

MANAGEMENT OF INDIGENOUS PIG BREEDS IN ISEYIN, OYO STATE OF NIGERIA

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Summary

Indigenous pigs are reservoirs of adaptive genes which could be useful in genetic improvement of the breed and future pigs' development plans. This study therefore focused on the management of indigenous pig breeds in Iseyin, Oyo State of Nigeria. Personal interview and open-ended questionnaires were administered on 105 local pig owners. They were selected using purposive sampling technique. The questionnaire addressed the following aspect of pig production: socio-economics, housing, feeding, health and marketing. Information from the respondents revealed that majority (40%) of the owners were within the age range of 61 – 80 years and were mainly males. Traditional worshippers (Herbalists) (84%) were mostly engaged in its rearing and they were highly (60%) used for sacrificial purposes. The pigs were most of the time on free range and the owners did not attach much importance to their health care. Most of the times, these pigs were sold live, the price was always based on visual appraisal and male pigs attract quick sales (80%). The daily routine management practices were not adhered to and majority of the respondents did not consider the provision of wallowing pits for the pigs to cool their bodies as necessary. In view of the aforementioned respondents' responses, it is therefore imperative that local pigs should be conserved as one of our animal genetic resources for further genetic improvement.

Key words: Characterization, management, indigenous pigs, Iseyin

Introduction

Increase in meat production is one of the ways to solve the problem of protein malnutrition in Africa. Production of pig meat holds advantage over other sources of meat produced because pigs grow fast and are prolific breeder, farrowing 10 to 12 piglets at a time and their meat is rich in vitamins like thiamin, niacin and riboflavin (Ajala *et al.*, 2007). Therefore to bridge the gap between protein recommended and consumed, there is an urgent need to look for cheaper and alternative sources of meat on short-term basis. This calls for serious attention to pig production. Pigs can convert food waste to valuable products and this has made them to excel above other red meat producing animals such as cattle, sheep and goats. Their annual growth rate at 3.8% is higher than that of the human population at 2.30 – 2.80%.

Indigenous pigs of Nigeria are characterized by long snout, back wept ears, straight tail, and short ears. They are predominantly small in size with coat colours of brown, black, black with grey or white patches and brown with black patches. They are common in the rural areas of Nigeria. They have relatively low cost of production and their growth rate is fast, (Osaro, 1995). They also have short generation interval, high production potential, prolificacy, carcass yield and possess easy adaptation to environmental conditions (ILCA, 1992).

Earlier efforts had been directed towards improving their productivity through adequate nutrition (Ademola *et al.*, 2009), improved health care and management (Adebambo, 1982), breed development specifically through cross – breeding with superior exotic breeds. However, the Nigerian local pigs are decreasing in number

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and with possibility of the animals going into extinction.

Iseyin is a typical rural town located at the northern part of Oyo State and it is one of the few towns where the local pigs are reared. It is therefore important that the management practices of the local pigs employed in this area be studied for rapid transformation and genetic improvement of this breed. For any meaningful breeding program to be achieved, the needs and aspirations of the producers must be adequately understood (Verbeek *et al.*, 2007). Thus, in designing an effective breeding programme for pigs, it is important to understand and consider the socio-economic factors that are relevant to the production system (Verbeek *et al.*, 2007). The study therefore seeks to study the management practices being employed by the producers of local pigs in Iseyin area of Oyo State, Nigeria.

Materials and Methods

The study was conducted in Iseyin local Government area of Oyo State. It has a

characteristic humid environment and it is located in the South western part of Nigeria. Iseyin is a rural town typical of subsistence and small-scale commercial agricultural activities. The town lies on latitude 7°51'N and longitude 3°35' E with the altitude ranging from 50 to 200 metres above the sea level. Its climatic condition is tropical wet and dry season with annual rainfall ranging between 905mm and 1063mm. It also has relatively high humidity.

Personal interview was conducted with structured and open-ended questionnaire administered on one hundred and five owners of local pigs using purposive sampling technique. The questionnaire focused on the socio-economic characteristics, housing, feeding, health care and marketing of the breed.

The responses obtained from personal interviews and questionnaire were collated and analyzed using descriptive statistics procedure of SAS (1999).

Table 1: Demographic parameters of indigenous pig owners in Iseyin, Oyo State.

PARAMETERS	FREQUENCY	PERCENTAGE	CUMMULATIVE PERCENTAGE
SEX			
MALE	105	100	100
AGE DISTRIBUTION			
1 – 20	12	11.4	11.4
21 – 40	30	28.6	40
41 – 60	21	20	60
61 – 80	42	40	100
MARITAL STATUS			
MARRIED	105	100	100
RELIGIOUS STATUS			
CHRISTIANITY	21	20	20
TRADITIONAL WORSHIPPER	84	80	100
EDUCATIONAL STATUS			
LITERATE	42	40	100
ILLITERATE	63	60	60
FULL TIME IN OPERATION			
YES	84	80	80
NO	21	20	100

Table 1 Contd.

PARAMETERS	FREQUENCY	PERCENTAGE	CUMMULATIVE PERCENTAGE
OTHER OCCUPATION			
HERBALIST	105	100	100
REASON FOR PRODUCTION			
INHERITED	21	20	20
OCCULTIC/TRADITIONAL	21	20	40
SACRIFICE	63	60	100

Table 2: Pig source, record keeping and other information.

PARAMETERS	FREQUENCY	PERCENTAGE	CUMMULATIVE PERCENTAGE
PIG SOURCE			
ISEYIN	63	60	60
OKEHO	21	20	80
OSUN STATE	21	20	100
CONSTRAINT / LIMITATION			
COMPLAINT/HATRED	81	77	77
THEFT	12	11.5	88.5
NONE	12	11.5	100
PERSONAL KEEPING			
RECORDS ARE KEPT	15	14	14
RECORDS ARE NOT KEPT	90	86	100
MOTIVATION FOR PIG FARMING			
INHERITED	63	60	60
FRIENDS	21	20	80
NONE	21	20	100
TYPE OF LABOUR			
FAMILY	105	100	100
SOURCES OF FINANCES			
SELF	105	100	35

Table 3: Feeding of indigenous pigs in Iseyin

PARAMETERS	FREQUENCY	PERCENTAGE	CUMMULATIVE PECENTAGE
FEEDING SYSTEMS			
SCAVENGE	105	100	100
SUPPLEMENT FEED PROVISION			
AVAILABLE	84	80	100
NOT AVAILABLE	21	20	20
SOURCE OF WATER			
ANY AVAILABLE WATER	105	100	100

Table 4: Housing of indigenous pigs in Iseyin

PARAMETERS	FREQUENCY	PERCENTAGE	CUMMULATIVE PERCENTAGE
PIG HOUSING TYPE			
BAMBOO/WOOD	21	20	20
MUD	21	20	40
PLANK/TREES	21	20	100
NONE	42	40	80
FLOOR TYPE			
EARTHEN	63	60	60
NONE	42	40	100
ROOF TYPE			
IRON SHEET	63	60	60
NONE	42	40	100
PROVISION OF WALLING PIT			
AVAILABLE	21	20	20
NOT AVAILABLE	84	80	100

Table 5: Health management of indigenous pigs in Iseyin

PARAMETERS	FREQUENCY	PERCENTAGE	CUMMULATIVE PERCENTAGE
HEALTH MANAGEMENT			
PERSONAL	84	80	80
VETERINARY SERVICE	21	20	100
COMMON DISEASE			
NOT AVAILABLE	30	29	80
ROUNDWORM	30	29	100
SKIN MANGE	45	42	
TREATMENT ADMINISTERED			
NOT AVAILABLE	84	80	80
PREVENTIVE	21	20	100
MORTALITY NUMBER			
2-5	63	60	60
6-10	42	40	100
ECTOPARASITES			
NONE	42	40	40
MITE	21	20	60
TICKS	21	20	80
FLEAS	21	20	100

Table 6: Routine management of indigenous pigs in Iseyin

PARAMETERS	FREQUENCY	PERCENTAGE	CUMMULATIVE PERCENTAGE
DAILY CLEANING			
ONCE	42	20	100
NONE	84	80	80
TIME OF FEED			
TWICE	105	100	100
WASTE MANAGEMENT			
BURNING/ FED TO FISH	21	20	100
BURNING	21	20	80
NONE	63	60	60
IDENTIFICATION METHOD			
EAR NOTCHING	12	11	11
NAMES	74	71	82
NONE	19	18	100

Table 7: Marketing of indigenous pigs in Iseyin

PARAMETERS	FREQUENCY	PERCENTAGE	CUMMULATIVE PERCENTAGE
AVAILABLE MARKET			
CONSUMERS	63	60	60
RETAILERS	21	20	80
RETAILERS/ CONSUMERS	21	20	100
SALES PERIOD			
FESTIVE PERIOD	105	100	100
GROWTH/STAGE DEMANDED			
GROWERS	33	31	31
GROWERS/OLD	60	57	88
WEANERS	12	15	100
SEX DEMANDED			
MALE	21	20	100
MALE/ FEMALE	84	80	80
FORM OF MARKETING			
LIVE	105	100	100
SALES MODE			
VISUAL APPRAISAL	105	100	100

Results and Discussion

Table 1 shows that pig farmers were mostly male (100%), married (100%), within the age range of 61-80years (40%). These farmers were predominantly traditional religious believers (40%) with primary or no education at all (60%). The motivation to rear pigs came from their religious belief (60%) because most of the pigs reared were used for sacrifice.

Table 2 shows that majority of the owners came into the business of rearing local pigs through family inheritance (60%) and as such they solely financed the project. Pig farmers in the study area did not keep records (81%) of their activities and the major limitation to rearing pigs was the complaints received from distant and near neighbours (77%) of the destructive habit of the animal. The other limitation is theft (11.5%).

Farmers leave their pigs to scavenge for food (100%) most of the time and supplementary feeds (80%) such as cassava, kitchen waste, cassava peels, and local feed are provided. Famers or family members did the feeding in

most cases once or twice a day (Table 3). This is in agreement with the finding of Nsoṣo *et al.* (2004). The use of any available water mostly for pigs in the present study contradicted the findings of Nsoṣo *et al.* (2004). These authors reported tap water as the only source of water in their studies. The supplementary feed given to pigs in this study agrees with the work of Scherf (1990). The author noted that pigs scavenged for food during the free-ranging period and when in confinement, they were fed with supplements such as maize, maize husks, green maize, kitchen waste, cabbage waste, pumpkins, groundnut shells, fruits. The importance of supplementary feeding to the rearers' immediate environment was positively expressed by Ironkwe and Amefule (2008). These authors concluded in their studies that pig production signified a significant re-use of household waste, the waste of commercial enterprises (bakeries and vegetable and fruit markets) and industrial activities (breweries and abattoirs).

Majority of indigenous pigs in the study area were not housed (40%). However, the owners do provide occasional housing and such houses were made of bamboo/wood, mud with earthen floor (60%) and in most cases these houses were located close to the owners' home. Wallowing pits were often not provided (80%) (Table 4).

In the study area, the respondents did not place much importance on the health management of the animals (80%). In most cases veterinary services were not engaged to diagnose and treat any noticeable diseases and as such greater number of mortality often occurred. Major ectoparasites discovered included, mite, ticks and fleas while skin mange (45%) and roundworm (29%) were the predominant diseases in the area (Table 5)

Table 6 shows that most of the owners did not observe daily routine cleaning of the pens (80%) and faecal droppings could be seen littering the floor of the pens perhaps due to the earthen type of floor. The owners burnt the faeces to feed their fish. The predominant identification method used by the owners was by giving each pig a name (71%) such as, Suuru, Eyiowuawi, Igbehinadun. However, to a lesser extent ear-notching (11%) was also practised. Nutrition, housing and health are interrelated. It should be noted that inadequate housing can predispose pigs to disease and possibly trigger-off the spread of contagious disease (Ajala *et al.*, 2007). It was observed that less attention given to feeding and disease control might have predisposed pigs to other problems such as poor growth and general weakness (Subalini *et al.*, 2010).

Marketing of indigenous pig in the study area (Table 7) focused mainly on form, mode, sex, stage and time. Live pigs were marketed (100%) and the price placed on each animal depended on the visual appraisal (100%) of the owner. Both growers (31%) and finisher (57%) pigs were often demanded and marketed and the highest sales period coincided with festival periods (100%) such as Christmas and New year.

Conclusion

It is evident that the local pig breeds are gradually going into extinction in view of the age of the owners and what the respondents do for living (Herbalist). Government efforts should be

geared towards arresting this ugly trend by focusing much more on the genetic improvement of this breed so that the much desired animal protein in the Nigerians' diet will not be a mirage.

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