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Comparative Analysis of Livestock Resources and Productivity In Nigeria With Some Selected Countries of The World

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Abstract

The critical role of livestock industry in the economy of any nation, including Nigeria cannot be underscored. This sector represents the main animal protein resources for the population. The livestock production potentials of Nigeria was examined and compared with those of African countries and some selected developed countries of the world. Nigeria holds a total of 212.8 million livestock with cattle, sheep and goats contributing 7.1%, 10.8% and 13.2% of the total population respectively. Pigs and poultry represent 3.1% and 65.8%, respectively. Nigeria holds about 12% of African continents of goats, 9% of sheep, 31% of pigs and 10% of poultry. The livestock population in Nigeria is about 58%, 56% and 14% higher than found in countries like Italy, Spain and Germany respectively but the level of productivity (meat, milk and egg) is comparably lower. The major reasons for this short fall are diseases, poor management techniques, poor genetic composition of the local breeds and unsustainable government policy measures, to mention but a few. It was suggested that government at different levels, in concert with the private sector, should come up with sustainable policy measures that will enhance animal agriculture in the country. This will lead to improve animal protein production and consumption, and consequently, abate the associated health implications often occasioned from poor consumption of animal protein among the protein vulnerable groups.

Keywords: Livestock resources, Productivity, Nigeria, Selected Countries

Introduction

Livestock industry plays a major role in the economy of any nation especially in a developing nation like Nigeria (Alokan, 2008). In Nigeria for example, the contribution of agricultural sector to the Gross Domestic Product (GDP) was immense dated back 1970 before the discovery of crude oil. Consequently, livestock plays significant role in the supply of animal protein to the Nigerian populace. Protein derived from animal is known to be superior in terms of amino acid component and biological value to that of plant protein.

The component of animal protein in human diet varies from country to country and it is a function of the available numbers of animals (cattle, sheep, goat, pigs and poultry) and products (beef, mutton, goat, pig and chicken and eggs) derived from the animals. Compared with other parts of the world, the livestock resources in Nigeria are higher than found in most developed countries but the products derived from these animals are ridiculously lower than obtained in these advanced countries (FAO, 2003). The implication of this is that the consumption of animal protein in Nigeria and Africa is inadequate. The poor performance could be due to many factors, which include disease (ILRAD, 1990) and the poor genetic make up of these animals in Nigeria and Africa at large. Therefore, this paper attempts to review the livestock policies in Nigeria and also examines the livestock resources in Nigeria vis-à-vis animal products and compares same with those of some selected

countries of Africa and the world at large. Also, some factors that are militating against good performance of these livestock and their products will be highlighted with a view to proffer some solutions. This is envisaged will help to improve animal production with attendant increase in animal protein consumption in Nigeria.

Review of Policy on Livestock Production in Nigeria

A review of government objectives and policies for the Livestock Sector in Nigeria can be conveniently divided into 5 periods: the colonial period preceding independence in 1960, the immediate post-independence period up to the end of the Sahelian drought in 1974, the oil-boom period from 1975-1985, the period from 1986-1999 marking the commencement of the Structural Adjustment Programme (SAP) and the period from 1999 during democratic dispensation culminating in the National Economic Empowerment Development Strategy (NEEDS).

The colonial era: Initial colonial objectives with respect to the livestock sector (LSS) were not explicitly stated, but the commitment to expand exports of livestock products had emerged prior to World War II. The colonial government objectives were primarily implemented through a policy of investment in both physical infrastructure and basic research. However, most of the schemes embarked upon during this period were oriented toward ranching and thus had little impact on smallholder or pastoral systems. Furthermore, attention appears to have been focused mainly on cattle, particularly dairy production, to the exclusion of other species.

Independence to 1974: The onset of independence saw both a continuation and a shift in livestock development policy in Nigeria. On the one hand, some of the programmes initiated during the colonial period such as the tsetse eradication and livestock breeding programmes were continued. On the other hand, driven by a desire to improve the rate of growth of the economy and to achieve a more equitable distribution of income, the new regional governments initiated a number of programmes in an attempt to improve smallholder and pastoral systems. By 1965, grazing reserves were introduced to secure a year-round source of fodder for ruminants and to encourage the settlement of pastoral nomads. Trade and production investment policies were also emphasized during this period. Trade policy towards the sector initially took the form of import duties.

1975-1985: Policies instituted in the immediate post-independence period were largely continued in the 1975-85 period. The basic economic objective remained income growth with some new concern for increased animal protein intake. The rise in government revenue as a result of the oil boom initially led to a relaxation of livestock trade policy. Between 1974 and 1977, quantitative import restrictions were removed and tariff rates were reduced such that, once again, customs duties on most livestock products fell in the range of 10-30%. Institutional policies involving land and credit were introduced during this period. The 1978 Land Tenure Decree vested all rural land not under active exploitation in state governors. Although an official title to land (i.e. certificate of occupancy) can be obtained through this decree, the process is both time consuming and expensive and, thus, out of the reach of most pastoralists. Further, it has been argued that the decree with its recommended high levels for land compensation has militated against land acquisition for the establishment of new grazing reserves (Waters-Bayer and Taylor-Powell, 1986). The Agricultural Credit Guarantee Scheme (ACGS) was also introduced in 1978. The scheme was established to guarantee loans granted by commercial and merchant banks for agricultural purposes. Lending to the LSS has featured prominently since the inception

of the scheme. The lending, however, has been lopsided firstly in favour of the crop sector and secondly for the livestock sector, it has tended to favour mostly the modern poultry sector. Loan guarantee statistics showed that between the inception of the scheme in 1978 and 2002, total guaranteed loans amounted to ₦4,354,525.4 million. Out of this total, ₦457,952.2 million went to livestock (Amos and Ayanda, 2004) and the scheme also appeared to have catered mainly for the large commercial producer.

1986 -1999: The Structural Adjustment Programme (SAP) initiated in September 1986 has brought about a variety of sector reforms in the Nigerian economy. As it affects the livestock sector, it involves a reduction in the role of the state in production activities with a corresponding emphasis on using the private sector as an instrument for production and input supply. Since early 1988, a ban on imports of fresh, chilled or frozen meat has been applied to protect domestic producers. For live animals, except poultry, import duty rose to 20% in 1986 from the 15% duty applied in 1984. However, since most live animals are trekked across the border from neighbouring countries, the herders avoid official crossing posts and the animals are, therefore, not directly affected by these tariff rates. Live poultry imports were banned in 1986, except for foundation and grandparent stock used for research or multiplication purposes.

Since independence, two of the major long-run goals of livestock policy have been to raise the low level of supply of animal protein, and to improve and stabilize rural income emanating from livestock production and processing. Concerns about balance of payments problems may have directed increased policy attention towards the need to attain self-sufficiency in livestock production in Nigeria.

Post 1999 era

The Policy thrusts of the Nigerian government as it relates to animal production are:

- ✚ to provide the right policy environment and target incentives for private investment in the sector
- ✚ implement a development policy aimed at addressing the constraints in the sector
- ✚ foster effective linkage with industry to achieve maximum value added and processing for export
- ✚ modernize production and create a sector that is responsive to the demands and realities of the Nigerian economy in order to create more employment opportunities which will increase the income of farmers and rural dwellers
- ✚ reverse the trend in the importation of food through a progressive program for expansion
- ✚ invest in improving the quality of the environment in order to increase yields

Government's aims over the years have been to:

- Achieve minimum annual growth rate of 6 percent in agriculture
- Raise agriculture exports to \$3 billion by 2007
- Drastically reduce food imports by 14.5 percent
- Develop and implement a scheme of land reparation services to increase cultivable arable land by 10 percent a year and foster private sector participation through incentive schemes
- Promote the adoption of environmentally friendly practices
- Protect all prime agricultural lands for continued agricultural production.

These are laudable goals which can be achieved but needs a lot of efforts. Governments at different times have tried to achieve these laudable goals by establishing the Agricultural Credit Guarantee Scheme Fund (ACGSF),

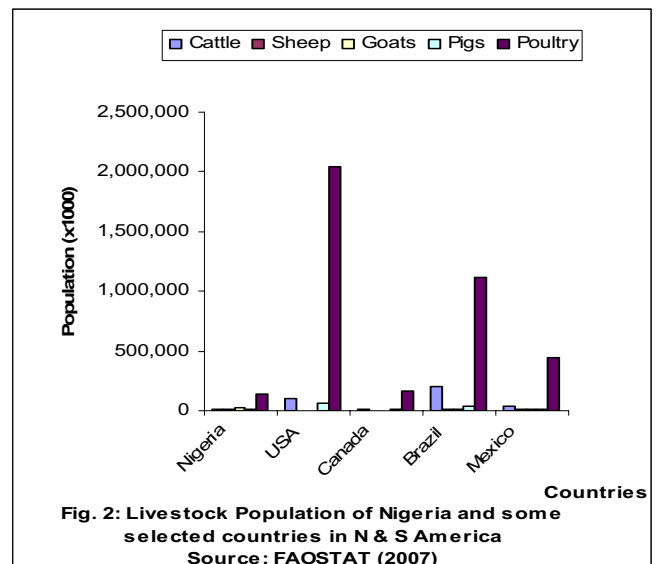
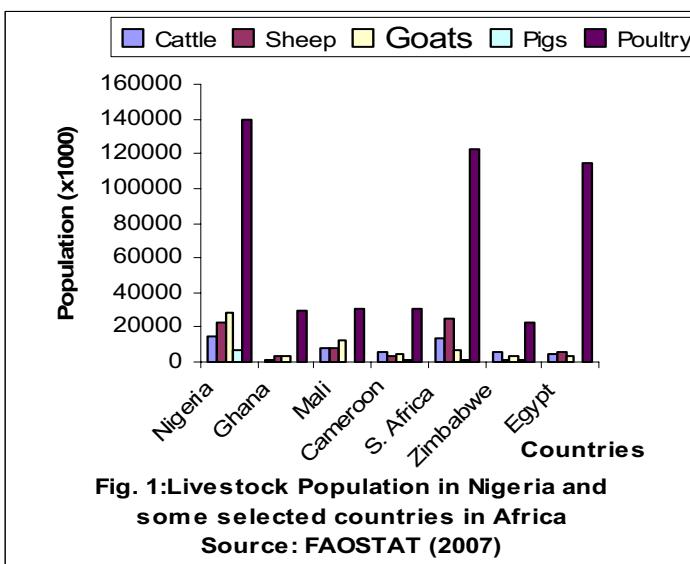
instituting tax free quota for some imported livestock drugs/vaccines, establishment of grazing reserves in different parts of the country and establishment of training schools for different manpower development.

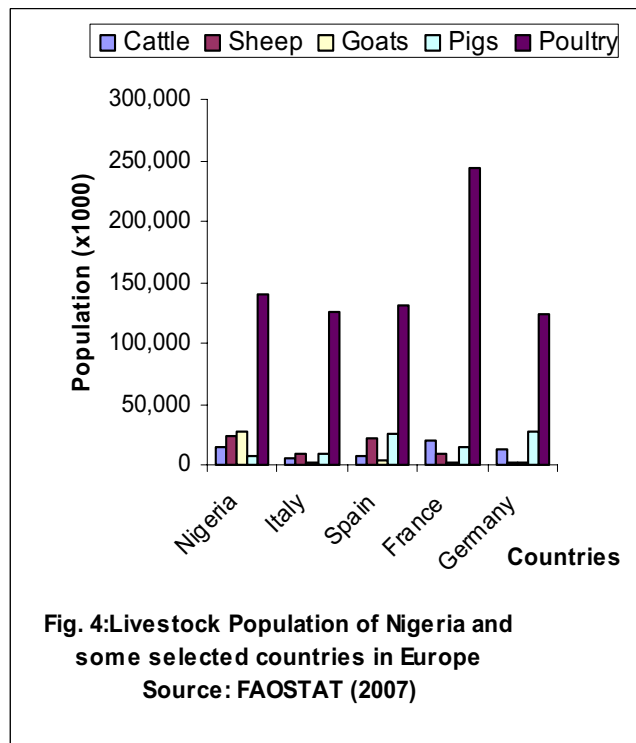
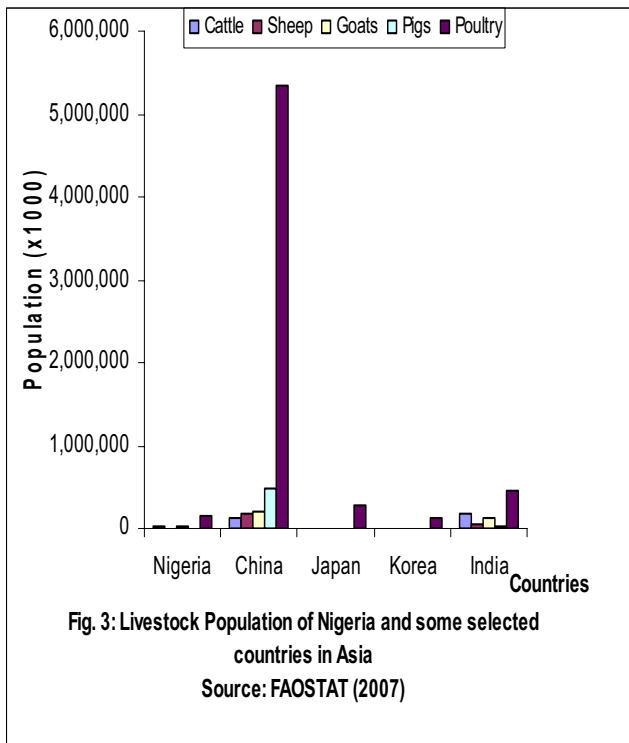
Comparative Analysis of Livestock Population

As found in most countries of the world, the major livestock species found in Nigeria are cattle, sheep, goats, pigs and poultry. Figure 1 indicates that Nigeria as at 2005 had 15.2 million heads of cattle, 23.0 millions of sheep, 28.0 millions of goats, 6.6 millions of pigs and 140.0 millions of poultry (FAOSTAT, 2007). The livestock resources in Nigeria are fairly large compared with the total holding on the African continent but in some cases lower than those in selected countries in America and Asia (Figures 2 & 3). However, they are in some cases higher than those found in some countries in Europe (Figure 4). Nigeria holds about 12% of the continent of African goats, 9% of sheep, 31% of pig and 10% of poultry. These proportions gave Nigeria a pre-eminent position in livestock industry in Africa (Alokan, 2008).

Larmode (1998) reported that Nigeria was the largest livestock producer in West Africa sub-region and third largest producer in the sub-Sahara Africa following Ethiopia and Sudan. Compared with countries like Italy, Spain and Germany, the livestock population of Nigeria is about 58%, 56% and 14% higher suggesting that Nigeria has more livestock potentials than even some well-known livestock producers of the world. However, the livestock population is managed by small holders and a considerable proportion is managed on free range traditional system. According to Rim (1992), 85% of all species found in Nigeria are been traditionally managed while commercially managed livestock was only significant for poultry (13.8%) and to a lesser extent for pigs (3.2%),

Cattle (0.5%), goats (0.03%) and sheep (0.2%). This is the trend contrary to what is obtainable in Europe and N America where over 97% of the livestock are managed intensively.





Comparative Analysis of Livestock Products

Table 1 shows that the livestock products (meat and milk) in Nigeria is consistently higher in most cases than those found in most African countries irrespective of the species of livestock concern. However, in comparison with other countries of the world, the livestock products from America (Mexico, Argentina, Brazil, Canada and USA), South and eastern Asia (China, Japan and India) and Europe (Italy, Spain, France and Germany) are much higher than found in Nigeria and Africa in general.

With a population growth of about 3.0% per annum, Nigeria present population of about 140 million will reach about 200 million by year 2020. This explains why large numbers of live cattle, sheep and goats were imported as well as various milk products (up to US\$275 M) in year 2004 (FAOSTAT, 2006; Alokun, 2008). To be able to meet the protein needs of the populace, the urgent need to improve animal agriculture is imperative in Nigeria.

Factors Militating Against Livestock Production in Nigeria

The number of livestock resources in Nigeria out weighs those found in many developed countries of the world but with a resultant poor productivity. Thus, the inability of the Nigerian livestock industry to meet the protein needs of her populace compared with those of developed nations like France, Italy, Germany, Canada and USA, could be as a result of some factors affecting the industry. These factors include livestock and human (farmers) diseases, poor management techniques, cultural belief, poor nutrition and high cost of finished feeds, poor genetic make of the indigenous breeds, vagaries of weather, reduction in the available grazing land due to urbanization and industrialization, poor research output from our research stations including universities and, inconsistent and unsustainable government policy on agriculture.

The combined effects of these factors are poor productivity, low income for the livestock farmers, increased animal protein importation to ameliorate the deficit, high mortality and morbidity and of course, gross reduction in animal protein intake in Nigeria. Consequently, resource-poor families cannot afford sufficient animal protein such as egg, meat and milk in their diets. The consequence of this is increase incidence of kwashiorkor, retarded growth, poor mental alertness, marasmus, mortality and morbidity among the protein vulnerable groups such as pre-school children, infants, nursing mothers and aged people.

Conclusion

The livestock potential of Nigeria was compared with those of some selected countries. Livestock populations in Nigeria compared and in some cases are more than found in many countries of the world including the developed countries. However, the level of products production is comparably lower than found in the developed nations. This has an adverse effect on the gross domestic product and the resource-poor populace that constitute over 85% of the population. The reasons for the poor productivity are highlighted. From the foregoing, government at all levels should work in concert with private sector to sustain animal agriculture policy in the country. This is envisaged will increase animal protein consumption and abate the adverse effects of the associated health implications among the protein deficiency vulnerable groups.

Table 1: Livestock products (x1000MT) of Nigeria and of some selected countries of the world

COUNTRIES	BEEF	MUTTON	GOAT	PIG	POULTRY
Africa					
Nigeria	280F	99F	142F	200F	1042F
Ghana	24F	11F	11F	10F	172F
Mali	113F	36F	46F	2F	259F
Cameroon	95F	16F	15F	16F	218F
S/Africa	590F	104F	36F	113F	1686F
Zimbabwe	102F	1F	13F	27F	206F
Egypt	250F	75F	33F	3F	1445F
Malawi	16F	-	6F	21F	59F
America					
Mexico	1496	40	42	1043	4908
Costa Rica	74	7	-	36	182
Argentina	2800*	52F	10F	216F	4163
Brazil	7526	68F	40F	3059	18684
Colombia	680F	7F	7F	110F	1442F
Canada	1171	-	-	1952	4248
U.S.A	11906	90	-	9064	38748
Asia					
China	6218*	1991*	1603*	46048*	71041
Japan	505*	-	-	1259	2991
Rep. Korea	185*	-	3F	1153*	1771
India	1490F	234F	473F	630F	6038F
Pakistan	445*	174*	373*	-	1892
Europe					
Greece	62F	82F	44F	140F	484F
Italy	1125	58*	4*	1587*	4224
Spain	700	237	14	3322	5442
France	1650F	135F	7F	2340F	6516
Germany	1220	44	-	4238	6597

F = FAO Estimate, * = Unofficial figure

Source: FAO (2003)