

## Service Quality Assessment in Regulatory Certification Processes for Animal-Derived Food Products

Marliza Wiesdareni<sup>1</sup>, M. Oktaviannur<sup>2</sup>, Yufendra<sup>3</sup>, Besari<sup>4</sup>, Angga Murizal<sup>5</sup>

<sup>1,2,3,4,5</sup> Universitas Bandar Lampung

Email: [marlizawiesdareni@gmail.com](mailto:marlizawiesdareni@gmail.com)

---

### Abstract

This study evaluates the quality of public services in issuing Veterinary Control Numbers (VCNs) for animal-origin food products in Lampung Province. Employing a descriptive qualitative approach, data were gathered through interviews, observations, and documentation involving the Livestock and Animal Health Service, VCN auditors, and business units. The SERVQUAL model covering tangibles, reliability, responsiveness, assurance, and empathy was used to assess service performance. The findings reveal that while the tangible, responsiveness, and empathy dimensions are rated as good, reliability and assurance remain suboptimal. Supporting factors include a strategic office location, adequate facilities, sufficient human resources, and free services. In contrast, weak inter-agency coordination, low awareness among business units regarding VCN registration, and insufficient public education on certified animal-origin products hinder service quality. Strengthening auditor competence through refresher training, improving coordination mechanisms, and enhancing outreach programs are recommended to improve service delivery, ensure food safety, and build public trust in animal-based food products.

**Keywords:** Service quality, Veterinary Control Number (VCN), SERVQUAL, Public Service.

### Introduction

Public service is essentially a series of activities and interactions between providers and recipients designed to meet community needs (Lindgren *et al.*, 2019). In Indonesia, the government is mandated to deliver high-quality services in accordance with Law No. 25 of 2009 and Government Regulation No. 96 of 2012 on Public Services. These legal frameworks highlight the principles of transparency, accountability, responsiveness, and fairness as the foundation for building public trust and ensuring citizen satisfaction (Twizeyimana & Andersson, 2019). Moreover, the implementation of regional autonomy has strengthened the role of local

governments, where the quality of public services increasingly functions as a key benchmark of governance performance (Lapuente & Van de Walle, 2020).

Within this context, the Lampung Province Livestock and Animal Health Service has a strategic responsibility in safeguarding food safety and public health. Government Regulation No. 95 of 2012 on Veterinary Public Health and Animal Welfare stipulates that all animal-based food products must comply with the ASUH criteria (safe, healthy, intact, and halal) and be certified with a Veterinary Control Number (VCN). This certification serves as a guarantee that businesses adhere to hygiene and sanitation standards throughout production and distribution. However, despite efforts to enhance the certification process, the number of certified business units in Lampung has dropped sharply, from 56 in 2020 to only 12 in 2023, indicating persistent challenges in maintaining service quality.

Several obstacles hinder the effectiveness of VCN issuance in the province. Limited auditor competency and a lack of regular refresher training reduce the consistency and credibility of evaluations (Daoust & Malsch, 2020). Coordination between provincial and district offices, as well as with business actors, also remains problematic, often resulting in delays in audit scheduling and processing (Surono, 2024). Furthermore, public awareness regarding the significance of VCN certification is still low, which creates additional barriers to compliance among animal-based food producers (Syahlani *et al.*, 2023). These issues underscore the need for a systematic examination of service quality and a thorough identification of both supporting and constraining factors within the certification process (Saleem *et al.*, 2024).

Accordingly, this study seeks to analyze the quality of services related to the issuance of VCN certificates for animal-based food products in Lampung Province and to identify the factors that either facilitate or impede the process. Employing a qualitative descriptive approach, the research examines how service delivery aligns with the SERVQUAL dimensions of tangibles, reliability, responsiveness, assurance, and empathy. The findings are expected to contribute theoretically to the academic discourse on public service quality and practically to the enhancement of institutional performance within the Lampung Province Livestock and Animal Health Service. Ultimately, these improvements are anticipated to strengthen public health protection and reinforce consumer confidence in animal-based food products.

## Literature Review

### a. Service Quality

Public service quality refers to the degree of excellence of services provided by service providers to meet public expectations (Barusman, 2024). As the primary provider of public services, the government is obligated to deliver services that are economical, effective, efficient, and accountable, in line with the principles of good governance (Ritz *et al.*, 2016). Within the context of the Lampung Province Livestock and Animal Health Service, service quality plays a critical role, particularly in the issuance of the Veterinary Control Number (NKV), which serves as proof of compliance with hygiene and sanitation standards (Wibowo *et al.*, 2024). The NKV ensures that animal-based food products marketed to consumers meet the criteria of being safe, healthy, intact, and halal as mandated by Government Regulation No. 95/2012 and Minister of Agriculture Regulation No. 11/2020.

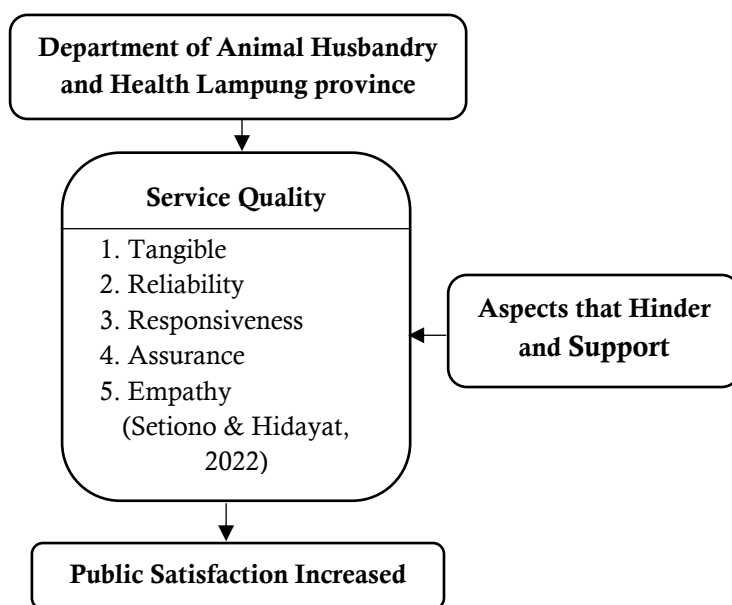
Setiono & Hidayat (2022), categorize service quality into five SERVQUAL dimensions: tangibles, reliability, responsiveness, assurance, and empathy. Tangibles relate to the appearance of facilities, equipment, and personnel; reliability reflects the ability to deliver services accurately and consistently; responsiveness highlights the willingness of staff to assist promptly; assurance underscores the knowledge and courtesy of employees that build trust; and empathy signifies individualized attention to customers (Sugiarto & Octaviana, 2021). Applying these five dimensions is essential for evaluating the effectiveness of public services, particularly in the NKV issuance process.

Several factors influence service quality, including technical competence, employee motivation, internal and external supervision, bureaucratic behavior, and organizational communication (Chikazhe & Nyakunuwa, 2022). External factors such as public expectations, past experiences, and access to information also shape perceptions of service quality (de Ona *et al.*, 2016). In the case of NKV issuance, the competence of auditors and coordination among provincial and district offices and business operators remain primary challenges (Chapot *et al.*, 2023). Gaps in coordination can prolong service delivery times and diminish user satisfaction (Wang *et al.*, 2016).

Improving public service quality can be achieved through the implementation of Standard Operating Procedures (SOPs), the development of service charters, strengthening infrastructure, and enhancing staff competencies (Irfan et al., 2023). Furthermore, adherence to principles of transparency, accountability, participation, and non-discrimination as stipulated in Law No. 25/2009 and Ministerial Decree No. 63/2003 provides a critical foundation. In the context of NKV, strategic measures such as refresher training for auditors and broader outreach to the veterinary community are necessary to elevate service quality (Syah, 2023).

Overall, ensuring high-quality public services in the issuance of NKV strengthens public confidence in animal-based food products (Celestin, 2019). Enhancing service quality not only reflects the accountability of local government but also contributes to protecting public health and advancing the livestock sector (Nguyen et al., 2017). Therefore, continuous improvement through the evaluation of SERVQUAL dimensions, capacity building for human resources, and the simplification of service procedures is vital for achieving optimal and competitive service delivery (Gavahi et al., 2023).

**Research Framework**



**Figure 1. Framework**

**Methodology**

This study employed a qualitative approach with a descriptive qualitative method to analyze the service quality of Veterinary Control Number (VCN) issuance

for food products of animal origin in Lampung Province. This design was chosen to explore in depth the phenomena that cannot be adequately explained through statistical procedures (Asenahabi, 2019). The research informants comprised the Head of the Lampung Province Livestock and Animal Health Service, officials from the Animal Health and Veterinary Public Health Division, VCN auditors, and two business units of animal-based food products, all selected based on their expertise and access to relevant information.

Data were collected through in-depth interviews, direct observation, and a review of relevant documentation. Primary data were obtained from key informants, while secondary data were gathered from official documents and activity reports (Purnomo & Tsany, 2024). Data analysis followed the Miles and Huberman model, which includes data reduction, data display, and conclusion drawing/verification. To ensure the validity and credibility of the findings, triangulation of sources, techniques, and time was applied throughout the research process.

The study was conducted at the Animal Health and Veterinary Public Health Division of the Lampung Province Livestock and Animal Health Service, located at Jl. Cut Mutia No. 23B, Teluk Betung Utara, Bandar Lampung. Fieldwork took place over three months, from November 2023 to January 2024. The research stages included preparation and data collection, data processing and analysis, report writing, consultations with academic supervisors, and the presentation of findings during a seminar and thesis examination. This methodological approach is expected to provide a comprehensive understanding of public service quality in VCN issuance.

## **Result And Discussion**

### **Tangible**

Service quality represents the expected level of excellence and the control over that excellence to meet customer needs. Two key factors influence service quality: expected service (the service anticipated by customers) and perceived service (the service actually received). When the perceived service matches or exceeds expectations, the service quality is considered good or even ideal. Conversely, if the perceived service falls below expectations, the service quality is perceived as poor. Thus, the overall assessment of service quality depends on the provider's ability to consistently fulfill customer expectations. Based on this definition, service quality can

be understood as the degree of excellence delivered professionally by service providers to satisfy consumer demands (Prakoso *et al.*, 2017). Interviews and document reviews related to the performance of employees at the Lampung Province Livestock and Animal Health Service indicate that the issuance process of the Veterinary Control Number (VCN) for animal-origin food products adheres to the principles of public service. Furthermore, service quality measured through the tangible dimension is considered good, primarily due to the availability of adequate facilities and infrastructure. Staff members are equipped with resources that support the dissemination of information, application procedures, and the processing of VCN issuance documents. Therefore, to achieve optimal service quality, employee competence must be complemented by comprehensive facilities and infrastructure.

### **Reliability**

Ability and reliability in service can be defined as the extent to which an individual performs tasks effectively in accordance with established and mutually agreed criteria, ensuring that assigned duties are carried out properly. Based on interviews and a review of documents and activity reports from the Lampung Province Livestock and Animal Health Service regarding Veterinary Control Number (VCN) issuance, the researcher found that service quality in terms of reliability remains suboptimal. Therefore, VCN auditors require enhanced professional competence and regular refresher training to update their knowledge and skills on livestock and animal health regulations, thereby improving personnel performance. Strengthening these aspects is crucial to improving the quality of services provided by the Lampung Province Livestock and Animal Health Service in issuing VCNs, ensuring that future services are delivered optimally. Furthermore, enhanced reliability in service delivery will help educate the veterinary community on the importance of using VCN-certified animal-based food products to guarantee food safety that is ASUH safe, healthy, intact, and halal. Ideally, at least 50% of VCN auditors should participate in competency development and refresher training to achieve these objectives.

### **Responsiveness**

Based on interviews with officials from the Lampung Province Livestock and Animal Health Service, VCN auditors, and representatives of business units, it can

be concluded that the quality of service in the responsiveness dimension is generally good. Staff members have delivered services in accordance with established Standard Operating Procedures (SOPs), demonstrating speed, accuracy, and precision in processing applications for Veterinary Control Numbers (VCNs). The auditors were recognized for their expertise and strong work motivation, which enabled them to provide clear explanations and guide applicants through each stage of the process. Positive feedback was also received from business unit representatives, who confirmed that the services met their expectations and assisted them in complying with the required standards.

Nevertheless, the study also identified the need for enhanced outreach and education to the veterinary community regarding the importance of using animal-origin food products certified with a VCN. Such efforts are essential to strengthen public understanding of food safety assurance that adheres to the ASUH principles (safe, healthy, intact, and halal). Therefore, improving service quality relies not only on the responsiveness of the staff but also on the effective dissemination of information to all relevant stakeholders.

### **Assurance**

The ability, courtesy, and politeness of staff in gaining consumer trust are essential for delivering quality service. Assurance depends on an organization's success in establishing clear service standards and integrating diverse units into a cohesive service delivery system. The quality of an organization's services serves as a key indicator of its effectiveness in implementing programs. Assurance provided by staff regarding service quality enhances organizational productivity, fosters collaboration across units and related agencies, and strengthens overall work morale. Consequently, the goal of delivering high-quality services that facilitate smooth workflow can be achieved.

From the assurance dimension, the quality of service provided by employees at the Lampung Province Livestock and Animal Health Service is considered satisfactory. Although the services offered by the agency are free of charge, staff members consistently follow established Standard Operating Procedures (SOPs), providing accurate and careful assistance to applicants. However, they are unable to guarantee exact service completion times. To address this, proper scheduling and

effective coordination among three key locations the Provincial Office, the District Offices, and the business units are necessary to ensure timely NKV audit services. Furthermore, implementing a system of rewards and penalties is recommended as an assurance mechanism for maintaining service quality. Rewards would serve as recognition for staff performance and motivate them to provide better services, while penalties for non-compliance with SOPs would reassure applicants regarding the timeliness and reliability of service delivery.

### **Empathy**

Based on interviews with officials from the Lampung Province Livestock and Animal Health Service, VCN auditors, and business unit representatives, it can be concluded that the quality of service in the empathy dimension is generally good. Staff members consistently demonstrated friendliness, courtesy, responsiveness, and non-discriminatory attitudes toward applicants at every stage of the Veterinary Control Number (VCN) issuance process, including document verification, field audits, and the provision of guidance and recommendations. Easy access to communication channels and transparent information further facilitated applicants' understanding of procedures and requirements, thereby enhancing user satisfaction.

The empathetic behavior displayed by the personnel such as their ability to understand customer needs and provide professional guidance in accordance with established SOPs reflects the commitment of the Lampung Province Livestock and Animal Health Service to maintaining high-quality public services. These findings align with the SERVQUAL framework proposed by (Ali & Raza, 2017), which emphasizes the importance of empathy, courtesy, accessibility, communication, and understanding customer needs as critical determinants of service quality. Through the consistent application of these empathy indicators, public service delivery for VCN issuance in Lampung has successfully met the principles of high-quality, customer-oriented service.

### **Aspects Supporting and Hindering the Quality of Service Provided by Employees of the Lampung Provincial Department of Animal Husbandry and Animal Health**

The findings of this study reveal several aspects that support the service quality of employees at the Lampung Province Livestock and Animal Health Service. The strategically located office at Cut Mutia street No. 23B, Teluk Betung Utara, Bandar

Lampung, ensures convenient public access. In addition, the availability of adequate facilities and infrastructure, combined with a sufficient number of human resources particularly auditors responsible for issuing Veterinary Control Numbers (VCNs) further strengthens service delivery. The services provided are also free of charge, as they form part of the core duties and functions of the Lampung Province Livestock and Animal Health Service.

However, the study also identifies several factors that hinder service quality. Coordination and consultation among the Provincial Office, District Offices, and business units remain challenging, resulting in audit schedules for VCN issuance that are often unmeasured and delayed. The level of awareness among business units regarding VCN registration is still low. Furthermore, communication, information dissemination, and public education (CIE) regarding the importance of using VCN-certified animal-origin food products require significant improvement.

Overall, the findings of this analysis on service quality in the issuance of Veterinary Control Numbers (VCNs) for animal-origin food products in Lampung Province align with the SERVQUAL framework proposed by (Ali & Raza, 2017). This framework emphasizes that service quality can be measured through five key dimensions: tangibles, reliability, responsiveness, assurance, and empathy. Accordingly, the theoretical model strongly supports the results of this study.

## **Conclusion and Implication**

### **Conclusion**

Based on the research findings and discussion, it can be concluded that the quality of service in issuing Veterinary Control Numbers (VCNs) for animal-origin food products in Lampung Province, examined through a study at the Lampung Province Livestock and Animal Health Service, indicates that the reliability and assurance dimensions remain suboptimal. In contrast, the quality of service in the tangible, responsiveness, and empathy dimensions has been evaluated as good.

The study also identified both supporting and inhibiting factors influencing service quality. Supporting factors include the strategically located office, the availability of adequate facilities and infrastructure, the provision of free services, and the presence of sufficient human resources, particularly VCN auditors. Conversely, inhibiting factors involve unmeasured and poorly coordinated consultation and

communication among stakeholders, which affect the timeliness of service delivery. Additionally, the low awareness among business units regarding VCN registration and the need for greater public education on the importance of using VCN-certified animal-origin products were also highlighted as challenges that must be addressed to improve overall service quality.

### **Implication**

Referring to the research findings and conclusions presented earlier, several important implications should be considered. Enhancing the competence and providing refresher training for VCN auditors significantly influence user satisfaction. This is evident from the study's findings, which indicate that updated information regarding VCN procedures is essential for improving personnel knowledge and skills, thereby ensuring more optimal service delivery. Furthermore, strengthening coordination and consultation among the Provincial Office, District Offices, and business units has a positive impact on service assurance, enabling services to be delivered in a timely and measurable manner. Additionally, increasing public education about animal-origin food products certified with VCNs contributes to improving the performance of human resources or VCN auditors, ultimately leading to higher overall service quality.

### **Bibliography**

- Ali, M., & Raza, S. A. (2017). Service quality perception and customer satisfaction in Islamic banks of Pakistan: the modified SERVQUAL model. *Total Quality Management & Business Excellence*, 28(5–6), 559–577. <https://doi.org/10.1080/14783363.2015.1100517>
- Asenahabi, B. M. (2019). Qualitative research, Mixed method research. *International Journal of Contemporary Applied Researches*, 6(5), 76–89. [www.ijcar.net](http://www.ijcar.net)
- Barusman, A. R. P. (2024). The Influence of Service Quality and Customer Relationship Management (CRM) as Moderators on Customer Satisfaction for Private University Students. In *Europe PMC* (pp. 8–16). <https://doi.org/10.32388/SBEXNG>

- Celestin, M. (2019). Impact of Project Management Practices on Contractor Performance in Rwanda's Local Government Sector. *International Journal of Computational Research and Development (IJCRD)*, 4(2), 38–45. [www.dvpublication.com](http://www.dvpublication.com)
- Chapot, L., Hibbard, R., Ariyanto, K. B., Maulana, K. Y., Yusuf, H., Febriyani, W., Cameron, A., Paul, M., Faverjon, C., & Vergne, T. (2023). A qualitative analysis of health information-sharing networks in the Indonesian poultry sector. *Preventive Veterinary Medicine*, 219, 106003. <https://doi.org/10.1016/j.prevetmed.2023.106003>
- Chikazhe, L., & Nyakunuwa, E. (2022). Promotion of Perceived Service Quality Through Employee Training and Empowerment: The Mediating Role of Employee Motivation and Internal Communication. *Services Marketing Quarterly*, 43(3), 294–311. <https://doi.org/10.1080/15332969.2021.1992560>
- Daoust, L., & Malsch, B. (2020). When the Client Is a Former Auditor: Auditees' Expert Knowledge and Social Capital as Threats to Staff Auditors' Operational Independence. *Contemporary Accounting Research*, 37(3), 1333–1369. <https://doi.org/10.1111/1911-3846.12582>
- de Ona, J., de Ona, R., Eboli, L., Forciniti, C., & Mazzulla, G. (2016). Transit passengers' behavioural intentions: the influence of service quality and customer satisfaction. *Transportmetrica A: Transport Science*, 12(5), 385–412. <https://doi.org/10.1080/23249935.2016.1146365>
- Gavahi, S. S., Hosseini, S. M. H., & Moheimani, A. (2023). An application of quality function deployment and SERVQUAL approaches to enhance the service quality in radiology centres. *Benchmarking: An International Journal*, 30(5), 1649–1671. <https://doi.org/10.1108/BIJ-07-2021-0411>
- Irfan, M., Aiyub, A., Nurhafni, N., Chalirafi, C., & Matriadi, F. (2023). Optimization of Public Services. *International Journal of Public Administration Studies*, 3(1), 8–14. <https://doi.org/10.29103/ijpas.v3i1.12328>

- Lapuenta, V., & Van de Walle, S. (2020). The effects of new public management on the quality of public services. *Governance*, 33(3), 461–475. <https://doi.org/10.1111/gove.12502>
- Lindgren, I., Madsen, C. Ø., Hofmann, S., & Melin, U. (2019). Close encounters of the digital kind: A research agenda for the digitalization of public services. *Government Information Quarterly*, 36(3), 427–436. <https://doi.org/10.1016/j.giq.2019.03.002>
- Nguyen, T. V., Bach, T. N., Le, T. Q., & Le, C. Q. (2017). Local governance, corruption, and public service quality: evidence from a national survey in Vietnam. *International Journal of Public Sector Management*, 30(2), 137–153. <https://doi.org/10.1108/IJPSM-08-2016-0128>
- Prakoso, A. F., Nurul, R., Wulandari, A., Trisnawati, N., Fitrayati, D., Rachmawati, L., & Andriansyah, E. H. (2017). Reliability, responsiveness, Assurance, Empathy, and tangible: still can satisfy the customer. *International Journal of Business and Management Invention*, 6(3), 68–75.
- Purnomo, A., & Tsany, H. P. (2024). The Effect of Raw Material Quality and Production Process on Product Quality On Chips Business in Pringsewu Regency. *International Journal of Economics, Business, and Innovation Research*, 03(02), 939–950.
- Ritz, A., Brewer, G. A., & Neumann, O. (2016). Public Service Motivation: A Systematic Literature Review and Outlook. *Public Administration Review*, 76(3), 414–426. <https://doi.org/10.1111/puar.12505>
- Saleem, S. M. U., Taib, C. A., Ikram, M., & Mehmood, W. (2024). A comprehensive analysis of service quality: a systematic literature review. *Total Quality Management & Business Excellence*, 35(9–10), 1124–1166. <https://doi.org/10.1080/14783363.2024.2357805>
- Setiono, B. A., & Hidayat, S. (2022). Influence of Service Quality with the Dimensions of Reliability, Responsiveness, Assurance, Empathy and Tangibles on Customer Satisfaction. *International Journal of Economics, Business and*

*Management Research*, 06(09), 330–341.  
<https://doi.org/10.51505/ijebmr.2022.6924>

Sugiarto, S., & Octaviana, V. (2021). Service Quality (SERVQUAL) Dimensions on Customer Satisfaction: Empirical Evidence from Bank Study. *Golden Ratio of Marketing and Applied Psychology of Business*, 1(2), 93–106.  
<https://doi.org/10.52970/grmapb.v1i2.103>

Surono, S. (2024). Enhancing The Excellence of Quality Management System Auditors: A Competency-Based Training Model with Instructional Design Strategic Approaches and Measurable Outcomes. *Devotion : Journal of Research and Community Service*, 5(8), 949–960.  
<https://doi.org/10.59188/devotion.v5i8.781>

Syah, A. F. (2023). Implementation Of New Public Management In Improving Bureaucracy Reform In The Public Services Sector In Government Agencies. *The Sunan Ampel Review of Political and Social Sciences*, 2(2), 129–141.  
<https://doi.org/10.15642/sarpass.2023.2.2.129-141>

Syahlani, S. P., Wankar, T. J., & Triatmojo, A. (2023). The influence of objective and subjective knowledge on attitude and willingness to pay veterinary control number-certified livestock food product. *Livestock and Animal Research*, 21(3), 136. <https://doi.org/10.20961/lar.v21i3.73266>

Twizeyimana, J. D., & Andersson, A. (2019). The public value of E-Government – A literature review. *Government Information Quarterly*, 36(2), 167–178.  
<https://doi.org/10.1016/j.giq.2019.01.001>

Wang, X., Birch, S., Zhu, W., Ma, H., Embrett, M., & Meng, Q. (2016). Coordination of care in the Chinese health care systems: a gap analysis of service delivery from a provider perspective. *BMC Health Services Research*, 16(1), 1–11.  
<https://doi.org/10.1186/s12913-016-1813-8>

Wibowo, C. P., Syahlani, S. P., & Haryadi, F. T. (2024). An implementation of an extended theory of planned behavior to investigate consumer behavior on

hygiene sanitation-certified livestock food products. *Open Agriculture*, 9(1), 1–11.  
<https://doi.org/10.1515/opag-2022-0302>