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A Review of Direct Marketing Strategies in the Philippine Smallholder Livestock Sector: Implication for Enterprise Profitability

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Abstract: The livestock subsector plays a significant role in Philippine agriculture and rural livelihoods; however, many smallholder livestock farmers continue to experience limited profitability due to fragmented marketing systems and dependence on intermediary-based trading. This review aimed to examine direct marketing strategies used by Philippine smallholder livestock farmers and evaluate their implications for enterprise profitability and sustainability. While existing literature often focuses on production mechanics, this review addresses a critical gap by uniquely synthesizing recent shifting market dynamics and digital integrations within the smallholder sector**.** A qualitative narrative review methodology was employed through the synthesis of peer-reviewed studies, government publications, and value-chain analyses published between 2016 and 2026. Data were extracted and structured using a thematic analysis approach, focusing on distinct marketing channels, financial outcomes, and structural constraints**.** The review identified several direct marketing approaches, including direct-to-consumer farmgate selling, cooperative and collective marketing, institutional market linkages, and emerging digital marketing platforms. Findings indicate that direct marketing can improve producer earnings by reducing intermediary dependence. This enables farmers to capture a greater share of the final selling price, with reported profit gains ranging from 15% to 25%. However, the effectiveness of these strategies is influenced by operational risks, labor demands, weak cold-chain infrastructure, and inconsistent biosecurity systems. Cooperative arrangements and digital market participation emerged as the most promising pathways for improving market access and income stability. The review concludes that strengthening municipal-level processing facilities, cold-chain systems, and market support mechanisms is essential for enhancing the competitiveness and long-term sustainability of Philippine smallholder livestock enterprises.

Keywords: Direct Marketing, Smallholder Livestock, Philippine Agriculture, Enterprise Profitability, Narrative Review

Introduction

Conceptual Framework

This review adopts a conceptual framework that explains how marketing constraints influence the adoption and outcomes of direct marketing among Philippine smallholder livestock farmers. Traditional livestock marketing is commonly characterized by

information asymmetry, fragmented market access, weak infrastructure, and dependence on intermediaries. These structural constraints often limit farmer bargaining power and profitability. In response, smallholders increasingly adopt direct marketing strategies such as farmgate selling, cooperative and collective marketing, institutional contracts, and digital marketing platforms. The effectiveness of these strategies is reflected in enterprise outcomes including improved profitability, market access, and long-term sustainability. However, these outcomes are moderated by several enabling and limiting factors such as cold-chain infrastructure, biosecurity conditions, logistics capacity, and policy support.

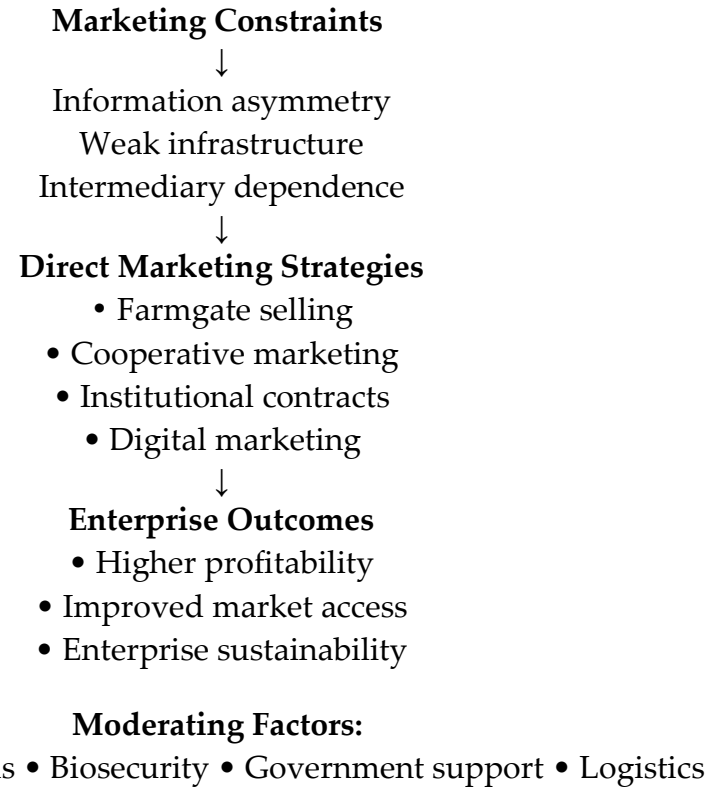

Figure 1. Conceptual Framework of Direct Marketing and Enterprise Profitability
Source: *Developed by the author based on synthesized literature.*

The livestock and poultry sector remain a vital component of Philippine agriculture, contributing approximately 14%–18% of total agricultural output and serving as a year-round source of income and food security for rural households (Philippine Statistics Authority [PSA], 2024). Unlike crop production, which is highly vulnerable to seasonal variability and typhoon-related losses, livestock functions as a "living bank" that provides financial security and liquid capital during emergencies. Despite the continuing expansion of commercial operations, the Philippine livestock industry remains largely dualistic, with more than 65% of livestock populations, particularly swine, goats, and native chickens, still raised by backyard or smallholder farmers (Bureau of Animal Industry [BAI], 2023). However, compared with grain-based agriculture, the livestock subsector has historically received fewer development interventions, resulting in persistent deficiencies in infrastructure, extension services, and market support systems (Domingo & Olaguera,

2017). Recent sector assessments further indicate that disease outbreaks, climate-related disruptions, and market volatility continue to challenge livestock development and competitiveness in the Philippines (Villanueva et al., 2025).

Previous studies on livestock marketing and rural enterprise development have emphasized that smallholder farmers experience substantial marketing inefficiencies due to information asymmetry, high transaction costs, and dependence on intermediary-based trading systems. Limited access to real-time price information and formal market channels frequently places producers at a disadvantage, particularly in peri-urban and expanding livestock markets where traders exercise considerable control over pricing and market access (Costales et al., 2004). Existing studies also indicate that marketing margins and unequal value distribution often constrain farmer welfare and reduce enterprise profitability (Cifra et al., 2022). In addition, inadequate cold-chain facilities and limited production scale compel farmers to sell livestock quickly regardless of prevailing market conditions. Such conditions create supply chains characterized by several intermediaries, resulting in consumers paying higher prices while producers retain only a small share of the final value (Domingo & Olaguera, 2017).

To address these inefficiencies, previous research has increasingly explored alternative marketing arrangements and value-chain innovations that strengthen farmer participation and improve market access. Studies on clustered and direct-market systems in the Philippines demonstrate that linking producers to higher-value markets and collective marketing arrangements can enhance bargaining power and improve income opportunities (Bacus et al., 2015). Similarly, research on sustainable value-chain financing emphasizes that stronger market linkages, institutional support, and producer organization are essential for increasing the competitiveness of smallholder agricultural enterprises (Bayudan-Dacuycuy et al., 2022). The growing demand for traceable, locally sourced, and specialty livestock products has further increased the relevance of shorter supply chains and localized market systems.

Although previous studies have examined livestock marketing constraints and value-chain development, much of the literature remains fragmented and frequently focuses on broad agricultural marketing systems rather than livestock-specific direct marketing experiences. Many studies emphasize market access and value-chain participation but provide limited analysis of how profitability interacts with biosecurity risks, institutional support, and infrastructure limitations. Existing literature has also concentrated on crop-based systems or generalized rural marketing conditions, leaving important evidence gaps regarding the transition of Philippine livestock smallholders from passive price-takers to active market participants. Furthermore, few review studies synthesize how direct marketing simultaneously affects profitability, enterprise sustainability, and disease-management considerations. Therefore, this review addresses these limitations by integrating Philippine-based evidence on direct marketing strategies and examining their socioeconomic and institutional implications. The novelty of this paper lies in its focused synthesis of Philippine livestock experiences and its evaluation of direct

marketing not merely as an alternative selling mechanism but as an integrated approach to enterprise development, biosecurity management, and rural livelihood sustainability.

Research Methodology

This study employed a qualitative narrative review design to synthesize and interpret existing literature on direct marketing strategies within the Philippine smallholder livestock sector. The narrative review approach was selected because the available literature consists of diverse forms of evidence, including peer-reviewed journal articles, government publications, institutional reports, and livestock value chain analyses that vary in research design, methodology, and scope. Rather than statistically aggregating findings, the narrative method enables the integration of multidisciplinary perspectives from agricultural economics, rural development, and animal science to provide a broader and context-specific understanding of direct marketing practices and their implications for enterprise profitability and sustainability.

The population of this review consisted of published and publicly available literature related to livestock marketing, smallholder livestock production, value chains, and enterprise profitability within the Philippine context. A purposive sampling approach was used to identify relevant literature sources that directly addressed the objectives of the review.

Data collection involved a structured search of peer-reviewed journals, government publications, and institutional reports obtained from the Philippine Statistics Authority (PSA), the Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA), and the Philippine Institute for Development Studies (PIDS). Additional literature was retrieved from online academic databases and agricultural research repositories. The search was limited to publications released between 2016 and 2026 to ensure inclusion of contemporary developments affecting livestock marketing systems, including the effects of African Swine Fever (ASF) and the increasing digitalization of agricultural markets.

Studies were included if they focused on Philippine smallholder livestock farmers and addressed themes related to direct marketing strategies, livestock value chains, enterprise profitability, marketing margins, transaction costs, or supply chain management. Both qualitative and quantitative studies were considered when they provided findings relevant to livestock marketing and profitability. Studies were excluded if they focused exclusively on large-scale commercial livestock enterprises, crop-based agriculture, or international settings with limited applicability to Philippine conditions. Publications lacking adequate methodological information or those not directly aligned with the objectives of the review were also excluded.

The primary instrument used in this study was a literature review matrix and thematic content analysis framework designed to organize and synthesize information from selected sources. Information extracted from each publication included study objectives, research design, marketing strategies examined, major findings, and implications for enterprise profitability and sustainability.

Thematic content analysis was employed to identify recurring patterns and major themes across the selected literature. Key thematic areas included marketing margins, transaction costs, digital marketing adoption, intermediary dependence, supply chain efficiency, and enterprise profitability. Findings from multiple sources were compared and synthesized to determine converging and diverging perspectives regarding the effectiveness of direct marketing strategies among smallholder livestock farmers.

To enhance trustworthiness, this review relied on credible and verifiable sources, including peer-reviewed studies and publications from recognized government and research institutions. Cross-comparison of findings from multiple sources was undertaken to improve consistency and minimize interpretive bias. Because this study utilized secondary data and did not involve direct participation of human or animal subjects, formal ethical clearance and informed consent were not required. Nevertheless, ethical research standards were maintained through accurate citation, responsible interpretation of findings, and proper acknowledgment of all original sources.

Results and Discussion

Overview of Smallholder Livestock Marketing in the Philippines

The livestock marketing system in the Philippines is closely connected to the smallholder subsector, which remains an important part of rural livelihoods. Smallholder farmers usually operate diversified farming systems in which livestock serves as an additional but essential source of income. The most raised animals in backyard farms include swine (Sus scrofa domesticus), which contributes the largest share of meat production, followed by poultry such as native chickens and ducks, as well as small ruminants like goats (PSA, 2024). These animals are often raised alongside crop production systems. Farmers commonly use farm by-products and kitchen waste as feed, helping reduce production costs but also limiting opportunities for large-scale expansion (DA-BAR, 2021).

Traditional Livestock Marketing Channels

Traditional livestock marketing channels in the Philippines are mostly informal and decentralized. Many farmers sell their animals directly at the farmgate, usually in live form instead of processed meat. In most cases, livestock is first sold to a local collector or mobile trader locally known as a biyahero. The animals may then pass through additional traders, wholesalers, or consolidators before reaching wet markets or local butcher shops (SEARCA, 2021). This system developed because many smallholder farms are geographically scattered, making it difficult for farmers to transport their animals directly to accredited slaughterhouses or urban markets (Domingo & Olaguera, 2018).

Figure 2. Traditional and Direct Livestock Marketing Models in the Philippines

Source: *Developed by the author based on reviewed literature (Costales et al., 2004; Domingo & Olaguera, 2017; SEARCA, 2015).*

The role of the biyahero remains an important topic in Philippine agricultural studies. Middlemen are often criticized for receiving a large share of the profit within the supply chain. However, they also provide services that many smallholder farmers are unable to perform on their own. These services include collecting animals from remote farms, transporting livestock to markets, providing immediate cash payments, and taking on risks related to transport, such as animal weight loss or death during travel (Costales et al., 2022). For farmers living in remote or mountainous areas, middlemen may serve as their only connection to larger markets, even if the prices offered are lower than retail market prices.

Structural Constraints in Traditional Marketing

Despite its importance, the current marketing system faces several structural problems. One major issue is the absence of standardized grading and weighing systems at the farmgate level. In many backyard transactions, prices are still based on visual estimation or fixed per-head pricing, which often benefits experienced traders more than farmers (Cifra et al., 2022). Another challenge is the lack of adequate cold chain infrastructure, especially in the Visayas and Mindanao regions. Without proper refrigerated storage and transport, meat products must be sold quickly after slaughter. This limits the ability of farmers to wait for more favorable market prices.

Disease Risks and Biosecurity Challenges

In addition, livestock producers continue to face threats from transboundary animal diseases such as African Swine Fever (ASF). These challenges create uncertainty and

discourage many smallholder farmers from investing in improved marketing systems and modern production practices (BAI, 2023).

Direct Marketing Strategies Used by Smallholder Livestock Farmers

The transition from passive production to active marketing has encouraged smallholder livestock farmers in the Philippines to adopt different direct marketing strategies. Among the most common approaches is Farmgate and Direct-to-Consumer (DTC) selling. In this strategy, farmers bypass traditional intermediaries and sell live animals or fresh meat directly to consumers, neighborhood wet markets (talipapa), or roadside buyers. In many rural communities, this practice takes the form of "scheduled slaughter," where residents are informed in advance that a pig or cow will be slaughtered on a specific day (Cifra et al., 2022).

Studies show that DTC marketing allows farmers to retain the full marketing margin that would otherwise go to middlemen. Farmers may receive prices that are 15% to 20% higher than those offered by biyaheros or mobile traders (SEARCA, 2021). This strategy also reduces transportation expenses and provides faster cash returns. However, its effectiveness is often limited by labor demands, limited market reach, and the absence of cold storage facilities. Unsold meat can spoil quickly, especially in areas with poor refrigeration infrastructure. As a result, while DTC selling can increase short-term income, it may not always provide long-term market stability for small-scale producers.

Cooperative Marketing

Another widely used strategy is Cooperative and Collective Marketing. In this approach, farmers combine their livestock products to sell in larger volumes. This allows them to negotiate with institutional buyers or larger markets more effectively. Cooperative members in provinces such as Batangas and Bukidnon have reported more stable prices and improved access to government support programs compared to independent farmers (Domingo & Olaguera, 2018). Collective marketing also helps reduce transportation and logistics costs because resources are shared among members.

Compared with individual direct selling, cooperative marketing often provides greater income stability and stronger bargaining power. However, the success of cooperatives depends heavily on effective management and member participation. Some groups experience internal conflicts, unequal participation, or "free rider" problems that reduce operational efficiency. Despite these challenges, literature suggests that cooperative marketing remains one of the most sustainable strategies for smallholder farmers because it balances profitability with reduced market risk.

A more formal marketing arrangement involves Contract Growing and Institutional Buying. Under this system, farmers supply livestock products to large companies, restaurants, supermarkets, or institutional buyers under agreed conditions. Contract arrangements usually provide farmers with assured buyers, technical support, and access to production inputs. However, pricing is often controlled by the integrator or contracting institution, limiting the farmer's ability to benefit from favorable market price increases

(Costales et al., 2022). While this strategy reduces marketing uncertainty, it may also reduce farmer independence and profit flexibility.

Digitalization

The modernization of livestock marketing is also evident in the growth of Digital and Online Marketing. This trend expanded rapidly during the COVID-19 pandemic, when mobility restrictions encouraged consumers to purchase food online. Many Filipino farmers now use Facebook Marketplace and e-palengke platforms to market livestock products directly to urban consumers (PSA, 2024). Digital marketing has become especially effective for specialty products such as native chicken and organic pork because consumers are willing to pay higher prices for products with identifiable origins and perceived quality (Cifra et al., 2022).

Among the strategies discussed, digital marketing shows strong potential for future expansion because it increases market access beyond local communities. However, its effectiveness depends on internet connectivity, digital literacy, and delivery systems. Smallholder farmers in remote areas may struggle to manage online transactions and product distribution efficiently.

Value-Addition

Another important strategy is Value-Addition through processed meat and dressed poultry products. Instead of selling live animals, farmers process livestock into products such as longganisa, tocino, or dressed chicken. This approach can significantly increase product value, with studies estimating profit increases of 30% to 50% compared to live-animal selling (DA-BAR, 2021). Processed products also have longer shelf lives, allowing farmers more flexibility in marketing. However, this strategy requires higher capital investment, processing equipment, and compliance with National Meat Inspection Service (NMIS) regulations.

Among the different strategies, cooperative marketing and digital marketing appear to offer the most sustainable long-term benefits for smallholder farmers. Cooperative systems improve bargaining power and reduce marketing risks, while digital platforms expand market access and allow farmers to reach higher-value consumers. In contrast, farmgate selling provides immediate income but remains limited in scale, while contract growing may reduce farmer control over pricing. Value-added processing offers high profitability potential but requires greater financial and technical capacity. Collectively, these strategies demonstrate how smallholder livestock farmers attempt to overcome structural limitations and secure a larger share of the livestock value chain in the Philippines.

Direct Marketing and Profitability

The findings of this review indicate that direct marketing presents significant opportunities for improving profitability and enterprise sustainability among Philippine smallholder livestock farmers. Existing literature consistently suggests that reducing

dependence on intermediary-based trading systems allows producers to retain a greater portion of the final selling price while improving market participation and bargaining power. However, the profitability of direct marketing remains dependent on production capacity, biosecurity conditions, infrastructure availability, and farmers' managerial capabilities.

One of the most consistent findings across the literature is the influence of marketing margins on producer profitability. In conventional livestock marketing systems, intermediaries such as *biyaheros*, wholesalers, and retailers absorb a considerable share of the final market value. Consequently, farmers often remain price-takers and receive relatively low farmgate prices. Empirical evidence demonstrates that marketing margins and unequal value distribution significantly influence farmer welfare and enterprise income (Cifra et al., 2022). Direct marketing alters this arrangement by transferring part of the marketing margin from intermediaries to producers. Studies examining producer linkages and alternative marketing systems indicate that shortening supply chains may improve net returns and market participation among smallholders (Bacus et al., 2015). Based on **Table 1**, the economic differences between traditional and direct marketing systems involve important trade-offs between increased producer earnings and additional operational responsibilities.

Table 1. Comparative Analysis of Marketing Models and Economic Outcomes

Economic Factor	Traditional Marketing (Indirect) Model	Direct Marketing Model	Advantages	Disadvantages	Implication on profitability
Marketing Margin	Profit is divided among 3–5 intermediaries such as collectors, wholesalers, and retailers	Farmers retain most or all the marketing margin	Higher income potential for farmers	Requires more farmer involvement in marketing activities	High increase in net profit potential
Price Control	Farmers act mainly as price-takers and depend on trader pricing	Farmers have greater influence over product pricing	Better bargaining power and pricing flexibility	Prices may fluctuate depending on consumer demand	Improved income stability
Logistics Cost	Traders usually handle transport and delivery	Farmers are responsible for transportation and distribution	Greater control over product handling and delivery	Higher transportation and operational expenses	May reduce net earnings if costs are unmanaged
Risk of Spoilage	Spoilage and storage risks are mostly handled by traders	Farmers assume responsibility for unsold or	Encourages better product management and quality control	Increased losses without proper cold storage facilities	Higher financial risk

Economic Factor	Traditional Marketing (Indirect) Model	Direct Marketing Model	Advantages	Disadvantages	Implication on profitability
		perishable products			
Transaction Speed	Transactions are usually fast with immediate cash payment upon pickup	Farmers need time to locate buyers and process orders	Opportunity to access higher-paying customers	Slower cash turnover and delayed payments	Variable cash flow
Market Reach	Limited to local traders and nearby markets	Farmers can access consumers directly through markets or online platforms	Expanded customer base and better market opportunities	Requires marketing skills and digital literacy	Potential for long-term income growth
Product Value	Products are commonly sold as live animals with limited added value	Farmers can sell processed or specialty products at premium prices	Higher selling price and improved product differentiation	Requires additional capital and compliance with regulations	Increased profitability potential

Source: *Developed by the author based on synthesized literature (Costales et al., 2004; Domingo & Olaguera, 2017; SEARCA, 2015).*

The profitability gains associated with shorter supply chains are consistent with broader findings on value-chain efficiency and producer empowerment. Research on sustainable value-chain financing highlights that stronger market linkages and institutional support improve market access and enterprise performance among smallholder producers (Bayudan-Dacuycuy et al., 2022). In livestock systems, improved control over marketing activities enables farmers to negotiate better prices and respond more effectively to consumer demand. These findings support earlier livestock-sector analyses that associate market participation with enhanced enterprise resilience and rural livelihood improvement (Domingo & Olaguera, 2017).

Biosecurity considerations further strengthen the relevance of direct marketing within the Philippine livestock industry. Disease outbreaks, particularly African Swine Fever (ASF), have disrupted conventional trading networks and exposed the risks associated with intermediary-based animal movement. Traditional trading systems involving multiple farm visits increase opportunities for pathogen transmission and threaten production continuity. Recent livestock-sector reviews emphasize that disease outbreaks and biosecurity weaknesses remain major constraints to industry sustainability (Villanueva et al., 2025). Consequently, localized and direct selling arrangements may

reduce unnecessary livestock movement and serve not only as economic strategies but also as practical disease-prevention approaches.

The literature also demonstrates that direct marketing may contribute to greater income stability and stronger producer bargaining power. Farmers who establish direct relationships with consumers, local butchers, or cooperative organizations may secure more stable pricing arrangements and repeated transactions. Stable income conditions enable reinvestment in housing, feed quality, and veterinary care, thereby improving livestock productivity and enterprise performance (Domingo & Olaguera, 2017). Cooperative and clustered marketing systems further enhance bargaining power by consolidating production and reducing transaction costs (Bacus et al., 2015).

Despite these advantages, the literature equally highlights important operational risks and structural limitations. By bypassing intermediaries, farmers assume responsibilities related to transportation, customer acquisition, delivery logistics, and product handling. These demands may create a labor constraint where marketing responsibilities compete with livestock husbandry activities. Moreover, inadequate refrigerated storage and weak logistics infrastructure often force farmers to sell immediately regardless of prevailing prices, limiting their capacity to maximize profitability (Department of Agriculture–Bureau of Agricultural Research [DA-BAR], 2021). Such findings reinforce earlier observations that infrastructure deficiencies remain major barriers to sustainable livestock enterprise development.

Policy and Infrastructure Implications

The literature further identifies value addition and digital market participation as promising pathways toward higher profitability. Processed and branded livestock products may command premium prices and improve product differentiation, while digital platforms create opportunities to access higher-value urban markets. However, unequal internet access, digital literacy gaps, and compliance requirements continue to limit participation among geographically isolated farmers. Sustainable expansion of these systems therefore depends on coordinated institutional support, improved infrastructure, and stronger producer organizations (Bayudan-Dacuycuy et al., 2022).

Conclusion

This review demonstrates that direct marketing represents a viable pathway for improving profitability and sustainability among Philippine smallholder livestock farmers by reducing intermediary dependence, increasing producer control over pricing, and strengthening market participation. Consistent with the objectives of this review, the synthesized literature indicates that cooperative marketing and digital platforms provide important opportunities for farmers to capture larger marketing margins and access higher-value markets while shifting their role from passive price-takers to active market participants. However, profitability gains remain strongly influenced by structural conditions including cold-chain infrastructure, logistics systems, labor availability, and compliance with food safety standards. These findings advance current understanding by

framing direct marketing not merely as a sales alternative but as an integrated rural development and enterprise strategy with implications for biosecurity and long-term resilience. Therefore, policy interventions should prioritize strengthening cold-chain systems, expanding digital marketing training for livestock producers, promoting cooperative-based livestock marketing, and increasing local government support for slaughterhouses and processing facilities. Future research should further examine long-term income stability under digital marketing systems and evaluate the biosecurity implications of decentralized livestock marketing in the context of transboundary animal diseases.

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