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System Dynamics of Exchange Rate and COVID-19 Shocks in Iran's Broiler Industry

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Abstract

Iran's poultry industry plays a critical role in national food security but remains highly dependent on imported feed inputs. Exchange rate volatility, economic sanctions, and disruptions associated with the COVID-19 pandemic has imposed significant pressures on production costs, profitability, and sectoral sustainability. This study employs a system dynamics approach, using time-series data obtained from the Iran Customs Administration, the World Bank, the Ministry of Agriculture-Jihad, the Food and Agriculture Organization (FAO), and the Central Bank of Iran for the period 2018–2023, to analyze the combined effects of exchange rate shocks and the COVID-19 pandemic on Iran's broiler industry. Two policy scenarios were evaluated: a phased increase in the preferential exchange rate and its complete elimination, each under pre- and post-pandemic conditions. The simulation results indicate that exchange-rate depreciation, rising feed costs, and inflation were the principal drivers of increasing broiler meat prices. Under the dual-shock scenario combining the complete removal of the preferential exchange rate with COVID-19-related disruptions, broiler meat prices are projected to increase by approximately 2,107% from 2018 to 2026. The findings demonstrate that gradual subsidy reform, combined with targeted producer support, strategic feed reserves, and investment in domestic feed crop production, would substantially improve the resilience of Iran's broiler industry while mitigating the adverse effects of exchange-rate shocks and future external crises.

Keywords: Broiler Industry, COVID-19, Exchange Rate Volatility, System Dynamics.

1- Introduction

Over recent decades, Iran's poultry industry has expanded considerably and has become one of the most important components of the national food system. Owing to its affordability and wide availability compared with red meat, poultry has become the primary source of animal protein for Iranian households (Mirzaei et al., 2024; Adaszyńska-Skwirzyńska et al., 2025). In

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2019, Iran produced more than 2.73 million metric tonnes of poultry meat through approximately 16,000 commercial broiler farms, while per capita consumption reached about 33 kg. Poultry production is primarily directed toward domestic consumption, with exports (4.5 thousand tonnes) and imports (2.8 thousand tonnes) accounting for less than 1% of the total market supply. Despite its economic importance, Iran's poultry industry remains highly dependent on imported feed inputs (Iranian Agricultural Ministry, 2020; Zamani et al., 2021). Feed costs account for approximately 60–70% of total broiler production costs (Ramankevich et al., 2025).

Each year, more than US$4.5 billion worth of livestock feed is imported into Iran, of which approximately 73% consists of corn and 13% of soybean meal (IRCA, 2021). According to the Importers Union of Livestock and Poultry Inputs, more than 15.9 million tonnes of feed ingredients were imported during the first eleven months of 2021, while over 70% of the country's feed requirements were supplied through imports (Biria & Fakour, 2024).

Iran's dependence on imported feed has made the poultry sector particularly vulnerable to exchange-rate fluctuations and international sanctions. Following the re-imposition of economic sanctions in 2018 and the outbreak of the COVID-19 pandemic, exchange-rate volatility increased substantially, leading to a sharp depreciation of the Iranian Rial and a significant increase in the cost of imported feed inputs (Central Bank of Iran, 2021). Because corn and soybean meal constitute major components of poultry feed, rising exchange rates directly increased feed costs and, consequently, broiler production costs (Arıkan et al., 2019; Hejazi & Emamgholipour, 2020; Javadi et al., 2024). To mitigate these pressures, the Iranian government introduced a preferential exchange rate of 4,200 Tomans per US dollar in 2018 for importing essential livestock inputs (Salem et al., 2022). Although this policy temporarily reduced production costs, weaknesses in its implementation and distribution led to resource misallocation, rent-seeking, and greater dependence on imported feed (FAO, 2020; Taheri Reykandeh & Shabanzadeh Khoshrody, 2022).

The COVID-19 pandemic further intensified these structural challenges. Evidence from Iran indicates that the pandemic significantly increased exchange-rate volatility, particularly during periods of high market uncertainty (Ghaderi et al., 2025). At the same time, global supply chain disruptions, higher transportation costs, and reduced feed availability increased production costs, constrained production capacity, and threatened the sustainability of poultry farms (Palouj et al., 2021; Sattar et al., 2021; Hafez et al., 2021). These developments highlight the

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importance of assessing the combined effects of exchange-rate reform and external shocks on the resilience of Iran's broiler industry.

Previous studies have examined exchange-rate fluctuations, subsidy reforms, and external shocks from different perspectives. Heydari and Haj Seyed Javady (2024) showed that the gap between official and market exchange rates significantly affects livestock input imports. Javadi et al. (2024) demonstrated volatility spillovers from livestock input markets to egg prices, while Ronaghi (2022) reported that COVID-19 affected Iran's meat market mainly through exchange-rate increases and declining exports. Together, these studies emphasize the importance of exchange-rate policy but largely investigate individual shocks rather than their interactions.

International evidence likewise confirms the vulnerability of poultry supply chains to external shocks. System dynamics studies highlight the role of feedback mechanisms in production instability (Cuevas Garcia-Dorado et al., 2021; Chaudhry & Miranda, 2024), while studies from Bangladesh, Indonesia, India, and Nigeria reported that COVID-19 disrupted feed supply, increased production costs, reduced producer income, and threatened poultry enterprises (Fouzder et al., 2021; Setiadi et al., 2022; Mishra et al., 2023; Bamidele et al., 2023). Other studies identified productivity constraints as a barrier to resilience (Onuwa, 2022; Zhong et al., 2021), and consistently recommended strengthening domestic feed production, improving supply-chain resilience, reducing exchange-rate distortions, and modernizing production systems (Gafi & Javadian, 2018; Singh Malik et al., 2024; Zargaraan et al., 2021).

Despite the growing body of literature, an important research gap remains. Previous studies have generally examined exchange-rate volatility, subsidy reform, or the COVID-19 pandemic as separate issues. To the best of our knowledge, no previous study has simultaneously investigated the combined effects of preferential exchange-rate reform and the COVID-19 pandemic on Iran's broiler industry using a System Dynamics framework. Addressing this gap is important because these shocks interact through multiple feedback mechanisms affecting feed prices, production costs, production capacity, productivity, and broiler meat prices.

Accordingly, this study develops a System Dynamics model to evaluate the interactive effects of preferential exchange-rate policy and the COVID-19 pandemic on Iran's broiler industry. The model captures the dynamic relationships among exchange rates, feed prices, production costs, production capacity, productivity, and broiler meat prices under alternative policy scenarios. The hypotheses of this study are formulated around the reinforcing effects of external shocks. First, increases in exchange rates are expected to significantly raise feed costs,

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production costs, and broiler meat prices (H1). Second, the COVID-19 pandemic is anticipated to exacerbate the negative impacts of exchange-rate fluctuations on the broiler industry by adding pressure to the supply chain and production capacity (H2). Third, when preferential exchange rate reform coincides with the pandemic, the combined shocks are projected to generate more severe adverse impacts than either occurring individually, leading to cumulative effects on costs, productivity, and broiler meat prices (H3).

The findings are expected to provide evidence-based policy recommendations for improving the resilience, productivity, and long-term sustainability of Iran's poultry sector.

2- Methodology

System dynamics is an interdisciplinary method for simulating and analyzing complex problems, integrating qualitative and quantitative aspects of systems to support policy analysis and decision-making (Sterman, 2000).

The modelling process begins with Causal Loop Diagrams (CLDs) to represent relationships among system variables, with positive (+) and negative (−) signs denoting link polarity (García, 2020). A Stock–Flow Diagram (SFD) is then constructed to describe the system's dynamic behavior and physical structure, followed by simulation, validation, and scenario analysis (Schoenenberger et al., 2021).

The detailed procedure is described below. Key modelling assumptions include: (1) broiler feed price as a weighted function of imported corn (60%), soybean meal (30%), and other inputs (10%); (2) the exchange rate directly determining import prices with no smoothing buffer under full subsidy removal; and (3) COVID-19 impact operationalized via a time-indexed Lookup function with disruption coefficients declining from 0.4 in 2019 to 0 by 2023. Historical data for the period 2018–2023, including exchange rates, broiler meat prices, feed prices, production indicators, and import statistics, were obtained from official sources, including the Central Bank of Iran, the Ministry of Agriculture, FAO and the Iran Customs Administration. These observed data were used for model calibration and validation. Forecast values for the period 2024–2026 were generated by the validated system dynamics model under the defined policy scenarios. Model parameters were calibrated using historical observations, while validation was conducted through behavior reproduction tests comparing simulated and observed values.

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Table 1. Model Variables and Main Equations Used in the System Dynamics Model

Variable	Formula / Relationship	Description
Broiler Meat Price	$P_{broiler\ meat}(t) = ((\frac{P^1_{meat} - P^0_{meat}}{t}) \times (1.8 * Inflation))$ $Broiler\ Meat\ Price = INTEG\ (cp\ CM)$	Broiler meat price as a stock variable, reflecting price adjustments resulting from inflation and the discrepancy between actual and expected prices
Imported Corn Price	$Imported\ Corn\ Price(t) = P\ World\ Corn(t) * Ex(t)$	The import price of corn depends on the global price and the exchange rate
Imported Soybean Price	$Imported\ Soybean\ Price(t) = P\ World\ Soya\ Bean(t) * Ex(t)$	The import price of soybeans depends on the global price and the exchange rate
Corn Inventory	$Corn\ inventory = INTEG\ (import\ corn + prod\ rate\ corn - sale\ corn)$	Corn inventory represents the accumulation of imports and production minus sales
Soybean Inventory	$Soybean\ Inventory = INTEG(import\ soya + prod\ rate\ soya - sale\ soya)$	Soybean inventory represents the accumulation of imports and production minus sales
Broiler Feed Price	$dP_{Feed}/dt = w_{Corn}\ (dP_{Corn}/dt) + w_{Soya}(dP/dt) + w_{Other}(dP_{other}/dt)$	Broiler feed price is a function of changes in input prices with weighted coefficients.
Broiler Feed Demand	$DPF(t) = BP(t) * \alpha$	Feed demand is proportional to broiler production and the feed conversion coefficient
Day-Old Chick Demand	$DOC(t) = BP(t) \times \beta$	Day-old chick demand is estimated based on the ratio of the average weight of a day-old chick to the standard broiler weight
COVID-19 Impact on Imports	$Impact\ of\ Covid-19(t) =$ $With\ Lookup(Time)$, (2018,0),(2019, 0.4),(2020, 0.3),(2021,0.2),(2022,0.1),(2023,0))	The intensity of the impact of COVID-19 on input imports is determined based on the year and a Lookup function.

Source: Research Findings
Notes: Ex(t): exchange rate at time PWorld Corn(t): world corn price at time PWorld Soybean(t): world soybean price at time DPF(t): broiler feed demand at time t; BP(t): broiler production at time t; DOC(t): day-old chick demand at time t; WOC: average weight of a day-old chick.

Model validation followed established system dynamics practice (Sterman, 2000), comprising behavior reproduction test. The model was simulated over a nine-year horizon (2018–2026) and simulated values were compared against actual data for key variables: broiler feed price, broiler meat price, and the productivity index. As Figures 1–3 show, the simulated trajectories closely matched observed behavior—feed and meat prices rising sharply while the productivity index remained relatively flat, reflecting the structural constraints documented.

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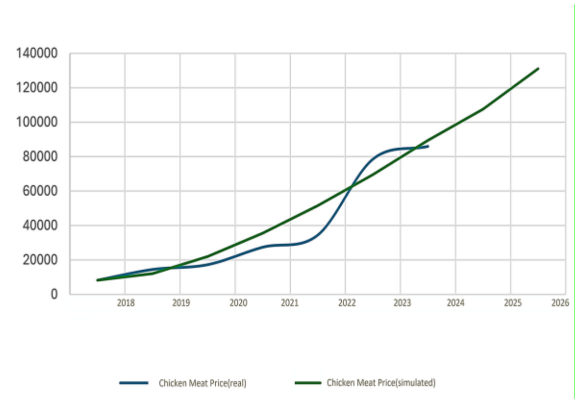

Figure 1. Behavior reproduction test – comparison of simulated broiler meat prices with actual data.

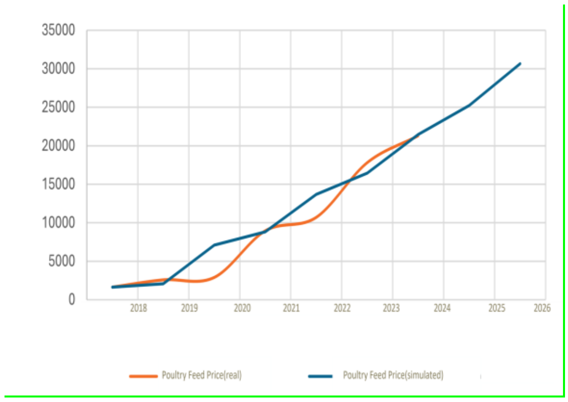

Figure 2. Behavior reproduction test – comparison of simulated Poultry Feed Price with actual data.

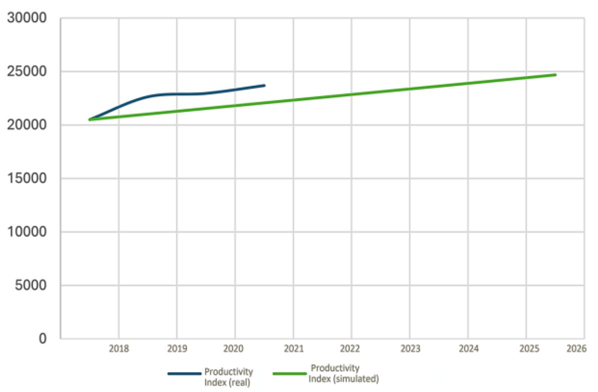

Figure 3. Behavior reproduction test – comparison of simulated productivity index with actual data

The model reflects standard industry relationships, assuming direct exchange-rate pass-through to feed costs and constant feed formulations. Producers adjust production and pricing based on cost shifts. While specific intervention delays and behavior heterogeneity are excluded for tractability, the model effectively captures core feedback mechanisms between input costs, production capacity, and meat prices.

3- Results and Discussion

The modeling process begins with the development of causal loop diagrams (Sterman, 2000). First, hypotheses are formulated to identify key variables based on causal relationships within the poultry supply chain.

3-1- Causal Loop Diagrams

These diagrams represent the dynamic system of the broiler industry, examining cause-and-effect relationships among variables. Vensim software was used to develop the diagrams. The

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impact of economic variables—such as exchange rates and input prices—on production, productivity, and prices of broiler feed and meat was analyzed. The structure includes four balancing loops and three reinforcing loops. Figure 4 illustrates the causal relationships among the variables involved in broiler meat production.

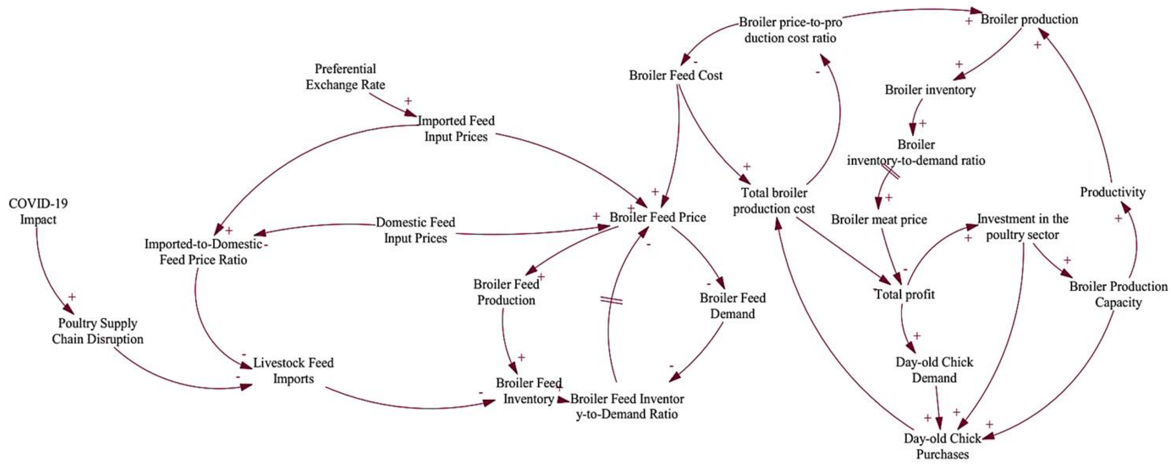

Figure 4. Causal relationships among the variables involved in broiler meat production

3-2- Causal Loops Related to Production, Demand, and Input Prices

Figure 5 illustrates the interaction between R1 (reinforcing) and B1-B3 (balancing) loops, generating a "Limits to Growth" pattern. Feed price hikes—driven by exchange-rate depreciation and COVID-19 logistical disruptions—surge production costs, which are passed to consumers. While R1 supports short-term supply through imports, it increases long-term vulnerability. To counteract these shocks, producers pivot toward domestic input expansion (B3) and inventory rebuilding (B1), though these balancing mechanisms often operate with significant delays.

The simulation results directly support the behavior generated by these interacting loops. Specifically, the dominance of the reinforcing loop (R1)—where exchange-rate depreciation continuously inflates imported input prices—explains the exponential, sustained rise in broiler feed prices observed in the simulation period. Concurrently, the balancing loops (B1 and B3), Inventory adjustments and domestic production responses are delayed, making these balancing mechanisms too slow to offset R1-driven price shocks, resulting in the sharp increase in broiler meat prices shown in Figure 5.

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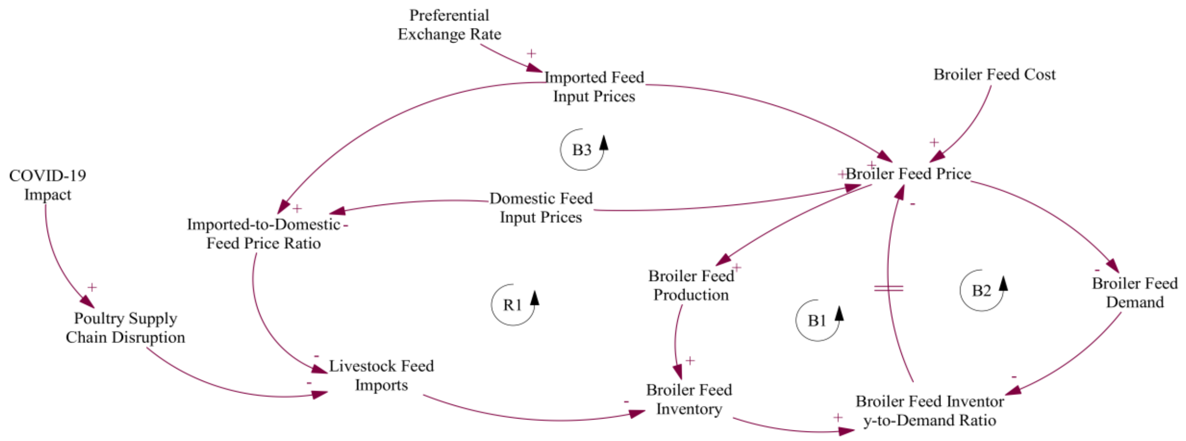

Figure 5. Causal loops resulting from the increase in input prices

3-3- Causal Loops Related to Investment, Production Capacity and Productivity

Figure 6 presents three loops illustrating interactions among variables in the broiler production system. These loops influence price, production, capacity, and demand, functioning as both balancing and reinforcing mechanisms. Balancing loop B4 links productivity gains to improved inventory-to-demand ratios, supporting price stability. Meanwhile, reinforcing loops R3 (demand-profitability) and R2 (investment-capacity) drive sectoral growth and unit-cost reduction. However, the removal of the preferential exchange rate and the resulting rise in input costs weakened profitability and investment, limiting the effectiveness of reinforcing loop R2 and threatening long-term industry sustainability. Simulation results indicate that R2 improved production capacity, while balancing loop B4 stabilized production through inventory adjustments (Figure 6). Although COVID-19 disruptions peaked during 2019–2020, their effects gradually diminished, whereas exchange-rate depreciation remained the dominant driver of production costs.

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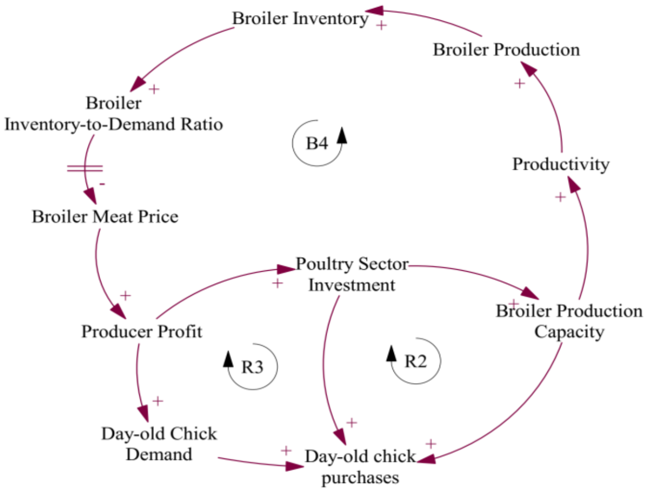

Figure 6. Causal loops of investment, production capacity, and productivity

3-4- Stock–Flow Diagram of Broiler Meat Production

The Stock–Flow Diagram (Figure 7) simulates the interactions between production costs, input prices, and broiler meat output. Key variables include meat and feed prices, productivity, and production capacity. The COVID-19 disruption was incorporated into the model through a time-dependent lookup function, reaching its maximum value (0.4) during 2019–2020. At this peak, the simulation showed the greatest reduction in livestock feed imports, reflecting the effects of transport restrictions, labour shortages, and supply-chain disruptions. The decline in imported feed availability increased feed prices and production costs, which were subsequently transmitted to broiler meat prices. As the disruption coefficient gradually declined to zero by 2023, feed imports recovered progressively, reducing the short-term supply constraints, although the inflationary effects associated with exchange-rate depreciation persisted.

A key simulation finding is the stagnation of production capacity after 2021 despite rising broiler meat prices, indicating that structural constraints—including exchange-rate instability, limited investment, and restricted access to long-term finance—prevent sustainable industry growth.

Furthermore, the productivity index increased only modestly, from 20,500 units in 2018 to 24,684 units in 2026. This improvement was insufficient to offset the sharp increases in feed and production costs caused by exchange-rate depreciation and external shocks, indicating that productivity gains alone cannot ensure sector resilience and should be supported by broader structural and policy reforms.

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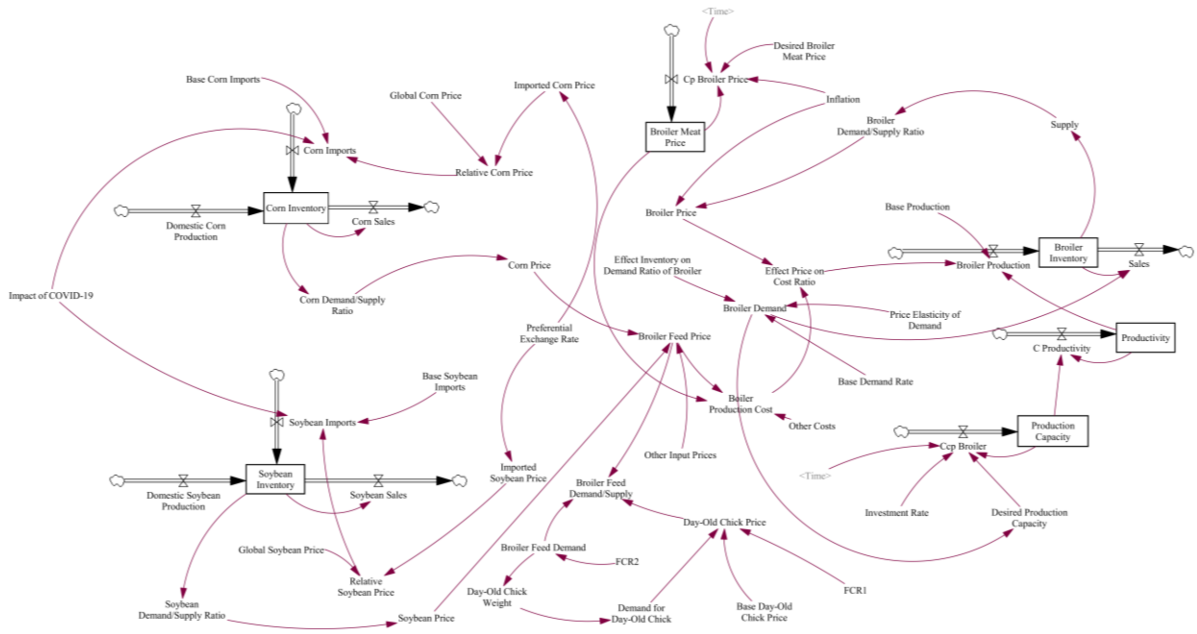

Figure 7. Stock–Flow Diagram of Broiler Meat Production Simulation Results

3-5- Simulation Results

Analysis of poultry industry trends shows feed prices surging from 1,635 Tomans in 2018 to 10,700 in 2021, with a forecast exceeding 30,000 by 2025. Modest productivity gains remain below international standards due to structural constraints like fragmented smallholdings, low R&D investment, and input volatility. As validated by the model's behavior reproduction test (Figures 1–3) for the 2018–2022 period, these factors hinder growth, with rising costs and inflation serving as the primary drivers of meat price increases and eroding industry profitability.

Table 2. Comparison of Actual and Simulated Values of Key Indicators in Iran's Broiler Industry

Indicator	Time Period	Actual Value	Simulated Value
Poultry Feed Price	2018	1,635 Toman	1,635 Toman
	2021	10,700 Toman	10,543Toman
	2026(Forecast)	-	30,656 Toman
Production Capacity	2018	378,447thousand tons	378,447thousand tons
	2021	421,883thousand tons	421,652 thousand tons
	2026(Forecast)	–	420,489thousand tons
Broiler Meat Price	2018	8,200Toman	8,200Toman
	2021	34,473Toman	33,980Toman
	2026(Forecast)	-	131,059Toman
Productivity Index	2018	20,500units	20,500 units
	2021	22,634units	22,481units
	2026(Forecast)	-	24,684 units

Source: Research findings (System Dynamics Model Simulation).

The simulation captured the major trends in Iran's broiler industry, indicating that long-term sustainability depends on productivity improvements, reduced import dependency, stable input

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prices, and continued investment. A key finding is the stagnation of production capacity after 2021 despite rising broiler meat prices, suggesting that structural constraints extend beyond short-term shocks. Although the productivity index improved modestly, these gains were insufficient to offset the cost increases caused by exchange-rate depreciation and import dependency.

Scenario analysis further showed that broiler meat prices were higher under Scenario 2 than under Scenario 1 by 2026, with the former producing the highest projected price among all simulated scenarios. These findings demonstrate that gradual exchange-rate reform is more effective than abrupt removal in limiting market disruption and controlling consumer prices.

3-6- Scenario result

Following model validation through various tests, simulation scenarios were developed based on different policy assumptions. Policy design involves creating new strategies, structures, and decision-making rules (Sterman, 2000). Accordingly, drawing on a systemic approach, research objectives, existing solutions, and expert opinions, the following scenarios were analyzed.

Scenario 1: This scenario evaluates a gradual preferential exchange rate increase from 4,200 to 38,500 Tomans. Under these conditions, broiler meat prices rise from 8,200 in 2018 to 160,000 in 2026, while feed prices surge from 1,635 to 32,480 Tomans. The 2019–2020 pandemic disruptions reduced the policy's cost-moderating efficacy, raising the projected 2026 price from 150,000 (pre-COVID) to 160,000 Tomans. Overall, this represents an 1,851% increase in meat prices, demonstrating Scenario 1's relative effectiveness in moderating costs compared to full subsidy elimination.

Scenario 2: Under Scenario 2, The preferential exchange rate is eliminated entirely, with the exchange rate increasing from 4,200 to 60,000 Tomans, requiring producers to import inputs at free-market rates. Under these conditions, broiler meat prices rise from 8,200 in 2018 to 181,000 in 2026, while feed prices surge from 1,635 to 34,000 Tomans. The 2019–2020 pandemic disruptions further intensified the cost pressures, raising the projected 2026 price compared with the pre-COVID scenario. Overall, this represents an approximately 2,107% increase in meat prices, demonstrating that complete subsidy elimination generates greater cost pressures than gradual adjustment.

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The model reports nominal price increases. The percentage increases are explicitly stated in the results: under Scenario 1, broiler meat prices increased by approximately 1,851% (from 8,200 to 160,000 Tomans), and under Scenario 2, by approximately 2,107% (from 8,200 to 181,000 Tomans). These figures represent nominal increases. The model does not separately calculate real increases adjusted for inflation, as the price dynamics are captured through exchange-rate pass-through and feed cost transmission channels. However, given Iran's high inflation rate during the study period, the real price increase would depend on the inflation adjustment applied and therefore was beyond the scope of the present system dynamics model.

From a policy perspective, the results support a phased subsidy withdrawal, as the gradual adjustment scenario reduced the projected 2026 broiler meat price by 13.1% compared with complete elimination. Since production capacity remains nearly unchanged through 2026, exchange-rate reform alone is insufficient to restore the sector and should be accompanied by investment incentives and long-term credit support. Furthermore, the modest productivity gain of 20.4% compared with the 2,107% increase in broiler meat prices indicates that improving efficiency alone cannot offset import dependency, highlighting the need to strengthen domestic feed production, strategic feed reserves, and modern production technologies (Figures 8-11).

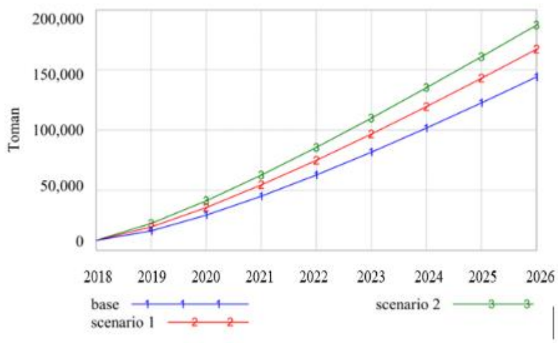

Figure 8. Response of Chicken Meat Price

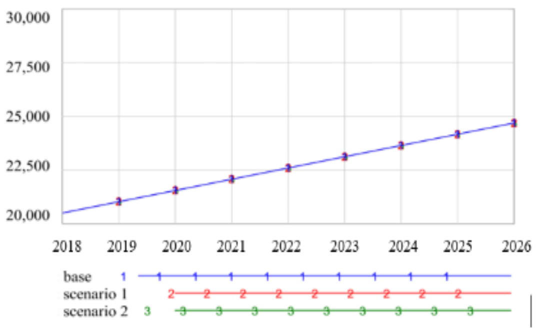

Figure 9. Response of the Productivity Index

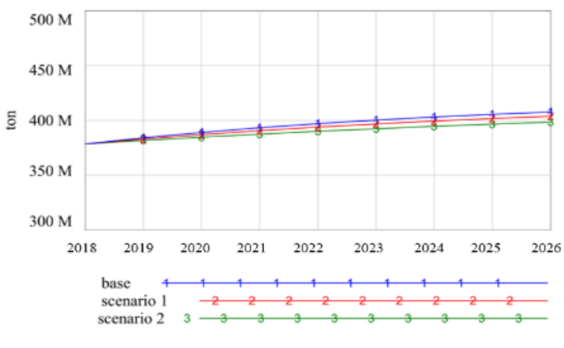

Figure 10. Response of Production Capacity

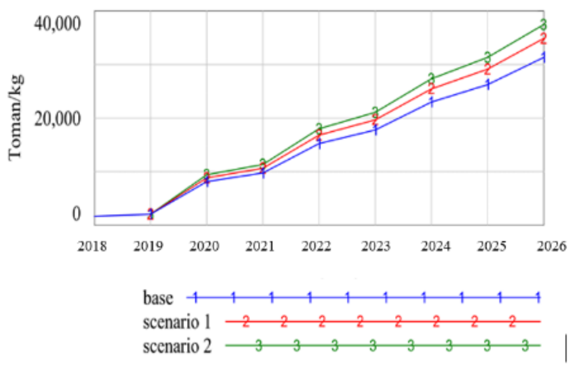

Figure 11. Response of Poultry Feed Price

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The findings are consistent with evidence from other import-dependent developing economies (Chaudhry & Miranda, 2024; Setiadi et al., 2022; Fouzder et al., 2021; Mishra et al., 2023), where exchange-rate instability, rising feed costs, and COVID-19 disruptions increased production costs and constrained poultry production. Recent studies (Singh Malik et al., 2024; Adaszyńska-Skwirzyńska et al., 2025) further emphasize that persistent price pressures are primarily driven by exchange-rate volatility and import dependency, reinforcing the need for structural policy reforms.

4- Conclusion

This study employed a system dynamics approach to evaluate the combined effects of exchange-rate reform and COVID-19 on Iran's broiler industry. The findings show that exchange-rate shocks, driven by dependence on imported feed, substantially increased production costs and broiler meat prices, while complete subsidy removal produced the most severe outcomes. COVID-19 further amplified these adverse effects, emphasizing the importance of accounting for compound shocks in agricultural policy.

The simulation provides clear policy implications. The 13.1% price difference between the gradual adjustment and complete elimination scenarios supports phased subsidy withdrawal over three to five years. However, stagnant production capacity and only a 20.4% productivity improvement indicate that exchange-rate reform alone is insufficient. Complementary policies, including investment incentives, domestic feed production, strategic feed reserves, modern production technologies, and improved access to finance, are required to enhance resilience and productivity.

Future research should compare the effects of direct production subsidies and feed-input subsidies on profitability, production capacity, market stability, and sectoral development. Further studies should also evaluate the long-term impacts of subsidy reform on small-scale producers and rural development, as well as the roles of strategic feed reserves, domestic feed production, productivity-enhancement programs, inflation-adjusted modelling, and producer and consumer behavioral responses under alternative policy scenarios. Addressing these issues would contribute to more resilient and sustainable policy frameworks for Iran's broiler industry.

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پویایی‌شناسی سیستمی شوک‌های نرخ ارز و کووید-۱۹ در صنعت مرغ گوشتی ایران

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چکیده

صنعت مرغداری ایران نقش حیاتی در تأمین امنیت غذایی کشور ایفا می‌کند، اما همچنان وابستگی زیادی به واردات نهاده‌های خوراک دام دارد. نوسانات نرخ ارز، تحریم‌های اقتصادی و اختلالات ناشی از همه‌گیری کووید-۱۹ فشارهای قابل‌توجهی بر هزینه‌های تولید، سودآوری و پایداری این بخش وارد کرده‌اند. این پژوهش با بهره‌گیری از رویکرد پویایی سیستم و استفاده از داده‌های سری زمانی مربوط به دوره ۲۰۱۸ تا ۲۰۲۳ که از گمرک جمهوری اسلامی ایران، بانک جهانی، وزارت جهاد کشاورزی، سازمان خواربار و کشاورزی ملل متحد (FAO) و بانک مرکزی جمهوری اسلامی ایران گردآوری شده‌اند، به بررسی اثرات هم‌زمان شوک‌های نرخ ارز و همه‌گیری کووید-۱۹ بر صنعت مرغ گوشتی ایران می‌پردازد. دو سناریوی سیاستی شامل افزایش تدریجی نرخ ارز ترجیحی و حذف کامل آن، هر یک در شرایط پیش و پس از همه‌گیری، مورد ارزیابی قرار گرفتند. نتایج شبیه‌سازی نشان داد که کاهش ارزش پول ملی، افزایش هزینه نهاده‌های خوراک و تورم مهم‌ترین عوامل افزایش قیمت گوشت مرغ بوده‌اند. در سناریوی شوک دوگانه، شامل حذف کامل نرخ ارز ترجیحی همراه با اختلالات ناشی از کووید-۱۹، پیش‌بینی می‌شود قیمت گوشت مرغ از سال ۲۰۱۸ تا ۲۰۲۶ حدود 2,107 درصد افزایش یابد. یافته‌ها نشان می‌دهد که اجرای تدریجی اصلاح یارانه‌ها، همراه با حمایت هدفمند از تولیدکنندگان، ایجاد ذخایر راهبردی نهاده‌های خوراک و سرمایه‌گذاری در تولید داخلی محصولات خوراک دام، می‌تواند تاب‌آوری صنعت مرغ گوشتی ایران را به‌طور قابل‌توجهی افزایش داده و آثار نامطلوب شوک‌های نرخ ارز و بحران‌های خارجی آینده را کاهش دهد.