related to regulations, local government policies, and the stability of governance. Strategic policy initiatives compel the government to demonstrate a strong commitment to rural development, sustainable tourism, and livestock-based food security. At the national level, the tourism village development programme was under the jurisdiction of the Ministry of Tourism and Creative Economy (Kemenparekraf), which provides support through the Tourism and Creative Economy Business Development Assistance Programme (DPUP). This initiative is further supported by the Coordinating Ministry for Human Development and Cultural Affairs (Kemenko PMK), which contributes to the advancement of rural tourism initiatives. While these national programs provide a framework, their implementation at the local level in Cijeruk remains limited due to regulatory and institutional gaps. These policies create a legal framework that enables regions such as Cijeruk Subdistrict to further develop an integrated tourism sector in conjunction with livestock farming. Table 3 presents the current conditions and proposed follow-up actions for the development of the tourism village.

**Economic Factors.** Economic development has the potential to enhance community welfare, generate employment opportunities, and increase local income, as reflected in the current conditions of Tajurhalang Village presented in Table 3. According to Rohman and Azizah (2019), the growth of a country's tourism sector stimulates the advancement of agriculture, livestock farming, plantations, local handicrafts, and contributes to the expansion of employment prospects.

Table 3. PESTLE Analysis of Political Factors

Current Conditions	Recommendations for Improvement
- Government policies for the development of tourism villages are not yet optimal.	- Regulatory and policy support from the government is needed to facilitate tourism village development.
- There is no legal framework for dairy cattle farming integrated with tourism villages.	- A formal legal framework is required to legitimize dairy cattle farming within the context of tourism villages.
- A Pokdarwis (Kelompok Sadar Wisata or Tourism Awareness Group) has been established.	- Continuous mentoring and support are needed to ensure the sustainability of Pokdarwis initiatives.
- Collaboration and synergy among institutions for the development of tourism villages remain weak.	- Strengthening institutional collaboration and sustainable synergy is essential.

Table 4. PESTLE Analysis of Economic Factors

Current Conditions	Recommendations for Improvement
- Processed dairy products are already available.	- The development of innovative dairy product lines is required to diversify offerings and add value.
- Digital marketing strategies and market development remain sub optimal.	- Enhancement of digital marketing initiatives and expansion into new market segments should be prioritized.
- There are no dedicated programmes or funding schemes to support livestock-based SMEs	- The establishment of targeted funding schemes and support programme for UMKM (SMEs) in livestock sector is necessary.
- Educational tourism activities centred on dairy processing have been initiated.	- Strengthening and broadening of educational tourism centred on dairy processing techniques and innovation is essential.
- Profit margins from product sales remain low due to the long distribution chain	- Streamlining the distribution chain to secure higher selling prices and improve margin realisation is recommended.

Tajurhalang Village has developed small and medium-sized enterprises (SMEs) that process cow's milk into products such as pasteurised milk, yoghurt, mozzarella cheese, cheese sticks, and caramel sweets, which are regularly produced by women's livestock groups. However, marketing issues that have not been optimally addressed have resulted in fluctuations in monthly production, which in turn affects income and expenditure. These marketing challenges can be mitigated through strategic marketing efforts, including enhanced promotion, the expansion of market reach, and the development of innovative products (Trimintarsih and Kusumawati 2022). Interviews with stakeholders revealed that the local government has provided support in the form of milk cans, milking machines, and training. Government investment in the tourism sector serves as an important indicator for achieving growth, particularly economic growth (Aliansyah and Hermawan 2019).

The farmers' approach to economic growth includes collaboration with educational institutions and the private sector through workshops on dairy product processing. While this represents an initial step towards addressing marketing and sales issues, further improvements are needed in terms of promotion and planning. Reducing the distribution chain would allow farmers to secure better selling prices and strengthen their relationships with consumers.

**Sociocultural Factors.** This factor plays a crucial role in preserving social values, strengthening community relationships, and supporting the conservation of local culture. A tourism village can serve as a platform for promoting local values, such as mutual cooperation and indigenous wisdom, particularly in the management of



Table 5. PESTLE Analysis of Socio-cultural Factors

Current Conditions	Recommendations for Improvement
- Communal work (gotong royong) activities are present in the management of livestock and tourism.	- There is a need to enhance active community participation in communal efforts to manage livestock and rural tourism.
- Local cultural practices with attractive values already exist, such as the earth alms culture and the Jaipong dance art.	- Strengthening and preserving local cultural heritage as a tourist attraction is essential for sustained development.

livestock farming. Changes in social interactions will foster collaborative relationships (Ningrum and Lestari 2022). The current socio-cultural conditions are presented in Table 5.

Collaboration between the community, government, and tourists will enable socio-cultural values to become a fundamental pillar for sustainable development, including communication relationships. Effective communication between various parties fosters social harmony, which is essential for the successful development of a tourism village (Rodiah and Yusup 2018).

**Technology Factors.** The dairy farming equipment in Tajurhalang Village have implemented technologies such as biogas production, the use of milking machines, and artificial insemination (AI or IB). The details regarding the application of technological factors are presented in Table 6.

Farmers in Tajurhalang Village have encountered technical challenges when using milking machines, which have impacted the quality and subsequent production of milk. This technology, however, aids in reducing stress on livestock, making the milking process more comfortable and stable (Anjani and Ansori 2023). Furthermore, the automated system ensures milk cleanliness and safety by minimizing microbial contamination resulting from human contact (Ilham *et al.* 2023).

The automatic feeding and drinking system technology has not yet been implemented in Tajurhalang's dairy farms due to the small scale of the operations.

Table 6. PESTLE Analysis of Technology Factors

Current Conditions	Recommendations for Improvement
- The application of technology in livestock management remains suboptimal.	- Training and assistance are required for the implementation of technology in livestock management, including the use of digital and modern technologies.
- Training and assistance in the use of digital and modern technology are inadequate.	- Greater optimisation of information technology is needed to enhance promotional efforts and improve visibility of local livestock-based tourism initiatives
- The use of information technology for promotional purposes is not yet optimal.	

According to Janis *et al.* (2022), dairy cattle require large amounts of water for metabolism, temperature regulation, respiration, as well as for digestion and feed absorption. Another technological advancement is the waste management system through biogas installations, providing an environmentally friendly solution for managing farm waste in Tajurhalang Village. The calorific value of biogas can be utilised as a source of energy for daily activities, such as cooking, drying, lighting, and tasks requiring heating or welding (Widyastuti *et al.* 2013). This technology also adds economic value and supports education and innovation within the context of rural tourism.

Another critical technology that should be implemented on dairy farms is biosecurity. Sanitation, biosecurity, disease prevention, and animal disease management are integral parts of farm management that require proper control and oversight (Christi *et al.* 2022). Biosecurity measures have been effectively applied in Tajurhalang, particularly during the Foot and Mouth Disease (FMD) outbreak, where livestock inspections and vehicle access control successfully prevented the spread of the disease.

Technology plays a vital role in the integration of livestock farming and tourism to enhance production efficiency, digitalisation, and environmental conservation. For the sustainability of the tourism village, appropriate technological support is necessary, considering the environmental balance, minimising negative impacts on the ecological system, and ensuring ongoing assistance to ensure effective and sustainable implementation.

**Legal Factors.** The legal framework governing the relationship between tourism and livestock farming serves as a critical foundation for supporting the development of a tourism village in Tajurhalang. The current legal conditions of the village and the necessary follow-up actions related to legal factors are presented in Table 7.

Table 7. PESTLE Analysis of Legal Factors

Current Conditions	Recommendations for Improvement
- Relevant legislation governing tourism and livestock farming exists but has not yet been optimally implemented in Tajurhalang Village.	- It is necessary to enforce and apply the relevant laws effectively in relation to tourism and livestock development within Tajurhalang Village.
- The objectives of BUMDes (Village-Owned Enterprises) in supporting economic development remain suboptimal.	- There is a need to optimise the role and objectives of BUMDes in promoting sustainable economic development at the village level.

Law No. 6 of 2014 on Villages has a positive correlation with the development of tourism villages. This law grants villages greater authority in managing development and community affairs, providing a legal foundation for the autonomous management of local potential through Village-Owned Enterprises (BUMDes), including in the tourism and livestock sectors. But Tajurhalang's BUMDes isn't

yet maximally used for tourism-livestock synergy. This is further supported by Government Regulation (PP) No. 11 of 2021, which governs the establishment and management of BUMDes. One of the main objectives of this regulation is to enable BUMDes to contribute to local economic development and enhance village welfare.

Law No. 10 of 2009 on Tourism also plays a critical role, emphasizing principles of sustainable tourism development that is community-based and environmentally conscious. Tajurhalang Village needs to align planning with these principles in order to meet the principles in developing tourism in the area. In parallel, Law No. 18 of 2009 on Animal Husbandry and Animal Health (as amended by Law No. 41 of 2014) stipulates that livestock activities must comply with animal health standards, waste management practices, and zoonotic disease control to ensure product safety and public health. Tajurhalang Village must implement these livestock health standards as part of tourism integration to ensure future livestock welfare. Moreover, regional regulations such as the Regional Medium-Term Development Plan (RPJMD) and spatial planning regulations in Bogor Regency determine zoning and guide regional development that supports the integration of tourism and livestock agribusiness. The success of such programmes is highly dependent on policy consistency across sectors and the political stability of the region. Legislative support at the regional level, along with synergy among relevant agencies (tourism, livestock, and regional planning), are key factors in ensuring the continuity and sustainability of the programme.

**Environment Factors.** The environmental factor is assessed based on infrastructure development, which includes the improvement of village and hamlet roads to facilitate access, the availability of supporting facilities and infrastructure, and other relevant aspects. The provision and development of infrastructure are aligned with the geographical conditions of Tajurhalang Village, while also ensuring the preservation of natural resources and the

surrounding environment. The current data related to this factor are presented in Table 8.

The availability of adequate road infrastructure is essential for both the distribution of livestock products and tourist accessibility, thereby enhancing logistical efficiency and the overall attractiveness of the destination. According to Hayati (2022), road infrastructure serves as a measure of accessibility, reflecting the ease with which an area can be reached through the transportation network. In addition to roads, infrastructure encompasses the provision of land, water, and vegetation that support sustainability. Supporting facilities such as parking areas, places of worship, sanitation, and telecommunications play a vital role in ensuring the continuity of livestock and tourism-related activities. All infrastructure development is planned with due consideration for environmental carrying capacity.

Additional facilities include designated training areas that offer workshops on livestock management and product processing. Tourism activities are further enriched by natural attractions and local cultural experiences that invite visitors to engage in livestock-related activities, from feeding to product processing (Kurniawan *et al.* 2019). Moreover, the provision of livestock product processing facilities-such as those for pasteurised milk, cheese, and yoghurt-adds value to local products while offering tourists the opportunity to observe and participate directly in the production process.

#### Stakeholder Contributions to PESTLE Factors

Stakeholders involved in the development of the dairy-based tourism village in Tajurhalang Village hold strategic roles and specific contributions, which are analyzed using the PESTLE framework. Table 9 presents the roles of each stakeholder in relation to political, economic, sociocultural, technological, legal, and environmental factors.

Table 8. PESTLE Analysis of Environment Factors

Current Conditions	Recommendations for Improvement
- Existing infrastructure, facilities, and environmental conditions are in place, but they are not yet fully adequate or optimal for supporting tourism development.	- It is necessary to enhance the completeness and adequacy of infrastructure, facilities, and environmental support to optimize tourism village development.
- Inadequate waste management and insufficient green infrastructure limit alignment with ecological sustainability principles.	- The implementation of environmentally friendly development concepts should be prioritized, taking ecological balance into account.
- Public awareness regarding the importance of cleanliness and village aesthetics remains low.	- Efforts should be made to raise community awareness of the importance of maintaining village cleanliness and aesthetic appeal for future sustainability.

Table 9. Stakeholder Contributions to PESTLE Factors

Stakeholders	Political	Economic	Sociocultural	Technological	Legal	Environmental
1. Farmers/ Business Actors	Actively participate in tourism village programs	Manage dairy and dairy-based SMEs	Preserve local wisdom in agro-tourism activities	Apply milking machines, bio-gas systems, and biosecurity practices	Establish legally recognized businesses (e.g., business permits, certifications)	Maintain balance between livestock activities and environmental conservation
2. Village Government	Formulates regulations and supports tourism village policies	Provides business assistance and entrepreneurship training	Facilitates community cooperation and cultural education	Promotes the use of simple technologies in livestock management	Develops village regulations and supports business legalization	Encourages environmental cleanliness programs and village tourism structuring
3. Livestock Department	Provides policy guidance for livestock development	Offers training to improve productivity and market access	Promotes integration of livestock and community empowerment	Transfers reproductive and feeding technologies, and hygiene systems	Supervises animal health standards and livestock product safety	Educates on livestock waste management and natural resource conservation
4. Tourism Department	Aligns regional tourism policies with village programs	Promotes locally-based tourism economic development	Promotes local culture and visitor–community social interaction	Supports digital promotion and creative content training	Assists tourism-related institutions (e.g., Pokdarwis) with legal compliance	Develops eco-tourism concepts and promotes environmentally friendly tourism infrastructure
5. BUMDes and Pokdarwis	Implements village policies in tourism operations	Manages tourism and dairy-based business units	Designs educational and cultural tourism packages	Utilizes online booking and digital promotion systems	Supports BUMDes legal operations and cross-sector collaboration	Provides eco-friendly facilities such as sanitation, waste management, and open spaces
6. Visitors/ Tourists	Provide feedback on regulation-based tourism services	Contribute to local income through spending and tourism services	Respect local cultural values and engage positively with the community	Access tourism information through digital technologies	Comply with village tourism rules and regulations	Participate in conservation-based and environmentally educational tourism activities

## CONCLUSION

The development of the dairy-based tourism village in Tajurhalang Village has received strong support from all stakeholders and holds significant potential for further advancement. The results of the PESTLE analysis indicate significant potential within both the livestock and tourism sectors. Its success depends on the integrated collaboration of political, economic, sociocultural, technological, legal, and environmental factors. The strategic roles of stakeholders are essential to ensuring business efficiency and program sustainability, encompassing regulatory support, economic empowerment, cultural preservation, technological adoption, legal certainty, and environmental sustainability.

## REFERENCES

- Aguilar, F. J.** 1967. Scanning the business environment. New York: Macmillan.
- Aliansyah, H., & W. Hermawan.** 2019. Peran sektor pariwisata pada pertumbuhan ekonomi kabupaten/kota di Jawa Barat. *Bina Ekonomi*. 23:39-55.
- Anjani, D. R., & T. Ansori.** 2023. Penggunaan teknologi pemerah otomatis pada peternakan sapi perah dan dampaknya terhadap produktivitas susu di Desa Bedrug. *SSA Journal*. 665-674.
- BPS (Badan Pusat Statistik).** 2022. Populasi Sapi Perah Menurut Provinsi 2020-2022. Badan Pusat Statistik, Jakarta.
- BPSKB (Badan Pusat Statistik Kabupaten Bogor).** 2023. Kecamatan Cijeruk dalam Angka 2023. Badan Pusat Statistik, Jakarta.
- Budiarti, T., A. D. N. Makalew, N. Nasrullah, Saptana, & Haryati.** 2012. Potential evaluation of community-based agritourism in Banyuroto and Ketep Rural Landscape Magelang District Central Java Indonesia. Symposium IFLA Asia Pacific Shanghai.

- Christi, R. F., H. Indrijani, & D. S. Asripin.** 2020. Penyuluhan pengetahuan kualitas bibit sapi perah pada kelompok ternak binaan balai perbibitan dan pengembangan inseminasi buatan ternak sapi perah (BPPIBTSP) Bunikasih Cianjur. JPMP. 5:1-6.
- Christi, R. F., L. B. Salman, & A. Sudrajat.** 2022. Pelatihan manajemen penerapan konsep biosecurity di peternakan sapi perah Kecamatan Sukalarang Kabupaten Sukabumi Jawa Barat. FJCS. 3:19-23.
- Hayati, L. N.** 2022. Analisis pengembangan infrastruktur jalan terhadap perkembangan pariwisata Kawasan pinggiran kota (studi kasus pada desa wisata "SETIGI" Kabupaten Gresik. JES. 3:1-11.
- Ichdayati, L. I.** 2022. Bersama Delphinium Tajurhalang Cemerlang [LP2M]. UIN Syarif Hidayatullah Jakarta, Jakarta.
- Ilham, M., H. Kusdodo, A. W. Nurroso, & M. A. Ansyorie.** 2023. Peningkatan produktivitas susu kambing di Desa Sumberdem dengan alat pemerah otomatis. JITET. 3:210-215.
- Jaki, M. M. R., M. K. Nawawi, & Yono.** 2023. Peran industri ternak sapi perah dalam upaya meningkatkan kesejahteraan ekonomi masyarakat dalam prospektif ekonomi islam di Kelurahan Kebon Pedes Kota Bogor. El-Mal: J. Kajian Ekonomi & Bisnis Islam. 4:569-595.
- Janis, A. N., U. F. S. Pane, & I. Zulkarnain.** 2022. Implementasi RTC pada pengisian bak air minum ternak sapi menggunakan metode counter berbasis Arduino. JURSIK TGD. 1:159-167.
- Kurniasanti, S. A.** 2019. Analisis strategi pengembangan agrowisata (studi kasus kampung petani buah jeruk siam di Kecamatan Bangorejo-Banyuwangi). JTC. 3:65-76.
- Kurniawan, A. R., D. Suganda, & S. D. Hadian.** 2019. Model desa wisata berbasis peternakan sapi perah di Desa Margamekar, Pangalengan. Tornare: Jour. of Sustain. Tour. Res. 1:1-6.
- Ningrum, A.W., & P. Lestari.** 2022. Interaksi sosial masyarakat Desa Karangrejo pasca pengembangan berbasis pariwisata. E-Societas: Jurnal Pend. Sosiologi. 1:1-19.
- Rodiah, S., & P. M. Yusup.** 2018. Strategi komunikasi dalam pengembangan desa agrowisata di Kabupaten Pangandaran. Jurnal SIGNAL. 6:1-13.
- Rohman, T. S., & S. Azizah.** 2019. Strategi pengembangan wisata edukasi peternakan di kampung susu dynasty Desa Sidem Kecamatan Gondang Kabupaten Tulungagung Jawa Timur. E-Jurnal Karta Rahardja. 1:65-71.
- Trimintarsih, T., & Y. Kusumawati.** 2022. Strategi pemasaran susu sapi perah di peternakan sapi kedunglo Kediri. Ekuivalensi. 8:312-324.
- Widyastuti, F. R., Purwanto, & Hadiyanto.** 2013. Potensi biogas melalui pemanfaatan limbah padat pada peternakan sapi perah Bangka Botanical Garden Pangkalpinang. Metana. 9:19-26.