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Review Article

Marketing Strategy for Poultry Enterprises in Turkana, Kenya: Popularisation of Poultry Farming, Product Differentiation, and Market Delight

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Abstract

This study sought to mobilise production and marketing components for an effective and profitable poultry marketing plan in Turkana through the objectives (i) evaluating poultry production and marketing factors in Turkana and comparable contexts, (ii) examining the strategic objectives of the poultry industry in Turkana and refugee settings, and (iii) identification of enablers and challenges within the poultry industry. The study employed an exploratory methodology, incorporating comprehensive secondary research to collect information on the poultry sector, including aspects of profitability, competitiveness, and sustainability. The study involved 132 participants, including poultry home farmers, poultry producer organisations, traders from Turkana and adjacent counties, as well as government and civil society officials engaged in livestock development. The study revealed that poultry farming and marketing operations in Turkana are limited and profoundly affected by numerous constraints of social, economic, political, technological, environmental, legal and policy nature. To enhance poultry farming in Turkana, it is essential to ensure a reliable supply of certified local feed within the required regulatory quality standards. Poultry production and commercialisation are hindered by financial limitations; yet, providing funding to poultry producers and entrepreneurs can yield a competitive advantage. Turkana's poultry marketing strategy should enhance production and sales through direct acquisitions from local production units and aggregation centres. The diversification of poultry production and marketing depends on the optimisation of farm and market parameters, contract farming, and stable pricing. Strategic financial planning, biosecurity protocols, health evaluations, insurance optimisation, competitiveness oversight, technological advancements, and partner resilience can boost the performance and reliability of poultry ventures. The adoption of disease-resistant poultry breeds can diversify poultry enterprises and livelihoods, enhance nutrition, and augment income. An industrial analysis of the Turkana poultry sector is crucial for clarifying sector prospects and executing strategic initiatives. Poultry production, financing, marketing, operations management, human resources allocation, and innovation facilitators could be enhanced by further research.

Keywords: Poultry Farming, Strategy, Product, Price, Place, Promotion, Market Access, Consumer Delight.

1. INTRODUCTION

With over 25 billion chickens worldwide, 2.1 billion in Africa, and 57 million in Kenya, poultry farming is becoming increasingly popular in urban and rural Africa for domestic and commercial purposes. Chickens are the most raised birds. Poultry farming provides a financial opportunity for both large and small businesses, and it is an important component of strategies for ensuring food security, resilience, and self-sufficiency in both normal and displaced human situations (Macharia et al., 2022). Poultry is a popular livestock-based livelihood for households in Turkana and refugees alike. The demand for poultry products such as live birds, meat, and eggs is growing due to improved market production skills and market access opportunities provided by multiple partners under the leadership of the Turkana County Government departments of livestock production, veterinary services, trade, and cooperatives, civil society, and the private sector players.

There is no systematic plan (farming model) for producing and marketing poultry and products in Turkana. This weakness stymies the government, development partners mainly humanitarian and private sector organizations, poultry producer groups and entrepreneurs, and farmer households' efforts to create a viable county poultry farming and commercialization framework. The inherent and extrinsic restrictions of poultry production and selling in Turkana need long-term solutions that promote synergies and complementarities among stakeholders. A comprehensive and strategic road map for accomplishing poultry farming goals would be necessary to combine best practices, rationalize farmer and consumer behaviours and practices, deal with complex poultry farming challenges wisely, and apply lessons learned to market capitalization tactics. This would turn poultry farming into a profitable and sustainable source of income and employment for refugees and the hosting communities (Yiram et al., 2017).

A comprehensive marketing plan for poultry farming in Turkana ensures that valuable products are created and profitably disseminated to target markets while differentiating the production, productivity, and marketing of poultry resources. These outcomes

are achieved through a variety of strategies, including increased stakeholder engagement in poultry farming, more efficient use of resources and factors of production, growth, and diversification of poultry businesses, competitive advantage, brand building, customer satisfaction, and cost-effective marketing. It is worth noting that before the broad adoption of poultry farming in Turkana, the products market was dominated by foreign businesspeople who could provide live market-weight birds, eggs, and restaurants that dealt with distinct chicken product value chains. This market dominance is strong, and the best ways for local producers and vendors to reclaim market share are to increase the number of poultry farms in Turkana, offer distinctive and competitive products, and ensure that the market is thrilled, devoted, and loyal to local products (Anno et al., 2023).

2. LITERATURE REVIEW

Overview of Poultry Production and Marketing in Kenya

Poultry farming and marketing strategies are critical for the longterm development of households and market-driven poultry product chains. Over 75% of Kenya's population practices poultry farming, with indigenous chickens accounting for over 80%. Poultry is important for economic, social, and cultural reasons. Demand for poultry products in Kenya is expected to reach 164.6 thousand metric tonnes by 2030 (Macharia et al., 2022). Indigenous chicken ecotypes are marketable due to their genetic diversity and greater flavour. However, restricted input consumption because of costs and access factors reduces poultry productivity. Indigenous chickens are suitable for backyard keeping due to their tolerance, small size, and limited production space. Poultry farming systems are reasonably priced, making them accessible to low-income people but, many poultry businesses remain subsistence-level, as many poultry production initiatives in dryland systems face challenges such as disease, high feed costs, and volatile markets. Improved poultry commercialization and genetic enhancement means improved output, particularly in low-scale poultry production areas (Onono et al., 2017).

Kenya's indigenous chicken varieties, including Kuroilers, Rainbow Roosters, Kebro, and KALRO Naivasha, exhibit strong growth rates, dual-purpose production, and profitability (KIPPRA, 2016). However, the economic value of chicken production in Kenya is underestimated due to differences in management practices and genetic potential. Kenyan chicken production systems are classed as extensive, semi-intensive, and intensive. According to Kamau et al. (2018), extensive systems with a limited chicken population are self-sustaining. Semi-intensive and intense systems raise thousands of chickens, which producer groups frequently run. Despite high prices, diseases and bad management lead to losses, and inadequate nutrition and management techniques result in lowquality poultry products. Commercialization of indigenous chicken production is achievable because Kenya's chicken value chain includes input suppliers, producers, traders, service providers, and consumers. Chicken producers are classified as small, medium, or large, and crucial service providers include veterinarians, extension agents, livestock officers, financial institutions, non-governmental organizations (NGOs), and a wide range of commercial sector participants (Mwiti et al., 2021; Gheyas et al., 2021).

Chicken production restrictions are classified into four categories: production, social, technological, and infrastructure, which result in varying health and production, inadequate husbandry techniques, socioeconomic disparities, and low productivity issues. Poultry farming provides several prospects for homes and business ventures because of population expansion, food consumption trends, income needs, and urbanization demands. Chickens' genetic and physical adaptations allow them to endure disease and harsh environmental circumstances. Eco-labeling and traceability can

increase poultry enterprise performance in a variety of market segments when combined with strong government regulatory frameworks, farmer participation, and strengthened chicken value chains. Omondi's (2022) study on chicken value chains in Kenya's Thika and Kisumu cities demonstrates that input procurement, production, output trade, and consumption are critical components for viable, competitive, and lucrative poultry business ventures.

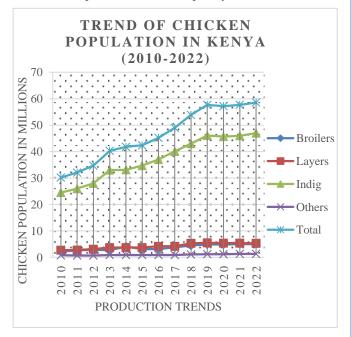


Figure 1: Poultry production trend in Kenya (2010-2022).

Adopted from Macharia et al. (2022)

Poultry Production and Marketing Approaches

Raising domesticated birds such as chickens, ducks, turkeys, pigeons, geese, and many others is essential for meat and egg production, as well as ornamental uses. Poultry farming is widespread in Sub-Saharan Africa's various human domains, including pastoral and displacement areas. According to Berihun (2017), animal marketplaces frequently promote animal purchase for a variety of purposes, including breeding and multiplication, fattening, donating (for weddings, celebrations, and penalties), slaughter, eating, and entertainment and adornment. While a marketing system is defined as the collection of product channels, market actors, and business activities that facilitate the movement of goods and services from producers to consumers, production remains the foundation of a successful agri-food and market system (Abebe, Tadie, and Taye, 2018). The ability to modify production and marketing methods, distribution networks, and market intermediaries, and achieve heightened consumer delight determines the efficacy of poultry enterprises (Shabana and Matanda, 2019).

Roba et al. (2019) go on to argue that traditional livestock production and marketing systems in Sub-Saharan Africa have fallen short of market-driven, competitive, and sustainable commercial models, preventing them from reaching competitive levels. While agricultural economics associate's livestock marketing with a variety of functions that add utility or value to farm produce, such as time, form, and location usefulness, Berger (2015) attributes poultry farming's richness and popularity in different market categories and almost all consumption points and outlets to market access capabilities supported by implementable and effective business models. According to Isako et al. (2019) and

Ryschawy, Desenhaus, and Bertrand et al. (2017), market access is a major influencer on farmers' market involvement and risk management, resulting in a higher rate of selling animals, with the most popular being traded and consumed in huge numbers.

Families in rural areas earn money for food, clothes, education, and medical care by selling livestock and poultry products (Roba et al., 2019). According to Isako et al. (2019), in most rural areas, highlevel traders transport the majority of large and some small animals, particularly goats and sheep, on foot to primary and secondary markets, and by road to terminal markets. Given the high expenses of producing and marketing large and small stocks, poultry farming is regarded as one of the least mobile animal industries; nevertheless, because of its popularity and affordability, markets can be easily developed near production locations (Yiram, Ahmed, and Mohamed, 2017). Poultry farming in displacement contexts is a key driver of socioeconomic inclusion and a popular source of income for refugee and host community households and businesses. However, the Anno et al. (2024) study identified various production, marketing, environmental, technological, management, and financial obstacles that jeopardize the profitability of poultry operations in Turkana, rendering many of them uncompetitive, nonprofitable, and unsustainable.

Poultry Market and Socioeconomic Factors

Poultry markets, like all other animal markets, are hampered by a variety of socioeconomic and political issues, including culture, conflicts, poverty, customer taste and preferences, and demand and supply market dynamics. According to Asfaw (2018), most livestock-producing households and organizations face limited business start-up opportunities, diseconomies of scale, and competitive rivalry. According to Shabana and Maranda (2019), the primary drivers of livestock market access are population growth, urbanization, income growth in developing countries, expanding urban centers, international influences such as globalization and more liberal international trade, and technological advances in the production, communication, and transportation sectors. In addition to these constraints, chicken production is hampered by high production input costs, disease exacerbated by insufficient veterinary and epidemiological services, and a scarcity of slaughterhouses and consumer outlets (FAO et al., 2020; Anno et al., 2024).

A successful livestock marketing system must be both market-oriented and policy-driven. According to Aggrey, Kuganza, and Muwanika (2018) and Kembe and Omondi (2018), a successful market-based livestock production and marketing strategy is based on policy and regulatory frameworks that promote ethical standards, inclusivity, and stakeholder participation. Similarly, Dido (2019) contends that small-scale livestock commerce in livestock-producing areas and primary markets must be well-organized to minimize exploitation and excessive rivalry in market transactions. According to Kembe and Omondi (2016) and Anno, Khavetsa, and Etabo (2023), the culture and sociology of livestock-keeping entities, as well as diverse consumer behaviour and touchpoints, continue to influence livestock and product purchase and consumption, particularly in Turkana.

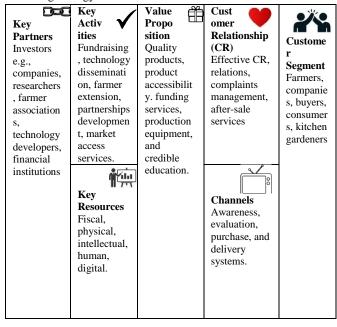
Poultry Marketing Model vs Market System

Boundary partners play an important role in poultry production, product development, and marketing. Ameso et al.'s (2018) study on the role of non-livestock sectors in pastoral area development, as well as Dido's (2019) study on livestock marketing practices and systems, show that there is sufficient investment in non-livestock sectors in pastoral systems, with a limited emphasis on the pastoral economy's improved production and marketing capabilities. This

can help to improve poultry farming operations through privatesector investments. Furthermore, a few studies, such as Lubungu (2016) and Shibru (2017), show that planning livestock production and marketing interventions, as well as coordinating the various interests of partners and stakeholders with strong market ties, can help local business owners enter new markets and compete more effectively.

By creating a livestock trade culture, pastoral production objectives that are firmly anchored in the market economy will be transformed into an embrace of market access capabilities, increasing the involvement of pastoral communities in the growth of the dryland economy and enhancing the well-being of households and communities (Mwangi, Ngigi, & Mulinge, 2015). Regulations controlling the production, trade, and consumption of a variety of livestock-based products and services will be strengthened if governments and civil society organizations invest in policy development and implementation strategies, according to Kgosikoma and Malope (2016) and Cheteni and Mokhele (2019). The administration of diverse livestock market segments will be shaped and facilitated by legislative and regulatory frameworks that center on the livestock marketing agenda, impacting both domestic and international markets (Shibru, 2017). According to Kgosikoma and Malope (2016), this finding highlights the significance of expanding both domestic and export markets to lower poverty, boost income for livestock producers and traders, and sustain the upward trend towards more stakeholder marketoriented behaviour, all of which benefit dependent business groups and households as well as the poultry production industry.

Anno et al. (2024) developed a poultry business model canvas for Turkana that includes key partners, key activities, value propositions, customer relationships and segmentation, key resources, communication channels, cost variables, and income streams. In Turkana, acute scarcity of production and market access factors have been observed to impede the performance of poultry enterprises. According to Macharia et al. (2022), these difficulties can be addressed through careful planning, effective business delivery pathways, monitoring and evaluation, strategic investments to mitigate the consequences of competition, and diversification of business niches in response to market demands. The model business canvas below presents the main parts of poultry farming and marketing plan that can inform production and marketing strategy.



Cost Structure

Cost-driven structure,
maintenance costs, employee
remunerations, effective marketing,
research and technology
development, utilities.

Revenue Stream

Product selling, transactional fees, extension and outreach, spot market deals, technological inventions, donor funding, and business grants.

3. RESEARCH METHODOLOGY

The study used an exploration research design to gather views from livestock development stakeholders on poultry farming and marketing strategy for Turkana. A survey design was used, with structured and semi-structured questionnaires distributed to randomly selected poultry-producing households (n=88), managers of poultry-producer groups (n=10), representatives of nongovernmental organizations (NGOs), and community-based organizations supporting poultry farming and livelihoods (n=26), and purposefully selected government officials (n=8). The survey had 132 participants, with 48 percent being women and 63 percent as youth. Literature was extensively explored to gain additional insights into livestock farming and marketing strategies in Africa, the Horn of Africa, Kenya, and Turkana regions. Much of the survey responses were analysed qualitatively and expressed in strategy statements.

4. RESULTS AND DISCUSSION

Strategic Focus on Poultry Production and Marketing in Turkana

The study discovered that many Turkana households engage in poultry farming, specifically chicken farming. Nonetheless, just a few chickens are kept per home (at least five). Poultry producer organizations, primarily composed of women's and youth groups, have attempted many programs to raise chicken and chicken products for the market throughout all of Turkana's sub-counties, including refugee settings. The main issue is inconsistent productivity caused by expensive and scarce resources such as improved feed, improved chicken breeds, Turkana's harsh daily weather, land regularization and access, a poor cash economy at the household and community levels, an undefined poultry market, insecurity in some areas, and a lack of enough water for poultry production across the county.

All study participants emphasized the importance of poultry production and marketing strategy ability to maximize production that creates products of value for target markets with significant direct and indirect economic returns distributed proportionally to stakeholders in the sector. Farmers and entrepreneurs envision a well-coordinated and streamlined poultry development program that will transform poultry production and marketing in the county by applying analytical processes to internal and external poultry industry environments, as well as managing services and risks. This program will identify production, financing, marketing, operations management, and human resource management pathways in the poultry industry.

Strategic Objectives of the Poultry Production and Marketing Strategy for Turkana

Production Objective:

The study identified production targets as the cornerstone of the poultry industry. This is where poultry products are made. To achieve the intended production thresholds, it is discovered that the Turkana County Government departments of Livestock Production, Veterinary Services, Trade, and Cooperatives can succeed by investing in a roadmap for poultry farming and trade in the county

with the full participation of civil society (NGOs, CBOs, Refugee Led Organizations [RLOs]), the private sector (producer groups, vendors, consumption outlets [hotels, wholesalers, retailers]), and communities (farmers). The same stakeholders should be involved in a sensitization plan aimed at improving production and market access, with a particular emphasis on poultry farming as a source of income and scalable business potential.

Promoting poultry production aim will increase the appeal of poultry production and marketing, expanding the business's reach, profitability, and sustainability. As a result, poultry producers will increase their commitment to investing in production procedures that provide marketable outputs. To improve brand loyalty and access to chicken products, producers and consumers must be convinced of their nutritional value and importance. To achieve consistently better results, stakeholders must conduct market surveys to assess production potential and market access capabilities, resulting in a season-long, sustainable industry that appeals to a diverse consumer clientele.

Financial Objective:

This objective is to position poultry businesses for financial success and expansion. To attain this result, the study discovered that stakeholders could map the financial needs of various poultry enterprises and specify the funding sources appropriate for each business category. Donor-funded projects integrating poultry farming into livelihood activities, business grants given to community producer groups, Kakuma Kalobeyei Challenge Fund (KKCF) projects, business loans provided by private sector players such as commercial banks i.e., Equity Bank, enterprise support organizations such as INKOMOKO, cooperatives, and village banks utilizing concepts such as Village Savings and Loaning. The Turkana County government periodically supplies chicken to households and producer organizations. To capitalize on the many financial opportunities presented by these fiscal partners, among others, efforts to establish a strong funding base and maintain capital access are regarded as critical milestones to sustain funding for the diverse poultry business and leverage during times of uncertainty.

The study also found that poultry businesses in Turkana that demonstrate financial strength, among other competitive and comparative advantages, require a fiscal management strategy. Promoting poultry farming business models that provide a higher return on investment (ROI) ensures financial security and predictability. This outcome is assessed and determined using accurate investment assessments as well as continuous enterprise performance monitoring and evaluation by the established project management cycles and routes. The study also emphasizes the importance of improving the performance of business groups financed by donors and financial institutions in terms of the smart use of financial and physical resources for poultry operations. Financial decisions should be strategic, high-yielding, and geared towards cost-effective poultry business activities. Important poultry production and marketing projects should not be undertaken on a short-term basis and defining market needs should correlate to financial investments and economic returns valued by the market.

Marketing Objective:

The study supports the concept that players in the poultry value chain must ensure that every poultry enterprise has strong production and marketing components planned to use a market-based approach. The expected economic returns should be determined during the project evaluation stage, and the paths for

achieving the desired output should be practical and attainable. It is vital to monitor the market functionality and performance of each value chain (product) to ensure that poultry businesses can maximize gains even during unpredictable times. Poultry marketing entities should be identified, their responsibilities and interests defined, and they should compete to adopt cost-effective, distinctive, and sustainable marketing systems. This will safeguard poultry value chain organizations in highly competitive marketplaces that are prone to risks and uncertainties.

The market of chicken value chains should be capitalized on so that agencies may support their beneficiaries while also gaining market share in local marketplaces that have long been dominated by external proprietors. External business entities control the prospective poultry value chain markets by selling live chicken, eggs, and poultry feed. To do this, efforts should be made to increase customer loyalty to local manufacturing output. This implies that monitoring client behaviour, tastes and preferences via extension services is strategically vital. The poultry value chain task force in Turkana should map all potential poultry value chain actors and product consumption outlets to create a communication plan that ensures feedback and the development of follow-up measures toward reinforcing all the components of the poultry value chain in Turkana.

Operations Objective:

The roadmap for poultry value chain development should focus on improving the efficiency and effectiveness of value chain activities, including primary services i.e., inbound and outbound operations, marketing and sales, services and support services i.e., procurement, infrastructure, Human Resource Management, and technology development. These efforts will include the necessary content and methods for establishing an efficient and productive chicken production and marketing system. Additional conditions for the health and safety of stakeholders, homes, and poultry product consumers can be ensured by a partnership with the Turkana County government's veterinary and animal production departments.

The study emphasizes the importance of chicken value chain stakeholders in spreading information on zoonosis and other notifiable diseases of public health importance. This includes the requirement for routine poultry management techniques, such as mass treatment, immunization, and extension services. It is also the responsibility of stakeholders to guarantee that any poultry value chain project implemented adheres to the required quality standards. Quality assurance and oversight should be included throughout the project delivery value chain. Additionally, poultry production and resource economics are critical in poultry value chain initiatives. Stakeholders should assess how poultry initiatives impact the economy, society, and environment. Poultry initiatives should positively impact populations' socioeconomic and environmental well-being, with no negative consequences for any humanity sphere.

Human Resource Objective:

The poultry value chain task force comprises agencies and individuals with a wide range of expertise, skills, and experiences, can support partner projects by providing the necessary human resources and other critical production and managerial inputs. Can ensure that the motivation of agencies and staff involved in poultry value chain operations is improved and sustained so that they can meet their business targets and have the desired beneficial impact on beneficiaries. The study also established the prudency of

ensuring that each agency and staff responsible for certain components of the poultry value chain have their performance continually monitored.

Empowerment and exposure to confidence building and increase of decision-making capacity of parties concerned with poultry value chain development in Turkana is achieved by providing learning opportunities, comparing production and marketing possibilities, and taking collective action in areas that require stakeholder participation. Because the best products are co-created through collaboration with third parties, the study emphasizes the need for prudent utilization of the available resources e.g., information, skills, and experiences, and making them accessible to all actors. This is crucial for enhancing poultry project outcomes, as well as improving the performance of external and internal business ventures.

Principles of Service

The Principles of Service aim to help poultry producers and feed formulators by empowering each component to maximize available opportunities, develop solutions to mitigate inherent challenges, and facilitate linkages that would improve poultry nutrition, and productivity, and for the attainment of significant economic returns from markets. Support for vendors strengthens poultry value chain services by providing functional transportation and communication systems. As a result, actors will be assisted in connecting production to markets, and consumer behaviour analysis will guide how poultry enterprises thrill and please target markets. Principles of service also ensure that stakeholder efforts and actions are coordinated to improve the efficiency of poultry project delivery systems

Resource mobilization, investment appraisal, quality control, standards, and ongoing market research and analysis are found to ensure that poultry initiatives remain relevant to developing nutritional, food, and economic insecurity management strategies. The empowered poultry value chain stakeholder will ensure that all poultry projects are customer- and consumer-focused. This will be accomplished by lobbying and advocating for livelihood possibilities that substantially influence various consumer groups. To strengthen the design of poultry projects and beneficiary targeting, actors will assist the government with production, marketing, and beneficiary targeting frameworks. This will be accomplished by integrating beneficiary targeting guidelines where those in greatest need, such as the rural poor, refugees, people living with disabilities, widows and widowers, orphans, and those living with HIV/AIDS, among others are prioritized to benefit from poultry farming and marketing activities.

Poultry Industry Analysis

Poultry Value Chains Analysis:

The study identified three potential value chains for the poultry sector in Turkana i.e., eggs, meat, and chicks. Eggs are produced by Indigenous and improved chickens for domestic and commercial use, broiler production ensures meat output and the development of local poultry breeds, while chick production allows for the replenishment of home flocks, support for poultry production self-help groups, and economies of scale in production, distribution, and consumption. Manure production is critical because it encourages crop production by small-scale farmers, such as household kitchens and school gardens. Given the scarcity of feed, feed production can ensure that assorted poultry feed is produced locally and supplied to local markets at a reduced cost, whereas poultry curative and prophylactic services can aid in the

management of poultry diseases and conditions through season-long calendars of response services and activities.

Extension services are essential for chicken production and marketing. It would help to ensure the uniformity of extension services in the transformation of poultry value chain components. Furthermore, it would ensure consistency in poultry product consumption, brand identity, loyalty, and delight for customers, consumers, and policy/duty bearers in charge of encouraging animal production and marketing in Turkana. Input supply will expedite the acquisition of poultry production inputs where the relevant organizations and government assure effective targeting and delivery of services based on the identified model. Poultry farming as an alternative livelihood that fits well in emergency humanitarian contexts can increase the possibility that it will be employed to respond to emergency food shortages. This is due to the robustness and prolificacy of poultry enterprises.

Analysis of the External Environment:

The study proposes that players in poultry development should keep a close eye on internal market factors such as demand and supply, as well as the causes that influence them, to determine the breadth and scale of chicken production and enterprise performance in Turkana. These market pressures are crucial for agencies to link poultry output to consumption indexes. Non-market forces, including social, cultural, traditional, economic, political, environmental, technological, legal, and ethical, are important because they show the impact of external elements on the internal operations of poultry interventions. Stakeholders would then combine surveillance of both internal and external market dynamics to maximize poultry enterprises. Any detected risk should be managed by strategic, policy, and market-based solutions that are cost-effective, affordable, and long-term.

Market Analysis:

Stakeholders who conduct SWOT analyses regularly to determine strengths and weaknesses (internal) and opportunities and threats (external) in Turkana poultry production and marketing will inform strategies for leveraging poultry production and value chain activities from the effects of internal and external factors. To promote chicken as an enterprise, stakeholders will conduct market segmentation based on the nature of the poultry business and market scope and needs. This segmentation will allow local poultry entrepreneurs to gain a significant market share while also meeting the needs of various poultry markets in Turkana. To compete with the highly competitive traders who have (for so long) controlled the chicken market in Turkana, stakeholders can do so by empowering the agencies and private sector organizations operating in Turkana to invest in product diversification through distinct production and marketing strategies. This is accomplished effectively by labour specialization relevant to quality products, enhancing competitive production and marketing, and fostering the unity of purpose among all parties with a common interest. Promotion, selling, product management, pricing, marketing information management, finance, and distribution are essential to market aspects that must be regularly analysed to establish the scope and delivery of poultry enterprise marketing responsibilities in the long run.

Risk Analysis and Management:

On production risk, poultry value chain stakeholders must consider the volatility and performance of new poultry breeds, the impact of production limiting factors, production context analysis, measuring the attitude of producers, vendors, consumers, and value chain partners, and investment hesitation where poultry projects are viewed as non-viable and irrelevant. In terms of financial risk, stakeholders should maintain consistency in financial investments, consider reinvesting profits with a high return on investment (ROI), reduce operating costs and capital intensity, and evaluate financial performance for the robustness of managerial and financial accounting decisions. On market risk, stakeholders can regulate and manage competition, value chain duplication, a lack of product distinctiveness, and market share determination, as well as investigate market segmentation and business mergers and partnerships as appropriate.

Human Resource Risk can be handled by acquiring the necessary information, skills, and attitude adjustment among the entities concerned, resulting in improved performance for poultry enterprises. Key enablers include business and enterprise management, human resource capacity development, knowledge management and sharing, low-cost chicken production technologies and systems, and fiscal and physical resource management and accountability. Economic risk (external) consideration can help manage recession (unemployment), customer purchasing power and limited budgets/choices, operational costs, input discontinuation, the need to invest in local solutions, and the transfer of costs to poultry value chain consumers. Stakeholders must ensure the availability and affordability of poultry products in all target market segments. Any market dynamic that partners are concerned about, such as competitiveness, ethics/morality, organization, and dispute resolution, should be mitigated by the relevant parties.

Marketing Plan:

Managing the marketing mix and raising awareness among the public, i.e. ensuring that the correct product is in the right place, at the right time, and at the right price, is crucial for Turkana's poultry value chains to thrive. Market system protection, including demand and supply, competition regulation, market jurisdictions, and effective price discovery/proposition management using scientific methodologies that do not hurt businesses or customers, will lead to an increase in poultry product consumption. Customer happiness and brand loyalty for long-term consumption of poultry value chains are strengthened and sustained by effective management of consumer behaviour, tastes, and preferences among a larger clientele.

Participatory Monitoring, Evaluation and Learning (PME&L Plan)

The successes and problems of poultry projects being handled by numerous stakeholders in Turkana County and affiliated corporate/self-help groups can be assessed through regular, participatory monitoring, assessment, and learning. Stakeholders would be able to assess socioeconomic change and advantages resulting from poultry development projects, as well as determine poultry and product market functionality and capitalization throughout seasons. To determine the level of satisfaction with poultry development programs among farmers, vendors, partners, and policyholders, the PME&L will also improve levels of communication, lesson learning, adoption and replication, changes in production and marketing techniques, and livelihood diversification facilitated by poultry keeping and market benefits. Over time, stakeholders will create and use Standard Poultry Value Chain Monitoring Tools to manage all poultry industry contents and processes.

Poultry Industry Development Enablers

Production Enablers:

Market research is critical for establishing feasibility, functionality, efficiency, and strategies to overcome variations in chicken farming and marketing. Research on costs and benefits to determine which poultry production decisions to make and which to avoid, determination of market demand to demonstrate the purchasing power of various consumer categories, price stability, feed and nutrition requirements based on the needs of different poultry species, consistent and affordable water supply, costeffective value chain development processes, and hygiene are all critical for the efficiency of poultry production projects. The availability of production factors and market conditions determine whether production systems should be intensive, extensive, or any other scale. Housing demands, such as cages for brooders, broilers, layers, breeders, and other housing systems, are also determined by the area's production environment and market recoverable costs. Health care and veterinary services are designed to meet the demands of chickens at various stages of growth.

Poultry breeds and breed improvement, product improvement to fulfill quality and quantity standards, credit and access to credit through lender identification, and cost of credit based on interest rates, and access to credit are all significant production enablers. Biosecurity measures and the implementation of security measures to reduce the likelihood of pathogen introduction, establishment, survival, or establishment within poultry production sites, to the community, and the larger environment can help ensure the public's trust in poultry products destined for markets, as well as ease of traceability. Stocking rate, which determines the number of viable poultry to keep in units/production locations over a given period, flock size management, clean and reliable energy supply for production processes, lighting, and heating, as well as the costs involved, capital, and equipment, will all help to strengthen poultry production activities on farms.

Financial Enablers:

Working capital for poultry production organizations' liquidity through a focus on the relationship between assets and liabilities, debt finance plans for borrowing and repayment in the specified future, and financial planning to determine the current financial situation and achievement of the identified financial goals are critical financial enablers of poultry farming and marketing initiatives. Growth funding to realize companies' business potential through revenue streams, grant access based on merit and promising social enterprise business performance, and business credit capability to access funds and assets with the assurance of repayment later are all ways to increase business capital resources. Building revenue streams with a positive variance in comparison to the past, as well as improving financial and enterprise management with an emphasis on monitoring, controlling, protecting, and reporting organizations' business resources daily, will strengthen investment, managerial, and financial accounting decisions.

Capital brought in by poultry business owners and how it is recovered from business outcomes, as well as expense management based on strategic and operational planning, enable organizations to execute their strategic business objectives and actions efficiently. Furthermore, tax planning allows poultry-producing organizations to pay the lowest taxes possible, effectively utilizing funds through proper budgeting, accountability, and sticking to the approved costs. Evidence-based business and financial forecasting using past financial data and current market trends can help make informed assumptions for the future and utilise possible business

mergers to strengthen local production and marketing capabilities and for the management of competitors.

Market Enablers:

Economic considerations are important in the context of Turkana and its displacement setting. Unemployment rates, inflation, commodity price changes, political influences where government policy and regulations shape business strategies and approaches, and targeting markets based on customer characteristics and market needs have all been identified as key market enablers for poultry enterprises. This is further achieved through raising brand awareness by improving knowledge of poultry businesses and products available in local and international markets. Socioeconomic aspects to consider include societal attitudes, beliefs, perceptions of markets, and marketing metrics and analytics to help track and analyse data from marketing operations and make quantitative forecasts. The research study emphasizes that the market's attractiveness and opportunities for poultry enterprise organizations, affiliate entrepreneurs, and consumer delight can strengthen production and market access factors.

Customer creation facilitates the conversion of prospective customers into actual purchasers and users of business products. This is critical for poultry operations. Measurable market results on stakeholder involvement, product competitiveness, market share significance, profitability of poultry operations, and domination of local businesses in their native markets ensure the sustainability of market access programs. Budgeting for marketing operations and access costs, promoting value chains/products through advertising that can generate consumer interest and spur significant purchases, defining market goals through strategic visioning and mission on poultry enterprises, and sustainability of value propositions through appealing statements on the benefits that customers receive from purchasing poultry products will further reinforce market access and turnover of poultry products.

Operations Enablers:

The study identifies three critical operations enablers: operations management for the administration of poultry business structure, methods, and techniques, competitive analysis to identify competitors in the poultry market, and mapping of their competitive tactics. It is important to consider business location and proximity, as these factors influence ease of access, cost management, and the possibility of business clustering and mergers. Branding, market scope determination, and customer loyalty all contribute to the emotional interaction between customers and poultry businesses, resulting in trust in brands and a willingness to pay more for various products. Improving existing business processes, including strategies and approaches for poultry production and marketing, mitigates political, economic, and social factors that affect business operations and protects the unique innovations of poultry business entities can support the tracking of operations performance indicators such as operating margins, customer acquisition costs, cash flows, product turnover rate, and employee productivity, which are key in defining the operational strategy of any business endeavour.

Human Capital Enablers:

Training and development for improving team performance in business organizations, reinforcing compliance to maintain established guidelines for poultry-related businesses, and Human Resources planning that facilitates the best fit between employees, the jobs assigned to them, and the strategic business goals are all critical in building businesses powered by human resources

expertise. Recruitment of the best skills through open and transparent processes, employee engagement and satisfaction, maintenance of business plans and human resource coordination, and ensuring worker protection through HR policies and regulating worker services by the law all contribute to the best and most competitive leadership and management systems that poultry enterprises require to thrive, become competitive, and profitable. Investing in employee interactions, health, and well-being, and defining organizational culture will motivate staff to work harder to achieve poultry market delight.

Accuracy and precision in business processes and dealings, empathy, particularly in social enterprises and targeted vulnerable populations, team-based customer support, and consistency in empowering and engaging employees define a holistic approach to maximizing poultry production and marketing opportunities through human resource influence. Transparency and the ability to listen to the workforce and target customers, holding poultry businesses accountable, responsive, and on a continuous path of improved performance, will reinforce the business focus on strategic needs and value for customers, honesty, and the ability to ensure poultry products demanded by the market are available and affordable. Considering the pace of production and supply of poultry products to the market, as well as the potential for business collaborations, would increase the business's future structure and the scope of dynamism required to manage the changing market and consumer needs. Customer relationship management (CRM) is a theoretical framework for developing healthy corporate settings where employees and customers can connect and ensure that business goals are met through a satisfied market and customer

Innovation and Human Relational Enablers:

The utilisation of modern agricultural skills in production, value addition, and marketing services, as well as the use of technology such as mobile apps and digital platforms, are all promoted by innovations. Practical solutions for enhancing the efficacy and productivity of poultry and market access initiatives are provided by the accessibility and affordability of technology. The nutrition status of refugees can be positively influenced by poultry (chicken) husbandry, as it is the livestock species that is kept by most refugee households. By collecting data and evidence on the diversity scores of household foods, it is possible to improve the nutritional outcomes of children under the age of five, expectant women, and individuals with chronic illnesses. Poultry farming is also crucial for the development and execution of strategies that ensure equitable access to poultry farming activities for marginalised groups, thereby promoting gender and social inclusion. Enhanced climate-smart poultry practices, including the use of droughtresistant feed crops, water-saving technologies, and the protection of poultry from extreme weather conditions, are achieved through the development of targeted capacity-building programs, access to finance, and climate resilience adaptability practices.

The provisions for transportation, storage, distribution, and security of poultry and poultry products along the marketing value chain will be determined by an analysis of supply chain and logistics that is specific to refugee settings. Legal and Ethical Considerations would establish the legalities associated with poultry production in refugee settings, including land use rights, animal welfare standards, labour laws, and guidelines for addressing these issues. Community engagement and social impact will further emphasise the significance of community engagement in the success of poultry projects. The application of empirical research evidence,

success stories, and case studies in the development of poultry projects in refugee setups will provide valuable insights into the scaling and replication of poultry production models in various refugee and host community settings. This will involve the monitoring of employment opportunities, empowerment of women and youth, and enhancement of community cohesion that poultry interventions generate. By securing funding for the expansion and consolidation of poultry interventions and establishing partnerships to achieve a broader impact, the attainment of resilience and self-reliance, which are distinct outcomes of livelihood initiatives in rural and displacement contexts, will be facilitated.

5. RECOMMENDATIONS FOR APPLICATION

The study highlights the poultry sector's challenges in Turkana due to a lack of a robust business model encompassing production, marketing, and consumption of products. To revolutionize poultry farming, a validated model with favorable costs, benefits, competitiveness, profitability, and sustainability is crucial. Applicable recommendations on specific elements of poultry production and marketing strategy are presented below:

- Certified local feed production and consistent supply can be implemented to resolve feed challenges in Turkana, thereby enhancing poultry farming productivity. Throughout the seasons, poultry supplies must be affordable, accessible, and sustainable, and they must adhere to regulatory quality standards. The county should have an adequate supply of raw materials and nutrition elements to produce poultry feed. Water management must be the primary concern of poultry producers throughout the entire poultry production process, and poultry units must be established and managed by the necessary animal husbandry standards.
- It is evident that financial constraints significantly restrict poultry production and commercialisation in Turkana. The low scope of poultry investments in Turkana is directly proportional to the limited finances and capital resources. Funding poultry farmers and entrepreneurs, enhancing their capacities through extended training, and safeguarding their market can provide them with a more competitive advantage to secure a significant portion of the Turkana market and successfully compete in other market jurisdictions, as national and county governments recognise poultry farming as a food source and a source of livelihood.
- As a result of the aggregation of poultry by leading farmers and producers, retailer purchases from aggregators, and direct purchases from local production units, Turkana's poultry marketing strategy should increase chicken production and sales. The marketing strategy should incorporate the quality of poultry products to facilitate the development and distribution of products that are worthwhile to the intended markets at a profit. This capability should be demonstrated by local producers, thereby establishing a successful marketing strategy that will enhance the production, marketing, and consumption of poultry value chains in the county.
- The diversification of Turkana's poultry production and marketing portfolio is contingent upon the optimisation of farm and market factors, contract farming, and consistent product pricing. In Turkana, poultry farming operations will be strengthened through strategic financial planning, biosecurity measures, health assessments, insurance utilisation, competitiveness management, technological innovation, and partner resilience, resulting in improved performance and enhanced enterprise reliability. The development of expertise in Turkana regarding the various components

of the poultry value chain will enhance the administration of enterprises and poultry farming, as well as livelihood programming in general. To provide refugee households (particularly in Turkana) with the greatest possible advantage in utilising the sole form of livestock (poultry) that has been authorised for their possession for security and convenience reasons, these human resources capacities should be similarly improved in refugee settings.

- Despite resource constraints, it is practicable to enhance poultry breeds in Turkana. To ensure that introduced poultry species prosper in regions with restricted production resources, research is required to enable breeds that are resistant to stress and disease to exhibit productivity. Chicken continues to be the most kept bird. The introduction of additional poultry species has the potential to expand the scope of poultry farming, diversify enterprises and livelihoods, enhance nutrition, and increase income.
- The industrial analysis of Turkana poultry is essential for the purpose of illuminating sector prospects and strategic interventions. The reinforcement of supply and demand

- relations in all market segments will be achieved by mapping poultry enterprises and value chains in Turkana and connecting them to their respective markets. The external environment, market analysis, risk assessment and management plans, and monitoring, evaluation, and learning activities should all be included in industrial analysis.
- Additional research should be conducted to optimise poultry production, financing, marketing, operations, human resources, and innovation enablers. These factors significantly influence Turkana's pursuit of poultry husbandry success. Although the intensity of poultry farming inhibitors is substantial in Turkana, converting them into opportunities for poultry industry growth would necessitate the expansion of production and marketing activities, as well as the importance of poultry initiatives in the context of food, nutrition, and income security for the population.
- Poultry industry stakeholders in Turkana should put into use the below framework for efficient production,
- marketing and improved consumption of poultry products in various markets.

PILLAR 1

POULTRY PRODUCTION DESIGNS & PLANS

- · Research: Links production and market needs
- Breeds: Selection of disease-free and suitable breeds.
- Land/Farm scale: Conducive for small and large-scale poultry enterprises including diversified value chain.
- Farm condition: Providing proper and safe farm structure.
- Water & Feed: Provision of enough and quality water and feed.
- Labor: Human and mechanical labor corresponding to the expected value chain outputs
- Economies of scale: Reducing the cost of producing a unit and ensuring scale, productivity, and profitability.
- Management: Knowledge and skills necessary for running poultry farms and production value chain activities.
- Hygiene: Maintenance of proper hygiene and sanitation.
- Health care: Maintenance of proper health care services.
- Security: Safety of poultry farm, units, assets, and personnel.
- Risks/Uncertainties: Well-noted social, economic, political, environmental, technological, and environmental risks including management system.
- Policy guidelines: Policy dictates on poultry production are strictly followed.

PILLAR 2

POULTRY PRODUCTS MARKETING

- Competitive market analysis: poultry products marketing advantage, marketing challenges, competitors and rivals, and external influence management.
- Target market analysis: Customers, location, media consumption, pain points, motivators, loyalty, willingness to purchase and pay.
- Poultry business goals definition: Smart marketing and sales goals defined.
- **Define Marketing Mix:** product, price, place, promotion, people, process, and physical evidence (7 Ps of marketing).
- Pricing strategies: Value-based, competition-based, cost-plus, and dynamic pricing.
- Strategy explanation: Value proposition, product benefit, customer service, and attaining strategic sales.
- Tactics demarcation: Brand making and messaging, product differentiation, brand communication.
- Resources designation: Roles in marketing and sales, marketing skills, and marketing resources.
- Marketing budget allocation: Marketing plan affordability, resources economics, and payback periods of marketing resources.
- Policy guidelines: Policy dictates on the marketing and consumption of

PILLAR 3 POULTRY PRODUCTION AND MARKETING DELIVERY COMPONENTS Suppliers: Poultry, feeds, medicine, construction materials, Service providers: Production and veterinary services, extension, equipment. financial services, policy guidelines. **Poultry producers:** Farmers/Households, Producer groups, Farmer Field Schools (FFS), Farmer Service Centres (FSC), Producer companies. Trade: Traders and middlemen/Brokers/ aggregators, business partnerships. Industry/Business customers: Purchasing poultry products, poultry slaughterhouses, and complementary products to make other products. **Product End consumers:** Primary (households), secondary and tertiary for business purposes.

Figure 2: Poultry production and marketing strategy for Turkana.

6. CONCLUSION

This research concludes that poultry farming offers numerous advantages for people, commercial entities, and the consumer market. Nonetheless, production, marketing, consumer, and policy-related challenges restrict the potential benefits of the industry. Poultry production and marketing strategies are essential; nevertheless, each component necessitates strategic planning and resource allocation to provide a comprehensive and effective framework. A stakeholder-coordinated approach to poultry farming and marketing will align partner intentions and efforts to leverage poultry farming as a swift solution for food, nutrition, and income security while capitalising on the popularity and high demand for poultry products in the market to attract micro and macro investments that can enhance the importance of poultry livelihoods and investments in Turkana.

It is stated that enhancing the local capacity of poultry enterprises through knowledge acquisition, technological advancement, and capital resources can enable them to secure their local market share and compete effectively in other jurisdictions. Research is necessary to ascertain the validity of the restriction that permits refugee households in Turkana displacements to keep poultry but prohibits them from keeping small livestock, due to concerns over insecurity from the host population. The integration of refugees who keep other livestock species will enhance their livelihoods and broaden their agricultural practices, as their current enterprises are limited to chicken farming and butcheries. To actualise the potential of poultry farming in Turkana, the Poultry Production and Marketing Strategy is essential.

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