

Governing animal welfare through organizational roles: an ex-ante analysis of the Animal Welfare Officer under the Minister of Agriculture Regulation No. 32/2025

Tata kelola kesejahteraan hewan berbasis peran organisasi: analisis ex-ante peran Animal Welfare Officer dalam Peraturan Menteri Pertanian No. 32/2025

Muhammad Yasin Syihabuddin^{1*}, Ahmad Romadhoni Surya Putra³, Ahmad Shantosi², Abidah Thorifatus Alya³

¹Department of Animal Science, Faculty of Agriculture, Lambung Mangkurat University, Banjarbaru, South Kalimantan, Indonesia

²Inspectorate General, Ministry of Agriculture, South Jakarta, Jakarta, Indonesia

³Department of Livestock Social Economics, Faculty of Animal Science, Universitas Gadjah Mada, Sleman, Yogyakarta, Indonesia

*Corresponding author. Email: yasinsyihab@ulm.ac.id

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Abstract

Animal welfare has become an increasingly important governance issue in livestock systems, driven by growing public concern, regulatory development, and demands for more credible oversight across production chains. In this context, Indonesia's Minister of Agriculture Regulation No. 32 of 2025 introduces the Animal Welfare Officer (AWO) as an internal compliance actor within livestock-related operations. Using qualitative documentary analysis, this study evaluates the AWO role as a policy instrument for embedding animal welfare compliance in practice, examining it as an internal governance mechanism within Indonesia's newly enacted animal welfare regulation. This study contributes to the literature by providing one of the first ex-ante analyses of the Animal Welfare Officer as an internal regulatory intermediary within Indonesia's emerging animal welfare governance framework. The findings show that the regulation recognizes the AWO as an important internal compliance actor, but several key design elements remain insufficiently specified. Compared with the more explicit regulatory construction of animal welfare auditors, the AWO framework provides less clarity on eligibility, competency standardization, and institutionalized training pathways. The regulation also gives limited attention to safeguards for internal reporting, escalation, and consistent implementation across farm, transport, and slaughter contexts. These gaps may undermine the credibility of implementation, especially in multilevel governance settings characterized by uneven institutional readiness and human resource capacity. The study findings recommended that nationally recognized competency specifications, tiered training pathways, stronger collaboration with universities and professional associations, and clearer accountability safeguards be implemented.

Kata kunci

Animal Welfare Officer
tata kelola kesejahteraan hewan
desain kebijakan
kapasitas kebijakan
perantara regulasi

Abstrak

Kesejahteraan hewan semakin menjadi isu tata kelola yang penting dalam sistem peternakan, didorong oleh meningkatnya perhatian masyarakat, perkembangan regulasi, dan tuntutan terhadap pengawasan yang lebih kredibel di sepanjang rantai produksi. Dalam konteks tersebut, Peraturan Menteri Pertanian Republik Indonesia Nomor 32 Tahun 2025 tentang Kesejahteraan Hewan memperkenalkan *Animal Welfare Officer* (AWO) sebagai aktor kepatuhan internal dalam operasional usaha peternakan. Dengan menggunakan analisis dokumen kualitatif, artikel ini mengevaluasi peran AWO sebagai instrumen kebijakan untuk melembagakan kepatuhan terhadap kesejahteraan hewan dalam praktik, dengan menempatkannya sebagai mekanisme tata kelola internal dalam regulasi kesejahteraan hewan yang baru diberlakukan di Indonesia. Kajian ini memberikan kontribusi pada literatur dengan menyediakan salah satu analisis ex-ante pertama tentang Petugas Kesejahteraan Hewan sebagai perantara regulasi internal dalam kerangka tata kelola kesejahteraan hewan yang sedang berkembang di Indonesia. Hasil analisis menunjukkan bahwa regulasi telah menempatkan AWO sebagai aktor kepatuhan internal yang penting, tetapi desain pengaturannya masih belum sepenuhnya terumuskan. Dibandingkan dengan konstruksi regulatif auditor kesejahteraan hewan yang lebih eksplisit, kerangka AWO masih kurang jelas dalam aspek persyaratan, standarisasi kompetensi, dan jalur pelatihan yang terinstitusionalisasi. Regulasi juga masih terbatas dalam mengatur perlindungan pelaporan internal, mekanisme eskalasi, dan konsistensi implementasi dalam konteks farm, transport, dan slaughter. Kesenjangan ini berpotensi melemahkan kredibilitas implementasi. Hasil

kajian ini merekomendasikan perlunya dilaksanakan penyusunan standar kompetensi nasional, jalur pelatihan bertingkat, penguatan kolaborasi dengan perguruan tinggi dan asosiasi profesi, serta penegakan mekanisme akuntabilitas.

1. Introduction

Animal welfare has increasingly evolved into a high-salience public policy issue shaped by scientific advances, shifting societal values, and market expectations (Støier et al. 2016; Salama-Carr 2021; Faucitano et al. 2022). Recent debates indicate that animal welfare governance now extends beyond technical veterinary standards to include regulatory legitimacy, institutional accountability, and the social acceptability of livestock production systems (Ryland 2018; Coleman et al. 2022; Hårstad 2024; Riuzzi et al. 2025). This shift suggests that effective animal welfare regulation depends not only on the articulation of normative principles, but also on the quality of policy design that links policy objectives to implementable instruments and clearly defined roles (Howlett and Mukherjee 2017).

In many jurisdictions, welfare compliance has increasingly been pursued through a combination of state regulation and organizational-level control mechanisms, creating implementation arrangements that connect internal routines with external verification. In multilevel or federated systems, however, uneven human resources and institutional readiness can widen the gap between regulatory ambition and field-level practice, particularly when implementing roles are not supported by standardized competencies and clear accountability arrangements. International literature on farm animal welfare governance highlights that policy outcomes depend on the capacity of implementing actors, the clarity of their mandates, and the alignment between internal compliance functions and external inspection regimes (Hårstad 2024; O'Toole 2000). From a policy design perspective, regulatory effectiveness depends on how objectives are translated into instruments and roles that are feasible to implement and monitor (Howlett and Mukherjee 2017). Animal welfare governance also involves ethical trade-offs across housing, transport, and slaughter, where expert communities can contribute by developing ethical frameworks, facilitating reasoned deliberation, and expanding policy options (Brom 2025). Taken together, this literature suggests that welfare outcomes depend not only on technical standards but also on how roles, competencies, and accountability mechanisms are institutionally arranged.

At the workforce level, Indonesia already has an earlier sector-specific reference in the form of the Special Occupational Competency Standard (*Standar Kompetensi Kerja Khusus, SKKK*) for Animal Welfare Officers (AWOs), issued in 2020 by the Indonesian Beef Cattle Business Association (*Gabungan Pelaku Usaha Peternakan Sapi Potong Indonesia, GAPUSPINDO*). This remains the only available AWO competency reference to date and is limited to the beef cattle industry (Ministry of Manpower 2020). The existence of this standard indicates that an operational competency logic for AWO functions has already been articulated within a specific commodity and organizational context. However, for other commodities and welfare-risk settings, an expanded Special Occupational Competency Standard (*Standar Kompetensi Kerja Khusus, SKKK*) or an accelerated Indonesian National Work Competency Standard specific to AWO (*Standar Kompetensi Kerja Nasional Indonesia, SKKNI*) is urgently needed to ensure cross-species and cross-sector consistency under the new regulation.

Despite these developments, two gaps remain salient for policy analysis in emerging multilevel regulatory settings. First, previous studies have more often emphasized external regulation, inspection, and market-based standards than the policy design of internal compliance roles as regulatory intermediaries within business units, including how mandates, competency pathways, and accountability safeguards are specified in legal instruments (O'Toole 2000; Heise and Theuvsen 2017; Howlett and Mukherjee 2017; Berg and Lundmark 2020; Esbjerg 2022; Natan-Krup and Mizrahi 2024; Hårstad 2024). Second, the Indonesian context remains underexamined following the issuance of the Minister of Agriculture Regulation No. 32 of 2025 on Animal Welfare (Permentan 32/2025), which introduces the AWO as an embedded implementing actor but leaves several design features only partially articulated (Ministry of Agriculture 2025). This becomes more evident when contrasted with the stricter framing of welfare auditors, who must be civil servants with professional backgrounds in veterinary or animal sciences and must hold certified auditor training, supported by clearer institutional pathways for appointment and training provision (Ministry of Agriculture 2025). The resulting asymmetry may contribute to inconsistent operational interpretations across provinces and business scales, potentially weakening the reliability of welfare outcomes (Howlett and Mukherjee 2017).

This study contributes to the literature through a policy design and policy capacity analysis of the AWO under Permentan 32/2025. It conceptualizes the AWO as an internal compliance institution that translates ethical commitments into operational routines within livestock-related business units (Brom 2025). It also maps the AWO's mandate and training requirements in the regulation and compares them with the auditor pathway to identify design asymmetries with likely implementation consequences (Howlett and Mukherjee 2017; Ministry of Agriculture 2025). In addition, the study interprets these findings through a policy capacity lens to anticipate bottlenecks related to human capital availability, standardization, and multilevel coordination (Wu et al. 2015; Hedman et al. 2021). In doing so, the article extends animal welfare research beyond technical assessment by examining how role-based internal oversight can be designed to support consistent welfare outcomes across diverse regulatory environments, including farm, transport, and slaughter contexts.

Against this background, the general objective of this article is to evaluate the role of AWO within Permentan 32/2025 as a policy instrument for embedding animal welfare compliance within livestock-related operations. Specifically, this article aims to map the AWO's formal mandate, assess the adequacy of competency standards and training pathways, and examine the accountability mechanisms that shape the credibility of internal welfare oversight. Using a qualitative documentary analysis approach (Bowen 2009) and drawing on policy design and policy capacity lenses, the study identifies plausible implementation bottlenecks in multi-level settings and proposes targeted refinements, including national competency specification, tiered training pathways strengthened through regulated collaboration with universities and professional associations, and clearer safeguards for internal reporting and escalation.

2. Methodology

2.1. Research design and analytical framework

This study employs qualitative document analysis to conduct an *ex ante* assessment of the Animal Welfare Officer (AWO) role under Indonesia's Minister of Agriculture Regulation No. 32 of 2025 on Animal Welfare (Permentan 32/2025). Document analysis is appropriate for examining policy texts because it enables the systematic interpretation of formal rules, institutional arrangements, and implementation assumptions embedded in regulatory design (Bowen 2009). In this study, the regulation is examined not only as a legal text but also as a policy instrument that structures actors, responsibilities, competencies, and accountability relations within animal welfare governance. This approach aligns with the study's objective of evaluating the AWO role as an internal compliance mechanism and identifying likely implementation bottlenecks before large-scale field application.

The analysis is informed by two complementary perspectives, namely policy design and policy capacity. From a policy design perspective, regulatory effectiveness depends on how coherently policy goals are translated into instruments, actor arrangements, and operational responsibilities that are administratively workable and institutionally credible (Howlett and Mukherjee 2017). This perspective is relevant because Permentan 32/2025 not only establishes general welfare principles but also designates the AWO as the implementing actor for livestock-related operations. The study, therefore, examines how the regulation defines the AWO role, assigns duties, links the role to training requirements, and positions it relative to other welfare oversight mechanisms.

The policy capacity perspective is used to assess whether the implementation conditions are adequate to support the regulatory design. Following Wu et al. (2015), policy capacity concerns the analytical, operational, and political competencies required for policy implementation at the individual, organizational, and system levels. This lens is particularly relevant for a newly institutionalized role such as the AWO because formal designation alone does not guarantee effective implementation when competency supply, training ecosystems, organizational safeguards, and intergovernmental coordination remain uneven. Accordingly, the study evaluates not only whether the AWO has been formally recognized, but also whether the broader regulatory architecture provides an adequate foundation for credible implementation across diverse livestock settings.

The analysis also applies contextual and comparative reasoning. Although the study is centered on Permentan 32/2025, the regulation is not examined in isolation. The AWO framework is interpreted in relation to the more explicit construction of animal welfare auditors in Indonesian regulation, as well as selected scholarly and international references on role-based welfare oversight, competency standards, accountability safeguards, and organizational implementation. This comparative approach is not

intended as a full cross-country legal comparison, but rather as a means of strengthening interpretation and avoiding an overly inward-looking reading of the Indonesian regulatory framework.

Within this framework, the AWO is understood as the principal internal welfare oversight actor because the regulation assigns it the role of monitoring animal health and environmental conditions, identifying welfare deviations, recommending corrective actions, and reporting noncompliance to management. By contrast, external welfare oversight refers to compliance verification conducted through inspections, audits, certifications, or formal regulatory supervision. Role clarity, professionalization, and accountability are treated as central analytical concerns in assessing the credibility of the AWO framework.

This study presents an ex-ante assessment of regulatory readiness based on textual design. It does not measure field-level implementation outcomes directly. However, this approach is appropriate for identifying likely areas of ambiguity, inconsistency, and institutional weakness, as well as for anticipating implementation bottlenecks and refinement priorities for a newly institutionalized role expected to operate across heterogeneous livestock systems and welfare-risk settings.

2.2. Data sources and document corpus

The primary source of analysis is Permentan 32/2025, which serves as the core regulatory text examined in this study. Because the manuscript is review-based and aims to assess regulatory design rather than measure field-level outcomes directly, the analysis also draws on supporting documentary sources to strengthen contextual interpretation and comparative reasoning. These sources include the 2020 Special Occupational Competency Standard for Animal Welfare Officers issued for GAPUSPINDO, relevant Indonesian regulatory provisions concerning welfare auditors and the implementation authority, and selected scholarly and policy references on regulatory intermediaries, policy design, policy capacity, and animal welfare governance. External references are also used selectively to situate the Indonesian case within wider debates on internal compliance roles, accountability design, and welfare oversight across farm, transport, and slaughter settings. This broader documentary base is necessary to respond to the asymmetry between the emerging AWO framework and more established models of external verification and to strengthen the interpretive depth of the analysis.

2.3. Unit of analysis and analytical procedure

The unit of analysis in this study is the regulatory provision and related competency or institutional reference relevant to the design and implementation of the AWO role. The analysis focuses on four dimensions derived from the research objective and analytical framework: role clarity, competency and training arrangements, accountability mechanisms, and implementation readiness. Role clarity is assessed by examining how Permentan 32/2025 specifies the AWO's duties, authority, and institutional location. Competency and training arrangements are assessed by examining whether the regulation provides a sufficiently standardized basis for qualification, certification, and training delivery. Accountability mechanisms are assessed by examining the extent to which reporting, escalation, and organizational safeguards are specified. Implementation readiness is assessed by examining whether the regulation appears feasible across different governance levels, business scales, and welfare-risk settings.

The analysis proceeded in three stages. First, relevant provisions in Permentan 32/2025 were identified and grouped according to the four analytical dimensions above. Second, these provisions were interpreted in relation to the broader regulatory and conceptual literature, including the differentiation between internal compliance roles and external verification roles. Third, the identified strengths, gaps, and likely implementation risks were synthesized using policy design and policy capacity lenses to derive targeted policy refinements. This procedure allows the study to move beyond descriptive reading of the regulation and toward a structured ex-ante diagnosis of how the AWO framework may function in practice. Because the study is interpretive rather than empirical in a fieldwork sense, the purpose is not to claim observed implementation outcomes, but to identify likely areas of ambiguity, inconsistency, or institutional weakness based on the current design of the regulatory framework.

3. Results and discussion

This section presents an integrated analysis of the Animal Welfare Officer (AWO) role under Permentan No. 32/2025, interpreted through the lenses of policy design and policy capacity. The results show that the regulation has taken a significant step toward institutionalizing welfare compliance within organizations, but several design and capacity gaps may undermine consistent implementation across regions and business scales.

3.1. *Animal welfare principles and the rationale for role-based oversight*

Permentan 32/2025 places the five animal welfare principles at the normative core of animal welfare governance. Article 3(1) states that the implementation of animal welfare is carried out by applying the principles of freedom from hunger and thirst, freedom from pain, injury, and disease, freedom from discomfort, abuse, and misuse, freedom from fear and distress, and freedom to express natural behavior. These principles are not confined to one operational setting. Article 3(2) extends them across animal capture and handling, housing, maintenance and care, use and utilization, fair treatment and protection, transport, slaughter and killing, and comparative veterinary practice. Article 3(4) further requires that persons with competence in animal welfare conduct such activities, while Article 3(5) links such competence to education and training. Together, these provisions show that Permentan 32/2025 frames animal welfare as a cross-context governance obligation spanning on-farm, transport, and slaughter settings.

This cross-sectoral structure helps explain the need for a role such as the AWO. The AWO should not be viewed solely as a slaughterhouse function, but as an internal welfare actor intended to help translate broad welfare principles into routine operational practice under different risk conditions. On-farm, welfare risks relate to feeding, housing, environmental management, and handling. In transport, Article 48(3) links welfare implementation to supervision or recommendation by a veterinarian, animal science engineer, or AWO. In slaughterhouse settings, Article 60(1)–(3) provides the clearest operational anchor by assigning the AWO responsibility for welfare implementation across all stages of animal handling in the slaughterhouse. These provisions suggest that the AWO role should be understood across the production chain rather than being confined to slaughterhouse administration.

The five principles also imply that the key issue is not simply which professional title should occupy the AWO position, but whether the role holder has the competence required to identify welfare risks, interpret operational conditions, and recommend corrective action in specific settings. This supports a competency-based rather than title-based reading of the AWO role. At the same time, because Permentan 32/2025 does not yet elaborate on this competency framework in detail, the question of role clarity, training design, and implementation readiness becomes central to the analysis developed in the following sections.

3.2. *Role clarity and the rise of internal welfare governance*

Following the cross-context welfare principles outlined above, Permentan 32/2025 can be read as moving animal welfare governance beyond abstract normative instruction toward a more actor-based implementation design. In this framework, the AWO is positioned as an internal welfare governance actor rather than merely an auxiliary designation. Article 1(25) defines the AWO as a person with competence, ability, and skills in the application of animal welfare. Article 5(3)(k) further includes the AWO among those who handle animals as part of their work, while Article 48(3) and Article 60(1)–(3) provide more concrete operational anchors in transport and slaughterhouse settings. Taken together, these clauses indicate that the regulation does not treat welfare implementation solely as a matter of external supervision, but also embeds responsibility within routine organizational structures.

From a policy design perspective, this actor-centered shift is significant because internal roles can translate broad welfare principles into day-to-day operational routines. Rather than relying exclusively on external state inspection, the regulation introduces an organizational node expected to monitor conditions, identify welfare deviations, support corrective action, and sustain routine compliance from within. This design logic is consistent with contemporary regulatory thinking in which governments increasingly embed compliance responsibilities inside regulated entities while retaining external verification and oversight functions (Howlett and Mukherjee 2017). In this sense, the AWO can be viewed as a regulatory intermediary that supports implementation by translating formal welfare rules into day-to-day operational routines within regulated entities (Kourula et al. 2019). It also functions as an institutional mechanism for embedding welfare governance within daily operations, particularly in

activities where welfare risks arise continuously rather than only at the point of inspection. This internal role is especially relevant in slaughter operations, where welfare outcomes depend not only on formal rules but also on continuous staff decisions, environmental conditions, and handling practices throughout processing activities (Wigham et al. 2018).

The regulation, however, specifies this role unevenly across contexts. In slaughterhouse operations, the AWO mandate is relatively explicit. Article 60(1) states that the implementation of animal welfare in slaughterhouses is carried out by the AWO and related personnel, Article 60(2) allows the role to be held by the slaughterhouse head or designated personnel, and Article 60(3) assigns responsibility for animal welfare implementation across all stages of handling in the slaughterhouse. In transport, Article 48(3) also recognizes the AWO as one of the actors under whose supervision or recommendation welfare implementation may be carried out. By contrast, the role is less concretely elaborated in broader on-farm settings, even though Article 3(2) makes clear that animal welfare applies across handling, housing, maintenance, use, transport, and slaughter. This unevenness does not negate the importance of the role. Still, it does suggest that the practical meaning of AWO authority may be interpreted more clearly in slaughterhouse settings than in other operational domains.

To provide a structured overview of how the regulation frames the AWO as an internal compliance actor, Table 1 summarizes the core regulatory requirements, intended governance functions, and the most foreseeable implementation risks. The table indicates that the AWO mandate is already recognizable as a meaningful institutional innovation, particularly because it creates an internal point of responsibility for animal welfare implementation. Nevertheless, the current framework still leaves room for uneven interpretation, especially where role boundaries, professional expectations, and escalation arrangements are not yet fully standardized across sectors and administrative settings.

Table 1. AWO role-requirement-function map

No.	Regulatory element	What the rule requires	Intended governance function	Implementation risk (brief)
1.	AWO qualification	AWO must hold a training certificate issued by the government or a professional certification body	Establishes a formal entry requirement for internal welfare compliance	Certification without a harmonized national competency standard may produce uneven training quality
2.	AWO core duties	Monitoring welfare conditions; addressing deviations; recommending corrective actions; reporting noncompliance to management	Embeds welfare compliance within organizational routines	Internal reporting may be weakened without explicit safeguards for independence and escalation
3.	AWO in slaughterhouses	AWO and staff conduct welfare implementation in RPH; AWO may be appointed from operational leadership; expected to have welfare assessment competence	Strengthens welfare oversight at a high-risk node of the value chain	Risk of role overload and conflict with operational throughput priorities
4.	Existing workforce reference	A sector-specific AWO Special Competency Standard registered in 2020 for GAPUSPINDO (beef cattle) with competency units covering handling, transport, monitoring, welfare program implementation, facility-related competencies, and pre-slaughter preparation	Provides an early sectoral competency foundation that can inform national standardization	Remains commodity- and association-bound; not yet harmonized as a cross-commodity national reference aligned with Permentan 32/2025

Note (regulatory and workforce basis): The AWO mandate and operational scope are based on Permentan 32/2025 provisions on AWO requirements and duties and slaughterhouse-specific responsibilities. The workforce reference reflects the registered SKKK AWO 2020 issued for GAPUSPINDO.

This limitation becomes clearer when the AWO is viewed as a regulatory intermediary. The RIT model emphasizes that intermediaries are effective not simply because a role exists, but because they

are supported by organizational structures and institutional scaffolding that allow them to stabilize compliance within regulated entities (Abbott et al. 2017). From this perspective, Permentan 32/2025 has established an important foundational role, but defining the role alone is not sufficient to ensure consistent implementation. The regulation signals a shift toward internal welfare governance, yet the institutional conditions needed to make that shift reliable across sectors, regions, and business scales remain only partially articulated.

3.3. Competency standards and training pathways

To demonstrate how the empirical reading of Permentan 32/2025 aligns with policy design and policy capacity diagnostics, Table 2 synthesizes evidence, identifiable gaps, and implementable implications. Taken together, these gaps suggest that the AWO framework has achieved strong doctrinal recognition but still requires clearer provisions for professionalization and accountability to serve as a reliable internal compliance pillar. The table indicates that the most critical vulnerabilities concern the incomplete specification of AWO competency standards and training pathways and the absence of explicit safeguards for internal accountability, which may constrain consistent implementation across regions and business scales.

Table 2. Design gap matrix (policy design + policy capacity)

No.	Analytical domain	Evidence from regulation	Identified gap	Policy implication
1.	Role clarity	- Permentan 32/2025 specifies minimum AWO duties and requires training certification	- Role is clear at the task level but not fully elaborated as a compliance prerequisite across diverse unit types and scales	- Issue technical guidance clarifying mandatory coverage, role scope across nodes (farm, transport, RPH), and minimum functional coverage
2.	Competency and training pathways	- Permentan requires AWO training certification; a sector-specific SKKK AWO 2020 exists for GAPUSPINDO (beef cattle)	- No harmonized national competency standard and structured training pathway explicitly aligned to Permentan 32/2025 - Existing SKKK remains commodity- and association-bound	- Harmonize and expand the SKKK into an interim national reference - Accelerate an AWO-specific SKKNI that is cross-commodity and risk-based
3.	Accountability mechanisms	- AWO reports noncompliance to management	- Internal reporting is not accompanied by explicit safeguards for functional independence, escalation, or documentation standards	- Add escalation procedures, minimum documentation requirements, and safeguards for professional judgment in welfare reporting
4.	Capacity feasibility and system readiness	- Auditor eligibility and training are more prescriptive than AWO - Regulation anticipates a guidance and supervision ecosystem and regulated training for auditors	- Asymmetric professionalization logic between internal (AWO) and external (auditor) pillars - Regional disparities in training supply and institutional support may hinder uniform AWO implementation	- Align internal and external frameworks to avoid fragmented compliance expectations - Adopt phased provincial capacity-building, expand accredited multi-actor training providers, and monitor implementation gaps

Note (regulatory and workforce basis): The matrix draws on AWO provisions, auditor eligibility/training provisions, and guidance-supervision provisions in Permentan 32/2025, alongside the sector-specific SKKK AWO 2020 issued for GAPUSPINDO as the only currently available AWO workforce reference.

The regulation requires AWOs to hold a formal training certificate issued by the government or a professional certification body. However, it does not articulate a national competency standard, minimum curriculum structure, or explicit quality assurance mechanisms for AWO training. Recent

expert evidence also indicates that staff training is among the most effective interventions for improving welfare during transport and slaughter, particularly when linked to practical competencies, handling behavior, and standardized procedures (Eichler et al. 2023). This gap becomes more apparent when compared with the more prescriptive framing of welfare auditors, who must meet specific professional and bureaucratic eligibility conditions and hold certified auditor training. The AWO’s intended function as an internal compliance actor also reflects an international trend in which welfare outcomes depend on the clarity and robustness of embedded organizational roles. International experience also suggests that internal welfare roles require clear supporting instruments to translate legal intent into routine practice, as illustrated by the European AWB model and the broader regulatory lesson that subordinate instruments supply the operational details needed for reliable compliance (Codecasa et al. 2021; Morton and Whittaker 2022).

Overall, these findings reveal an asymmetry between internal and external compliance arrangements. Policy design research cautions that such asymmetries can weaken the coherence of the overall instrument mix, particularly when internal roles are expected to function as the first line of compliance while external auditors serve as verification authorities (Howlett and Mukherjee 2017). This may lead not only to administrative inconsistency, but also to varying interpretations across provinces and industries, especially where training providers and institutional oversight capacities differ.

The slaughterhouse provisions further reinforce the urgency of competency systematization. Welfare assessment at slaughter is widely recognized as a high-stakes operational domain requiring trained personnel and reliable assessment approaches (Losada-Espinosa et al. 2021; Nicolaisen et al. 2023a, 2023b). Recent evidence from Ghana also indicates that although awareness of animal welfare among slaughterhouse workers was relatively high, formal training and verification practices remained limited, underscoring the importance of competency-based professionalization (Awuni et al. 2025). Where a regulation explicitly assigns welfare responsibility at this node, professionalization that relies primarily on a general certification requirement may be insufficient to ensure consistent welfare outcomes.

To clarify the intended interaction between internal welfare governance and external verification, Figure 1 depicts the conceptual compliance chain implied by the regulation. This figure illustrates that the credibility of the overall welfare regime depends on the AWO’s ability to function as an effective internal regulatory intermediary, reinforcing the importance of standardized competencies and protected reporting pathways.

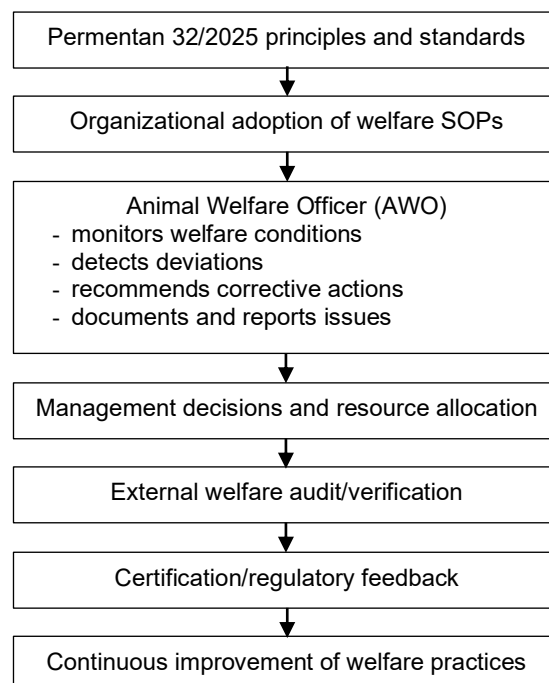


Figure 1. Internal-external compliance chain implied by Permentan 32/2025

3.4. Accountability design and internal conflict-of-interest risks

Permentan 32/2025 establishes an internal reporting responsibility in which AWOs must report noncompliance to business management. This is a pragmatic governance choice, but it also raises a foreseeable accountability tension. When internal compliance roles are fully embedded within management hierarchies, the effectiveness of reporting can be shaped by production pressures, cost considerations, and local organizational cultures.

This accountability vulnerability also resonates with comparative evidence on animal welfare enforcement gaps, which shows that even ambitious legal frameworks can underperform when enforcement responsibilities and institutional safeguards are unclear, creating discretionary spaces that dilute compliance in practice (Morton et al. 2020). Comparative evidence from Germany also shows that welfare violations may persist even under mature regulatory systems, highlighting the importance of effective oversight, reporting integrity, and enforceable accountability arrangements within slaughterhouses (Schneidewind et al. 2024).

Accountability research in street-level and organizational settings shows that internal oversight functions can become vulnerable when discretion is not balanced with safeguards that protect professional judgment (Brodkin 2008). In animal welfare governance, this risk is amplified by the possibility of “paper compliance”, where the formal existence of a role and its documentation does not necessarily translate into substantive welfare improvements (Escobar and Demeritt 2017). Within a policy design lens, the core issue is not that internal reporting is inappropriate, but that the regulation does not yet outline explicit mechanisms for functional independence, escalation pathways, or protection of internal welfare reporting (Howlett and Mukherjee 2017; Berg and Lundmark 2020). These missing elements may create implementation variation in how AWOs interpret and execute their mandates, particularly across business scales and sectors with different levels of governance maturity.

3.5. Capacity feasibility and system readiness

The AWO role is embedded within a broader implementation ecosystem that includes training, auditing, guidance, and supervision. The regulation also accommodates collaboration with non-governmental entities for auditor training, implicitly signaling openness to expanding co-regulatory capacity. Evidence from multi-stakeholder studies further suggests that welfare outcomes depend on coordinated understanding among slaughterhouse employees, transporters, and veterinarians, indicating that AWO effectiveness is likely to depend on broader system readiness rather than individual certification alone (Lipovšek et al. 2024). This is an important signal, as the introduction of a new national compliance role will likely increase demand for training, certification, and standardized practices.

The policy capacity framework suggests that such reforms require aligned investments in analytical capacity (standard setting and curriculum), operational capacity (training supply and audit coordination), and political capacity (legitimacy and buy-in from industry and professional bodies) (Wu et al. 2015). Without such aligned capacities, early implementation is likely to be uneven across territories and organizational types.

In practical terms, Permentan 32/2025 provides a foundation for scalable AWO professionalization, but the current textual design suggests that the training system may not yet be sufficiently standardized to prevent fragmentation. The gap between a general certification requirement and a detailed competency standard and training pathway may be especially problematic in regions with limited access to accredited programs or a thin pool of welfare-specialized professionals.

To translate the identified design and capacity gaps into a feasible implementation sequence, Table 3 outlines a staged reform roadmap for strengthening AWO professionalization. The table indicates that short-term regulatory clarification and national competency specification should precede broader multi-actor training expansion and longer-term recertification and performance integration.

3.6. Synthesis and targeted policy implications

Taken together, the findings indicate that Permentan 32/2025 has substantially advanced the institutionalization of internal animal welfare governance by formally establishing the AWO. Nevertheless, three interrelated design weaknesses remain. First, competency standards and training pathways are insufficiently specified relative to the breadth of operational responsibilities. Second, accountability arrangements rely heavily on internal reporting without explicit safeguards against organizational conflicts of interest. Third, uneven system readiness may constrain consistent

implementation unless supported by national competency standards and expanded multi-actor training capacity. These weaknesses can be addressed through practical regulatory refinements grounded in policy design and policy capacity principles (Howlett and Mukherjee 2017).

Table 3. Reform package roadmap for AWO professionalization

No.	Time horizon	Priority actions	Lead/key actors	Expected outputs
1.	Short-term (0–12 months)	Issue an interim national AWO competency standard by harmonizing and expanding the SKKK AWO 2020 for GAPUSPINDO; publish technical guidance clarifying AWO scope across nodes and scales; define minimum documentation and internal escalation procedures	MoA/DG Livestock; Ministry of Manpower coordination; provincial services; professional associations	Interim national competency reference; operational guideline; standardized reporting and corrective-action templates
2.	Medium-term (1–3 years)	Develop modular, tiered AWO curriculum with cross-commodity tracks (farm, transport, RPH); accredit multi-actor training providers, including universities and professional bodies; align AWO competencies with audit indicators and certification requirements	MoA; universities; LSP; associations; certified training institutions	Accredited training network; tiered AWO certifications; coherent internal-external compliance standards
3.	Longer-term (3–5 years)	Institutionalize periodic AWO recertification; integrate welfare performance indicators into certification renewal; evaluate regional capacity gaps and adjust funding/technical assistance	MoA; provincial governments; certification bodies	Sustained professional pipeline; measurable welfare governance outcomes; reduced inter-regional implementation variance

Note (regulatory and workforce basis): This roadmap translates the AWO mandate and the broader training, auditing, and supervision framework in Permentan 32/2025 into a feasible sequencing of supporting instruments, while using the SKKK AWO 2020 (GAPUSPINDO, beef cattle) as an interim technical foundation requiring national harmonization and cross-commodity expansion. MoA: Ministry of Agriculture; DG: Directorate General of Livestock and Animal Health; LSP: *Lembaga Sertifikasi Profesi* (Professional Certification Body).

A practical reform package could include the development of a national AWO competency standard and modular curriculum differentiated across slaughterhouses, transport, and farm operations; the establishment of a verified training and certification pathway through regulated collaboration with universities and professional associations, building on the regulation's existing openness to multi-actor training arrangements; and clearer accountability provisions specifying internal escalation procedures and protecting the integrity of welfare reporting. Such refinements would strengthen the AWO's function as a regulatory intermediary and reduce the risk of symbolic or documentation-led compliance that becomes decoupled from real welfare outcomes (Abbott et al. 2017).

3.7. Institutional coordination and inter-professional collaboration

Beyond technical and procedural issues, the success of Permentan 32/2025 will depend not only on these arrangements but also on the quality of institutional coordination and interprofessional collaboration. At the micro-institutional level, sectoral ego can unintentionally weaken policy effectiveness by fostering fragmented coordination and delaying agreement on shared standards. At the same time, the regulation can be read more constructively as a common legal anchor that enables joint work plans and aligned implementation targets across responsible agencies.

In this context, strong political commitment and good governance are central to effective coordination and implementation. This requires a clear understanding and institutionalization of governance roles at every level (Dahal et al. 2020). The functionality of coordination platforms is also shaped by leadership continuity and the seniority of participating representatives, both of which can substantially improve their effectiveness (Ezekannagha et al. 2023). Furthermore, collaboration is likely to be stronger when implementation aligns with compatible policies and when institutions are given sufficient adaptability to respond to diverse local circumstances (Doukas et al. 2023).

Inter-professional dynamics are equally decisive. Article 90(2) explicitly recognizes both veterinarians and animal science engineers as eligible animal welfare auditors, provided they are civil servants and

have completed certified auditor training. This inclusive provision signals the value of multidisciplinary verification. In field implementation, these auditors will work alongside Animal Welfare Officers. When these actors collaborate according to their respective mandates, the internal–external compliance chain becomes more credible and more consistent across regions and business scales.

4. Conclusion and policy implications

4.1. Conclusion

The analysis shows that the regulation has established a recognizable formal mandate for the AWO and introduced an actor-based model of internal welfare governance, particularly through clearer operational anchors in transport and slaughterhouse settings. However, the competency and training framework remains only partially specified, as the regulation does not yet provide a harmonized national competency standard, a structured curriculum pathway, or an explicit quality assurance mechanism for AWO training. The accountability dimension remains limited, particularly regarding escalation procedures, documentation standards, and safeguards for professional judgment in internal welfare reporting. Overall, these findings indicate that Permentan 32/2025 provides a strong regulatory foundation. Still, its effectiveness will depend on supporting instruments that standardize competencies, strengthen accountability safeguards, and better align AWO functions with external audit and certification mechanisms across sectors and regions.

4.2. Policy implications

To strengthen implementation of the AWO mandate, Permentan 32/2025 should be complemented by targeted amendments or, more feasibly, by subordinate implementing guidelines that make several enabling clauses explicit. First, the framework should mandate a national AWO competency standard applicable across commodities and welfare-risk settings, organized into sector- and risk-based modules for farms, transport, and slaughterhouses, and structured into tiered levels that reflect business scale and operational risk. Second, it should specify minimum training and certification requirements, including curriculum structure and learning outcomes, provider accreditation, trainer qualifications, and refresher or re-certification intervals to ensure training quality and comparability nationwide.

As a pragmatic transition measure, the government can harmonize and expand the existing SKKK AWO 2020 (GAPUSPINDO) into an interim national reference aligned with Permentan 32/2025, while accelerating the development of an AWO-specific SKKNI to secure long-term cross-commodity consistency. This step is particularly important because the current SKKK is association- and commodity-specific, which risks uneven professionalization if training supply expands without a unified national benchmark.

Third, accountability provisions should be strengthened by defining functional safeguards for the AWO role, including protected reporting, clear escalation thresholds for serious or repeated non-compliance, and minimum documentation standards for monitoring findings and corrective actions. Fourth, implementing guidance should require integration with external verification by linking AWO records to audit indicators and certification requirements, supported by a phased capacity-building roadmap that maps provincial readiness and prioritizes support for low-capacity regions. Collectively, these measures would improve role clarity, reduce interpretive variation, and enhance the credibility and scalability of welfare implementation under Permentan 32/2025.

AI use declaration

During the preparation of this work, the authors used DeepL and ChatGPT to improve the language of the manuscript. After using this tool/service, the authors carefully reviewed and edited the content as needed and take full responsibility for the content of the publication.

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