

# ASSESSMENT OF THE IMPACT OF EXTENSION SERVICES ON LIVESTOCK PRODUCTION IN OMUMA LOCAL GOVERNMENT AREA OF RIVERS STATE.

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## ABSTRACT

This study examined the impact of extension services on livestock output in six communities in Omuma Local Government Area of Rivers State. It also examined the demographic characteristics of livestock farmers as correlates of sustained use of livestock technologies. A total of 120 respondents randomly selected and interviewed comprising 20 livestock farmers from each of the six communities in Omuma Local Government Area. A structured questionnaire was administered to the respondents and the data collected were used for the study. Percentages and chi-square analysis were employed to analyse the data. Findings revealed that more male (83.3%) than female (16.7%) were involved in livestock farming in the study area. Results showed that majority of the livestock farmers (50%) had only primary education while very few (12.5%) had up to second degree. The study also reveals that 80% of the respondents were married. The analysis revealed that 41.8% respondents were visited regularly by extension agents and veterinary personnel while 45.8% claimed only occasional visits and 12.5% confessed of no visits at all to their farms. Chi-square analysis of demographic characteristics at  $P < 0.05$  level of significance showed that age ( $X^2 = 102.92$ ), gender ( $X^2 = 53.33$ ) marital status ( $X^2 = 221.27$ ) and level of education ( $X^2 = 52.92$ ) had significant relationship with the impact of extension services on livestock production. The study concludes that there is need to disseminate developed technologies from research Institutes to farmers through media like agricultural development projects (ADP), school to land etc. using extension agents (Ekumankama, 1997). There is also an identified need to develop a new way of making these technologies available to the farmers, to increase their awareness so that when the technologies are fully adapted and integrated as part of their practices, they can be sustained in our local environment to boost livestock productivity.

**KEYWORDS:** Extension agents, livestock farmers, demographic characteristics, technologies, impact.

## INTRODUCTION

Livestock occupy a vital position in human nutrition. In fact, animal protein has been a very important source of protein intake for majority of the rural and urban populace in Nigeria. (Nmike, 1991). Livestock production in Nigeria has been low and as such not meeting the animal protein requirement of the teeming population. Protein intake in developing countries is below the required 0.65g/kg/day (FAO, 1990). But majority of the people in developing countries can only afford 0.35g/kg protein per day. Livestock production consistently formed a small and minor sector in the farming system of Southern Nigeria where low skilled farmers rear these animals on a subsistence basis without making efforts to meet up with the high demands of the great population. (Igodan, 1991).

The need for livestock research in Nigeria to improve livestock productivity cannot be over emphasized as this has always been faced with the problem of poor productivity resulting in incessant and apparently, animal protein shortage (Adu et al, 2001). Of more importance is the role of extension agents in disseminating research findings to the farmers. A careful survey of some literature and governmental policy statements on the supply and consumption of animal protein reveal a growing concern. (Atala 1981). Livestock production being handled by non professionals with little or no education that refuses to accept new techniques from extension agents leading to insufficient production and supply of animal protein. And also inadequate purchasing power due to high prices, low income and population explosion, is also a contributing factor. (F.A.O. 2005). This shortage of animal protein is worsened by the attitude of people involved in livestock production. (Erhabor, 1990). The obsolete methods which they adhere to, make livestock production to decline rapidly in Rivers State. The farmers are not enlightened enough as to know the importance of forming farmers' co-operatives through which they can get loans from the State government or financial supports from agricultural banks and bodies like Niger Delta Development Commission (NDDC), Shell Petroleum Nigeria Limited, Agip Oil Company etc. The government through

Ministries of Agriculture do not sponsor research programs both in Nigeria and abroad. The farmers are also not properly informed of new research techniques. The findings are not communicated to the farmers as a result of no means of communication and lack of extensioners Land is a very expensive asset in Rivers State so the trained animal scientists find it difficult to purchase land and establish livestock farms. The elites who may not be indigenes also consider it unsafe to move into the rural communities like Owaza, Egbelu, Afam, Eberi, Umuechem and Umuebele to purchase land and establish farms for fear of safety of their lives and property.

The effect of all these is high prices of livestock Products that is available. Also these extension officers find it difficult to get into the interior areas to visit the practicing livestock farmers because the roads are inaccessible to them. There are also no existing records of these farmers to make them known to these extension agents. Even when they are accessed by these extension officers, the farmers find it difficult to accept new techniques given by these extension officers, the major reason being that most of them are not educated. (Omemesa, 1997). The focus of this study was to determine the impact of extension services on livestock production in six communities in Omuma local government area of Rivers State where everybody is interested in working in Oil companies with little or no effort to develop the livestock industry.

## Methodology

The study was carried out in Omuma Local Government Area of Rivers State, Nigeria. It comprises of six communities namely, Owaza, Eberi, Umuechem, Afam, Egbelu and Umuebele which are located in North Southern part of the state. These areas are known for Agricultural practices. A random sampling technique was used to select 20 livestock farmers from each of the study areas. A total of 120 livestock farmers in the areas were used for the study. The data for this study were obtained from primary sources through oral interview schedule and questionnaire administration to the sampled farmers on their demographic characteristics.

The data were analysed using statistical tools such as frequency and percentage to indicate the proportion of responses to certain variables and chi-square test was used to determine the relationship between the demographic characteristics of farmers and impact of extension services on livestock production.

## RESULTS AND DISCUSSION

The results show that the percentage of the respondents that had only primary education was very high (50%) (table 1). The percentage of the respondents that had both primary and secondary education was lower (30%) while the group that went to high Institution up to up to second degree is about (12.5%). This had adverse effect on the productivity since livestock business requires some intricacies and so demands that livestock farmers should be able to read and write in order also to be able to apply new technologies on their farms to improve productivity. The table indicates that 80% of the respondents were married. This may be adduced to the fact that early marriage is usually encouraged in the rural and sub urban areas. Also it could be as a result of the large amount of labour required for farming operations. Another reason may be the respect that usually goes along with marriage in the rural areas. Nevertheless, 20% of the respondents were single. These are young school graduates that got loan from NAPEP (National Poverty Eradication Programme), Agric bank etc to establish livestock farms. The table also shows that the highest percentage of the

respondents (50%) was between 31 – 40 years of age. This could be due to the fact that this age bracket is regarded as the productive age. About 83.3% of these respondents were males. This may be credited to the strenuous nature of the job and the many risks attached to it, which many women cannot accommodate.

Table 2 reveals that 41.8% respondents were visited regularly by extension agents and veterinary personnel. The implication of this is that they will have direct access to information on new livestock production techniques. Diseases are diagnosed early and the appropriate drugs administered. Disease preventive measures are also taught to the farmers. These will lead to increased livestock production. About 45.8% claimed that extension agents from the state Ministry of Agriculture (livestock section) occasionally visited them. This may be as a result of no incentives to the extension officers by the illiterate farmers who felt that the government pays them salary for the work they are doing and above all they do not value their services. Another reason may be because of bad roads that lead to these farms. The resultant effect of this lack of visits of the extension agents to the livestock farms leads to unavailability of information on new technological findings giving rise to low livestock productivity. The non visits to the farms could also be as a result of few number of extension officers available in the State Ministry of Agriculture.

Only 12.5% confessed that extension agents and veterinary personnel seldom visit them. This may be as a result of inaccessibility of the area to the extension agents.

**Table 1: Demographic Characteristics of Respondents**

Variable	Frequency	Proportion (%)	
Gender	Male	100	
	Female	20	
Age	Below 20	5	
	21 – 30	10	
	31 – 40	60	
	41 – 50	40	
	> 50	5	
	<b>Total</b>	<b>120</b>	<b>100</b>
Marital Status	Married	100	
	Single	15	
	Divorced	3	
	Widowed	2	
	<b>Total</b>	<b>120</b>	<b>100</b>
Educational background	Non Formal	15	
	Primary	55	
	Secondary	10	
	B.Sc	20	
	M.Sc	20	
	<b>Total</b>	<b>120</b>	<b>100</b>

Field survey, 2005

**Table 2: Frequency of Extension and Veterinary visits to the elite farmers**

Variable	Frequency	Proportion (%)
Regularly	50	41.8
Occasionally	55	45.8
Seldomly	15	12.5
<b>Total</b>	<b>120</b>	<b>100.1</b>

Field survey, 2005

Table 3 reveals the responses of farmers on the extension services that had been rendered to them and which they had adopted. They claimed that pest, disease control and improved livestock husbandry had been disseminated to them (25%). This was followed by improved livestock breed (29.29%), least cost feed formulation for livestock production (16.7%). The

least was simple housing design for poultry with (12.5%). The reception and adoption of the extension agents intervention is a clear indication of the fact that all enhance livestock production in the area.

**Table 3: Expert services rendered to farmers**

Extension Services	Frequency	Proportion (%)
Pest and disease control	30	25.0
Improved livestock breed	35	29.2
Improved livestock husbandry	20	16.7
Simple housing design for poultry	15	12.5
Least cost feed formulation for livestock production	20	16.7
<b>Total</b>	<b>120</b>	<b>100</b>

Source: Field survey, 2006.

Table 4 reveals that the respondents witnessed some improvement in livestock production as a result of adoption of improved methods introduced to them by extension agents. About 42.3% of the respondents claimed that their flock increased to between 51 – 100 animals after they had been visited by extension agents as against only 33.3% of the respondents before the agents' visits. (This is an increase of about 10.0% in the number of respondents accepting that the agents' visits were profitable). Also about 6.6% of the respondents now had above 200 animals as against 4.1% in this range before extension visit. This is an indication that

extension intervention yielded a positive result among the respondents. This implies that new technologies developed in research Institutes were introduced to the livestock farmers; they accepted and implemented them thereby realizing higher yields.

The study also revealed that there was an increase in the respondents' revenue, per annum after extension intervention. This is in support of the fact that improved livestock innovations increase the socio-economic status of the farmers.

**Table 4: Impact of Extension intervention on Livestock Production**

Number of livestock	Before extension visit	After extension visit
> 50	50 (41.8)	25 (20.8)
51 – 100	40 (33.3)	52 (42.3)
101 – 150	15 (12.5)	20 (18.3)
151 – 200	10 (8.3)	15 (12.5)
Above 200	5 (4.1)	8 (6.6)

\*Figures in parenthesis are percentages

Source: field survey, 2006

Table 5 shows the significance of demographic characteristics on the impact of extension on livestock production. Gender, age, marital status and level of education showed significance on relationship with the impact of extension services on livestock production. The positive effect of education on impact of extension on livestock production may be as a result of the fact that the better educated a farmer is the more accommodating and receptive he would be to new ideas. In other words, the more open livestock farmers are to new technologies, the more they gain and the greater and better the impact on their production.

The significance of gender on the impact of extension could be viewed from the point of view of the fact that women in most cases, do not own personal livestock farms (except for household animals) but depend on their husbands. Even where a woman owns a livestock farm, she may not adopt an innovation if she feels it is too strenuous. Also age and marital status may be constraints on positive impact of extension on livestock production in that a farmer who is single and still young in age may not adopt innovations disseminated to him by extension agents due to lack of capital and/or prefers to try out innovations on his own. (Idachaba, 1988.)

**Table 5: Chi square analysis of Demographic Characteristics and Impact of Extension on farmers' Livestock Production.**

Variable	X <sup>2</sup>	df	P	Remarks
Gender	53.33	1	***	Significant
Age	102.91	4	***	Significant
Marital status	221.26	3	***	Significant
Educational background	52.91	4	***	Significant

X<sup>2</sup> = Chi squared

P < 0.05 significant

## CONCLUSION AND APPLICATION

From the result of the analysis, it was observed that the impact of extension on livestock production was not only affected by demographic characteristics of the farmers but also by the frequency of extension visits to the farmers and their continuous usage of the technologies. It was however, discovered that extension services were beneficial to the livestock farmers who adopted them. The survey therefore recommends that government should increase farmers' access to new technological findings by employing more extension agents which will increase extension visits to farmers. Also financial grants should be made available as much as possible to research Institutes and Universities of agriculture to conduct researches in new technologies in livestock production. Specialists in animal production and nutrition should be encouraged to establish farms by making loans and other incentives available to them with little or no collateral security.

Their exposure through education will make them to be receptive to new technologies and innovations. Farmers generally should be encouraged to persevere in using livestock innovations so that they can have improved results. At the same time, research Institutes should endeavour to establish more extension/livestock farmers' sustainable relationships as this will bring them closer to each other.

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