

## LIVESTOCK INDUSTRY AS A TOOL FOR POVERTY ALLEVIATION<sup>1</sup>

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### INTRODUCTION

Poverty is an endemic disease that has inflicted a large segment of the world, particularly the developing countries in South Asia and Sub-Saharan Africa. In Nigeria, the situation is not better. The situation is a paradox - "Poverty in the Midst of Plenty". The definition and measurement of poverty are fraught with political and subjective judgement. Different assumptions and methodologies in determining poverty lines, sources of income considered, and the value given to social programmes and indicators has lead to differences in poverty measures in most countries including Nigeria. However, the identification of the basic features of the poor appears less contentious. The poor generally suffer from malnutrition and high incidence of diseases that lead to short life expectancies and high infant mortality rates. A prominent group of the poor consists of small marginal farmers with very low productivity. In Sub-Saharan Africa, they farm on low quality soils with poor methods and inputs inspite of relative land surplus. Their conditions are exacerbated, most often, by inappropriate policies, weak institutions and inadequate skill (Muhammad, 1998). Poverty, therefore, is defined as the absence of means to maintain and enjoy basic needs of life. This situation leads to deprivation and lack of access to food, social services and productive assets as well as makes it difficult for an individual to participate in the decisions that affect his/her life (Okunmadewa 1998,1999)

Generally, the magnitude and dimensions of poverty in a country depend on two related factors. First is the average level of income; second, is the degree of inequality in the distribution of that income. The more unequal the distribution of a given level of income per capita, the greater the incidence of poverty. On the other hand, for a given distribution, the lower the average income level, the greater the incidence of poverty. A logical concomitance of the trend is the probable emergence of new groups of absolute poor and persistence of absolute poverty. Absolute poverty is defined as inability to satisfy the basic physical needs of life: food; clothing and shelter to ensure continued survival.

Poverty reduction is increasingly becoming the over-arching goal of development especially in Africa south of the Sahara where two in every five

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people live in poverty. In recognition of the pervading scourge of poverty in Nigeria, increasing budgetary allocation as well as strengthening of poverty sensitive programmes is the in-thing. Similarly, the extensive poverty assesment of the Country by the world Bank in 1996, on-going policy reformation, formulation of a poverty alleviation strategy code-named Community Action Programme for Poverty Allevation (CAPPA) and the establishment of a national poverty reduction focused Family Economic Advancement Programme (FEAP) in 1997 with a total allocation of N8.7 billion between 1997 and 1999 have been done. The new administration has instituted a Presidential Panel on rationalisation and streamlining of all poverty alleviation related agencies and institutions, with a view to evolving a more effective institutional framework for poverty reduction in the country. To complement government efforts, donor agencies such as the World Bank,

UNICEF and UNDP as well as non-governmental organisations are rigorously involved in the battle against poverty by executing one programme or the other both micro and macro levels.

#### Food and Livelihood in Nigeria.

It is widely acknowledged that nutrition is an outcome of and an input to national development. The nutritional status of a population is a reflection of national development and to a greater extent serves as an indication of the national resource allocation efficiency. Adequate nutrition is also an essential input for many human functions that include body growth, motivation, work output and educational attainment. The sufficiency of input of human resource in economic growth and development invariably depends on the adequacy of food and body nutrients. It is therefore of paramount importance that attention be paid to the food and nutrient needs of the populace in any country by policy makers and operators. In Nigeria, like in other developing countries, poor nutrition is caused by poverty and inadequacy of supportive resources and facilities. Evidently, nutritional status depends on access to food, dietary intake; health and care of the individual. The insufficiency of these factors contributes to the poor nutritional situation in the country.

A survey conducted in 1990 concluded that about 13% of the Nigeria population could be defined as being "food insecure". The World Bank (1991), using a 1985-86 household survey estimated a higher figure of 18%. This indicates that Nigerians are worse-off than Kenyans in terms of food insecurity, but in a better position relative to Malawi, Burkina Faso and Madagascar where the food - insecure are estimated at 28% 45% and 35% respectively. The food consumption level in Nigeria is quite low when compared with the level of consumption of other countries. Both the intakes of calories and protein fall short of the minimum recommended intakes (UNICEF, 1990). The most important nutrition - related disease in Nigeria is protein-calorie malnutrition. Available evidence shows that the prevalence of stunting (low height for age) is higher than wasting (low weight for height),

with figures ranging from 38% to 48% for stunting and 18% to 27% for wasting for some communities. Various other cross-sectional studies have shown a high incidence of low birth weight with values ranging from 9.6% to 23.1%, a good indicator of maternal malnutrition. The prevalence of micro-nutrient deficiencies such as anaemia, iodine and vitamin A deficiencies, is also quite high. Prevalence rates of 24% to 36% have been described for goiter (FAO/WHO/ICN, 1992) The incidence of low birth weight in Nigeria is thought to be among the highest in the world. Between 1982 and 1987, 25% of births were low birth weight babies according to UNICEF (1990). Infant mortality in 1998 is 79 per 1000 live births, while under -5 mortality is 146 per 1000 live births.

The UNDP Human Development Index (HDI) of 1996 ranked Nigeria as the 35<sup>th</sup> poorest nation in the world. The HDI of 0.393 for Nigeria compares unfavourably with 0.960 for Canada that ranks first on the HDI scale, 0.716 for South Africa ranked 90<sup>th</sup> and 0.468 for Ghana ranked 132<sup>nd</sup> in the world. The Index of Human Suffering (IHS) ranked Nigeria 13<sup>th</sup> among 147 countries. The real GDP per capita according to UNDP was \$1315 in 1994. However, in nominal terms, the per capita GDP only amounts to about US \$260 in 1996. This amount is only 71% of US \$365 that is the minimum amount required for living at US \$1.00 per day. In a more precise form, the table below presents the socio-economic indicators for Nigeria.

**Table 1: Selected Social Indicators for Nigeria (1993-1998)**

	1993	1994	1995	1996	1997	1998
GDP Per Capita (N)	1069	1060	1063	1046.4	1056.1	N.A
Population Growth Rate(%)	2.83	2.83	2.83	2.83	2.83	2.83
Life Expectancy at Birth (yr)	52	52	52	53	53	52
Adult Literacy Rate (%)	55	55	57	57	57	55.6
Human Development Index	0.389	0.384	0.384	0.384	0.393	0.45

Source: CBN Annual Report and Statement of Accounts, 1997 and UNDP HDR Nigeria

The number of poor remains high as almost 67.9% of Nigerians were estimated to be below the poverty line in 1996. Poverty has been on the increase since it was measured at the national level in 1985, a level that then stood at 41.4% in 1992, the level had gone up by 10 percentage points to reach 51.1% from where it jumped by almost 17 percentage points in the four year period, 1992-1996. During the first period 1985-1992, the annual rate of increase in poverty amounted to 1.5 percentage points, but this was only about one third of the rate of 4.1 percentage points for the period 1992-1996. With a national population estimate of 102.3 million, there were at least 69.5 million poor people in Nigeria in 1996, compared with 33.8 million in 1985. (FOS, 1998). During the eleven year period, 1985-1996, the proportion of the core poor, the extremely poor, almost trebled, moving from 10.4% in 1985 to 17.2% in 1992 and to 29.7% in 1996. About 30.4 million people were core poor in 1996,

compared with 11.3 million in 1985. Urban poverty rose steadily between 1985 and 1996, going from 34.7 % in 1985 to 46.5% in 1992 and 61.4% in 1996: Similarly, rural poverty was on a continuous increase although at different rates in the two periods. It moved from 49.9% in 1985 to 52.2 % in 1992 and then to 69.3% in 1996. Thus, there was an increase of only 2 percentage points in the first period but a much larger increase of 17 percentage points in the second period. Recognising that there were seven years in the first period and four in the second, clearly the economic measures of 1985 to 1992 had strong positive effect on the rural dwellers, but little or no effect on the urban population (FOS Ibid).

The above indicators are very crucial to the understanding of the poverty situation in Nigeria. Population has direct bearing on the level of poverty in that the larger the household size, the poorer the individual given the same income. On the other hand, the level of education is expected to negatively correlate with poverty, hence, the emphasis on social indicators. The level of poverty in the country has very great implication for the nutritional level of the people. The per capita protein intake is under 7g/day while calorie intake is under 2,600 calories per day in spite of the size of the agricultural sector (World Bank, 1997). These levels of nutrition fall far below the internationally recommended levels. Therefore, from the food balance sheets prepared by various experts, Nigeria is a food deficient country.

Poverty in Nigeria has also been explained in terms of occupation of heads of households. The poverty assesment study of 1995 showed that 87% of the core poor in 1985 and 67% in 1992, were in agriculture and all basically live in the rural area (Canagarajah *et al.* 1995). The report further claimed that many of the poor have very little land on which to sustain their rapidly growing families. They also lack basic inputs and in most cases experienced decline growth in their agricultural production and productivity. In the effort to make up for declining production, the poor result to exploitation of generally fragile environment - leading to a cycle of low production, low income and poverty. A recent analysis by the Federal Office of Statistics, also indicate that the incidence of poverty in 1996 was about 70.8 percent in households whose heads were engaged in one form of agriculutre. This shows an 18% point increase from the incidence in 1992. The analysis also claims that about 77% of farmers are poor while about 48% are in extreme poverty. However agriculture plays a useful role in meeting the people's food requirements in quantity and quality, and contributes a significant proportion to overall national productivity and Gross Domestic Product (GDP). It also generates employment and provide income-earning opportunities for a considerable number of citizens who otherwise would have been a jobless without income and this increases poverty.

Table 2. Poverty of Household Head

Occupation of Household Head	Poverty Headcount			
	1980	1985	1992	1996
Professional/Tech.	17.3	35.6	35.7	51.8
Administration	45.0	25.3	22.3	33.5
Clerical & Related	10.0	29.1	34.4	60.1
Sales Workers	15.0	36.6	33.5	56.7
Service Industry	21.3	38.0	38.2	71.4
Agriculture & Forestry	31.5	53.5	47.9	71.0
Production & Transport	23.2	46.6	40.8	65.8
Manufacture & Processing	12.4	31.7	33/2	49.4
Others	1.5	36.8	42.8	61.2
Student & Apprentice	15.6	40.5	41.8	52.4
All Nigeria	27.2	46.3	42.7	65.6

Source: NCS 80,85,92,96.

### Livestock Industry and Poverty Reduction

"A land poor in livestock is never rich and a land rich in livestock is never poor" (Campbell and Lesley 1996). This quotation succinctly captures the potentialities of the livestock subsector in poverty reduction.

Using any of the criterion stated above, the Livestock Industry is incontrovertibly a potential tool for poverty alleviation. It is in three major areas that this paper will examine the role of the livestock industry in poverty reduction in Nigeria.

#### *Role of the Livestock Industry in Meeting Food Requirements*

Food production, availability and its economic accessibility are so important that they have become a major component of the HDI and poverty index that are internationally acceptable measures for ranking countries on the well-being scales. The need for animal protein in human diet as source of essential amino acids need not be over-emphasized. Alli, (1989) reports that proteins are especially required by nursing mothers, infants and children for growth, development and subsistence. The deficiency to proteins and calories in children result in merasmic kwashiokor that can cause a permanent or irreversible damage to the mental faculties of a growing child. Even in adults, proteins are needed for generation of aging and worn-out tissues and for maintenance of tissues. Livestock industry is the mother of life as the sperm cell and ovum have been found to consist almost entirely of high quality or first class proteins that are more often than not derivable from animals. At present, only about 8.4 g of animal proteins out of a recommended level of 35.0 g of animal

protein per day is consumed in Nigeria. The ability of the average Nigeria family to sustain animal protein consumption is therefore a sensitive barometer for assessing not only the physical but also the economic well-being of a nation. Apart from proteins, the livestock industry is a source of other food nutrients such as vitamins, minerals, lipids all of which must be present in human diet at a given quantity and required quality for a healthy growth and a productive life. The amount of high value proteins as meat, milk and eggs in the diet of both rural and urban populations of Nigeria had been estimated at 150,000.000 tons in the magic year 2000 (Akpokodje, 1985). There is, therefore, the challenge to step up the level of livestock production in the country if food poverty, in quality and quantity is to be arrested.

***Role of the Livestock Industry in Overall Agricultural Productivity and Gross Domestic Product.***

The wealth of a nation can be determined by the values of its livestock subsector, hence, the policy thrust of any government is to ensure increased production and productivity in this subsector. Livestock can be described as all animal that are kept by man for food and economic purposes. These animals include cattle, goats, sheep, pig and chicken. From a recent national census, the total livestock in Nigeria had been estimated at 430,901,100 with cattle accounting for 16 million, goats 41 million, sheep 20 million and chicken 85 million (FOS 1995). These livestock species are processed to get beef (from cattle), goat meat (from goat), mutton (from sheep), (pork from pig) and chicken and eggs (from poultry). The estimated output of this livestock processed products in Nigeria can be seen in table 3.

**Table 3. Estimated Output of Major Livestock Products in Nigeria**

Livestock Products	Year ('000 tonnes)				
	1991	1992	1993	1994	1995
Beef	207	167	182	183	192
Goat meat	70	93	78	80	88
Mutton	77	80	83	85	94
Pork	65	29	24	25	31
Poultry meat	53	64	67	63	73
Eggs	359	378	397	377	399
Total	851	811	831	838	877

Source: Federal Office of Statistics (1995)

The livestock subsector also makes a significant contribution to the Gross Domestic Product of the nation. The sub-sector accounts for about 5.0 percent of the total GDP of the nation on yearly basis. (See table 4)

Table 4: Nigeria's GDP at 1984 Constant Factor Cost (N'million)

Item	Year				
	1991	1992	1993	1994	1995
a. Livestock Sub-sector	5092.0	5137.8	5168.7	5220.4	5283.0
b. Total GDP	9464.1	97431.1	100015.1	101040.1	103217.6
c. a as% of b	5.38	5.27	5.17	5.17	5.12

Source: Federal Office of Statistics

Besides the importance of the livestock industry for its monetary value and contributions to the country's GDP, livestock production generates raw materials for agro-based industries that provide additional employment for Nigerians and reduce dependence on imported livestock and livestock products. As such, it saves the drifting of our foreign exchange to other countries. The increase monetary incomes that accrue to families involved in any state of the production process are being used to raise family standards of living. Animal traction is a major source of power in crop production by peasant farmers who cannot afford to buy modern agricultural machinery that is mostly imported. The manure from the livestock industry also serves as a good substitute for chemical fertilizers that are as irregularly available to peasant in Nigeria. Some livestock is also used as beast of burdens in moving harvested produce from distant farms to the urban centers. This has reduced the incidence of head portage in places where motorable roads are not available or are in a state of disrepair. Coupled with this, is that some livestock specialises not in load-carrying but in transporting man over a long distance. This last set of uses of livestock plays a major role in promotion of crop production. That the livestock industry does not exhibit its full potential in contributions to GDP is not in doubt and a redress is required.

#### *Role of livestock Industry in Employment Generation and Income-Earning Opportunities*

Because of the peasant nature of agriculture in this country and judging from the contributions of the livestock subsector of GDP, it is then incontestable that many people find themselves directly employed by this industry. Another considerable proportion of the Nigerian population is also employed in the agro-allied industries that are kept afloat by raw materials from the livestock sub-sector. The people employed in the livestock sub-sector are either into production, health, processing, packaging, storage, marketing and research. Table 4 shows that the amount in monetary terms that accrued to the livestock subsector between 1991-1995 ranged between N5092.0 million and N5283.0 million. It should be noted that a greater proportion of these earnings by the livestock sub-sector went to workers employed in the sub-sector as incomes that definitely help to provide these families the means of livelihood. That

majority of the poor is engaged in informal sector activities that include most of the earlier mentioned activities in the livestock industry also buttress the significance of the sector in poverty reduction.

The fore-going paragraphs have clearly explained the contributions of the livestock sub-sector to national development. It has also shown that the livestock industry qualifies as a poverty reducing sub-sector if it attains full development of its potentialities especially in a country like ours that uses labour-intensive production method. This attainment of full potentialities is only possible by removing or minimising the constraints and problems of this all-important sub-sector. For example, a nexus between increased performance of this sub-sector and poverty alleviation is clearly seen in the fact that, the more the number of livestock the more the number of people that will be employed to work in the subsector. This subsequently expands income-earning opportunities on goods and services occasioned by the income earned by workers in the livestock industry, which will also generate income and employment in the other sectors of the economy.

### Suggestions and Conclusion

To realise and utilise the full potential of the livestock industry for poverty alleviation in Nigeria the following suggestions are imperative.

- Livestock production still follows the traditional transhumance and or free range or scavenging systems of husbandry in the great majority of cases. So, the number of livestock per household is still very small and consequently, though, aggregate contribution of the industry to the nation's GDP appears substantial per capita contribution is very negligible. For the industry to attain its full potentials, there is a challenge to the affluent and investors in our society to establish commercialised livestock farms with modern facilities so that more animal proteins can be made cheaply available and employment opportunities generated to provide jobs for the jobless. Substantial increases in livestock productivity and aggregate output can be caused by modernisation and improved production technology with better feeding systems.
- Special concessions in form of soft loans with enough moratorium should be given to investors willing to invest in this risky industry (especially animal production aspect) and the Nigerian Agricultural Insurance Company should be mandated to pay 100 % compensation to cushion the effects of losses in insured farms. Along with that, a fresh take-off loan should be given to livestock farmers that suffer losses involving capital equipment on thier farms.
- Funding of researchers on animal production, health and pasture development is a critical factor in any successful livestock development programme. For example, imported exotic species do not tend to do well here because of our harsh climate. There is therefore the challenge to the experts in animal breeding, animal nutrition and pasture development





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