
ANALYSIS OF SOCIO- ECONOMIC CHARACTERISTICS OF PIGS FARMERS THAT INFLUENCE SUSTAINABLE DEVELOPMENT IN KADUNA STATE, NIGERIA

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ABSTRACT

This paper focuses on analysis of socio-economics characteristics of pigs farmers that influence sustainable development in Kaduna state, Nigeria. The objectives of this paper was to determine the socio-economic characteristics of pig farmers that influence sustainable development in the study area, to assess the source of farm inputs among the farmers and to identify the problems of pig production and suggest control measures to the factors limit productivity in the study area. Primary data used for this research were collected through the aid of structured questionnaire alongside oral interview during the 2011 farming season. A total of 90 farmers out of 1804 farmer identified by Kaduna State Agricultural Development Production(KADP) farmers list were selected using random sampling techniques. Simple descriptive statistics was employed to analyze parameters such as farmers' age, level of education, household size, problems of pigs productions. Result indicates that farmers had mean age of 44 years indicating that farmers were within the active age of productivity. The result in Table 1 indicates the mean herd size was 3.5 indicating the farmers were small-scale category. Overall educational level of the respondents showed that a large number of the pigs farmers were literate (73%). The result on Table 2 showed that sample farmers obtained their input from open market personal farms, neighbourhood, batter and gift. Problems of pigs farmers were identified to include cost of feeds (36%), disease and high cost of veterinary services (36%), poor pig housing 10%, low prices of pigs in the market (8%) lack of finance (6%), High cost of transportation (2%), and 1% lack of improved breeds 1%. The paper recommended that the state ministry of Agriculture should revive the breeding of improved and prolific breeds to increase production level, farmer need to be assisted financially through microfinance banks and cooperate societies to encourage production. Improved feeds including concentrates should be produced and distributed to farmers at affordable prices for increased and sustainable productivity and economic growth.

Keywords: *Analysis, Socioeconomic, Characteristics, Pigs, Farmers, Sustainable Development, Kaduna State*

INTRODUCTION

Food and Agricultural Organization (FAO) recommended that the minimum daily protein intake by an average person should be 65 grammes, out of which 36 grammes (i.e. 40%) should come from animal source. However, the animal protein consumption in Nigeria is less than 8 grammes per person per day which is a far cry from the FAO minimum recommendation (Niang and Jubrin, 2001). The swine industry in Nigeria has not get developed like the ruminants and poultry because pigs are not generally used for meat

purposes by majority of the population (Adebosin and Malion 1986). This is based on the culture and religion which make it a taboo for pigs to be eaten by some people. In Nigeria pigs account for 4.5% of the total meat supply of the country (Adebambo, 1982). Rekwot et al, (1990) established that in the raining season when all available land is heavy cropped, the pigs are totally confined and fed intensively. In the dry season the scavenge freely and are still given some supplementary feeds. In the study area 98% of the pigs are reported raised on small family farms while the rest are in institutional or large intensive production units (Pathiraja et al,1986). The study area hosts the Kafanchan pig market which is situated in Zango Kataf Local Government Area. Farmers, middlemen and government gain from the market as a source of revenue.

OBJECTIVES OF STUDY

The specific objectives of the study to be achieved are:

- i. To determine the socio-economic characteristics of pigs farmers that influence sustainable development in the study area.
- ii. To access the sources of farm inputs among farmers.
- iii. To identify the problems of pig production and to suggest control measures of these productive factors.

METHODOLOGY

The Study Area

This study was conducted in Kaduna State Nigeria. The state is estimated to be about 46.016 square kilometers and occupies 5% of land area of the 923,768 square kilometers of Nigeria. In 2006, the State has an estimated population of about 6066,562 people (NPC, 2006) and 470,000 farm families (APMEU, 1999). Based on these figures the current population is projected at about 6,667,787 people comprising of 644,013 farm families at a growth rate of 3.2% per annum. The State lies between latitude 11°32' and 09°02' north of the equator and longitude 80°50' and 06°15' east of prime meridian (Kaduna State statistical year Book, 1996). Rainfall is very much heavier in the southern part of the State like Kafanchan which has an average of over 1524mm than in the extreme part around Ikara which has an average rainfall of about 1016mm, over 75% of total population in the State are farmers (Shamach, 2009).

DATA COLLECTION AND SAMPLING TECHNIQUES

The information for this study were collected during the 2011. Primary data used for this study were collected through the aid of structured questionnaire along side oral interview. A total of 90 farmers selected out of 1804 farmers identified using random sampling techniques from the KADP farmers list in predominantly productive villages namely: Katsit, Zonkwa, Samaru, Fadan kaje, Gora, Jankasa, Fadan Kamantan and Madakiya.

ANALYTICAL TECHNIQUE

Simple descriptive statistics such as percentages means, frequency distribution were used to group the responses. It was used to analyze parameters such as farmers age, level of educations household size, problems of pigs production.

RESULT AND DISCUSSION

Socio-Economic Characteristics of Pig Farmers

The result in Table 1 showed that 36.47% of the farmers were within the age of 41-50 years, 12.94% and 9.41% fell within the range of 51-60 and above 60years respectively. The mean age of 44years showed that the respondents was within the active age of below fifty years. Age enable the farmers to accumulate resources and experience over years to enable them increase productivity (Ugwumba and Eziolise, 2010). Family size which refers to the adult, from the age of fifteen years in a family that were engaged in productive activities for economic growth. About 39% of the respondents fell within the range of 1-5 members are household, while 44.70%, 12.94% and 3.33% had the range of 6-10, 11-15 and 16-20 respectively. The more labour or workforce the family has to be allocated to swine production since the workforce doing most of the work are from the home during the crop production season (Idoje et al., 2012). Majority of the respondents 69.41% had less than four adult pigs, 23.53% had 4-6 pigs. The result showed that all the respondents were small- scale farmers considering their farm herd sizes. These livestock serves as buffer for food supply which make is easily for households to access the market when running out of food stock (Faden and Faden, 2012). The overall educational level of the respondents showed that a large number of the pig farmers were 73% literate. They could read and write in Hausa or English language thus, production of pigs is undertaken by illiterate and literate farmers. This result agreed with the report of (Faden and Nweze 2012). Two major source of land were identified among the pig farmers in the study area. About 88% of the respondents their land through inheritance while 11.76% regained theirs through borrowing. The average size of land used for pig production was found to be 0.108 hectares, this is acceptable as land does not influence swine production as the feeds.

Source of Farm Inputs among Pig Farmers in Kaduna State, Nigeria

The result in Table 2 showed that sampled farmers obtained their inputs (*Dusa*, Veterinary services and drugs, piglets, breeding services from government agencies (such as KADP, Local Government, State veterinary services) open market, personal farms, neighbourhood, batter market and gift. The result showed that open market and personal farms were the principal source of feeds and piglets. Other supplementary sources of feeds "dusa" were gifts (15.29%) and barter 1.18% which indicated that while relations can sympathize and donate some feeds to an individuals but they sometimes exchange "Dusa" for grain or other items.

Problems of Pigs Production

Respondents (about 36%) showed that cost of feeds have risen due to increase in the cost of crop production inputs. Diseases, high cost of drugs and veterinary service. The result indicated that about 36% of the pig farmers faced problems of diseases, high cost of drugs

and veterinary services. About 10% of farmers were faced with problems of housing. The pig shelters were generally poorly constructed and made of local materials. Results showed that 8% of respondent reported of low prices of pigs in the market. About 6% sampled farmers pointed out lack of finance as one of the problems that affected the pig production. Finance is needed for the procurement of feeds, building materials, piglets and drugs etc.

CONCLUSION AND RECOMMENDATIONS

This study revealed that socio-economic characteristics of farmers influence pig productivity and hence the socio-economic development in the study area. To achieve desired need of more animal protein through pig production and marketing in the study area various problems identified in this study may be minimized by executing the following recommendations:

1. The state ministry of Agriculture and its agencies should revive the breeding of improved breeds which are more prolific ones to fastly increase productive level. The present situation where the farmers are left to depend on neighborhood and personal farm for poor genetic piglets and other inputs should be seriously addressed for better productive result.
2. Farmers need to be assisted financially and the state government is called upon as a matter of policy to create an agency that disburses funds to farmers to increase their scale of operation.
3. Farmers should also be encouraged to form cooperative units with the aim of generating finance for sustainable pig production.
4. Improvement of feeds including concentrates should be made available to farmers at affordable prices for the purpose raising the sustainable development level.

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APPENDIX

Table1: Age Distribution of Swing Farmers

Age	Frequency of Respondents	%
21-30	9	10.59
31-40	20	30.59
41-50	31	36.47
51-60	11	12.94
Above 60	8	9.14
Total	85	100.00
<i>Family Size</i>		
1-5	33	38.81
6-10	38	44.70
11-15	11	12.94

16-20	3	3.53
Total	85	100.00
<i>Herd Size</i>		
1-3	59	69.41
4-6	20	23.53
7-9	6	7.06
Total	85	100.00
<i>Level of formal Education</i>		
Never gone to school	23	27.06
Adult education	31	36.47
Primary or secondary	26	30.59
Tertiary	5	5.88
Total	85	100.00
<i>Source of Income</i>		
Crop farming	75	88.24
Civil service and crop farming	5	5.88
Trading/crop farming	5	5.88
Total	85	100.00
<i>Source of Land</i>		
Inheritance	75	88.23
Leasing	10	11.76
Total	85	100.00

Survey data 2011

Table 2: Source of Farm Inputs of Pigs Production in Kaduna State

Source	Feed frequency	%	Veterinary drugs frequency	%	Piglet frequency	%
Government	-	-	44	51.76	-	-
Open market	78	46.99	-	-	30	35.29
Personal farm	74	44.58	-	-	29	34.12
Neighborhood	-	-	39	45.88	26	30.59
Barter	1	0.60	-	-	-	-
Gift	13	7.83	-	-	-	-
Government/neighborhood	-	-	2	2.35	-	-
Total	166	100.00	85	100.00	85	100.00

Source: Survey data 2011

Table 3: Problems of Pig Production in Kaduna State, Nigeria

Problem	Frequency	%
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Disease, drugs and veterinary service	59	36.42
High cost of feed	58	35.80
Poor housing	16	9.88
Low price	13	8.02
Lack of finance	9	5.56
Transportation	5	3.09
Lack of cross breed	2	1.23s
Total	162	100.00

Source: Survey data 2011