

Organic Poultry in Malaysia: A Review of Consumption Trends, Challenges, and Opportunities

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Abstract

The global demand for organic food has been growing steadily over the last two decades, reflecting shifting consumer attitudes toward healthier and more sustainable diets. Within this landscape, organic poultry has emerged as a niche but rapidly expanding market segment due to concerns over chemical residues, animal welfare, and foodborne illnesses. In Malaysia, poultry remains the primary source of animal protein, yet the development of an organic poultry industry has been relatively limited compared to organic vegetables and fruits. This review synthesizes existing literature on organic poultry in Malaysia, covering conceptual definitions, global consumption trends, production and consumer perspectives, and policy frameworks. The discussion highlights the interplay between health consciousness, environmental concern, price sensitivity, and trust in certification systems. Despite increasing consumer awareness, challenges persist, including high production costs, low consumer knowledge, and weak certification enforcement. Opportunities exist in leveraging digital platforms, aligning with Halal requirements, and exploring export markets. Lessons from other countries are presented to provide comparative insights, and research gaps are identified to guide future studies. The review concludes by emphasizing the importance of strengthening the organic poultry sector in Malaysia to contribute toward sustainable food systems and the achievement of the United Nations Sustainable Development Goals (SDGs).

Keywords: Organic Poultry, Malaysia, Consumer Behaviour, Sustainable Agriculture, Food Safety, Policy

Introduction

Globally, the consumption of organic food is strongly linked to increasing consumer concerns about personal health, environmental sustainability, and food safety (Barański et al., 2014; Cachero-Martínez, Valdunciel, & Esteban, 2025). Poultry, in particular, has become central to discussions of organic farming because it is widely consumed, relatively affordable compared to other meats, and often associated with food safety risks due to intensive farming systems. In Malaysia, poultry accounts for more than 60% of the national meat supply, making it the

most significant source of animal protein for Malaysians (Rahman, Hassan, & Ahmad, 2021). This centrality of poultry in the Malaysian diet makes the question of whether organic poultry can be a viable alternative to conventional production both timely and important.

Despite this significance, the Malaysian organic poultry sector remains underdeveloped. While organic fruits and vegetables have gained greater traction among consumers and producers, organic poultry has received limited attention both in practice and in academic research (Somasundram, Razali, & Hasbullah, 2016). Previous studies on organic food in Malaysia have largely concentrated on consumer perceptions of vegetables, grains, and fruits, with relatively few empirical investigations into poultry, which remains a daily staple (Iqbal, Ahmad, & Nasir, 2021). Furthermore, many of the studies that exist are descriptive in nature, with limited application of advanced analytical methods such as Partial Least Squares Structural Equation Modeling (PLS-SEM) or conjoint analysis to explore the complexity of consumer decision-making processes.

The purpose of this review is to consolidate existing knowledge on organic poultry in Malaysia by situating it within global trends, examining its unique local context, and identifying both barriers and opportunities for growth. By synthesizing research findings, policy initiatives, and consumer perspectives, this article provides a comprehensive overview that can inform future policy, industry practice, and academic inquiry.

Conceptual Background

Definition of Organic Poultry

Organic poultry refers to the raising of chickens and other poultry under farming systems that prioritize natural production methods and environmental sustainability. Unlike conventional production, organic systems strictly prohibit the use of synthetic pesticides, growth hormones, antibiotics for growth promotion, and genetically modified organisms. Birds are typically fed with organic feed that is free from chemical additives, and they are provided access to outdoor environments, which allows them to exhibit natural behaviors such as foraging and dust bathing (Hartmann & Siegrist, 2020). This focus on animal welfare distinguishes organic poultry from conventional intensive farming systems, where chickens are often kept in confined spaces with limited mobility.

The organic concept also emphasizes ecological balance and soil health, with poultry farming integrated into broader sustainable agricultural practices. Globally, organic poultry is often marketed as safer, healthier, and ethically superior compared to conventional chicken, appealing to consumers who are concerned about the risks of chemical residues, antibiotic resistance, and foodborne illnesses. In Malaysia, the concept is relatively new but is slowly gaining attention, particularly among urban consumers who are more exposed to global discourses on sustainability and food safety (Rahman, Hassan, & Ahmad, 2021).

Certification and Standards

Certification is central to building trust and credibility in organic poultry markets. Without reliable certification, consumers may be unable to distinguish genuine organic products from those merely marketed as “natural” or “farm-raised.” In Malaysia, the MyOrganic certification, managed by the Department of Agriculture Malaysia (DOA), sets the official standards for organic food, including poultry (DOA, 2020). The certification covers multiple

dimensions, such as feed sources, housing conditions, disease prevention, processing, and labeling requirements. However, the uptake of this certification among poultry farmers has been slow, mainly due to its costs, lengthy auditing processes, and lack of awareness among smallholders.

Moreover, Malaysian consumers are often unfamiliar with the *MyOrganic* logo and its meaning (Nguyen, Lobo, & Greenland, 2019). This creates opportunities for mislabeling and erodes consumer confidence. Complicating matters further, Malaysia is a Muslim-majority country where Halal certification is also crucial in shaping food choices. Poultry products that carry both Halal and organic certifications are perceived as more trustworthy, particularly among Muslim consumers (Hassan & Shafie, 2019). This intersection between organic and Halal standards creates a unique dynamic in Malaysia's food market. Compared to international benchmarks such as the European Union or USDA Organic certification, the Malaysian framework is still evolving, and its ability to build consumer trust remains a work in progress.

Global Trends in Organic Poultry

Globally, the organic poultry market has shown steady growth, particularly in developed countries. In Europe and North America, demand for organic poultry is driven by multiple factors, including concerns about antibiotic resistance, rising interest in animal welfare, and growing environmental consciousness (Testa, Iraldo, Vaccari, & Ferrari, 2019). For example, in the European Union, government subsidies and strong regulatory frameworks support organic production, making organic poultry widely available in supermarkets and specialty stores. Consumers in these regions often associate organic products with superior taste, higher nutritional value, and lower exposure to harmful substances (Chatterjee, Rana, & Dwivedi, 2020).

In the Asia-Pacific region, growth has been significant but uneven. China has witnessed rapid increases in organic poultry demand, largely fueled by food safety scandals that undermined consumer confidence in conventional products (Liu & Zheng, 2022). In Thailand, the organic poultry sector has been supported by government policies aimed at promoting sustainable farming practices and catering to export markets. However, other Southeast Asian countries, including Malaysia, are still at the early stages of development, with challenges such as fragmented supply chains, limited infrastructure, and weak consumer awareness slowing down progress.

Another important global trend is the integration of e-commerce into the organic poultry market. Online platforms have become increasingly important for connecting farmers directly to consumers, particularly during the COVID-19 pandemic (Khan, Tandon, & Dhir, 2021). This digital transformation has expanded access to organic poultry for urban populations while enabling producers to reach niche markets. For Malaysia, which has a high rate of internet penetration and a rapidly growing e-commerce sector, this trend offers an opportunity to accelerate organic poultry consumption and improve market accessibility.

Organic Poultry in Malaysia

Production Landscape

Malaysia's poultry sector is one of the most developed segments of its agricultural industry, yet organic poultry represents only a small fraction of overall production. Most organic poultry farms are small- to medium-sized operations located near urban centers such as Kuala Lumpur, Penang, and Johor Bahru, where consumer demand is higher. Farmers face substantial challenges in adhering to organic standards, particularly in sourcing organic feed, which is more expensive and less readily available than conventional alternatives (Rahman et al., 2021). Additionally, organic chickens require longer rearing times and larger spaces, which increase costs and reduce production efficiency compared to intensive farming systems. These structural challenges limit scalability and contribute to higher retail prices, which in turn restrict consumer access to organic poultry.

Consumer Perspectives and Awareness

Consumer attitudes in Malaysia toward organic poultry are influenced by a complex mix of health, environmental, and cultural factors. Studies suggest that health consciousness and food safety concerns are primary motivators for purchasing organic poultry, as consumers seek to avoid chemical residues, antibiotics, and hormones (Nguyen et al., 2019; Yadav & Pathak, 2016). Environmental concern also plays a role, though it is often secondary to health-related motivations (Iqbal, Ahmad, & Nasir, 2021).

However, consumer awareness of organic poultry remains limited. Many Malaysians are either unfamiliar with the concept of organic farming or confused about the distinctions between organic, free-range, and conventional chicken (Somasundram, Razali, & Hasbullah, 2016). A lack of effective education campaigns and inconsistent labeling further exacerbate this confusion. Awareness of certification logos, such as *MyOrganic*, is particularly low, which undermines trust in the system. In addition, some consumers express skepticism about whether certified organic poultry truly adheres to the standards claimed. This gap between awareness and trust represents a major barrier to market expansion, as even health-conscious consumers may hesitate to pay a premium without confidence in certification.

Policy and Regulation

Government support for organic agriculture in Malaysia is embedded within broader food security and sustainability agendas. The National Agro-Food Policy (2021–2030) includes provisions to strengthen organic farming, though poultry has received less emphasis compared to crops (DOA, 2020). Certification under *MyOrganic* is available but costly and bureaucratic, discouraging smallholders from seeking approval. Unlike in the European Union, where subsidies offset certification costs and increase farmer participation, Malaysia has yet to provide sufficient financial incentives to make certification attractive to smaller farms.

Market Challenges

The organic poultry market in Malaysia faces structural barriers, including high production costs, limited consumer knowledge, and strong competition from cheaper conventional poultry. Organic poultry is often priced at two to three times higher than conventional chicken, making it inaccessible to middle- and lower-income households (Chatterjee et al., 2020). Consumer skepticism about certification, combined with confusion over labeling, further restricts demand. From the supply side, farmers face difficulties scaling up operations

due to the lack of organic feed suppliers, high land costs, and limited government support. These challenges create a cycle in which low demand discourages investment in supply, and limited supply restricts consumer accessibility.

Opportunities

Despite these challenges, there are promising opportunities for growth. Rising health consciousness, particularly in the aftermath of the COVID-19 pandemic, has heightened consumer awareness about the links between diet and immunity (Khan et al., 2021). This creates new space for promoting organic poultry as a safer, healthier alternative. The rapid expansion of e-commerce platforms in Malaysia provides a channel for producers to bypass traditional retail systems and market directly to consumers, thereby improving accessibility and reducing costs (Cachero-Martínez et al., 2025). Furthermore, Malaysia's status as a Halal food hub positions organic poultry for regional export markets, particularly in Southeast Asia and the Middle East, where demand for Halal-certified organic products is rising.

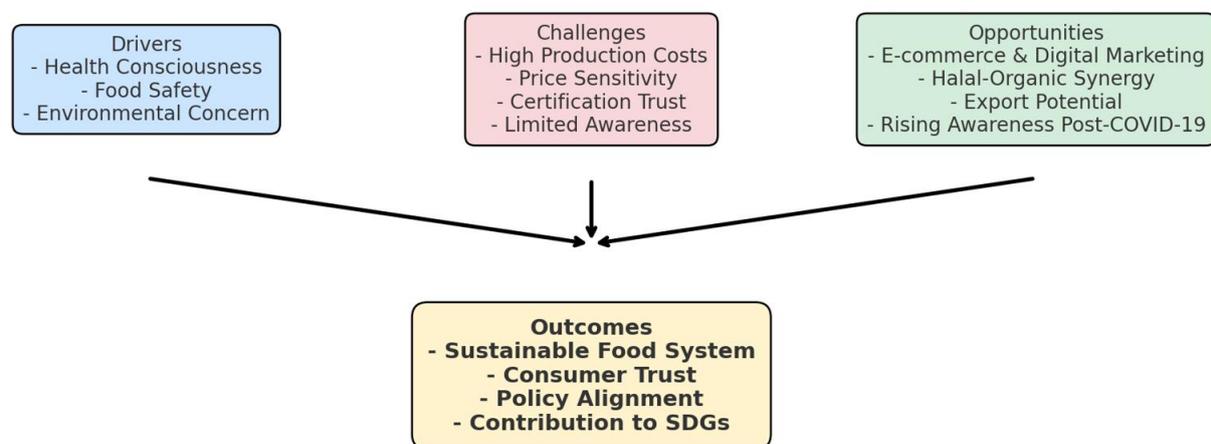


Figure 1: Conceptual Framework – Organic Poultry in Malaysia

Taken together, the drivers, challenges, and opportunities facing Malaysia's organic poultry sector can be synthesized into a broader conceptual framework (see Figure 1). This framework illustrates how consumer health consciousness, food safety concerns, and environmental awareness interact with structural barriers such as high production costs, limited consumer knowledge, and certification trust issues. At the same time, it highlights emerging opportunities including the growth of e-commerce, the integration of Halal and organic certification, and increasing export potential. Collectively, these factors influence the extent to which organic poultry in Malaysia can contribute to building consumer trust, advancing sustainable food systems, and aligning with the United Nations Sustainable Development Goals (SDGs).

Comparative Insights

The development of organic poultry in Malaysia can be better understood by comparing it with international experiences, particularly in countries where organic markets are more mature. The European Union (EU) provides one of the most advanced models for organic poultry development. In the EU, organic production is supported by a comprehensive regulatory framework that covers not only certification standards but also farm subsidies, labeling requirements, and consumer education campaigns (Testa, Iraldo, Vaccari, & Ferrari,

2019). Farmers in the EU receive financial incentives to adopt organic practices, which helps reduce the cost gap between conventional and organic poultry. This has created a relatively competitive organic poultry market, where consumers have confidence in certification systems due to strict enforcement and traceability mechanisms. For Malaysian policymakers, the EU model highlights the importance of subsidies, consumer education, and certification credibility in building a sustainable organic poultry sector.

In North America, particularly the United States, the rise of organic poultry has been market-driven rather than subsidy-driven. Strong consumer demand, supported by high-income levels and widespread awareness of food safety issues, has fueled rapid expansion (Chatterjee, Rana, & Dwivedi, 2020). Large-scale producers have successfully entered the organic poultry market, benefiting from economies of scale and distribution networks that make organic chicken more widely available. For Malaysia, this example demonstrates the potential of integrating larger players and agribusiness firms into the organic poultry sector while ensuring that certification standards are not diluted.

Closer to home, China provides a compelling case of how food safety concerns can accelerate the adoption of organic poultry. Repeated food scandals involving contaminated meat and misuse of antibiotics pushed Chinese consumers toward safer, certified alternatives (Liu & Zheng, 2022). The Chinese government responded by tightening regulations, expanding organic certification systems, and encouraging domestic consumption of organic poultry. Malaysia, though not experiencing scandals of the same scale, faces rising consumer anxiety about foodborne diseases and antibiotic resistance. Harnessing these concerns in a constructive way—through reliable certification and transparent production practices—could replicate China’s success.

Thailand also offers a regional model, where government-led initiatives have positioned organic poultry as an export-oriented industry. By integrating organic poultry production into broader agricultural development strategies and branding it as a premium product for international markets, Thailand has succeeded in capturing niche export markets. Malaysia has similar potential, particularly given its status as a Halal food hub, but it must first overcome challenges of certification credibility and supply consistency before it can compete internationally.

Overall, the comparative evidence indicates that Malaysia’s organic poultry sector could be strengthened through a hybrid strategy, combining the European Union’s emphasis on regulatory enforcement and consumer education (Testa, Iraldo, Vaccari, & Ferrari, 2019), the United States’ market-driven model for scaling production (Chatterjee, Rana, & Dwivedi, 2020), China’s responsiveness to food safety concerns (Liu & Zheng, 2022), and Thailand’s export-oriented approach, exemplified by its consistently expanding poultry exports facilitated by free trade agreements and efficient processing systems (Novus International, 2025).

Research Gaps

Despite rising interest in organic foods, scholarship that specifically interrogates organic poultry in Malaysia remains sparse and methodologically narrow. First, there is a clear need for richer analytical designs that go beyond descriptive surveys. Advanced structural

modelling, especially PLS-SEM can unpack complex, multi-construct pathways linking health consciousness, environmental concern, price sensitivity, trust in certification, and willingness to pay. Contemporary guidelines emphasize PLS-SEM's suitability for prediction-oriented models, non-normal data, formative constructs, and higher-order structures; yet these strengths remain largely untapped in Malaysian organic poultry studies (Hair & Alamer, 2022; Magno et al., 2024).

Second, stated-preference methods such as discrete choice experiments (DCE) and conjoint analysis are underused for valuing organic poultry attributes (e.g., feed type, welfare assurances, certified organic-Halal status, provenance). Recent methodological reviews and sectoral applications underscore DCE's capacity to reveal attribute trade-offs and consumer heterogeneity, but Malaysian evidence is scattered and largely outside food categories (e.g., energy labels; public-health interventions), indicating a promising but underdeveloped avenue for organic poultry demand estimation (Nouwens et al., 2025; Grashuis et al., 2020; Kocher et al., 2022).

Third, there is a paucity of environmental performance evidence comparing organic and conventional poultry systems in Malaysia. Global syntheses and country-level life-cycle assessment (LCA) studies suggest broiler meat tends to have relatively lower footprints than ruminant meats, but impacts vary widely with feed, energy, and management; Malaysia-specific LCAs (including feed sourcing, climate, and manure management) are virtually absent (Poore & Nemecek, 2018; Guðjónsdóttir et al., 2025; Vékony et al., 2022). Robust local LCAs—ideally coupled with cost and animal-welfare metrics—would substantiate (or challenge) sustainability claims often assumed for organic systems.

Fourth, the Halal–organic interface is under-theorized and under-measured. Malaysia's majority-Muslim context creates unique expectations around slaughter, handling, and supply-chain integrity. While the Halal supply-chain literature is developed conceptually, empirical work that jointly models Halal assurance and organic certification in consumer choice and verifies integrity along the chain is limited (Tieman et al., 2012; Kurniawati et al., 2023). Early Malaysian evidence on Halal-organic purchase propensity exists, but rigorous, representative studies (e.g., DCE/PLS-SEM hybrids) remain rare (Putit et al., 2025; Shaharuddin et al., 2025). Fifth, trust, certification literacy, and traceability need deeper exploration. Emerging-market research shows that trust is pivotal for credence goods—particularly when premiums are high—and label skepticism suppresses green purchases (Nuttavuthisit & Thøgersen, 2017; Kühl et al., 2023). Malaysia-specific work should probe how MyOrganic recognition, Halal-organic co-labeling, and digital traceability (e.g., blockchain) shape trust and WTP. Reviews of blockchain in food supply chains highlight its potential to improve transparency and tamper-resistance, but adoption determinants and consumer responses in Malaysian poultry remain open questions (Casino et al., 2019; Ellahi et al., 2023; Westerlund, 2021).

Finally, there is a need for longitudinal, multi-method programs of research that connect awareness, trust, trial, repeat purchase over time, and that integrate supply-side data (costs, certification frictions, feed constraints) with demand-side preferences. Such designs would clarify whether post-pandemic shifts in safety and wellness translate into stable market adoption for organic (and Halal-organic) poultry in Malaysia.

Future Directions

The future of organic poultry in Malaysia depends on coordinated efforts across policy, industry, research, and society. From a policy perspective, the government needs to strengthen the institutional framework for organic certification. This includes simplifying certification procedures, subsidizing costs for small-scale farmers, and conducting nationwide education campaigns to build consumer trust in the MyOrganic brand. Greater alignment with international certification standards could also enhance Malaysia's competitiveness in export markets. Furthermore, embedding organic poultry development within broader initiatives such as the National Agro-Food Policy (2021–2030) would ensure long-term strategic support. From an industry standpoint, producers must explore ways to improve efficiency and scale without compromising organic integrity. This could include developing domestic supply chains for organic feed, adopting innovative technologies such as blockchain for traceability, and leveraging e-commerce platforms to reach younger, health-conscious consumers. Collaboration between smallholders and large agribusinesses could also enable knowledge transfer and cost-sharing, making the industry more resilient.

For researchers, future studies should adopt interdisciplinary approaches that integrate economics, consumer psychology, environmental science, and religious studies. This would provide a multidimensional perspective on how organic poultry intersects with issues of health, environment, food security, and cultural identity. Research should also investigate the role of post-pandemic consumer behaviors, as the COVID-19 crisis reshaped perceptions of food safety and resilience (Khan, Tandon, & Dhir, 2021).

At the societal level, consumer awareness campaigns must play a central role. Many Malaysians remain uncertain about what organic poultry entails, how it differs from "natural" or free-range chicken, and why it carries a higher price tag. Educational initiatives, supported by both government and industry, could bridge this knowledge gap and foster informed consumer choices.

In the longer term, organic poultry should be framed not only as a niche market for affluent consumers but as part of Malaysia's sustainable development agenda. By aligning with the United Nations Sustainable Development Goals, particularly SDG 2 (*Zero Hunger*), SDG 3 (*Good Health and Well-Being*), and SDG 12 (*Responsible Consumption and Production*), organic poultry can contribute to healthier diets, sustainable farming practices, and food security. Such alignment will ensure that the organic poultry industry is not merely a passing trend but a cornerstone of Malaysia's transition toward a more resilient and sustainable food system.

Conclusion

Organic poultry has emerged as an important but underexplored component of Malaysia's organic food sector. While the global organic poultry market has expanded significantly in Europe, North America, and parts of Asia, Malaysia remains in the early stages of development, with production concentrated in niche markets and consumer awareness still limited. This review highlights that although Malaysian consumers increasingly recognize the health, safety, and environmental benefits of organic poultry, widespread adoption continues to be hampered by high prices, weak certification trust, and inadequate policy support.

The comparative analysis underscores that Malaysia can draw valuable lessons from international experiences. The European Union demonstrates how strong certification systems and subsidies can boost both supply and consumer confidence, while the United States illustrates how market-driven growth can create economies of scale. China's experience shows that food safety crises can accelerate organic demand, and Thailand provides a model for positioning organic poultry as an export commodity. These cases highlight the importance of adopting a hybrid strategy that blends strong regulation, consumer education, industry collaboration, and export orientation to ensure the viability of Malaysia's organic poultry sector.

At the same time, significant research gaps remain. There is a need for more empirical studies on Malaysian consumer behavior using advanced methodologies, as well as comprehensive sustainability assessments comparing organic and conventional poultry systems. Additionally, greater attention should be given to the role of Halal-organic certification, supply chain transparency, and the integration of digital platforms into marketing strategies. Addressing these gaps would help policymakers and industry stakeholders better understand consumer demand and design more effective interventions.

Looking forward, the future of organic poultry in Malaysia depends on coordinated action among policymakers, producers, researchers, and consumers. Policies should provide targeted subsidies and simplify certification processes, while producers must explore innovative ways to reduce costs and enhance transparency. Researchers should adopt interdisciplinary approaches to address both consumer and environmental dimensions, and societal-level campaigns should focus on raising awareness and trust in certification systems. Ultimately, the organic poultry sector in Malaysia should be positioned as part of a broader sustainable food system that aligns with the United Nations Sustainable Development Goals, particularly those related to health, responsible consumption, and food security. With the right mix of policy support, consumer education, and industry innovation, organic poultry can play a vital role in enhancing Malaysia's food security, protecting public health, and promoting sustainable agricultural practices in the decades to come.

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