STATUS OF DUCK PRODUCTION AND MANAGEMENT IN SOUTH WEST NIGERIA

[1]Folorunso, O.R., [1]Sule, K., [2]Bakre, A.A.

[1]Department of Animal Health and Production, Federal College of Agriculture, Akure, Nigeria

[2]Department of Veterinary Medicine, University of Ibadan, Nigeria

Abstract: **In Nigeria, duck production is less favoured compared to other poultry species due to perceived economic unviability. This study examines the production patterns, socio-economic characteristics, and management practices of duck farming in southwestern Nigeria, including Ekiti, Lagos, Ogun, Ondo, Osun, and Oyo States, where poultry farming is prominent. A multi-stage random sampling technique was used to select 60 respondents from each state's eastern, western, and central senatorial districts, or northern, central and southern senatorial districts as the case may be, totaling 360 respondents, who are duck farmers. Primary data were collected and analyzed using descriptive statistics with frequency counts and percentages. The findings reveal a predominance of female farmers (80%), with most respondents being under 50 years of age. Additionally, 72.2% were married, and 82.6% were educated. The predominant flock size was 1-5 ducks (53.3%), with a significant reliance on household labour. Most farmers preferred local Muscovy ducks (92.2%) managed extensively (36.5%) due to their adaptability and lower maintenance costs. Most female ducks began laying eggs at 7 months of age (46.7%), with an incubation period of 30 days (35.6%). Most respondents provided feed for the ducks, primarily grains (18.9%), along with water. A significant proportion (65.6%) raised ducks for cash. The study highlights the untapped potential of duck farming in Nigeria due to limited awareness and cultural taboos, it recommended increased awareness, improved breeds, and better practices to boost productivity and food security.**

Keywords: **Adaptability, Demographics, Flock size, Food security, Indigenous breeds, Muscovy ducks, Scavenging, Small scale, Taboos, Veterinarians.**

1. INTRODUCTION

The livestock industry is a major component of any nation's economy, particularly its agricultural sector. Livestock contributes to the global food supply directly through the production of meat, milk, and eggs, and indirectly by providing traction and manure for crop production (FAO, 2011). Consequently, the livelihood and food security of nearly a billion people worldwide depend on livestock. In recent decades, there has been a global shift towards increased consumption of animal-source foods (Robinson *et al*., 2014).

In Nigeria, animal agriculture primarily involves poultry, fish, cattle, sheep, goats, and, to a lesser extent, micro-livestock like rabbits, snails, and more recently, cane rats. These animals significantly contribute to the internal supply of animal protein. Among these, poultry are the most numerous and widely distributed in both urban and rural areas (Adeniyi and Oguntunji, 2011). As of 2014, Nigeria was home to 19.5 million cattle, 41.3 million sheep, 7.1 million pigs, 278,840 camels, 145 million chickens, and 4.3 million rabbits (FAO, 2014).

The commercial poultry industry in Nigeria is valued at approximately 80 billion Naira ($6600 million) and is considered the most industrialized component of the livestock subsector. It employs over 25 million people directly and indirectly, while an estimated 85 million people involved in rural family poultry production manage assets worth about 320 billion Naira ($2400 million). The entire poultry subsector contributes over 25% to the agricultural Gross Domestic Product and attracts private investors, despite being a fragile and high-risk component (PTAP, 2011).

The better performance of exotic poultry breeds has led to the neglect of indigenous counterparts, and the cost of poultry meat remains beyond the reach of the average person. Therefore, it is crucial to increase the contribution of local poultry species to the national supply of animal protein. While local chickens have received some attention, other promising local poultry species such as ducks, geese, turkeys, and pigeons have been largely overlooked. Recently, there has been a growing interest, especially in developing countries, in the contribution of local chickens and other poultry species (FAO, 2011, Oguntunji, 2013, Sule *et al*., 2024).

Although a few farmers in Nigeria have started rearing ducks, many poultry farmers have yet to recognize the potential of duck production. This is mainly because duck rearing is not widely considered economically viable and is not as commonly consumed as chicken. Ducks are often produced by rural, small-scale, backyard units for household consumption, influenced by religious and superstitious beliefs and the perception that ducks are dirty and unpleasant around the home. Despite this, duck production has progressed rapidly in recent decades and is expected to continue playing an increasingly important role in global food production and security (Huang *et al*., 2012). Duck meat production increased from 1.3 million tons in 1991 to 3.6 million tons in 2007, with 65% of the world's production coming from China (Pingel, 2009). Duck production in 2010 was six times that of 1961 (FAOSTAT, 2012). In Nigeria, the duck population was ranked third (9,553,911) after chickens (101,676,710) (NBS, 2012).

Muscovy ducks, which make up about 74% of the ducks in Nigeria, are considered healthier due to their lower fat content (Hassan *et al*., 2018). Ferdus (1999) reported that increased duck rearing would significantly add to total poultry output since they do not compete with chickens for rearing and scavenging spaces. Muscovy ducks are particularly suited for scavenging systems due to their good foraging and incubation behaviour and their better adaptability to hot climates compared to chickens (Raji *et al*., 2009). Some advantages of raising ducks over chickens include the need for inexpensive and non-elaborate housing facilities, minimal attention, and less space per head for rearing. Additionally, ducks are hardy, resistant to common avian diseases, and can subsist on a low-cost diet. Locally raised ducks also have higher hatchability rates compared to chickens due to their plumage, which ensures effective incubation. Furthermore, ducks lay more eggs than chickens, with each duck laying about 250 – 300 eggs per year (Jacob, 2024). Duck eggs are larger, have thicker shells, a unique flavor, and are more suitable for processing into value-added products (Nworgu *et al*., 1997).

However, there is a prevalent apathy among poultry farmers in Nigeria towards duck rearing, primarily due to cultural beliefs and low consumption rates. This study aims to investigate these issues in depth and to collect comprehensive data on duck rearing and management practices across the southwestern states of Nigeria, including Lagos, Oyo, Ondo, Ekiti, Osun, and Ogun.

2. METHODOLOGY

Location of the Study

The study was conducted in the Southwest geopolitical zone of Nigeria, encompassing the states of Ekiti, Lagos, Ogun, Ondo, Osun, and Oyo. This region is rich in both natural and material resources, situated entirely within the tropics. It is bordered to the south by the Atlantic Ocean, to the east by the Niger Delta region, and to the north by the Guinea Savannah of the middle belt. The area benefits from substantial annual rainfall of approximately 1500 mm, primarily from April to October (NIMET, 2022). Livestock farming in this region includes ruminants, pigs, fish, rabbits, and poultry. The favourable climatic and vegetative conditions made this region an ideal choice for the study. Additionally, Ocholi *et al.* (2006) noted that Nigeria's estimated poultry production of around 140 million birds is largely concentrated in the southwest, further justifying the selection of this region.

Methods of Data Collection

The study employed a multi-stage random sampling procedure to select localities in rural, peri-urban, and urban areas across the three senatorial districts of each state. The selected localities included Ado and Ifaki Ekiti (Central), Ikere and Ilawe Ekiti (Southern), and Ikole and Otun Ekiti (Northern) in Ekiti State; Surulere and Apapa (Western), Agege and Ikeja (Central), and Ikorodu and Ketu (Eastern) in Lagos State; Abeokuta and Egba Owode (Central), Ayetoro and Ilaro (Western), and Ijebu Ode and Ikenne (Eastern) in Ogun State; Akure and Iju-Itaogbolu (Central), Ode-Irele and Odigbo (Southern), and Owo and Akungba Akoko (Northern) in Ondo State; Osogbo and Ikirun (Central), Ede and Iwo (Western), and Ile-Ife and Ipetu-Ijesha (Eastern) in Osun State; and Moniya and Olorunsogo (Central), Oje/Molete and Apata (Southern), and Iseyin and Oyo (Northern) in Oyo State. These localities were chosen due to their significant advantages in poultry production, trading, and consumption.

Primary data were collected from duck farmers in these localities using a pre-tested questionnaire and structured interview schedule. A trial run of the questionnaire was conducted with 10 duck farmers to refine the instrument and train field workers, who were HND II students from the Federal College of Agriculture, Akure, Nigeria, for the actual survey. The main survey encompassed 360 duck farmers, with 60 farmers from each of the six southwestern states of Nigeria. From each state, 20 duck farmers were randomly selected across the three senatorial districts. Local guides and field assistants were employed to interpret and explain the questionnaires in local languages to respondents who were not proficient in English, ensuring minimal bias. The snowball sampling method was employed to gather information on the production, consumption, utilization patterns, geographical distribution, and marketing of ducks. This approach involved producers, sellers, and consumers of Muscovy ducks within the study area.

Statistical Analyses

The collected data were analyzed using descriptive statistics (frequency and percentages) with the aid of the Statistical Package for Social Scientists (SPSS), Version 16.

3. RESULTS AND DISCUSSION

The profile of respondents concerning sex across the states is presented in Table 1. The majority of respondents were females (67.2%), with males constituting 32.8%. Ekiti State had the highest proportion of female duck farmers (80%), while Lagos State had the lowest (46.6%). Conversely, Lagos State had the highest proportion of male duck farmers (53.3%), with Ekiti State having the lowest (20.0%). All respondents were under 50 years old, indicating that most were in their active years, capable of engaging in poultry production, including duck farming.

The study revealed that females dominated duck production in the study areas, primarily responsible for generating and disposing of household waste fed to ducks. This finding aligns with reports by Gueye (2005), McAinsh *et al.* (2004), Mogesse (2007), Alfred and Agbede (2012), and Ayodele and Olufemi (2020), who observed that poultry flocks in many African countries are largely owned by women. It also corroborates reports by Kitalyi (1998) and Mapiye and Sibanda (2005) that village poultry ownership is more common among females, who dominate domestic activities and control domestic poultry.

Most respondents (76.2%) were aged between 21 and 50 years, while about 21.6% were over 51 years old. Ogun State had the highest proportion (66.7%) of duck farmers aged 41-50 years, whereas Osun State recorded the highest proportion (36.7%) of duck farmers aged 51 years and above. This indicates that farmers were within the physically productive age range, suggesting they could be encouraged to actively participate in duck production.

The study also found that 72.2% of respondents were married, with the highest proportion (86.6%) in Osun State. Regarding household size, 52.2% of respondents had between 1 and 5 members, 33.9% had between 6 and 10 members, and 13.9% had more than 11 members. This suggests that household labor might be more prevalent than hired labor, especially in duck rearing.

Furthermore, 82.6% of respondents had varying levels of education, reflecting the high educational attainment in the study area, likely due to early exposure to education via the pre-independence regional government's free education policy. This level of enlightenment could help overcome cultural factors and taboos against duck production. Most duck farmers (65%) were self-employed with businesses around the home, 24.4% were farmers, and civil servants and artisans each made up 5% of the respondents. This differs from rural communities in Nigeria, where over 70% of rural dwellers engage in agriculture for livelihood (Alfred, 2001; Olayide, 1980). The inclusion of some urban respondents in the data collection might explain this discrepancy. Similarly, Sule *et al.* (2024) reported that only 15.1% of 769 respondents considered farming their primary occupation in a survey on the management and challenges of pigeon production in South-West Nigeria. The authors attributed the low number of farmers to a contemporary trend where young individuals prefer alternative employment options over farming.

Table 2 shows the distribution of respondents according to duck flock characteristics. The years of duck-rearing experience were as follows: 32.8% had 6-10 years, 13.9% had 11-15 years, 18.3% had 16-20 years, 18.3% had over 20 years, and 11.1% had less than 5 years. Long experience in duck rearing would likely have enabled respondents to master the intricacies of duck production. The highest proportion (53.3%) of respondents kept 1-5 ducks. The overall flock size tended to decrease

as the number of ducks kept increased. Small flock sizes agree with previous studies on extensively managed Muscovy ducks in Nigeria, where Nwata *et al*. (2006) and Duru *et al*. (2006) reported average flock sizes of 6.9 and 10.9, respectively. In comparison, studies in Asia, where over 75% of global ducks are reared, reported significantly larger flock sizes: 100-536 in Bangladesh (Khanum *et al*., 2005), 60-300 in Tamil Nadu, India (Gajendran *et al*., 1992), and 400-1000 in the Philippines (Chang and Villano, 2008). The small flock size in the study area suggests small-scale production, poor acceptability, and low demand for duck and its products.

The highest number of respondents with flock sizes above 40 (76.7%) was in Lagos, likely due to more farmers keeping exotic ducks and practicing improved semi-intensive and intensive systems, which can accommodate more birds than the extensive system. Muscovy ducks, commonly called local ducks, were predominant, kept by 92.2% of respondents across the states. The prevalence of local (Muscovy) ducks corroborates previous studies in northern (Duru *et al*., 2006) and southern (Ugbomeh, 2002; Udedibie and Ogbona, 2006; Ayodele and Olufemi, 2020) Nigeria, which found Muscovy ducks to be the prevalent breed nationwide.

Oguntunji (2013) suggested that adaptability to the environment and acceptability among the populace were the principal reasons for the prevalence of Muscovy ducks in the study areas. Additionally, many respondents were unaware of the existence of exotic ducks in Nigeria, and those who were aware either did not know how to obtain them or were not interested. Some respondents preferred local ducks due to concerns about the suitability of exotic breeds to the extensive management system and their marketability. The cosmopolitan nature of Lagos State might have encouraged the rearing, marketing, and consumption of exotic ducks. High literacy levels and a higher number of youths in Lagos might also contribute to the rearing of all available breeds (Oguntunji, 2013).

Table 3 depicts the distribution of respondents by husbandry methods. The prevalent management system in all states was extensive (35.6%). Although the extensive system was predominant, the highest proportion of those practicing improved semi-intensive and intensive systems was in Lagos State. This finding aligns with reports by Ugbomeh (2002), Duru *et al*. (2006), and Adeyemi *et al*. (2008), who found that the extensive management system was commonly practiced by duck farmers in Nigeria. The cost implications of rearing ducks intensively might limit most farmers to adopting the low-cost extensive system. Some respondents were unaware of the possibility of permanently confining ducks like chickens and expressed concerns about their water-loving habits and breeding behaviour if confined.

Improved management systems were more practiced in Lagos State compared to other states, possibly linked to the high literacy level of duck farmers and the urban nature of Lagos, which may not encourage extensive duck farming. Most respondents (46.7%) claimed that female ducks began laying from 7 months and above, and the majority (35.6%) reported an incubation period of 30 days and above. Regarding taboos against duck rearing, the majority (56.7%) agreed that such taboos existed. About 48.0% of respondents fed ducks with one type of feed, with the majority (18.9%) feeding ducks with grains only. Lagos State had the highest number of respondents feeding ducks with compounded rations, possibly due to the higher proportion of farmers keeping exotic breeds and practicing improved management systems. Nearly all (90.6%) duck farmers provided drinking water for ducks, recognizing the need for water for optimum physiological performance. Drinking water was provided in various containers such as old, split pneumatic tires, plastic containers, and broken clay pots.

Health management and the purpose of duck production are presented in Table 4. Most respondents (80%) recognized when ducks were unwell, while 20% claimed ducks do not get sick. All duck farmers treated their birds when sick, but only 26.7% patronized veterinarians, with the majority (57.5%) using home remedies, potentially affecting productivity. This finding corroborates Banga-Mboko *et al*. (2007), who reported that a higher percentage of duck producers used home remedies for treating their birds. The primary purposes of duck production were for cash (65.6%), home consumption (28.9%), cultural engagements (4.4%), and aesthetic purposes (2.2%).

4. CONCLUSIONS AND RECOMMENDATIONS

The study has shown that duck rearing in the study area is popular, commonly domesticated, embraced by younger and middle-aged people, and offers numerous opportunities. It is recommended that relevant agencies and organizations conduct awareness campaigns highlighting the advantages and nutritive values of duck meat. Farmers should be empowered and supported to develop appropriate and acceptable duck products. Establishments of more duck farms and processing

enterprises should be encouraged to address the problem of duck and duck product availability. Additionally, access to improved breeds and information on improved husbandry practices should be readily available to duck farmers.

CONFLICT OF INTEREST STATEMENT

We confirm that there are no conflicts of interest associated with the publication of this paper. We have no financial or personal affiliations that might influence our research. Our study was conducted with integrity and impartiality.

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Table 1: Profile of Duck Farmers in the Study Area (n=360)

State	Ekiti	Lagos	Ogun	Ondo	Osun	Oyo	Overall Mean
Sample size	60	60	60	60	60	60	360
Sex							
Male	12 (20.0%)	32 (53.3%.)	22 (37.7%)	20 (33.3%)	14 (23.3%)	18 (30%)	118 (32.8%)
Female	48 (80.0%)	28 (46.6%.)	38 (63.3%)	40 (66.7%)	46 (76.7%)	42 (70.0%)	242 (67.2%)
Age (yrs.)							
Less than 2020	02 (3.3%)	-	02 (3.3%)	02 (3.3%)	02 (3.3%)	-	08 (2.22%)
21-30	10 (16.7%)	08 (13.3%)	08 (13.3%)	08 (13.3%)	-	08 (13.3%)	42 (11.7%)
31-40	18 (30.0%)	16 (26.6%)	10 (16.7%)	16 (26.7%)	12 (20.0%)	06 (10.0%)	78 (21.7%)
41-50	22 (36.7%)	32 (53.3%)	40 (66.7%)	18 (30.0%)	18 (30.0%)	24 (40.0%)	154 (42.8%)
51-60	08 (13.3%)	04 (6.60%)	-	16 (26.7%)	22 (36.7%)	16 (26.7 %)	66 (18.3%)
≥ 61	-	-	-	-	06 (10.0%)	06 (10.0%)	12 (3.3%)
Marital Status							
Married	42 (70.0%)	40 (66.7%.)	40 (66.7%.)	40 (66.7%)	52 (86.6%)	46 (76.7%)	260 (72.2%)
Single	4 (6.7%)	08 (13.3%)	12 (20.0%)	10 (16.7%)	04 (6.7%)	06 (10.0%)	44 (12.2%)
Separated	12 (20.0%)	04 (16.6%)	-	02 (3.3%)	-	-	38 (10.6%)
Widowed	2 (12.0%)	08 (13.3%)	08 (13.3%)	08 (13.3%)	04 (6.7%)	08 (13.3%)	38 (10.6%)
Household Size							
1-5	28 (46.7%.)	38 (63.3%)	48 (80.0%)	30 (50.0%)	38 (63.4%)	06 (10.0%)	188 (52.2%)
6-10	24 (40.0%)	12 (20.0%)	10 (16.7%)	18 (30.0%)	14 (23.3%)	44 (73.3%)	122 (33.9%)
11 and above	08 (13.3%)	10 (16.6%)	02 (3.3%)	12 (20.0%)	08 (13.3%)	10 (16.7%)	50 (13.9%)
Education							
No formal education	10 (16.7%)	08 (13.3%)	16 (26.7%)	06 (10.0%)	08 (13.3%)	10 (16.7%)	58 (16.1%)
Primary School	10 (16.7%)	14 (23.3%)	08 (13.3%)	12 (20.0%)	10 (16.7%)	06 (10.0%)	56 (15.6%)
Secondary School	36 (60.0%)	20 (50.0%)	18 (30.0%)	28 (46.7%)	20 (33.3%)	30 (50.0%)	162 (45.0%)
Tertiary Education	02 (3.3%)	20 (33.3%)	18 (30.0%)	14 (23.3%)	12 (20.0%)	16 (26.7%)	82 (22.8%)
Others	02 (3.30%)	14 (23.3%)	14 (23.3%)	16 (26.7%)	08 (13.3%)	18 (30.0%)	88 (24.4%)
Occupation							
Farming	18 (30.0%)	06 (10.0%)	02 (3.3%)	02 (3.3%)	04 (6.7%)	02 (3.3%)	18 (5.0%)
Civil Servant	40 (66.7%)	30 (50.0%)	42 (70.0%)	34 (56.0%)	48 (80.0%)	40 (66.7%)	234 (65.0%)
Artisans	-	08 (13.3%)	02 (3.3%)	08 (13.3%)	-	-	18 (5.0%)

Field Survey 2022

Table 2: Duck Flock Characteristics (n=360)

States	Ekiti	Lagos	Ogun	Ondo	Osun	Oyo	Overall Mean
Sample size	60	60	60	60	60	60	
Duck Rearing Experience							
Less than 5 years	04(6.7%)	04(6.7%)	06(10.0%)	12(20.0%)	06(10.0%)	08(13.3%)	40(11.1%)
6-10 years	24(40.0%)	30(50.0%.)	18(30.0%)	14(23.3%)	04(6.7%)	28(46.7%)	118(32.8%)
11-15 years	12(20.0%)	10(16.6%.)	18(30.0%)	06(10.0%)	- `	04(6.70%)	50(13.9%)
16-20 years	06(10.0%)	14(23.3%)	18(30.0%)	12(20.0%)	12(20.0%)	04(6.70%)	66(18.3%)
Greater than 20 years	14(23.3%)	02(3.3%)	-	16(26.7%)	18(30.0%)	16(26.7%)	66(18.3%)
Flock Size							
1-5	24(40.0%)	46(76.7%)	30(50.0%)	22(36.7%)	36(60.0%)	36(56.7%)	192(53.3%)
6-10 years	08(13.3%)	28(46.6%)	22(36.7%)	24(40.0%)	20(33.3%)	16(26.7%)	118(32.8%)
11 and Above	06(10.0%)	08(13.6%)	08(13.3%)	14(23.3%)	14(3.30%)	10(16.7%.)	41(11.4%)
Breed Kept							
Local Bread (Muscovy)	58(96.7%)	50(83.3%)	54(90.0%)	52(86.7%)	58(96.7%)	60(100%.)	332(92.2%)
Exotic Breed	02(3.3%)	10(16.6%)	04(6.7%)	06(10.0%)	02(3.3%)	-	24(6.7%)
Both	-	-	02(3.3%)	-	-	-	02(0.6%)

Source: Field survey 2022

Table 3: Distributions of Respondents by Husbandry Methods (n=360)

States	Ekiti	Lagos	Ogun	Ondo	Osun	Oyo	Overall Mean
Sample size	60	60	60	60	60	60	
Management System							
Extensive	28(46.7%)	04(6.7%)	06(10.0%)	18(30.0%)	36(60.0%)	10(16.7%)	128(35.6%)
Semi Extensive	26(43.3%)	24(40.0%)	16(26.7%)	14(23.3%)	10(16.7%)	18(30.0%)	108(30.0%)
Intensive	06(10.0%)	32(30.0%)	28(63.3%)	16(26.7%)	14(23.3%)	18(53.3%)	114(31.7%)
Age at Laying							
1-2 Month	02(3.3%)	02(3.3%)	-	-	-	02(3.3%)	06(1.7%)
3-5 Month	02(3.3%)	12(20.0%)	02(3.3%)	-	06(10.0%)	04(6.7%)	26(7.2%)
6-7 Month	18(30.0%)	14(23.3%)	34(56.7%)	30(50.0%)	28(46.7%)	12(20.0%)	136(39.8%)
7 Months and Above	38(63.4%)	10(16.6%)	24(40.0%)	30(50.0%)	24(40.0%)	42(70.7%)	168(46.7%)
No Idea	-	02(3.3%)	-	-	02(3.3%)	-	04(1.1%)
Length Incubation							
11-15 days	04(6.7%)	-	-	-	-	02(3.3%)	06(1.7%)
16-20 days	04(6.7%)	06(10.0%)	-	02(3.3%)	02(3.3%)	02(3.3%)	16(4.4%)
21-25 days	04(6.7%)	02(3.3%)	04(6.7%)	06(10.0%)	04(6.70%)	02(3.3%)	22(6.1%)
26-30 days	26(10.0%)	24(40.0%)	32(53.3%)	36(60.0%)	34(56.70%)	22(36.7%)	170(47.2%)
30 Days and Above	26(43.3%)	28(46.6%)	24(40.0%)	16(26.7%)	20(33.3%)	32(53.3%)	128(35.6%)
Taboo against Duck Rearing							
Yes	42(70.0%)	42(70.0%)	42(70.0%)	22(36.7%)	36(60.0%)	20(33.3%)	204(56.7%)
No	18(30.0%)	18(30.0%)	18(30.0%)	38(63.4%)	24(40.0%)	40(66.7%)	156(43.3%)
Feed Fed							
Grains Only	12(20.0%)	14(23.3%)	16(26.7%)	10(16.7%)	16(26.7%)	-	68(18.9%)
Grains and Leftover Food	44(73.3%)	34(56.6%)	18(30.0%)	44(73.3%)	08(13.3%)	60(100%)	208(5.8%)
Leftover Foods only	02(3.3%)	06(10.0%)	08(13.3%)	4(6.7%)	06(10.0%)	-	26(7.2%)
Formulated Feed Ration	02(3.3%)	30(50.0%)	18(30.0%)	02(3.3%)	06(18.0%)	-	58(16.1%)
Provision of Drinking							
Yes	56(93.3%)	60(100%)	48(80.0%)	22(36.7%)	54(90.0%)	60(100%)	326(90.0%)
No	04(6.7%)	-	12(20.0%)	12(20.0%)	06(10.0%)	-	349.4%)

Field Survey, 2022

Table 4: Health Management and Purpose of Duck Production (n=360)

States	Ekiti	Lagos	Ogun	Ondo	Osun	Oyo	Overall Mean
Health Status							
Recognition							
Easily Recognized	44(73.3%)	44(73.3%)	52(86.7.%)	44(77.3%)	44(77.3%)	60(100%)	288(80%)
Don't Get Sick	16(26.6%)	16(26.6%)	08(13.3%)	16(23.7%)	16(23.7%)	-	72(20.0%)
Types of Treatment							
Home Remedies	26(43.3%)	28(46.6%)	52(93.3%)	30(53.6%)	52(86.6%)	42(70.0%)	207(57.5%)
Veterinarian	16(26.7%)	22(36.6%)	04(6.7%)	30(53.9%)	08(13.4%)	16(26.7%)	96(26.7%)
No Medication	18(30.0%)	10(16.6%)	-	-	-	02(3.3%)	30(8.3%)
Reasons for Duck Rearing							
Household Consumption	06(10.0%)	04(6.6%)	46(76.6%)	02(3.3%)	42(70.0%)	-	104(28.9%)
Source of Income	54(90.0%)	42(70.0%)	12(20.0%)	58(96.7%)	10(16.7%)	60(100%)	236(65.6%)
Aesthetic Purpose	-	06(10.0%)	02(3.3%)	-	-	-	08(2.2%)
Cultural Belief	-	06(10.0%)	08(13.3%)	-	08(13.2%)	-	16(4.4%)
Mode of Sales of Ducks							
Sold to Interested Person	42(70.0%)	34(56.6%)	-	40(66.7%)	02(3.3%)	58(96.7%)	176(48.9%)
Sold to Duck Sellers	14(23.3%)	22(36.6%)	60(100%)	16(26.7%)	58(96.7%)	02(3.3%)	172(47.8%)
Do Not Sell at all	04(6.6%)	02(3.3%)	-	04(6.70%)	-	-	10(2.8%)
Reasons for Duck Purchase by the Buyers							
Personal Consumption	20(33.3%)	14(23.3%)	32(53.3%)	22(36.7%)	14(23.3%)	06(10.0%)	108(30.3%)
Traditional /Cultural Purpose	36(60.0%)	42(70.0%)	28(46.7%)	32(53.3%)	42(70.0%)	54(90.0%)	234(65.3%)
Research Purpose	02(03.3%)	04(6.6%)	-	06(10.0%)	04(6.6%)	-	16(4.4%)
Others	02(03.3%)	-	-	06(10.0%)	-	-	02(0.6%)

Field Survey, 2022