

## Challenges of poultry production in Nigeria: A review

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### Abstract

*This study provides a review on the challenges facing poultry production in Nigeria and the possible solution. The study considered the socio-economic roles of poultry to include; means of livelihood and a way of achieving a certain level of economic independence, meeting human needs for dietary animal protein supply, source of foreign earnings and opportunities for saving, investment and security against risks for small-scale poultry farmers. This paper reviewed the challenges of poultry production in Nigeria and how the rate of production in the industry has slowed down. These challenges included; high rate of disease and pest attack, lack of loan and credit procurement, lack of technical knowledge, high rate of mortality, high cost of poultry feed, supply of poor quality chicks, inadequate poultry extension services, and inadequate access to and high cost of veterinary services, as reported by Possible solutions to these challenges are not farfetched, which included; intervention of veterinary in order to curb losses due to diseases, technical know-how for improving production should be made available to poultry keepers through extension service, poultry farmers should be encouraged to form cooperative societies or join existing one to be able to access loan for their business and addressing these challenges will prove vital to increase production, increase animal protein availability and consumption, and reduce the rate of food insecurity.*

**Keywords:** poultry, livestock, production, challenges

### Introduction

Nigerian economy, although has been largely depend significantly on the oil sector, Agriculture remains its mainstay. Agriculture contributed 24% of Nigeria's gross domestic product (GDP) in 2008 (NBS, 2010). Agriculture is the second largest export earner after crude oil and employing over 70% of rural labour; thus, the sector ranks as a key contributor to wealth creation and poverty reduction (Nwafor, 2008). Nigeria's agricultural sector comprises four sub-sectors: crops, livestock, fisheries and forestry (Rekwot *et al.*, 2015). Crops contribute about 85% to agricultural GDP, livestock production about 10%, fisheries and Forestry about 4% and 1%, respectively in 2006 (Rekwot *et al.*, 2015). The crop and livestock sub-sectors have

maintained their shares in recent years, while the fishery has been expanding and the forestry shrinking (Nigeria vision 2020, 2009). In Nigeria, the major source of animal protein is the livestock industry. Over the years, the contributions of the livestock sub sector to Gross Domestic Product (GDP) have decreased from 5.61% in 1960 to about 2.64% in 2010 (CBN, 2010). The contributions of livestock to Agriculture in 1999 and 2010 remain at 2.64% (CBN, 2010). Livestock production constitutes an important component of the agricultural economy in developing countries and it is an instrument of socio economic change, improved income and quality of rural life in Nigeria (Okumadewa, 1999). Poultry, as an aspect of livestock production outnumbers all

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other forms of livestock in Nigeria and not surprisingly is found throughout the country (Adeyemo and Onikoyi, 2012). Today, poultry production has developed from backyard business to a commercially oriented industry. Its offer of highest turnover rate and quick returns to investment outlay in the livestock enterprises has made it unique (Adeyemo and Onikoyi, 2012). In (FDLPC, 2004) reported that Nigeria produced 2 billion eggs, 12,000 tones of poultry meat, while estimated poultry meat consumption per capital was 1.3 Kilograms (Okaiyeto and Adamu, 2004). Poultry, which is next to ruminant as a source of protein in Nigeria, accounts for almost 25% of local meat production (Nwagu, 2002). The poultry sector is characterized by relative faster growth in consumption and trade volume

than many other agricultural livestock sector. Different species in poultry production include; Chickens (local chickens, broilers, and layers), turkeys, geese, ducks, guinea fowls and pigeons. Despite the fast growing trade and importance of poultry production in Nigeria, it's not without challenges. This paper seeks to review the challenges of poultry production in Nigeria and suggest possible solution to cub these challenges to increase production, increase animal protein availability and consumption, and reduce the rate of food insecurity. The tables below shows that of all the livestock reared in Nigeria, chickens are the most populated, common and widespread, while Nigeria has the least rate of consumption of meat and egg, that is 8.1 and 3.5kg, respectively (Adeyemo and Onikoyi, 2012).

**Table 1: Nigerian livestock population**

Species	Number
Chickens	82,400,000
Goats	34,500,000
Sheep	22,100,000
Cattle	13,900,000
Donkeys	900,000
Horses	200,000
Camels	90,000
Other poultry*	31,900,000
Pigs	3,500,000
Dogs	4,500,000
Cats	3,300,000
Rabbits	1,700,000
Guinea pigs	500,000
Giant rats	60,000

\*include pigeons, ducks, Guinea fowl and turkey; FAO Corporate Document Repository in 2010.

**Table 2: Consumption of meat (including poultry) and egg in selected countries (kg/capital/year)**

Country	Meat	Egg
USA	124.0	14.5
Spain	113.1	13.9
Canada	101.1	10.8
France	99.9	16.0
Malaysia	54.0	14.4
Japan	42.4	19.2
Britain	76.3	9.2
South Africa	33.2	6.3
Libya	32.7	9.4
Israel	68.3	11.9
Tunisia	23.9	7.3
Zambia	11.0	3.9
Egypt	22.6	2.1
Sudan	21.1	1.2
Nigeria	8.1	3.5
Algeria	18.7	3.5
Morocco	18.5	5.2
Chad	15.4	0.5
Cameroon	15.1	0.7
World average	37.9	8.0

FAOSTAT, 2002

### ***Socio-economic Role of Poultry Production***

Poultry production is one of the important components of the livestock subsector in the Nigerian economy, which can be embarked upon by the people with small or no land capital (Conroy, 2005). Nigeria's poultry industry is composed of local unimproved breeds and the high performing commercial breeds. Over the last 50 years, the exotic breed has made an aggressive incursion into the production economy of the country, while the local chicken is driven by traditional system management, the exotic breeds have stimulated an industrial advancement of the poultry industry through specialization as egg or meat type strains to satisfy the increasing demand for poultry commodity in the food market (Rekwot *et al.*, 2015). It provides direct employment for a large number of rural and urban people and indirect employment to suppliers of products and services such as grain farmers, feed mill operators as well as those producing various goods and services used to support poultry production and marketing activities (Adeyemo and Onikoyi, 2012). Poultry is considered to be a means of livelihood and a way of achieving a certain level of economic independence in Nigeria. The primary purpose for keeping poultry in all parts of the country is for both dietary and economic reasons (Ogundipe and Sanni, 2002). Poultry as an aspect of livestock production is important to the biological needs, economic and social development of the people in any nation (Oladeebo and Ambe-Lamidi, 2007). However, the contribution of poultry production (meat and eggs) to total livestock output increased from 26% in 1995 to 27% in 1999 with an increase in egg production alone accounting for about 13% during the period

(Ojo, 2003). The development of the poultry industry has also been described as the fastest means of bridging the protein deficiency gap prevailing in most of the developing countries. The poultry industry, if properly harnessed can also serve as a source of foreign earnings complementing crude oil which at present constitutes the main source of foreign earnings in Nigeria (The - poultry site news 2009). In poultry production, small scale poultry production represents one of the few opportunities for saving, investment and security against risks. It accounts for approximately 90% of total poultry production (Branckaert, 1999). Poultry production in rural parts of the country is more important because of the divergent roles it plays (Nwagu, 2002). Poultry meat and eggs offers considerable potential for meeting human needs for dietary animal supply (Folorunsho and Onibi, 2005). This single reason among others has made the enterprise attractive and popular among small medium, as well as large scale poultry farmers

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Despite the leading role of poultry production in the livestock industry, it's not without challenges. The challenges of poultry production in Nigeria cannot be over emphasized. These challenges have slowed down the rate of production in the industry. High rate of disease and pest attack as a major challenge in poultry production was reported by Ajala *et al.* (2007) and Aromolaran *et al.* (2013). Lack of access to Loan and credit procurement was also identified in different research carried out (Agbato, 1997; Akeeb 1997; Adebayo and Adeola, 2005; Aromolaran, 2013). Lack of technical knowledge was also reported by Olaniyi *et al.* (2008), and Aromolaran *et al.* (2013) as another challenge facing the industry, this they say,

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that most people go into poultry farming simply because of the huge profit they see others getting, but fail to enquire the necessary knowledge involved in poultry production. High rate of mortality was also identified by Chilate and Guta (2001); Aromolaran (2013); Anosike *et al.* (2015), as major challenges facing the industry, this they say was due to supply of poor quality chicks as reported by Ajala *et al.* (2007); Adeyemo and Onikoyi (2012); Anosike *et al.* (2015). Anosike *et al.* (2015), also reported that most farmers do not have an idea of the farms that hatch the chicks they buy, as they buy from road side hawker. Ajala *et al.* (2007), also reported that mortality mostly occur at brooding stage. High cost of poultry feeds was identified by Agro-Ind (2002); Sonaiya and Swan (2004); Adeyemo and Adeyemo (2009). Adeyemo and Onikoyi (2012) reported that inadequate poultry extension services are one of the major challenges faced by the poultry industry. Inadequate access to and high cost of Veterinary services was reported by Adeyemo and Onikoyi (2012); Anosike *et al.* (2015) as another major challenge posing a trait to the industry.

#### ***Possible solutions to the challenges of poultry production in Nigeria***

Despite the challenges of poultry production in Nigeria, it has not stopped the industry from functioning, though these challenges might have slowed down its production rate. Solution to curb these challenges are not farfetched. The incidence of diseases outbreak is one of the pressing challenge of poultry production in Nigeria. There is need for veterinary intervention in order to curb losses due to disease as suggested by (Ajala *et al.*, 2007). Also educations on feeding of brood and simple disease control programmes are possible short-term methods to improve poultry production in Nigeria. Technical

know-how for improving poultry production should be made available to poultry keepers through extension service. Thus the extension workers have a major role to play in improving rural poultry production as suggested by (Ajala *et al.*, 2007). Aromolaran *et al.* (2013), in their research carried out in Ibadan, Oyo State on small poultry farms did recommended, that small scale layer poultry famers should be encouraged to form cooperative societies or join the existing one to be able to access loan for their business and government could also make fund available to assist the poultry farmers. They also recommended capacity training of poultry famers to enable them cope with the challenges of modern poultry farming and commercialization of small scale layer poultry production should be carried out. This is also in line with the recommendation of Adeyemo and Onikoyi (2012), who recommended that Government should provide financial assistance to subsistence and small-scale poultry farmers in form of soft loans. This they say will help to prevent the decline of the sectors as a result of unprofitable operation or increase in the price of its products. Anosike, *et al.* (2015) did recommend that to reduce the rate mortality to a barest minimum, hatchery industry should be inspected by relevant agencies to ensure that healthy day old chicks are produced under good hygiene condition.

#### **Conclusion**

The challenges of poultry production in Nigeria are multifaceted. These challenges might not have stopped the industry from functioning because there has been a steady increase in the demand for poultry products in Nigeria due to several factors such as increase in population, new poultry farms the expansion of existing ones and the resuscitation of some others which had

stopped production but might have slowed down rate of production in the industry. This paper reviews these challenges to include; disease and pest attack, lack of loan and credit procurement, lack of technical knowledge, high rate of mortality, high cost of poultry feed, supply of poor quality chicks, inadequate extension services, and inadequate access to and high cost of veterinary service. Possible solutions to these challenges include; intervention of veterinary in order to curb losses due to diseases, technical know-how for improving production should be made available to poultry keepers through extension service, poultry farmers should be encouraged to form cooperative societies or join existing one to be able to access loan for their business and Government could also make funds available to assist the poultry farmers through soft loans, capacity training of poultry farmers to enable them cope with challenges of modern poultry farming etc. If the solutions stated above are set in place to tackle the challenges facing the industry, poultry industry is and will still remain one of the fastest growing livestock industry of the agricultural sector in the country.

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