

Animal Rights Policy in Nigeria: The Way Forward

¹A.O. Shoyombo, ¹O.O. Alabi, ¹A.G. Adeyonu, ²O.B. Akpor and ³M.O. Oluba

¹Department of Agriculture, PMB 1001, Omu-Aran, Kwara State, Nigeria

²Department of Microbiology, PMB 1001, Omu-Aran, Kwara State, Nigeria

³Department of Biochemistry, Landmark University, PMB 1001, Omu-Aran, Kwara State, Nigeria

Abstract: There has been increased public concern on animal rights and welfare in the production and logistics chain. This has prompted an intensification in the scrutiny of how food animals are treated due to the impact of welfare on the quality and status of slaughter animals. Factors influencing this status starts at the farm, extends during animal transportation and at the abattoir. Adverse effects observed on both the animal and their products are thought to be associated with the activities these animals are subjected to before slaughter. Prior to or during this period, animals suffer pain resulting in the compromise of their meat quality and quantity, their status physically, biochemically and general health and resulting to economic losses. For the food producers, they are quite aware of the challenges of meeting the needs of this increasing human population. Although, animal production issues and topics extending from the human health to the environment have well been discussed, still, it is essential to address animal welfare related factors employed in the production chain of farm animals. A clear understanding of animal's environment, their behavior, biochemical relations during stress and the consequences on animal's health and welfare are important. These are useful in developing efficient and effective mitigation strategies and to promote the achievement of reasonable goals in animal rights within the Nigerian sociocultural environment. Therefore, this study, aims to highlight the literature on animal right and welfare in Nigeria and suggest strategies that could be adopted to improve animal rights.

Key words: Welfare, biochemical, physically, environment, mitigation, developing

INTRODUCTION

Animal welfare which is the major concept of animal right is a complex and multifaceted issue involving social, cultural, scientific, political, economic, religious and ethical dimensions. In addition, it involves studying animal's relationship with their physical environment and their response to humans. This indicates the interconnectivity of animal welfare with biodiversity, environment and the wellbeing of human at different levels of the society. Similar as "human health and animal health are interdependent and bound to the health of the ecosystems in which they exist", preservation and improvement of animal rights and welfare has various direct and indirect influences with human wellbeing and environmental concerns.

Globally, expectations to improve animals and human health require scientific studies which involve the use of animals while addressing public concerns on the welfare of animals used in science. Nevertheless's there are more than 1.2 billion individuals living in extreme poverty and around 850 million are persistently hungry (number is still

increasing). A greater part of these vulnerable individuals lives in the developing countries in sub-Saharan Africa, South Asia and East Asia (Wadhwa, 2018). Yet, animal welfare is of significance on account of the connection between sound science, healthy and animals that are well cared for (Demers *et al.*, 2006). Therefore, this study aims to highlight the literature on animal right and welfare in Nigeria and suggest strategies that could be adopted to improve animal rights.

MATERIALS AND METHODS

Challenges to animal rights: In developing countries such as Nigeria, factors such as poverty, education and resource scarcity contributes to how people regard and treat animals. In some cultures, for instance, certain animals may be considered as a sacred status while other animals are subjected to extreme insignificance and disregard. Inhumane practices commonly observed in factory farming is associated with human values and economic systems which has prioritize efficiency and profit over animal rights (Rahman *et al.*, 2005). Therefore,

it is difficult to view welfare issues in isolation from values, norms, cultures and economic conditions which are all factors affecting animal perception and treatment. Increasingly, developing countries have been under pressure to harmonize international standards set by developed countries which include improvement of veterinary services delivery as a requirement of entering the competitive international trade sector in animals and its products (Bruckner, 2004). Though development of alternative methods for animal tests in developing countries is considered highly significant, it is quite important to note that there has been implementation of some alternative methods in the development, production and testing of new vaccines (Di Fabio *et al.*, 2002) as well as in toxicological studies by some institutions.

By 2050, global human population is expected to reach nine billion. Ultimately, this will correspond with an increasing need for animals and its products from associated processes spanning from the farm to the slaughtering ground (UN, 2011). For the food producers, they are quite cognizant of the challenges of meeting the needs of this increasing human population. Despite these challenges and urgent call, animal producers are willing to adopt and apply available biotechnologies with the aim of improving crop yields for livestock and human consumption. Yet, persistent challenges relative to animal welfare arise in such systems. Various growing activist groups campaign with the aim of promoting a reduction in meat consumption. If there is a corresponding response to such call by consumers, there would be a significant impact on the environment and the entire agricultural sector (Capper, 2013). Food choices could influence the state of human health, quality of life and the environment. A study of Schonfeldt *et al.* indicated that choosing animal source foods with high nutritive contents could improve human health and the quality of life. Nevertheless, strategies needed to be employed to produce healthier food from stress-free animals need further research.

There has been increased public concern on animal rights and welfare in the production and logistics chain. Therefore, there is need for more research attention for such concerns to avoid animal rights violations (Grandin, 2005; Boissy *et al.*, 2007; Fraser, 2008). Animal production involve different processes which include kraaling, rounding up, transporting and off-loading of animals in lairages at the abattoir. Similarly, in such processes, "awareness of the use of pain-and stress-free methods" during animal handling has been increasing (Al-Fartosi *et al.*, 2010) with the aim to improve animal health during these processes. For example, animals are exposed to stress during confinement, transportation,

movement and acceleration, when ambient temperatures are high, crowding and noise. This results in economic losses due to the compromise of their biochemical and physiological processes and their meat quality and quantity (Bourguet *et al.*, 2011; Chulayo *et al.*, 2012; Miranda-De La Lama *et al.*, 2014). Before slaughter, animals become excessively stressed due to a rapid and sudden environmental change leading to an increase in the secretion of enzymes such as creatine phosphokinase, lactate dehydrogenase, etc. and hormones such as cortisol and catecholamines. Consequently, this reduces the meat quality and that of its products (Chulayo *et al.*, 2012). Besides the effects on meat quality in such instances, carcasses are downgraded and animal welfare is compromised (Muchenje *et al.*, 2009; Rosado *et al.*, 2010; Chulayo *et al.*, 2012; Chulayo and Muchenje, 2013) despite numerous acts, codes of conducts and regulations available for the protection of animals against pain and stress.

The history of animal rights activities can only be traced back to veterinary activities in the nation. An ordinance creating the Veterinary Council of Nigeria (VCN) was enacted in 1952 which was amended in 1958 to enable council to constitute a Board of Examiners for the purpose of ascertaining the professional qualifications. The problem of enhancing animal welfare and rights are numerous. Some of the constraints include prevalence of animal diseases of serious socioeconomic impact, non-availability of veterinary drugs and biologics, inadequate and poor-quality feeds, inadequate number of veterinarians (only 4,835 registered veterinarians of whom 3141 (65%) are in the private sector and only 7,500 para vets/lab. scientist), obsolete/deficient veterinary laws and administrative set-up amongst other things. In Nigeria, many laws, edicts and legislations have been promulgated by the then Central (Federal) or Regional (State) governments over the years with a view to strengthening veterinary delivery in the country.

The declaration of veterinary legislation dates back to 28th day of October, 1917 in Lagos when the Diseases of Animal Ordinance (now recognized as Animal Diseases (Control) Decree 10, 1988) was enacted with the objective to support the efforts of the veterinary sector in preventing and controlling outbreaks of animal diseases in the country (FGN, 1988; Olukole, 2008). Since, then, several other laws have been promulgated to regulate various veterinary activities at the instance of veterinarian or other professional bodies (Ogundipe, 2000, 2001). However, some of these laws are obsolete, conflicting or duplicating within or between agencies. For example, two military decrees the Animal Disease Control Act (decree 10) of 1988 and the revised National Food and Drugs

Administration and Control (NAFDAC) decree of 1999 regulate and control medical and food safety matters. NAFDAC has monopolized the regulation and control of food safety matters to pharmacist, failing to accede and concede to the unique roles of public health veterinarians which has been clearly elucidated in the animal disease decree 10 of 1988 (FGN., 1988; Babalobi, 2008). Similarly, the level of compliance to most of these laws is low. For example, the level of compliance of two veterinary laws, the Animal Diseases Control Decree 10, 1988 and Meat Edict, 1978 of Oyo State was reported to be 26 and 25%, respectively which was too low and was attributed to amongst other things low and obsolete penalties attached to these laws (Olukole, 2008).

RESULTS AND DISCUSSION

Animal welfare as integral index of animal rights: the way forward in Nigeria: Nigeria animal right journey and progress is best reviewed from the concept of animal welfare due to the nation's poor regulatory policy and framework in food security matters generally.

Animal rights as reviewed, also, involves animal welfare and health. In recent years, public concern for animal welfare has increased due to alleged poor treatment of animals before slaughtering. The biochemical and physiological processes of an animal are affected by handling and this often reduce the quality of meat (Chulayo and Muchenje, 2013), however, this does not seem to be the case in Nigeria. Animal welfare integrates feeling, behavior and adaptability of animals to different environmental conditions, to ensure proper disease control, a healthy state of the animal, humane slaughter and effective management (Al-Fartosi *et al.*, 2010; Anonymous, 2013).

Generally, animals are subjected to routine management procedures at the farm which could be daily, monthly and once-off. These routine farming practices incorporate physical examination of their health, vaccination, dehorning, branding and castration. As a result of the pain and stress often associated with these farm management and husbandry practices, the animals adjust their physiological functions and behavioural patterns to cope with these changes. Nevertheless the term "welfare" has captured several discussions because of variations on the interpretations and moral assessments amongst cultures and societies and people (Probst *et al.*, 2012). In a study, Grandin (2013) highlighted the increasing concern about the approaches that are employed in handling animal's and rendering it unconscious prior to slaughtering. Therefore, when animal welfare is defined and characterized, moral values

held by the general public should be taken into consideration due to the societal gaps and differences on animals (Webb, 2013).

Further, Croney and Millman (2007) indicated that poor management of animals have raised several complains by consumers and further expressed the need to improved animal environments and the establishment of "a framework for integration and uptake within the industries". Predominantly, the views of consumers concerning issues of animal welfare are not often taken into consideration, though attracting their purchasing behavior are often the aim of production (Webb, 2013).

Generally, animal welfare is associated with different stakeholders such as producers, retailers and the industry. However, consumers maintain that "farmers may claim to take care of their animals while they disregard the reality that product quality is the predictor of welfare-friendly buying power". Thus, consumers are concerned about the origin and management practices employed in raising these animals (Croney and Millman, 2007). Not with standing the concerns by consumers, there is still a need of special programmes that integrates activities at the farm and what to consider when shopping. This is because there are differences between animal's kept as pets for the purpose of companionship and farm animals reared for improving meat (IGD., 2007). Nowadays, animal welfare has become an interesting and thought-provoking topic because of consumers interest in gaining deeper knowledge of production methods, rearing and slaughtering locations and other activities involved until it gets to the final consumer (Velarde and Dalmau, 2012).

To produce healthy meats and particularly from stress free animal's opportunities for animal welfare improvement and prioritization of animal welfare should start from the farm, extend during animal transportation and maintained at the abattoir. By adopting new technologies, there can be improvement of productivity through advances in various sectors of production system from the beginning to final consumption (Webb, 2013).

Webb (2013) stressed that adequate training and appropriate selection of farm personnel could lessen humans fear and avoidance behavior, improve animal's health and ultimately improve productivity. Improvement of animal welfare could mean the evaluation of animal-based measures (Boissy *et al.*, 2007). This is an advancement to the perfection of the rights and welfare of animals, their quality of life and meeting the expectations of consumers which is good quality meat. Animal productivity is associated with the state of their

environment. For optimal animal welfare, the production systems must be maintained with good and hygienic management and farming practices. As an advantage, this increases animal's resistance to infections, particularly pigs. Furthermore, modification of the old methods used on field and current knowledge to create new approaches of animal welfare assessment would offer suitable ground to maintain proper welfare of animals.

Lameness in farm animals is one of the problems requiring careful and more serious intervention particularly in systems for dairy production. Lameness impacts on animal health, welfare and their productivity and affects the product quality post slaughter. Examination of lameness in animals requires different personnel. It requires the collaboration of farmers, claw trimmers, veterinarians and veterinary technicians, scientists and university personnel for effective management and elimination of causative agents of pain (Becker *et al.*, 2014). Miranda-De La Lama (2014) highlighted the need for farmers to optimally manage animal transportation relative to weight and number of animals per transport and work with the hauler to deliver animals that are alive and fit for slaughter.

As a means of improving this situation, there might be a need for the application of biotechnologies and genetic selection by farmers and the industry to assist in reducing hunger and alleviating poverty through the breeding of highly adaptable crops and animals to the changing climate (FAO., 2014). The effects of environment and breed on some characteristics of meat quality like meat tenderness been well documented (Warner *et al.*, 2010). A study recommended that the genes of *Bus indicus* should be selected for the slaughter population as a means of solving the challenges encountered by the industry, though questions arose concerning meat quality characteristics that could potentially be improved relative to market needs (Scholtz, 2007).

In slaughter animal's measures that could improve animal welfare, carcass and meat quality are still being investigated because of their roles in these improvements. Such measures include "selection, breeding programme's response to stress and physiological markers of positive emotions" (Grandin, 2013). Nevertheless the relationship that exist between the genetics of animal and their response to handling facilities such as in cattle is rather complex. This is attributed to the fact that the behavior and response of animals to stress differs due to genetic differences which helps them in resisting and coping with stress. According to Voslarova *et al.* (2010), stress is non-specific and signifies the consequences of physiological, emotional and behavioral state of the animal in response to diverse environmental stimuli.

These stimuli could be the humidity, stocking density, ambient temperature, transport and duration of lairage or even management practices employed on the farm and at the abattoir (Miranda-De La Lama, 2014).

CONCLUSION

There is the urgent need for sociocultural re-education and public enlightenment on animal welfare and rights to create a consumer base that concerns itself with animal rights and welfare which is the basis for recreating a robust and competitive animal rights and welfare system in Nigeria.

It is also clear, that most of the laws contained in our regulations are inadequate, obsolete or unenforceable and no longer in tune with 21st century practice and therefore, require review and urgent upgrading.

REFERENCES

- Al-Fartosi, K.G., Y.J. Talib and S.H. Ali, 2010. Comparative study of some serum biochemical parameters of cattle and sheep of the marshes in the south of Iraq. *Al Qadisiyah J. Vet. Med. Sci.*, 9: 78-84.
- Anonymous, 2013. One Health at a glance. World Organization for Animal Health, Paris, France. <http://www.oie.int/en/for-the-media/onehealth/>
- Babalobi, O.O., 2008. The public health veterinarian and food safety challenges. *Vom J. Vet. Sci.*, 5: 32-37.
- Becker, J., M. Reist and A. Steiner, 2014. Factors influencing the attitudes of cattle veterinarians, farmers and claw trimmers towards the pain associated with the treatment of sole ulcers and the sensitivity to pain of dairy cows. *Vet. J.*, 200: 38-43.
- Boissy, A., G. Manteuffel, M.B. Jensen, R.O. Moe and B. Spruijt *et al.*, 2007. Assessment of positive emotions in animals to improve their welfare. *Physiol. Behav.*, 92: 375-397.
- Bourguet, C., V. Deiss, C.C. Tannugi and E.C. Terlouw, 2011. Behavioural and physiological reactions of cattle in a commercial abattoir: Relationships with organisational aspects of the abattoir and animal characteristics. *Meat Sci.*, 88: 158-168.
- Bruckner, G.K., 2004. Working towards compliance with international standards. *Rev. Sci. Tech.*, 23: 95-107.
- Capper, J.L., 2013. Should we reject animal source foods to save the planet? A review of the sustainability of global livestock production. *South Afr. J. Anim. Sci.*, 43: 233-246.

- Chulayo, A.Y. and V. Muchenje, 2013. The effects of pre-slaughter stress and season on the activity of plasma creatine kinase and mutton quality from different sheep breeds slaughtered at a smallholder abattoir. *Asian-Australasian J. Anim. Sci.*, 26: 1762-1772.
- Chulayo, A.Y., O. Tada and V. Muchenje, 2012. Research on pre-slaughter stress and meat quality: A review of challenges faced under practical conditions. *Appl. Anim. Husb. Rural Develop.*, 5: 1-6.
- Croney, C.C. and S.T. Millman, 2007. Board-invited review: The ethical and behavioral bases for farm animal welfare legislation. *J. Anim. Sci.*, 85: 556-565.
- Demers, G., G. Griffin, G. De Vroey, J.R. Haywood and J. Zurlo *et al.*, 2006. Harmonization of animal care and use guidance. *Sci.*, 312: 700-701.
- Di Fabio, J.L., M.T. Jaramillo and J.L. Arciniega, 2002. Adoption of three Rs alternatives for regulatory testing of vaccines in the developing world: Possibilities and barriers. *Dev. Biol.*, 111: 195-198.
- FAO., 2014. Meat and Meat Products in Human Nutrition in Developing Countries. Food and Agriculture Organization, Rome, Italy,.
- FGN., 1988. Federal republic of Nigeria official Gazette, extraordinary. FGN Inc., Auckland, New Zealand.
- Fraser, D., 2008. Toward a global perspective on farm animal welfare. *Applied Anim. Behav. Sci.*, 113: 330-339.
- Grandin, T., 2005. Maintenance of good animal welfare standards in beef slaughter plants by use of auditing programs. *J. Am. Vet. Med. Assoc.*, 226: 370-373.
- Grandin, T., 2013. Making slaughterhouses more humane for cattle, pigs and sheep. *Annu. Rev. Anim. Biosci.*, 1: 491-512.
- IGD., 2007. Consumer Attitudes to Animal Welfare: A Report for Freedom Food. Institute of Grocery Distribution, RSPCA Herts East Branch Office, Baldock, England, Pages: 66.
- Miranda-De La Lama, G.C., M. Villarroel and G.A. Maria, 2014. Livestock transport from the perspective of the pre-slaughter logistic chain: A review. *Meat Sci.*, 98: 9-20.
- Muchenje, V., K. Dzama, M. Chimonyo, P.E. Strydom and J.G. Raats, 2009. Relationship between pre-slaughter stress responsiveness and beef quality in three cattle breeds. *Meat Sci.*, 81: 653-657.
- Ogundipe, G.A.T., 2000. Laws regulating veterinary practice in Nigeria. *Jilog Niger. Company Ibadan*, 380: 4-6.
- Ogundipe, G.A.T., 2001. The salient provisions of veterinary laws of Nigeria and the level of their enforcement in Oyo State. *Nigr. Vet. J.*, 22: 90-102.
- Olukole, S.G., 2008. Assessment of enforcement and impacts of two veterinary legislations in Oyo State, Nigeria. *Niger. Vet. J.*, 29: 41-47.
- Probst, J.K., A.S. Neff, F. Leiber, M. Kreuzer and E. Hillmann, 2012. Gentle touching in early life reduces avoidance distance and slaughter stress in beef cattle. *Appl. Anim. Behav. Sci.*, 139: 42-49.
- Rahman, S.A., L. Walker and W. Ricketts, 2005. Global perspectives on animal welfare: Asia, the Far East and Oceania. *Rev. Sci. Tech. Off. Intl. Epiz.*, 24: 597-610.
- Rosado, B., S. Garcia-Belenguer, M. Leon, G. Chacon and A. Villegas *et al.*, 2010. Blood concentrations of serotonin, cortisol and dehydroepiandrosterone in aggressive dogs. *Appl. Anim. Behav. Sci.*, 123: 124-130.
- Scholtz, M.M., 2007. Improvement of meat quality in commercial beef and pork production systems. *SA. Anim. Sci.*, 8: 31-34.
- UN, 2011. World population prospects: The 2010 revision, Volume I: Comprehensive tables. ST/ESA/SER.A/313, United Nations, Department of Economic and Social Affairs, Population Division, New York. http://esa.un.org/wpp/documentation/pdf/WPP2010_Volume-I_Comprehensive-Tables.pdf.
- Velarde, A. and A. Dalmau, 2012. Animal welfare assessment at slaughter in Europe: Moving from inputs to outputs. *Meat Sci.*, 92: 244-251.
- Voslarova, E., P. Chloupek, L. Steinhäuser, J. Havlicek and V. Vecerek, 2010. Influence of housing system and number of transported animals on transport-induced mortality in slaughter pigs. *Acta Vet. Brno*, 79: 79-84.
- Wadhwa, D., 2018. The number of extremely poor people continues to rise in Sub-Saharan Africa. World Bank, Washington, DC., USA. <https://blogs.worldbank.org/opendata/number-extremely-poor-people-continues-rise-sub-saharan-africa>
- Warner, R.D., P.L. Greenwood, D.W. Pethick and D.M. Ferguson, 2010. Genetic and environmental effects on meat quality. *Meat Sci.*, 86: 171-183.
- Webb, E.C., 2013. The ethics of meat production and quality-a South African perspective. *South Afr. J. Anim. Sci.*, 43: S2-S11.