Factors Militating Against Animal Production in Nigeria

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Rec.Date: Mar 29, 2013 03:28; Accept Date: Apr 09, 2013 05:00

Abstract

Animal production is a very important sector of the economy of any nation and is crucial in ensuring food security. Livestock have been known for ages to meet the animal protein requirement of man and many other benefits they provide for farmers and the national economy. Nigeria’s population is growing at a faster rate than the increase in animal products in the country whose population is expected to reach 402 million people by the year 2050. Only an optimum animal production level will be able to help alleviate poverty, provide food security and meet other needs of such a growing population. As Nigeria struggles to advance in animal production many factors militate against animal production in the country. This paper focuses on factors like inadequate finance, high cost of animal feeds, animal diseases, lack of infrastructure, lack of government incentives, transportation and other factors militating against animal production in Nigeria and tries to proffer solutions to them.

Key words: Animal Production, factors, food security, militating, Nigeria

Introduction

Agriculture, though largely under-developed, is the most important sector to the Nigerian economy after oil of which animal production is a very crucial part (Okereke 1982, Lai and Felton 1986, Anyanwu and Jukes 1991). Crop and animal Agriculture should be combined together for best results in the economy. Nigerian has had and still has very laudable agricultural policies and schemes on paper but yet implementation is a challenge and hunger has persisted in the country for many years and food security has not been guaranteed (Obeta 1990, Babatunde and Qaim 2010, Agboola and Balcilar 2012). Animal production is very essential to food security and the development of any nation. It provides: (a) foreign exchange for the economy (b) employment for the citizens (c) rich source of protein which is essential for human nutrition (d) it is a source of prestige (e) provides income for the citizens (f) provides draught power (g) transportation (h) provides raw materials for the clothing and shoe industry and by-products can be used in various other industries such as the cosmetic industry.

Animal products are responsible for one-sixth of the human food energy and also more than one-third of the protein requirement on a global basis (Bradford 1999). Animal production trends are said to be influenced by strong demand-driven factors such as population growth, urbanization, income growth and
changing customer services which are of two categories: (1) modern demand driven and capital intensive non-ruminant (swine and birds) sector and (2) traditional resource-driven and labour intensive ruminant (cattle, sheep and goats) sector (Devendra 2002; Devendra 2007).

Nigeria has 36 states and is the most populous country in Africa with a population of about 170 million as of 2012 (Population 2012) with over 70% of the population living on less than a dollar a day (Watts 2006). By the year 2050 the projected population will be 402 million making Nigeria the 4th most populous country on earth after India, China and the United States (Population 2012).

With a fast growing population Nigeria is threatened with the problem of food insecurity and poverty which can be addressed with a more developed animal production sector in addition to other sectors (Fasoyiro and Taiwo 2012). The average Nigerian still consumes far less animal protein than his counterpart in the developed world because the animal production industry is still in its infancy due to hydra-headed problems and the per capita income is low leading to a consumption of less than 9 grams of animal protein per capita per day as compared to over 50 grams per capita per day in North America and Europe (Grigg 1995, Boland et al. 2013). Some countries even in the developing world are already considering novel approaches to meat production such as in-vitro meat production (Sachan et al. 2012) but in Nigeria animal production is facing numerous challenges with certain factors militating against successful animal production. In this paper we will examine briefly 14 of such factors.

1. **Capital**

One of the most crucial factors of production known to man is capital. Capital is needed to set up an animal production and processing farm and capital is needed to sustain productivity. One of the major constraints of the animal industry especially in developing countries like Nigeria is capital. Financial inadequacies have led to slow growing animal industries or moribund ones or even destroyed animal production industries. Low income earners who dominate the animal industry are not able to cope with the demands of the industry especially when production is not at its optimum level. Apart from the poultry industry most of the animal production activities in Nigeria are concentrated in the northern part of the country which has an even lower income power than the southern part (McKay 2012). This implies that farmers are not able to afford a lot of infrastructural and other facilities that they need for maximum productivity. To worsen matters loan facilities are hardly available and where they are available there are lots of bottle-necks and constraints to accessing such loans. Many of the farmers involved in animal production have to find other sources of income to better the quality of life of their families. In a study in Kwara State of Nigeria it was discovered that in farming families the prevalence of child stunting,
underweight and wasting was lower in families with off-farm income than the families who did not have (Babatunde and Qaim 2010).

2. **High cost of animal feeds**

Nutritious animal feeds are essential for full development and productivity of animals. Animal feeds are not readily available and where they are they are not easily affordable for an average farmer. Since farmers go into animal production for profit they need to obtain feed at a price where they do not only break-even: but also make reasonable profit. Perhaps the livestock industry of ruminants does not feel the impact as much as the poultry industry which is mostly intensive in nature requiring constant supply of feeds for maximum productivity unlike the livestock which can still be fed on pastures and forage or allowed to scavenge for food. Due to the high cost of feeds various research alternatives have been sought for other means of providing animal feeds to ameliorate the effects of cost of feed such as the use of activated sludges (Vriens et al. 1989). Many livestock and poultry farmers compound their own feed themselves for their farm animals but they face the challenges of raw materials for compounding the feed which may be very expensive or unavailable.

3. **Animal diseases**

Livestock diseases remain a veritable threat to the animal production industry. Animal products are constantly under threat by diseases that affect livestock and hence reduce productivity (MacRae et al. 2005). Endemic animal diseases such as Helminthosis, Contagious Bovine Pleuropneumonia (CBPP), brucellosis, mastitis, peste des petits ruminants (PPR), and many others have devastating impacts upon the animal industry leading to losses in hundreds of millions of dollars every year in developing economies like Nigeria (Bamaiyi 2012, Bhat et al. 2012). Brucellosis alone in sheep and goats of Borno and Yobe states of Nigeria is estimated to cost the economy USD 3.2 million annually (Brisibe et al. 1996). The poultry industry is even more devastated by viral infections such as Newcastle disease and Infectious bursal disease (Gumboru) in spite of several attempts at vaccinations. Some of the reasons for these may be vaccine failure and the involvement of quacks in fighting these endemic animal diseases in the country (Babalobi 2005, Olugasa et al. 2013).

4. **Access to veterinary services-Vaccines and drugs**

Most animal production activities are located in rural areas or remote areas inaccessible to proper veterinary services and many that are accessible find the high cost of veterinary services prohibitive. Hence they resort to easily available quacks that wreak havoc on the animal industry by using expired
vaccines, fake drugs and wrong prescriptions for treating diseases. Sub-standard and all manner of low quality drugs and vaccines are in the market now and can easily be purchased and used by practically almost everyone (Babalobi 2005, Olugasa et al. 2013). In order to have a viable and good animal production system in the country the government should subsidize veterinary services to farmers.

5. Level of education of farmers

It is a well-known fact that most farmers have a low level of education or are even illiterates making it difficult for them to employ modern animal production techniques where traditional techniques have failed or yielded less profit. A study carried out in Osun state has found that education level had significant and positive relationship with average production (Adebayo and Adeola 2005). This means the higher the educational level of farmers the higher the productivity of their farms. Therefore, farms managed by educated entrepreneurs will perform better than those managed by illiterates. It will be a good idea and for the development of the animal production to have more graduates encouraged into animal production to develop the sector. Such graduates will bring in modern animal production methods that guarantee food security in the country and the development of animal production.

6. The Role of the Government

The failed policies of the government are most of the times inimical to the progress of the animal industry. Sometimes politicians ban the importation of goods not readily available in the country in an attempt to help home grown industries but without providing viable alternatives. An example is the shortage of feeds and sky-rocketing high prices due to scarcity of soya beans (Glycine max) and groundnut (Arachis hypogaea) cake in the country (Adeniyi 2012).

The government has tried loan schemes and policies through mainly banks for decades right from the 1970s (Nwoko 1981) but this has often met with failure due to many factors bordering on proper implementation over the years (Jabbar et al. 2002). Good loans for maximum animal productivity are lacking and access roads are not there to facilitate smooth movement of animal products from farm to fork. The poultry industry sometimes suffers from egg glut and the government can help by mopping up eggs to prevent egg glut as happens in some developed economies such as the United States and the United Kingdom where such eggs can be given to schools as part of the school food program but in Nigeria such government incentives are rare and individual farmers are left to suffer losses for no fault of theirs.
In the developed world farmers and animal industry workers have access to modern technology such as telecommunication facilities and affordable internet. This helps in addressing emergencies on the farm such as giving an emergency call to a veterinarian to visit the farm or advertising their animal products online to reach a world-wide market. Science and technology are very crucial to national development in all facets and must be employed for development (Sanni et al. 2001). The Nigerian government seems to be heading in this direction with the recent initiative to buy ten million hand phones for farmers to boost their production and communication capacity with the world outside their farms (Nkemachor and Nnadozie 2013). Government can also help more in the area of transportation because most farmers are low income earners they are not able to afford modern means of transport and have to rely on traditional methods or inefficient and unorganized public transportation to convey for example animals meant for slaughter and human consumption. Transportation is also very important in connecting the rural to the urban areas (Porter 1995).

Another important area where the government has failed is the area of security. In recent years animal production investors especially poultry farmers have lost large sums of money due to inability to sell their products due to the threat of terrorist attacks in the country (Aboluwade 2012). Insecurity in the country is inimical to the development of the animal production and other industries and a threat to the national economy which must not be taken lately as it has the potential to ground the whole economy. In the midst of such circumstances government can help farmers by providing alternatives outlets for their products such as buying off eggs and using them as food programs in schools in parts of the country not affected by the conflict.

7. Urbanization

There is rapid urbanization in many developing countries which comes at a high price to animal productivity due to neglect of animal farming as a result of mass rural-urban drift for better standards of living and yet increased demand for animal products is the order of the day (Devendra 2007). A study has shown that from the year 1961 to 2001 there has been a dramatic increase in the consumption of meat in developing countries due to urbanization and industrialization (Fraser 2008). This urbanization is usually associated with higher income (Van der Zijpp 1999) which increases the purchasing power of individuals leading to higher demands for better quality food which entails a good amount of animal protein in the food unlike the normal rural food which has less animal protein and more carbohydrate and fats. Urbanisation also leads to constraints of space due to overcrowding arising from population explosion in the cities (Alirol et al. 2011, Lancet 2011). This implies that there will be less opportunity for animal production as emphasis shifts to rapid industrialization. Nigerian cities like Lagos consume a lot of meat
mainly brought from some northern parts of the country like Borno state which accounts for about a quarter of all ruminant livestock population in the country (Ngere et al. 1984, Majiyagbe and Lamorde 1997) to provide the animal protein need of a city with a population of more than 12 million people (Braimoh and Onishi 2007).

8. **Market and storage facilities**

Market for animal products is crucial for the sustainability of the industry. The animal production market is poorly organized and often farmers lose instead of making profit because most animal products are perishable goods that expire within a short period of time. A rapidly developing country like China has over the years rapidly developed its animal production industry leading to a meat industry revolution with international processing and storage facilities good enough for local consumption of a large population and export (Zhou et al. 2012) which is a contrast to the situation in Nigeria with the largest population in Africa and significant animal population but the market and storage facilities are still mostly primitive. To encourage maximum animal productivity there should be provision for storage of animal products in deep freezers and other storage facilities that are now been used with technological advancement. Employing modern methods of meat preservation will help Nigeria to grow its animal production to be able to take part in international trade and better the economy of the nation.

9. **Inadequate Extension services**

Extension services are crucial in promoting good agricultural and farming practices among our animal industry stakeholders. The livestock industry can produce more than it is doing currently if the farmers are well enlightened on certain aspects of production. A good number of Nigerian Universities and other institutions offer courses on Agricultural extension services but the number of graduates each year that end up in the actual profession of Agricultural extension are still grossly inadequate compared with the population involved in farming and the locations of those they are supposed to service. Extension workers provide technical advice to farmers on techniques for maximum productivity and advise on market related matters with the ultimate aim of ensuring the farmers succeed in their chosen vocation and contribute meaningfully to the economy of the nation (Davis 2008). Well trained extension service workers could be deployed to help train farmers in remote locations and get answers to their questions. This training could be strategically positioned at farmers who command a lot of market and followership who will in turn influence other farmers. Unfortunately in Nigeria the number of qualified agricultural extension workers is grossly inadequate to make meaningful impact on the economy of a nation with a large population like
Nigeria. In some remote areas such extension services are lacking completely and farmers are left to use their traditional knowledge to improve animal productivity. One of the greatest challenges of extension services in Nigeria in spite of the intervention of a world bank assisted project is the ability to secure the commitment of government and mobilizing local funds to sustain the service (Omotayo et al. 2001).

10. Inadequate manpower

There is a short supply of, especially, skilled labour in the animal production industry in Nigeria for example in some quarters one man does the work of many people leading to inefficiency in productivity. This is a point for major concern because of the potentials of a nation of over 170 million people (Population 2012). If more people are encouraged to go into animal production like in China (Zhou et al. 2012) Nigeria will have adequate manpower involved in animal production. There is inadequate labour supply in the country and many times farmers have to hire temporary workers or forfeit it at the detriment of their farms due to costs (Ude and Salau 1987). It is gratifying to note that women like their men counterparts are actively involved in animal production in Nigeria (Adekanye 1984, Porter 1995). But in spite of all these the manpower is still inadequate for the industry and for sustainable animal production.

11. Transportation

Transportation is very important to the industry. Lack of access roads to farms and from farms to the market hampers the development of the animal production industry. The movement of animal products from production to consumption points requires good transport networks that are either not existing or in very bad shape in the Nigerian context (Ibitayo 2012, Gujba et al. 2013). Many of the methods used in Nigeria for transporting ruminants from the north to the south of the country go against standard animal welfare procedures for the safety and welfare of the animals (Fraser 2008) because most times the animals are under undue stress as they are overcrowded in trailers for mass transport making them sustained traumatic injuries and stress that affects their health and productivity (Minka and Ayo 2007). There is a need to improve on these transport systems for maximum animal production because good transport is essential for food security (Pirie 1993).

12. Inadequate basic infrastructure

Many African countries have problems with infrastructure for animal production (Van der Zijpp 1999) and Nigeria is not an exception. There is generally a lack of proper mechanized animal farming using modern infrastructure such as improved milking machines that could reduce the incidence of diseases like mastitis and good animal houses to help productivity of the animals by focusing on intensive farming
instead of allowing small ruminants for example, to roam about scavenging for food and the large ruminants invading crop farms in the community and destroying harvests meant for human consumption—an issue which has often been a source of communal conflicts. There is also the perennial problem of electricity supply in Nigeria which is a major setback for the livestock industry. It means meat has to be prepared for consumption immediately after slaughter or additional costs of utilizing generating plants to store the meat will be incurred. Water supply is also inadequate even though it is very essential to have water always for maximum animal productivity.

13. Climates and environmental factors

Certain climatic factors are natural and some are man-made due to human activities but affect animal production (Yatoo et al. 2012). In the northern part of Nigeria desert encroachment is already a major environmental problem (Akinbami et al. 2003). Animals are an important part of the renewable energy for the country (Mohammed et al. 2013) which is beneficial to the environmental but with human activities such as deforestation this potential is diminished as animal production is affected. One of the reasons for constant deforestation is the failure of the government to provide alternative reliable sources of fuel for the people (Odihi 2003). As the desert encroaches in the northern part of the country the nomadic Fulani who are the main custodians of cattle in Nigeria are forced to keep migrating southwards in search of pasture for their cattle and expose their animals to diseases of the rainforest such as Trypanosomosis which will affect productivity of the animals (Nawathe et al. 1988, Opasina and Ekwuruke 1988). The constant movement of the nomadic Fulani in search of pasture because of traditional animal production systems inherited over centuries also makes disease control difficult. Some natural disasters like flood affect agricultural produce and animal production. Sometimes many animals as well as humans are killed by these natural disasters in addition to losses suffered by survivors in different forms (Ologunorisa and Adeyemo 2005, Adelekan 2010, Agbola et al. 2013).

14. Attitude to animal production

People’s attitude to animal husbandry and production is very poor. Some young people in Nigeria think animal production is only for the elderly or sometimes retired government staff but youths are known to do very well in animal production when they diligently go into it (Oladeebo and Ambe-Lamidi 2007). Some believe that animal production is for illiterates or the jobless in the society unlike what is obtained in developed economies where the wealthy and educated are leading the way in animal farming with animal farm empires. When the attitude of the people is wrong one can only expect a decline in the rise of
the animal production industry. Attitudinal change is a sine qua non for improved animal productivity in Nigeria. One of the ways the citizens’ attitude can be improved is by strategically organized seminars and workshops targeting different echelons of the society by the department of veterinary services and the federal livestock departments at various levels. When people are properly informed they will see the great potentials in this sector and will invest more in animal production leading to the rapid development and expansion of the industry in the country.

Conclusion

The development of the Nigerian animal production industry is of serious importance from the socio-economic and public health point of view. From the socio-economic perspective it will empower the employees and employers of the animal industry in the nation and raise their purchasing power thereby improving the national economy. From the public health perspective a good animal industry will eliminate the threats of infectious diseases that are particularly zoonotic in nature thereby guaranteeing public health. In order to achieve all these militating factors must be addressed at all stages and levels by entrepreneurs, the government and the entire national community. Addressing these factors will guarantee a better economy and food security for the citizenry.

References


