The Link Between Efficient Enforcement of Animal Welfare and Sustainable Development in Africa.   Animal Welfare Enforcement in Nigeria.

By

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Preamble/Country Information.

- Federal Republic of Nigeria is located in West Africa bordered by Benin, Niger, Chad and Cameroon;
- Has coast on the Gulf of Guinea and Atlantic Ocean;
- Geography ranges from Lowlands in the South, Mountains in South-east, Central hills and Plateau and plains in the North;
- Nigeria has an area of 923,768Km2 with population of about 192 million people United Nation (UN estimate, 2017);
- Nigeria is seventh most populous nation projected to be the third most populous nation by the year 2050 in a UN report;
- The Capital city is Abuja, while Lagos is the largest city serving as the economic hub, with primary port (Sea);
- Official language is English, but major languages of Yoruba, Hausa and Igbo are spoken. Have over 250 ethno-linguistic groups;
- Nigeria has 36 States and Federal Capital Territory, with 774 Local Governments;
- Islam and Christianity are the country's major religions.

Agriculture/Animal Production Data.

- Nigeria area of 923,768Km2 is made up of 369,507 sq KM pasture lands, 341,729 sq Km Arable land, 66,788 sq Km forest land, 27,713 sq Km wet lands, 166,278 sq Km Deserts and 9,238 sq Km Highlands;

- The over 190 million population is made up of 48.6% (93 million) in Urban Areas engaged in intensive/agro pastoral farm activity while 51.4% (99 million) in rural areas with extensive farm activity mainly pastoral/transhumance. In 2017, 49.5% are in urban Centres;

- Current livestock census (2017) according to species is Bovine 20 million, Caprine 78 million, Ovine 44.5million, Porcine 7.9 million, Equine 1.07 million, Camel 279,677, Birds 233 million, Bees 918,465 and Rabbit 4.8 million (FMARD).

- Animal and animal products trade data is majorly in imports animal average, Poultry meat, 542 ton, Bovine – 1362 ton, Pig meat – 1,044 ton.

Animal Resources Economics.

- Nigeria is Africa largest economy with a GDP of 376.36 billion USD with GDP per capita of USD 1,968. Agriculture was the main stay of the economy before the discovery of crude oil. It is the main source of livelihood contributing about 21.2% to GDP and 36.5% to employment (World Bank 2018). Livestock is vital to the socio-economic development of the country contributing about 1.7% to national GDP and around 9% value addition to Agriculture (FAO 2019).

- Agriculture (inclusive of animal production & health) still has enormous potential to develop the national economy, three national programs have been instituted to facilitate that ERGP 2017-2020, APP 2016-2020 and NLDP 2019-2028

Animal Welfare

- Animal welfare is the avoidance of abuse and exploitation of animals by humans through:
    - maintaining appropriate standards of accommodation, feeding and general care
    - the prevention and treatment of diseases
    - the assurance of freedom from harassment, and unnecessary discomfort and pain during production at farm, transportation prior to slaughtering and at slaughtering levels

Animal Welfare and Disease

- A close connection between animal welfare, animal health and food-borne diseases has been established
- Keeping animals under poor welfare conditions
  - increases stress, pathogen shedding,
  - susceptibility of animals to diseases,
  - propagation or transmission of diseases,
  - and subsequent contamination of food supply.
- Most food animals in Nigeria are raised under harsh environment e.g poor management and hygiene conditions, inadequate biosecurity and disease control guidelines.
- Which induces stress, pains, and suffering of animals, promotes the shedding and spread of animal diseases and reduces animal product quality and quantity.
- The harsh treatment of animals becomes worse during transportation prior to slaughtering and during slaughtering.

Sustainable Development Goals Risk.

- About 53% of the population lives under the poverty line with most the poor living in rural areas. 13 Million households (42% of population) own livestock and are engaged in extensive production systems comprising small holder and nomadic holders. Large commercial holdings are rare but expanding especially in the poultry sub-sector.
- There is no doubt that most of the 17 global goals for sustainable development can be attained with contributions from efficient enforcement of animal welfare in the Nigeria livestock subsector.
- Total production of milk, meat and eggs amounts to 0.5 billion liters, 1.4 and 0.6 million tones per year respectively.
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- Importation of food amounts to up to 3-5 billion USD per year out of which milk accounts for 1.3 billion USD (NLTP, 2019), the per capita food supply of animal source foods is 8 liters of milk, 9 Kg of meat and 3.5 Kg or 55 eggs per year.
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- The income (%) generated by livestock farmers that keep cattle is 67% at Pastoral, 30% Agro pastoral and 100% commercial. For poultry income generated can be said to be 23% extensive, 20% semi extensive systems and 51% intensive systems. While livestock contributes to food security and nutrition through the provision of beef/meat and milk to the population, poultry do same through provision of meat and eggs.

- Public Health is affected negatively by incidences of zoonotic diseases (Diseases passed from animals to human). The cost of brucellosis and tuberculosis in cattle and human amounts to 5% of agricultural value added, while 0.5% of consumers were infected with salmonellosis from poultry in 2016. The total cost of salmonellosis is estimated to equal about 0.4% of agriculture value added (FAO). In appropriate use of antibiotics in livestock, cattle, poultry, etc can result in antimicrobial resistance in human. This will make the treatment of infectious disease more difficult on human leading to death and still remaining as a challenge.

- In the environment, about 126 animals and 205 plants species are threatened with extinction (World Bank WDI, 2018). The forest area decreased by 62% between 1990 and 2015 (WDI, 2018). Olagunju (2015) estimates that 64% of Nigerian land is at risk to desertification, affecting directly or indirectly about 64 million people. Livestock are considered a major contributor to this trend, Livestock are major users of land. The Nigeria diary sector generate about 34.4 MT CO_2 of green home gas emissions per year. Greenhouse gas emissions from cattle – co2 eq. per liter of milk according to production system is Pastoral - 5Kg, Agro Pastoral- 1 Kg, Commercial - 1Kg. In appropriate waste management in poultry pollutes solid and water and contribute to greenhouse gas emissions through manure and feed production. Poultry production systems emit a total of 1.3 MT CO_2 eq. Per year. Intensive and semi intensive systems account for 85% of the emission and extensive for 15%.

Animal Welfare Stakeholders

- The key welfare actors/stakeholders that are part of the Nigerian Animal Welfare strategy are persons in charge of animals, animal users, Veterinary Professionals, Animal Scientist, agricultural processors, transporters, animal welfare bodies/NGOs (AWI & NSPCA), researchers, animal technicians, educational facilities and teachers, consumers, marketers of animal and animal products, government agencies and allied entities. Most of these stakeholder activities are not well known or coordinated due to lack of strong legislations and poor Implementation or enforcement of few legislation which cannot meet current trends.

Hindrances / limitations to Animal Welfare initiatives

- There are few legislations covering certain aspects of animal welfare in Nigeria like criminal code (1990) there is very little policy or activity in animal welfare. The Animal Disease Control Act 2004 includes some animal welfare provisions related to transport of animals (limited time or distance slaughter animals can be transported, resting animals to feed and drink, stocking density, etc), enforcement of this has been a challenge. Irresponsible transportation of animals by motorist and traders has led to loss of lives through road accident in the country. This indicates animal welfare is related to safety of lives and properties in Nigeria roads.

- Lack of Knowledge / general awareness of the polity on animal welfare.

- Other key animal welfare issues in Nigeria are activities of cattle rustlers, ethnic and religious conflicts, Terrorist activities, kidnappers and armed bandits, land scarcity, poor infrastructure, etc.

Current Efforts/Plans for Efficient Animal Welfare implementation

- Current efforts of including animal welfare initiatives in the amendment of the Animal Disease Control Act 2004, Veterinary Surgeons Act 2004 and implementing the National Animal Welfare Strategy document will help lead animal welfare.

- Already activities of an NGO - Animal Care and Use in Research, Education and Testing (ACURET) has led to the establishment of animal ethics committee in two Nigerian Universities. Currently, the Veterinary Council of Nigeria (VCN) is partnering with ACURET to organize a workshop in October 2019 for representatives/researchers from Universities / research institutes on animal welfare in research.

- There is presently plans to establish an Animal welfare network to be made up of all stakeholders in Animal welfare to be coordinated at the Chief Veterinary Officer office by the Animal welfare desk officer.

- General awareness / promotion of animal welfare in the polity.

- Review of Veterinary Curriculum to improve content on animal welfare.

- Collaborations: initiate new collaborations and strengthen existing partnerships with local, sub- regional, regional and other international organizations to foster animal welfare initiatives.

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Thank you