

Current Status of Poultry Meat Production, Processing and Marketing in Ethiopia: A Review

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Abstract

The review was conducted to assess the current status of poultry meat production, processing and marketing in Ethiopia. It assesses Ethiopian poultry meat production potential, status of poultry meat consumption, and challenges of Poultry meat production and marketing in Ethiopia. According to [1], Ethiopian poultry is estimated total population of 57 million. In Ethiopia, about 14.3 million poultry were slaughtered (9.5 million Male and 4.8 Million Female). The Poultry meat production is conservatively estimated to be 21,853 tons per year. From this, 18,192 ton (83%) from Male, and 3,659 ton (17%) from Female chicken. As a result, the estimate of total number of eggs produced during the year is about 369 million. The per capita poultry and poultry product consumption in Ethiopia is one of the lowest in the world: 57 eggs and 2.85 kg of chicken meat per annum. The marketing system of poultry and poultry products is generally informal and poorly developed. Low levels of education among producers, and inadequate availability of water and electricity, poor coordination of the value chain linkages between input suppliers, service providers, producers, traders and retailers, along with a lack of credit services and risk adverse investors limit production and marketing of poultry production in Ethiopia.

Keywords: Poultry; Meat; Production; Marketing; Substitution

Introduction

Poultry production systems of tropical regions are mainly holidays. In general, poultry consumption accounts for based on the scavenging indigenous chickens found in less than 1% of the total annual food needs of farm virtually all villages and households in rural area. It has households [2]. Rural chicken in Ethiopia represents been estimated that 80% of the poultry population in significant part of the national economy in general and the Africa is found in traditional scavenging systems [3].

Ethiopian poultry is an estimated total population of 57 million. Poultry includes cocks, cockerels, pullets, laying hens, non-laying hens and chicks. Most of the poultry are lying hens (34.26 percent), followed by poultry are chicks (32.86 percent). Pullets are estimated to be about 6.47 million in the country. Cocks and cockerels are also estimated separately, and are 6.38 million and about 3.27 million, respectively. The others are non-laying hens that make up about 4.59 percent (2.61 million) of the total poultry population in the country. With regard to breed, 78.85 percent, 12.02 percent, 9.11 and percent of the total poultry were reported to be indigenous, hybrid and exotic, respectively [4].

Poultry production stimulates local economic development of urban centers through the development of related micro-enterprises wholly or partly responsible for the provision of inputs and processing, packaging, and marketing of outputs as well as the provision of services to the sector [5].

The productivity of poultry has been limited by the scarcity and subsequent high prices of conventional protein and energy sources in Ethiopia. Poultry producers in Ethiopia are constantly complaining about the high cost and quality of poultry feed on the market. The quality of mixed feed used is generally poor and most formulations available do not have vitamin or mineral premixes [6].

In Ethiopia, poultry industry plays a significant role in the supply of human food (eggs and meat) in rural and urban area and as a source of income, especially to small holder farmers. About 95.86% of the total national poultry products (eggs and meat) are contributed by indigenous chickens kept under village management system while

the remaining 1.35% is obtained from intensively kept exotic breed of chickens and 2.79% are obtained from hybrids. Poultry meat and eggs are relatively cheap and affordable sources of protein for most consumers, compared to other animal products such as beef. At the household level poultry is important to the nutritional well-being of household members especially children and as income source for women. However, the per capita poultry and poultry product consumption in Ethiopia is one of the lowest in the world: 57 eggs and 2.85 kg of chicken meat per annum. The marketing system of poultry and poultry products is generally informal and poorly developed [7].

Objectives

The objective of the study is to review on Current Status and challenges of Poultry Meat Production, Processing, Consumption and Marketing in Ethiopia.

Poultry meat production and processing

Poultry is one of the most important agricultural subsectors for rural communities in Ethiopia. The poultry production systems of Ethiopia are classified into the industrial and integrated/medium- and large-scale intensive systems and the different categories of family poultry production systems (i.e., the small-scale intensive, semi-intensive, extensive scavenging and small-extensive scavenging systems [8]. Producers keeping over 1,000 broilers, or 500 layers are considered the medium- and large scale intensive systems. Within such systems, there are large variations among producers in terms of technology use,

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management level and scale of operation. Medium- and large-scale intensive poultry producers are mainly located in and around cities and major towns such as Addis Ababa, Bishoftu and Adama. Broiler production is concentrated in Adama, Modjo and Bishoftu; pullet rearing is heavily concentrated in Bishoftu; while egg production is mainly in Addis Ababa [8].

In Ethiopia, about 14.3 million poultry were slaughtered (9.5 million Male and 4.8 Million Female). If we convert to meat based on Halima, 2008 (1Male chicken = 1.691 Kg, and 1Female chicken= 0.758 Kg), the Poultry meat production is conservatively estimated to be 21,853 tons per year. From this, 18,192 ton (83%) from Male, and 3,659 ton (17%) from Female chicken. As a result, the estimate of total number of eggs produced during the year is about 369 million [9].

According to [9], small-scale farms usually sell live birds and do not have slaughtering facilities. Those who slaughter chickens at their farm use hired labor/butchers and brokers who take the carcasses to their own premises to dress and freeze them for marketing. Slaughtering and processing are carried out manually and 'Halal' slaughter is not practiced. However, some farms slaughter, process, and sell spent chickens to market vendors for sale in mini markets and specialized shops equipped with deep freezing facilities. As we can see from the (Table 1) above, United States of America is the leading country in poultry meat production having 17% share of the World's capacity. Ethiopia have the lowest capacity even when compared with other African countries. In Africa, South Africa is the most producer of poultry meat having around 1.5% from the world's total production.

Poultry meat marketing in Ethiopia

Poultry and egg markets in Ethiopia are at an early stage of development. The scavenging family poultry production systems are the principal providers for the domestic market, supplying most of the marketable poultry products. The share of the intensive and semi-intensive poultry systems in the national market is currently on the rise. There are a few private large-scale commercial poultry farms in Ethiopia, most of which are located near the capital or regional towns. Alema Farms, ELFORA Agro-Industries, Ethio chicken, SAFE Poultry PLC, Astral Foods and Feedco Animal Feeds PLC are among the major companies importing breeding stock, supplying DOCs, and hatching eggs. ELFORA, Alema, and Genesis are the three largest commercial poultry farms with modern production and processing facilities [10].

In Addis Ababa (Ethiopia) the high price of feed, shortage of land, unavailability of pullets in time, high cost of pullets, feed quality, shortage of water, lack of available feed in nearby areas, marketing difficulties during selling of poultry products, health problem, lack of access to credit, and inadequate training [11].

In their study of Challenges and chicken production status of poultry Producers in Bishoftu, Ethiopia, almost all (98.0%) of poultry producers used a house confined with deep litter. Larger percentages (94.2%) of poultry producers provided supplementary feed to their

chicken. A higher percentage (82.7%) of poultry producers fed a commercial ration while 17.3% fed mixed feed to their chicken [12].

Market prices of chicken in Ethiopia are seasonal. Consumer prices generally rise during holidays such as Easter, New Year, and Christmas. The demand of poultry meat demand increases during the time of holidays Ethiopian Christmas of 2014 E.C or 2021 i.e. indigenous breed (1000 ETB), Exotic breed (450 ETB) and Crossbreed was 700 ETB (Self-Observation).

Import substitution

According to [13], Ethiopia recorded a trade deficit of 3433.60 Million USD in 2021. Ethiopia runs consistent trade deficits due to small production of exportable goods and logistic difficulties. Main exports are gold, coffee, live animals and oilseeds. Ethiopia is a net importer of fuel, foodstuffs and textile apparel. Main trading partners are China (18 percent of total imports and 8 percent of exports) and Saudi Arabia (13 percent of imports and 7 percent of exports). Imports in Ethiopia increased to 4350.20 USD Million from 4136.60 USD Million in the third quarter of 2021.

Ethiopian Airlines Group is the most importer of chicken meat estimated 100 Ton per year for the purpose of hospitality to its customers in airplane and Skyliht hotel. There are also other hotels and supermarkets (Sheraton Addis, Lewis supermarket) importing chicken meat from different countries. The main source of chicken meat for Ethiopia are Brazil and South Africa (Self-observation).

Large amount of poultry product particularly, broiler me is imported from abroad for international star hotels and Ethiopian airlines. Due to quality standards and disease problems, the country forced to import 544 ton of poultry meat by spent 1.4 million USD in 2019. These large amounts of foreign currency need to be substituted either through adopting appropriate technologies and/or generating technologies like breed improvement and producing international quality standard poultry products [14].

Status of poultry meat consumption in Ethiopia

Over the last several decades, global meat consumption has increased tremendously. Notable increases in total consumption have been observed in all world regions, but especially in Asia, Latin America, and Africa. In terms of meat types, pork and poultry dominate in today's global consumption and have seen the strongest consumption increases [15].

Doro Wat is a saucy chicken stew which is served with Injera and boiled eggs. Chicken is a 'must' dish in Ethiopian culture for holidays and social ceremonies independent of the differences in religions. Chicken plays also an important function in their bartering value. Poultry are used for strengthening marriage partnerships and social relationships. In the local culture, women who can provide men with food like a chicken dish (*Doro wat*) are considered to be contributing to a stable marriage. Serving *Doro Wat* is also a demonstration of respect to guests, thus strengthening a social relationship which is especially important for poor households [16].

The increase in pork consumption is primarily driven by China and a few other countries in Southeast Asia. In contrast, poultry consumption has sharply increased in all parts of the world, as it is cheaper, often perceived as healthier, and less affected by religious restrictions than other meat types [17]. Although to a lesser extent, the global consumption of bovine meat, mutton and goat, and other meat types has also increased over time (Figure 1). Figure above shows

Table 1: Poultry Meat Production.

SN	Country	Production in '000' ton	Share in %
1	USA	23,000	17.29
2	China	22,000	16.54
3	Brazil	14,000	10.53
4	South Africa	1,965	1.48
5	Angola	49	0.04
6	Ethiopia	22	0.02
7	World	133,000	100.0

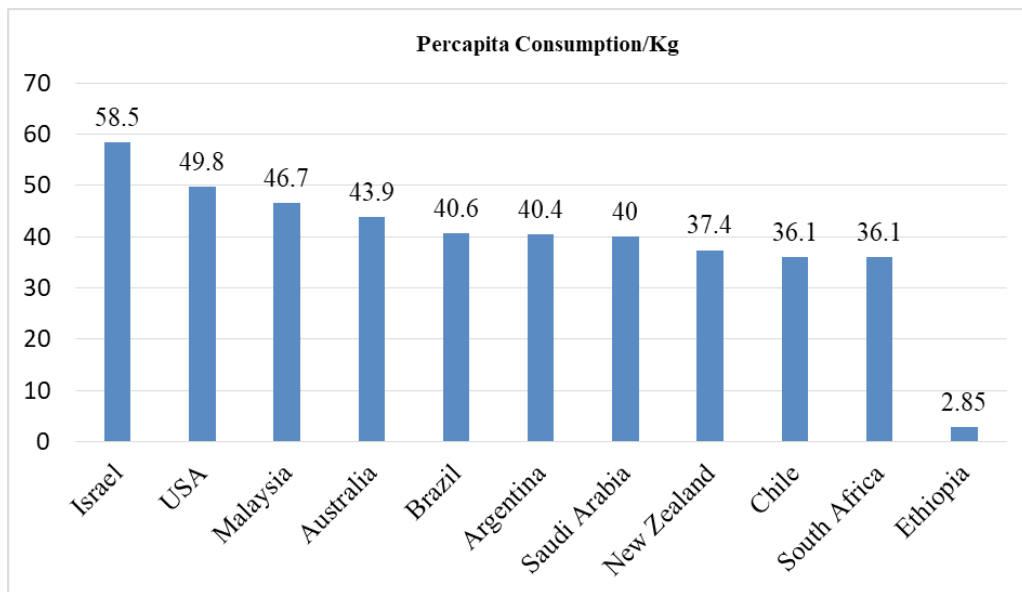


Figure 1: Poultry Meat Consumption.

the top world countries in poultry meat per capita consumption. Israel (58.5Kg), USA (49.8Kg), and Malaysia (46.7Kg) were top poultry meat consumers in the world. Ethiopian per capita poultry meat consumption is only 2.85Kg.

Challenges of poultry meat production and marketing

General issues for poultry meat production, processing and Marketing in Ethiopia include;

- High price and poor quality of feed;
- Fluctuation in demand for poultry products, with drastic peaks and declines in demand around the Orthodox Christian fasting periods;
- The poor value chain linkages between input suppliers, service providers, producers, traders and retailers;
- Inadequate Advertising or promotion;
- Inadequate working capital due to limited access to bank loan/credit for manufacturers for long term and mega projects;
- Lack well trained and highly qualified workers on poultry meat processing;
- Inadequate infrastructural facilities (Electricity, Water);
- Underutilized capacity of Poultry farms and slaughterhouses resulting in higher product costs exposing them to fierce competition against imported products;
- Technology (inadequate supply of equipment and machinery);
- Lack of provision of incentive mechanisms for quality differentiation which demotivate producers to commit for quality products.

Conclusion

Poultry is one of the most important agricultural subsectors for rural communities in Ethiopia. United States of America is the leading country in poultry meat production having 17% share of the World's

capacity. Ethiopia have the lowest capacity even when to compared with other African countries. In Africa, South Africa is the most producer of poultry meat having around 1.5% from the world's total production.

Market prices of chicken in Ethiopia are seasonal. Consumer prices generally rise during holidays such as Easter, New Year, and Christmas. The demand of poultry meat demand increases during the time of Ethiopian holidays i.e. Christmas of 2014 E.C or 2021 the average price of indigenous breed (1000 ETB), Exotic breed (450 ETB) and Crossbreed (700 ETB). Large amount of poultry product particularly, broiler meat is imported from abroad for international star hotels and Ethiopian airlines. Due to quality standards and disease problems, the country forced to import large amount of broiler meat annually.

Recommendations

From this review the following recommendations are suggested:

- To meet the demands of poultry meat and egg consumption in the country, increasing production in quantity and quality
- Promote diversified poultry meat products than 'Doro watt'
- The consumption behavior of chicken meat and egg also should not be depended only on holidays and religious festivals.
- To reduce imported poultry meat, encourage private sectors to participate on the sector;
- So as to enhancing access to finance the government should alleviate the problem of shortage of finance to fund capital goods (machinery and equipment's);

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