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A Study of Dang Chicken Supply Chain in the Upper Southern Provinces of Thailand
การศึกษาห่วงโซ่อุปทานไก่แดงในพื้นที่จังหวัดภาคใต้ตอนบนของประเทศไทย

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Abstract

This study investigated the supply chain of Dang chickens in the upper southern provinces of Thailand. Data were collected through structured interviews with 60 Dang chicken farmers, 20 collectors, 20 wholesalers/retailers, and 400 consumers in Nakhon Si Thammarat, Surat Thani, and Chumphon provinces. The results showed that farmers typically raised Dang chickens for an average of 16 weeks, achieving a weight of 1.5–1.6 kilograms. Regarding distribution channels, farmers predominantly sold to local collectors due to ease of communication and established trust with long-term partners. Other channels included direct sales to wholesalers/retailers, consumers, and local restaurants. Live chickens were generally sold at 70–80 Baht per kilogram, with prices increasing to 90–100 Baht per kilogram during festivals such as the Chinese New Year and the Qingming festival. Wholesale traders sometimes acted as live chicken collectors, while processed chickens were sold at 110–125 Baht per kilogram. Most consumers purchased Dang chicken from retailers at fresh markets or community flea markets at 120–150 Baht per kilogram. The Dang chicken supply chain comprised small-scale farmers and network groups, live chicken collectors, wholesalers/retailers, shop or restaurant operators, and end consumers. The study recommended encouraging farmers to join cooperative groups to enhance operational efficiency through improved production planning, marketing channels, and knowledge exchange.

Keywords: supply chain, Dang chicken, collector merchants, consumers

บทคัดย่อ

งานวิจัยนี้มีวัตถุประสงค์ เพื่อศึกษาห่วงโซ่อุปทานไก่แดงในพื้นที่จังหวัดภาคใต้ตอนบนของประเทศไทย โดยเก็บรวบรวมข้อมูลจากการสัมภาษณ์แบบมีโครงสร้างกับเกษตรกรผู้เลี้ยงไก่แดง จำนวน 60 ราย พ่อค้ารวบรวม จำนวน 20 ราย ผู้ค้าส่ง/ค้าปลีก จำนวน 20 ราย และผู้บริโภค จำนวน 400 ราย ในพื้นที่จังหวัดนครศรีธรรมราช สุราษฎร์ธานี และชุมพร พบว่าด้านการผลิต เกษตรกรเลี้ยงไก่แดงระยะเวลาเฉลี่ย 16 สัปดาห์ น้ำหนักตัวเฉลี่ย 1.5–1.6 กิโลกรัม ด้านช่องทางการจัดจำหน่าย เกษตรกรส่วนใหญ่นิยมจำหน่ายไก่แดง ให้แก่พ่อค้ารวบรวมในท้องถิ่น เนื่องจากมีความสะดวกในการติดต่อสื่อสารและมีความเชื่อมั่นจากการเป็นคู่ค้าระยะยาว นอกจากนี้ยังมีช่องทางการจำหน่ายอื่น ๆ ได้แก่ การจำหน่ายโดยตรงให้แก่ผู้ค้าส่ง/ค้าปลีก ผู้บริโภค และร้านอาหารในท้องถิ่น ราคาจำหน่ายไก่แดงมีชีวิตเฉลี่ย 70–80 บาทต่อกิโลกรัม และจะปรับสูงขึ้นเป็น 90–100 บาทต่อกิโลกรัม ในช่วงเทศกาลสำคัญ เช่น เทศกาลตรุษจีน และเทศกาลเช็งเม้ง โดยมีผู้ค้าส่งบางรายทำหน้าที่เป็นผู้รวบรวมไก่มีชีวิตด้วย ในขณะที่ไก่แดงชำแหละมีราคาจำหน่ายเฉลี่ย 110–125 บาทต่อกิโลกรัม สำหรับผู้บริโภคส่วนใหญ่จะซื้อไก่แดงจากผู้ค้าปลีกในตลาดสดหรือตลาดนัดชุมชน ในราคาเฉลี่ย 120–150 บาทต่อกิโลกรัม ทั้งนี้พบว่า ห่วงโซ่อุปทานไก่แดง ประกอบด้วย เกษตรกรรายย่อยและกลุ่มเครือข่าย พ่อค้ารวบรวมไก่มีชีวิต ผู้ค้าส่ง/ค้าปลีก ผู้ประกอบการร้านค้าหรือร้านอาหาร และผู้บริโภคปลายทาง ทั้งนี้ควรมีการส่งเสริมให้เกษตรกรรวมกลุ่มกันในรูปแบบสหกรณ์หรือกลุ่มความร่วมมืออย่างเป็นระบบ เพื่อยกระดับประสิทธิภาพในการดำเนินงาน โดยมุ่งเน้นการวางแผนการผลิตอย่างเหมาะสม การพัฒนาและขยายช่องทางการตลาด ตลอดจนการสร้างกลไกในการแลกเปลี่ยนและถ่ายทอดองค์ความรู้ระหว่างสมาชิกภายในกลุ่ม อันจะนำไปสู่ความเข้มแข็งและความยั่งยืนของการพัฒนาในระยะยาว

คำสำคัญ: ห่วงโซ่อุปทาน ไก่แดง พ่อค้ารวบรวม ผู้บริโภค

Introduction

Currently, native chicken farming in Thailand is primarily managed by smallholder farmers as a supplementary occupation, with operations found in almost all provinces of the country (Phromnoi and Phattanakunanan, 2017). Due to the slow growth rate of native chickens, the yield is relatively low, which is insufficient to meet market demand. As a result, the price of native chickens is higher than that of broiler chickens (Laopaiboon *et al*., 2010). This price disparity has affected the domestic poultry market, leading to challenges such as market inefficiencies and unfair trading practices between producers and traders. Furthermore, there is an urgent need to develop hygienic slaughterhouses that adhere to international standards to ensure that consumers can access clean, hygienic, and safe chicken meat. Ongoing technical and academic support is also essential to enable local chicken farmers to produce meat of comparable quality to international standards.

Native chicken meat is an agricultural product that currently lacks overall competitive potential, particularly among small-scale producers. In the southern region, there are 412,989 native chicken farmers and a total of 13,666,794 native chickens (Information and Statistics Group, Information and Communication Technology Center, Department of Livestock Development, 2023). Nakhon Sri Thammarat Province has the highest number of native chicken farmers in the southern region. Most of these farmers are small-scale producers who raise chickens alongside other agricultural activities. Among the native chicken breeds commonly raised in the southern region, the “Dang chicken” or “Dang Surat chicken” stands out as an indigenous breed of Thailand (Sentangsedtee, 2018). The Department of Livestock Development has implemented a policy to conserve and develop animal genetic resources, particularly native breeds, in an effort to establish Surat Thani Dang chicken as a purebred breed with consistent and unique external characteristics (Songsang *et al*., 2015). This breed maintains exceptional traits, such as strong maternal instincts and high genetic diversity, providing opportunities for selective breeding to enhance economically valuable characteristics beyond those of typical Thai native chickens. The conservation, research, and development of the Surat Thani Dang Chicken breed is managed by the Surat Thani Animal Research and Breeding Center, which also encourages farmers in the southern region to raise this breed to generate additional household income.

Most native chickens are primarily raised for domestic consumption, with very few being exported as live chickens or meat products. The market for slaughtered native chickens is relatively narrow compared to other meat markets, which may be due to the unique characteristics of the general market for live chickens. This market mainly serves small farmers or small-scale farms, where sales and purchases typically take place directly at the farm. Most buyers are local traders or butchers. The inefficiency of native chicken marketing is a significant issue and a major barrier to the development of native chicken production, preventing it from advancing like other livestock products. This inefficiency causes farmers to feel insecure about pursuing native chicken farming as a long-term career, leading many to abandon it altogether. From a marketing perspective, there are additional challenges, such as complex market mechanisms and high costs at each stage of the supply chain. Farmers lack bargaining power, and the absence of clear grading and standards for native chicken meat results in minimal price differentiation between various meat qualities. This lack of differentiation discourages farmers from improving the quality of their chicken production. Moreover, there is a shortage of standardized slaughterhouses, further hindering market development.

This research examined the supply chain of Dang chickens in the upper southern provinces of Thailand, focusing on current production status, related businesses, live chicken markets, product distribution sources, market structure, and distribution channels. It identified various forms of native chicken supply chains and aimed to promote their development into a sustainable commercial model. The study also provided policy recommendations to guide the development of commercial Dang chicken farming, expanding economic opportunities for stakeholders across the supply chain. Furthermore, government and related agencies can use the findings to establish guidelines for managing native chicken production, which may also be applied in other regions to support systematic and sustainable management practices.

Methodology

Research Tools

The research tool used in this study was an interview form, which was validated through a content validity check. The researcher submitted the questionnaire to three experts to evaluate its content validity. Following this, the Index of Consistency (IOC) and the appropriateness of the language used (wording) were calculated. Necessary revisions were made based on these evaluations before the instrument was used for actual data collection. The interview form consisted of four parts as follows:

Part 1: General economic and social information of Dang chicken farmers

Part 2: Information on costs and returns from Dang chicken production

Part 3: Information on Dang chicken distribution channels

Part 4: Information on problems and obstacles in Dang chicken production

The research proposal has been submitted for approval to conduct human ethics and has received the document number RUTS-IRB 2566.021/ 05.05.

Additionally, small group meetings (focus groups) were conducted with stakeholders involved in the production and marketing processes, including both government and private agencies. These meetings aimed to brainstorm and discuss production processes, operational guidelines, and to identify any challenges and obstacles in production.

Research Methods

Step 1: This study examined the general production and marketing conditions of Dang chicken farmers in the upper southern provinces of Thailand, including Nakhon Si Thammarat, Surat Thani, and Chumphon. A sample of 60 farmers was selected using purposive sampling, as the total population size was unknown. The sample was drawn from farmers affiliated with the Surat Thani Animal Research and Breeding Center, comprising 28 farmers from Nakhon Si Thammarat, 24 from Surat Thani, and 8 from Chumphon.

Step 2: This study examined the elements of the Dang chicken supply chain in the upper southern provinces of Thailand, encompassing the following activities:

Supply Chain 1: Production

General information on native chicken farming practices and farmers' knowledge was collected from 60 farmers in Nakhon Si Thammarat, Surat Thani, and Chumphon provinces, using the sampling procedure described in Step 1.

Supply Chain 2: Collection, Slaughter, and Dissection of Dang chickens

Information on the process of purchasing live Dang chickens, including collection, procurement, and slaughter was gathered from 20 participants in the upper southern provinces. Participants were selected using purposive sampling according to population proportion: 10 from Nakhon Si Thammarat, 7 from Surat Thani, and 3 from Chumphon.

Supply Chain 3: Distribution, Wholesale, and Retail of Dang chickens

The characteristics of Dang chicken distribution channels and farmers' sales volumes were surveyed using a sample of 20 retailers, selected through purposive sampling according to population proportion: 10 from Nakhon Si Thammarat, 7 from Surat Thani, and 3 from Chumphon.

Supply Chain 4: Consumer Group

The study involved individuals who had purchased or had purchased Dang chicken meat in Nakhon Si Thammarat, Surat Thani, and Chumphon provinces. Using Cochran's formula (1953) at a 95% confidence level, the sample size was determined to be 400 participants, distributed as 200 from Nakhon Si Thammarat, 133 from Surat Thani, and 67 from Chumphon. Participants were selected using a convenience sampling method.

Data Analysis

The researcher analyzed the data collected from the questionnaire using the following methods:

Descriptive Analysis (Descriptive Method)

This analysis employed basic statistical methods to describe the general social and economic conditions of Dang chicken farmers. The data were analyzed using the content analysis method to provide a comprehensive understanding of the information collected.

Quantitative Analysis (Quantitative Method)

This analysis utilized statistical methods to calculate the mean and percentage (Pongvichai, 2008) and numerical values related to cost-return analysis. The resulting statistics were then used to discuss findings and conduct an in-depth analysis of the data.

Results

Based on the study of production status, marketing, and elements of the Dang Chicken supply chain, the research examined the relevant processes from producers to consumers, yielding the following results:

Production and marketing of Dang chickens by farmers in the upper southern provinces of Thailand

From the study of Dang chicken farmers in the upper southern region conducted using purposive sampling, with a total of 60 participants. In terms of production processes, small-scale farmers typically purchased Dang chicken chicks from the Surat Thani Animal Research and Breeding Center, placing orders in advance and picking them up at the specified time. The center sold one-day-old chicks for 15 Baht each. For farmer groups, there were arrangements to breed and distribute chicks within the network, with a production capacity ranging from 50 to 300 chicks per cycle. Regarding the cost and returns from Dang chicken production, the production cycle lasted approximately 16 weeks, with an average weight of around 1,500 to 1,600 grams. Farmers sold live chickens at a price of 70 to 80 Baht per kilogram. The main production cost is attributed to feed, which accounts for 70% of the total cost. Effective management of feed costs can significantly enhance farmers' net profits.

The study also examined Dang chicken distribution channels, highlighting the movement of goods from producers to consumers. Data collection revealed that the sample group of Dang chicken farmers preferred to sell live chickens at an average price of 70 to 80 Baht per kilogram. The majority (68.33%) chose to sell to local collectors due to the convenience of communication and established trust, as these relationships had developed over time. The next most popular channels were wholesalers and retailers who purchased directly from the community (20.00%), followed by direct sales to consumers or local restaurants (11.67%). An analysis of the Dang chicken market structure indicated that it operated as a market with few sellers. Dang chicken sellers or collectors and wholesalers/retailers were scarce in each community. The Dang chickens were native breeds with similar characteristics, and any differences were minimal, making them substitutable. It was also noted that collectors, wholesalers, or sellers of slaughtered Dang chickens often overlapped, as they might be the same individuals who collected live Dang chickens from small farmers or community networks for butchering and sale in the main market of the province. In the research area, Dang chickens sold in the market were typically fresh, whole chickens with the internal organs removed, weighing approximately 1.50 to 1.70 kg each. Entering the market as a new seller was challenging, as Dang chicken farming was not widely practiced; it primarily involved original farmers, with some areas forming new networks. Furthermore, the Dang chicken market primarily operated in fresh or community markets, where most consumers were local shoppers. These consumers often purchased Dang chickens for ceremonial purposes during festivals such as the Chinese New Year and the Qingming Festival, leading to increased demand during these periods. Consequently, the pricing power for Dang chickens predominantly rested with wholesalers. However, wholesalers had to ensure the quality of the Dang chickens to maintain the established price.

Key Elements of the Dang Chicken Supply Chain in the upper southern provinces of Thailand

According to the study of the Dang chicken supply chain, it was found that the supply chain involved a series of processes that included the movement of goods from raw materials to finished products and ultimately to consumers. The study identified five key components of the supply chain, as outlined below:

1) Most farmers raising Dang chickens in the upper southern provinces of Thailand were smallholders, and in some areas, they had formed network groups. A few farmers practiced their own breeding. The production capacity ranged from 50 to 300 chickens per production cycle, with most being raised in semi-confined and semi-free-range systems. The rearing period typically lasted around 16–18 weeks until the chickens reach the market's desired body weight of approximately 1.5–1.8 kilograms. The carcasses were expected to have attractive skin, no defects, and a yellowish tint. The average selling price for live chickens was 70–80 Baht per kilogram. It was observed that farmers preferred to sell to local traders due to established long-term relationships.

2) Live Dang chicken collectors were responsible for purchasing chickens directly from farmers within communities or network groups. They typically travelled to different areas to buy live chickens, often operating within long-established networks. Under normal circumstances, live Dang chickens were purchased at a price of 70–80 Baht per kilogram. However, during festivals such as the Chinese New Year and the Qingming Festival, prices rose to 90–100 Baht per kilogram due

to increased demand. The chickens were then transported to a standard slaughterhouse for processing and subsequent sale.

3) In some cases, wholesale traders were also the live chicken collectors. They were responsible for selling processed (dissected) Dang chickens, with internal organs removed, to retailers in community markets and to restaurant operators. The processed chickens were typically sold at a price of 110–125 Baht per kilogram. Demand from wholesale traders increased by 30–50% during peak periods.

4) Most consumers purchased Dang chicken from retailers at fresh markets or community flea markets in Nakhon Si Thammarat, Surat Thani, and Chumphon provinces. Consumers typically bought dissected chickens with internal organs removed, at prices ranging from 120 to 150 Baht per kilogram, primarily for household cooking, such as boiled or curry dishes. Restaurant operators mainly located in Nakhon Si Thammarat, Surat Thani, Chumphon, and neighboring areas such as Phatthalung represented another important segment of the supply chain. Restaurant demand varied, with some preferring male chickens weighing over 1.5 kilograms. Common dishes prepared from Dang chicken included chicken rice, turmeric-boiled chicken, and curry chicken.

The study concluded that the Dang chicken market in the upper southern provinces operated as an oligopoly, characterized by a small number of sellers offering homogeneous or highly substitutable products. Market entry for new sellers was challenging, and pricing power was largely held by established traders. In Nakhon Si Thammarat, Surat Thani, and Chumphon provinces, five distinct trading models were identified, including:

Model 1: This model involved farmers raising live Dang chickens, processing them (dissecting) in their backyards, and selling directly to consumers within the community. These sales were often conducted through traditional community channels or online trading within specific community groups (as illustrated in Figure 1).

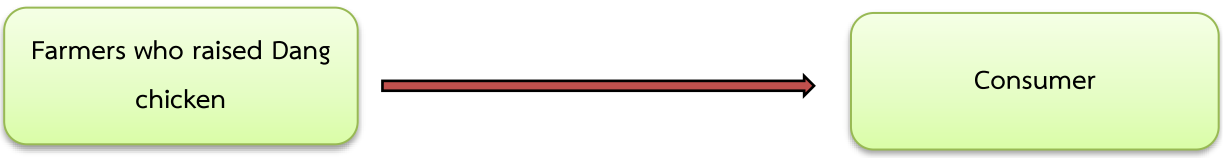

Figure 1 Dang chicken supply chain in the upper southern provinces Model 1

Model 2: The second model began with live Dang chicken farmers who processed (dissect) the chickens in their backyards and sold them directly to entrepreneurs or restaurants within the community, before reaching the end consumers. This process is illustrated in Figure 2.

Figure 2 Dang chicken supply chain in the upper southern provinces Model 2

Model 3 The third model began with live Dang chicken farmers who sold their products through wholesalers and retailers. These intermediaries then distributed the chickens to entrepreneurs and restaurants, ultimately reaching the consumers. This process is illustrated in Figure 3.

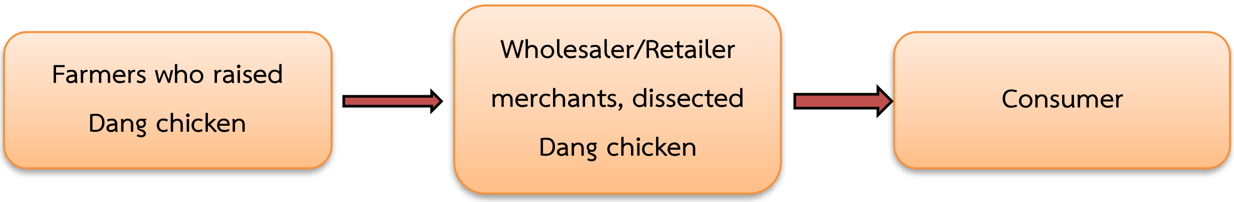

Figure 3 Dang chicken supply chain in the upper southern provinces Model 3

Model 4: The fourth model began with live Dang chicken farmers. The chickens were sold through traders who collected live Dang chickens, followed by wholesale traders who processed (dissected) the chickens, and finally to retail traders of dissected Dang chickens. This process is illustrated in Figure 4.

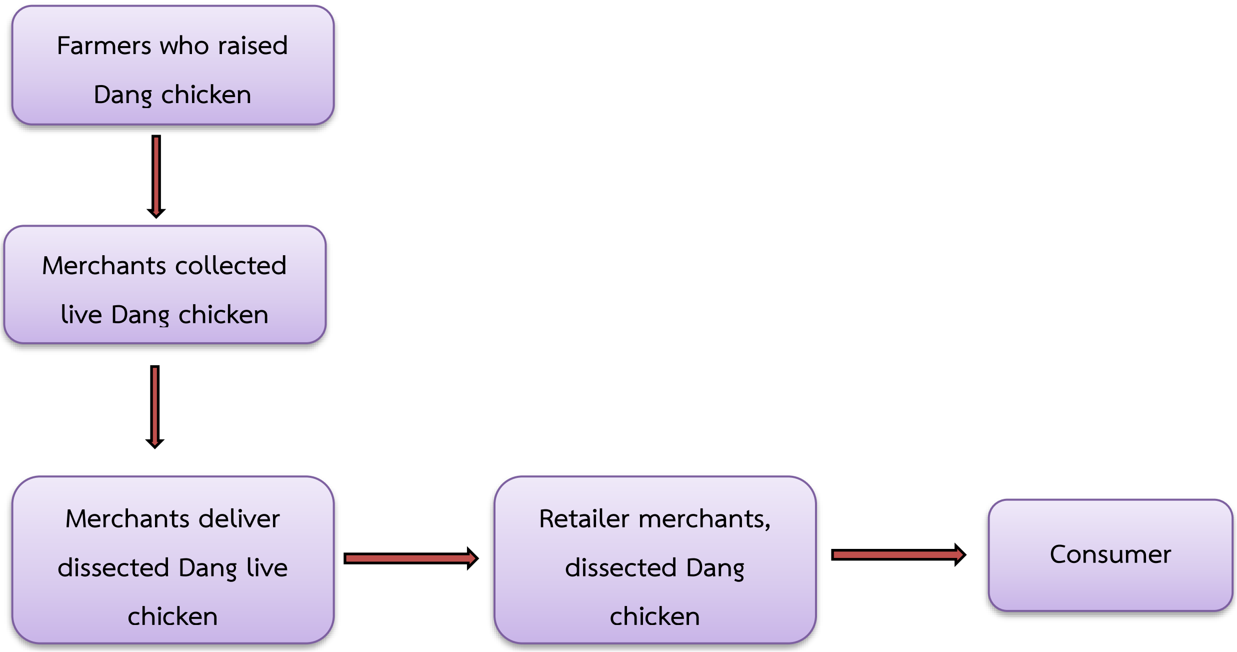

Figure 4 Dang chicken supply chain in the upper southern provinces Model 4

Model 5: The fifth model began with farmers who raised live Dang chickens. The chickens ware sold through live Dang chicken collectors, then to wholesalers and retailers of dissected Dang chickens, followed by entrepreneurs and restaurants, and finally reaching consumers. This process is illustrated in Figure 5.

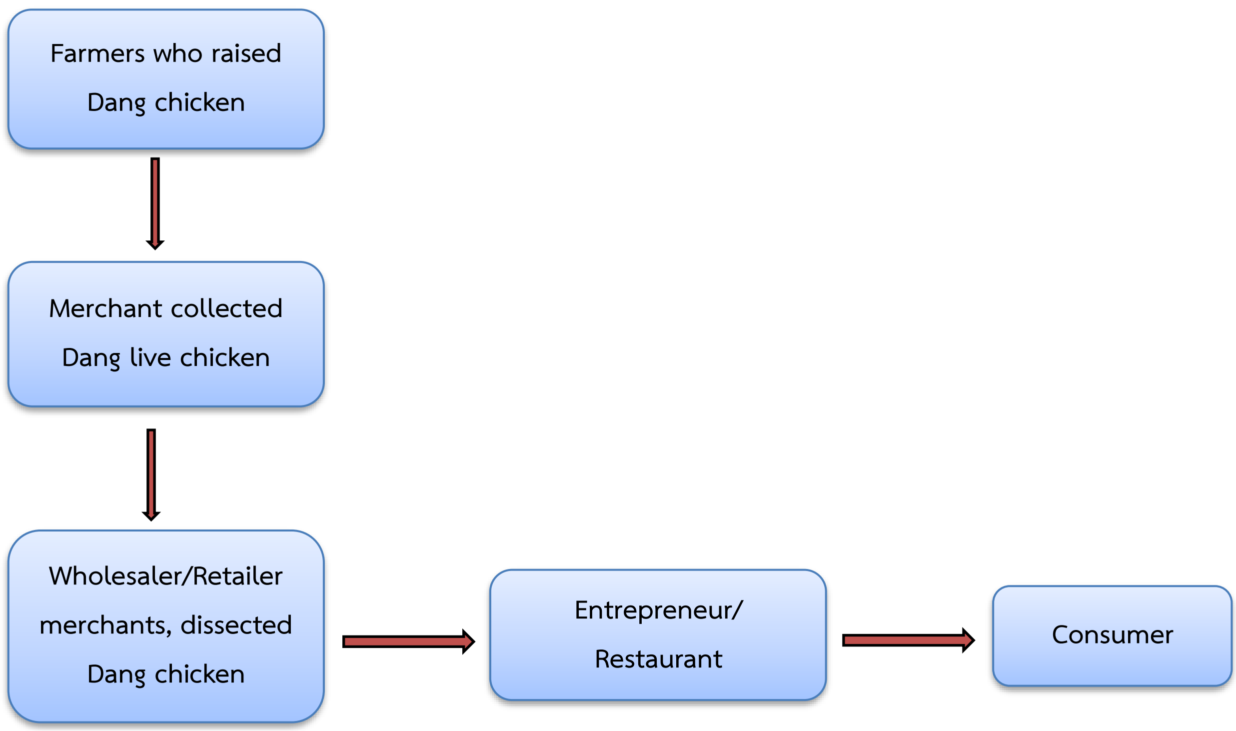

Figure 5 Dang chicken supply chain in the upper southern provinces Model 5

Discussion

The study of the Dang chicken supply chain in the upper southern provinces of Thailand revealed that most farmers operated on a small scale. In some areas, farmers had formed networks to raise native chickens using open-field, semi-confined, and semi-free-range systems. The average production cycle was approximately 16 weeks, yielding chickens weighing around 1.5 kilograms. The average selling price ranged from 70 to 80 Baht per kilogram, consistent with market preferences in the region. Raising chickens to meet the desired market weight within the appropriate time frame led to effective cost management for the farmers. In terms of distribution channels, the next most popular sales channels were wholesalers and retailers who purchased directly from the community (20.00%) and other avenues, such as selling directly to consumers or local restaurants (11.67%). These distribution channels for Dang chickens aligned with research conducted by Wongsuthavas and Sombun (2009) who examined the development of commercial native chicken products in Sakon Nakhon province. Their study found that most collectors and distributors of native chickens in Sakon Nakhon gathered chickens from the community to sell at fresh markets. Some farmers also served as collectors and butchers, traveling to villages to purchase chickens. The average selling price of native chickens in that region was reported to be between 100 to 120 Baht per kilogram. In contrast, a study by Saenkhunthow *et al*. (2016) on the production and marketing of native chickens in Maha Sarakham Province indicated that most farmers primarily produced chickens for household consumption, with any surplus sold as live chickens. This group focused on direct sales to community consumers, accounting for 46.60% of their sales, followed by community collectors (29.49%) and farmer networks (24.28%). In Maha Sarakham Province, native chicken farmers often took on multiple roles, serving as producers, collectors, butchers, and direct sellers to consumers. The structure of the Dang chicken market was characterized as an oligopoly, where only a few sellers dominated. The products offered by these sellers were largely similar, and any differences were minimal and substitutable. This market structure made it difficult for new sellers to enter, and pricing power was primarily held by collectors and wholesalers.

The study of the Dang chicken supply chain revealed that the Dang chicken market operated as an oligopoly market. This indicated that there were only a few sellers, including local chicken collectors and wholesalers/retailers, in each community. These sellers offered similar products, with only minor differences that could be easily substituted. Consumers generally recognized the product as native chicken without distinguishing between specific breeds. Entering the market was challenging for new sellers, especially for local collectors who possessed expertise, established networks for exchanging market information, and strong relationships with native chicken farmers in their communities. Consequently, the power to set prices predominantly lay with these collectors and wholesalers. The marketing route for Dang chickens began with farmers raising live Dang chickens, followed by collectors of live Dang chickens, wholesalers/retailers who sold butchered Dang chickens, restaurant operators, and ultimately, consumers. This pathway aligned with the supply chains of other native chicken breeds in various regions. For instance, Wongsuthavas and Sombun (2009) reported that the native chicken supply chains in Phang Khon and Mueang Districts of Sakon Nakhon Province involved free-range chicken farmers, collectors, butchers, distributors, and consumers. In this model, collectors, butchers, and distributors often assumed multiple roles, gathering native chickens from villages, butchering them, and selling directly to consumers. Similarly, Boonman and Weesaphe (2009) documented that the supply chain for native chickens in Sisaket, Yasothon, and Ubon Ratchathani Provinces involved small-scale farmers, live chicken collectors who established purchasing points in villages, and butchers in fresh markets, culminating in sales to consumers. Nualhnuplong *et al*. (2019) found that the Betong chicken market in Pattani, Yala, and Narathiwat Provinces also operated with few sellers. The marketing pathway for Betong chickens started with farmers raising live Betong chickens, followed by collectors and wholesalers who sold butcher Dang chickens to shop operators, including chicken rice shops and restaurants, until reaching consumers. Overall, the studies suggested that most native chicken marketing routes consisted of farmers, collectors, distributors, and consumers, often with overlapping roles among collectors, butchers, and distributors.

Relucio (2021) illustrated the value chain by showing the actors involved, their roles, and relationships in the value chain map; and determined the costs and revenues related to native chicken production. The results indicated that the main actors in this value chain were farmers/raisers of native chickens, wholesalers/middlemen, and retailers. The native chicken raisers sold their harvest directly to middlemen, who then sold it to consumers that visited their location. Conversely, the intermediaries sold the native chicken straight to the market. The findings showed that the three actors benefited from the industry; however, the middlemen's income exceeded that of both raisers and retailers. Results indicated that the native chicken did not have a fixed price in the Partido, Philippines. In Thailand, Yotapakdee *et al.* (2023) examined the management of the native chicken supply chain and strategies to improve value chain efficiency for commercial native chickens among farmer groups in the upper northern provinces. The study classified 148 farmers into three groups based on production potential: high, medium, and low. The authors suggested that promoting knowledge about the distinguishing characteristics of native chickens to customers could enhance farmers' commercial potential. Recommendations for upstream farmer groups included: maintaining high quality chicks for sale in the high group; developing farms to meet Good Agricultural Practice (GAP) standards in the medium group; and improving knowledge of chicken husbandry and vaccination systems in the low group. These measures aimed to strengthen each group's capacity for commercial native chicken production.

Similarly, Chankong *et al*. (2022) studied the native chicken supply chain in Nakhon Si Thammarat province, confirming that it comprised small-scale farmers, networks of live chicken collectors, wholesalers/retailers of slaughtered Dang chickens, and consumers. The market structure was found to be oligopolistic, with pricing power concentrated among collectors and wholesalers. Each community typically had only a few sellers offering similar products, limiting opportunities for new entrants due to established networks and local expertise. Nevertheless, encouraging cooperative models and collective marketing strategies could empower farmer groups. By consolidating supply and accessing larger markets, small-scale farmers could negotiate prices more effectively, reduce dependency on middlemen, and achieve better returns.

Conclusion

In conclusion, this study investigated the Dang chicken supply chain in the upper southern provinces of Thailand, identifying key actors including farmers, live chicken collectors, wholesalers/retailers of slaughtered Dang chickens, shop and restaurant operators, and consumers. Farmers predominantly sold to local collectors due to convenience and established trust, followed by wholesalers/retailers and, to a lesser extent, direct sales to consumers or restaurants. The market operated as an oligopoly, with few sellers offering similar products and pricing power concentrated among collectors and wholesalers.

The study recommended encouraging farmers to join cooperative or farmer groups to enhance operational performance through knowledge exchange, production planning, and improved marketing channels. Understanding the structure and dynamics of the Dang chicken supply chain provided a framework for developing Dang and other native chicken farming practices. Promoting household level native chicken farming requires careful management of costs particularly feed, the primary expense, alongside efficient distribution channel management. Furthermore, effective knowledge and information sharing among stakeholders, including academic and market insights, was essential. Collaborative management across farmers, collectors, wholesalers, retailers, restaurant operators, and consumers can generate mutual economic benefits and contribute to long-term food security.

Recommendations

Recommendations Based on the Research on the study of Dang chicken supply chain in the upper southern provinces of Thailand

1) Feed represents the most significant cost in raising Dang chickens. Therefore, farmers should carefully manage the raising period to achieve the desired size and quantity that aligns with consumer demand. To support cost-effective feed management and increase profitability, targeted policy interventions are needed. Such as training farmers on alternative feed sources, utilizing local feed ingredients, or purchasing feed collectively through cooperatives could substantially improve profit margins for small-scale Dang chicken producers.

Additionally, promoting group marketing strategies and cooperative models can strengthen farmer organizations, enabling them to negotiate prices more effectively, reduce dependence on middlemen, and potentially secure better returns through supply consolidation and access to larger markets.

2) Dang chicken farmers and merchants should align production volumes with market demand, coordinating collection and butchering processes to ensure consistent weights suitable for household consumption and diverse culinary applications. Moreover, farmers should maintain high standards in transportation and packaging to preserve product quality and meet consumer expectations.

3) Related Dang chicken businesses should consider developing ready-to-eat or semi-ready-to-eat products, as well as food items with enhanced nutritional value. Segmenting butchered chicken into convenient, ready-to-cook portions can simplify preparation for consumers. Implementing product grading systems based on weight, carcass quality, or freshness can further add value. These strategies cater to modern consumer preferences for convenience and have the potential to increase profitability.

However, for those interested in further exploration of this topic, it is recommended to investigate the purchasing behavior of consumers regarding Dang chicken meat in comparison to other native chicken breeds. This comparative analysis can provide valuable insights into consumer preferences, motivations, and trends. The findings can be utilized to develop native chicken products that align more closely with market demand and consumer expectations. Additionally, understanding these dynamics will facilitate the enhancement of value-added opportunities for native chicken products in the future. Therefore, it is recommended that farmers be encouraged to join agricultural groups in order to improve operational performance through marketing channels, production planning, and knowledge sharing.

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