

GENDER ROLES AND CHALLENGES OF VILLAGE CHICKEN KEEPING AMONG FARMERS IN ENUGU STATE, NIGERIA.

ROLES DE GÉNERO Y DESAFÍOS DEL POBLADO DE ALDEA MANTENIENDO POLLOS ENTRE AGRICULTORES EN EL ESTADO DE ENUGU, NIGERIA.

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ABSTRACT

Production of village chickens is largely in the hands of the rural farm families in Enugu State, Nigeria. This affects women more than men, and may further limit the participation of women in village chicken keeping. Gender roles and challenges faced by village chicken farmers in Enugu State, Nigeria were examined. Multistage sampling technique was utilized in selecting 100 respondents. Structured interview schedule and observations were used in collecting data for the study. Descriptive statistics such as frequency, percentage and mean scores were used in analyzing the data. Majority (93.0%) of the respondents were females. Construction of chicken house was carried out by men; while women were involved in feeding, disease control and marketing of chickens. Perceived challenges to village chicken keeping include: diseases ($\bar{x} = 2.98$), poor growth rate ($\bar{x} = 2.94$), predators ($\bar{x} = 2.94$), high mortality ($\bar{x} = 2.56$), inadequate veterinary services ($\bar{x} = 2.33$) and inadequate extension services ($\bar{x} = 2.26$). Provision of adequate housing facilities and mounting of vaccination and treatment campaigns are essential in reducing mortalities in village chicken.

Keywords: agriculture, challenges, extension, gender, village chicken.

RESUMEN

La producción de pollos de las aldeas está en gran parte en manos de las familias campesinas del estado de Enugu, Nigeria. El mantenimiento local del pollo ha sido

descuidado por la investigación y el desarrollo. Esto afecta a las mujeres más que a los hombres, y puede limitar aún más la participación de las mujeres en el cuidado de las gallinas de la aldea. Se examinaron los roles y desafíos de género que enfrentan los productores de pollo de las aldeas en el estado de Enugu, Nigeria. La técnica de muestreo de múltiples etapas se utilizó para seleccionar 100 encuestados. El cronograma de entrevistas estructuradas y las observaciones se usaron para recopilar datos para el estudio. Las estadísticas descriptivas tales como la frecuencia, el porcentaje y los puntajes promedio se usaron para analizar los datos. La mayoría (93.0%) de los encuestados fueron mujeres. La construcción de la caseta de pollos fue llevada a cabo por hombres; mientras que las mujeres participaron en la alimentación, el control de enfermedades y la comercialización de pollos. Los desafíos percibidos para el mantenimiento de gallinas en las aldeas incluyen: enfermedades (= 2.98), tasa de crecimiento pobre (= 2.94), depredadores (= 2.94), alta mortalidad (= 2.56), servicios veterinarios inadecuados (= 2.33) y servicios de extensión inadecuados (= 2.26) . La provisión de instalaciones de vivienda adecuadas y el montaje de campañas de vacunación y tratamiento son esenciales para reducir la mortalidad en el pollo de la aldea.

Palabras clave: agricultura, desafíos, extensión, género, pollo de pueblo

INTRODUCTION

Gender is a range of physical, mental and behavioural characteristics distinguishing males and females. Gender roles, therefore, refers to the socially constructed roles, behaviour, activities and attributes that a particular society considers about men and women (Eagly, 2009). Over the past decades, awareness of gender issues in agricultural production has steadily increased and questions have been raised on whether women and men benefitted equally from economic development (Rahman *et al.*, 2007). This is because of the enormous contributions of women in improving agricultural production in most developing countries of the world as they are engaged in a range of productive activities essential to household welfare, agricultural productivity and economic growth (Enete and Amusa, 2010). Brown *et al.* (2001) opined that women contribute to national agricultural output and household food security by working as farmers and farm workers.

Research reports have confirmed that women all over the world are taking over agricultural activities from men who migrate to the cities in search of paid employment (Ajani and Igbokwe, 2011). Women provide 43 percent of agricultural labour, produce approximately 70 percent of its food and do at least half of the tasks involved in raising animals (Food and Agriculture Organization, FAO, 2011). Oniang'ó (2005) reported that

women contributed 80% of labour to food production and do not get an appropriate share of agricultural extension information.

Chavangi and Hanssen (1983) estimated that women performed 70-80% of the daily work and yet have been disregarded by extension agents. In Nigeria, it has been estimated that 60– 80% of agricultural workers are women (Okoh *et al.*, 2010). The agricultural activities that women engage in range from dominating the labour resources on production farms and domestic food processing, to animal husbandry of which their involvement in village chicken keeping cannot be overemphasized.

Village chicken keeping plays a vital role, contributing to cultural and social life of rural farmers (Petersen, 2002). Village chickens are reared principally for family consumption and social security (Moreki, 2003; Nwagu, 2002). Several factors have been identified in some East African and Asian countries to be responsible for poor performance of village chickens. These factors include genetic make-up of the village chickens, poor management skills and information dissemination (Tadelle and Ogle, 2001; Solomon *et al.*, 2013; Nebiyu *et al.*, 2013; Meseret, 2010 ; Halima, 2007 and Nigussie *et al.*, 2010). Fayeye and Oketoyin (2006) observed that the native chickens constitute about 80% of the poultry birds in Nigeria. Production of village chicken is largely in the hands of the rural farm families. According to Udo (2002), local chicken keeping has been neglected by research and development. This affects women more than men, and may further limit the participation of women in village chicken keeping (Gueye, 2005). Decision on the various activities of the production chain in village chicken keeping involves various household members (Kebede *et al.*, 2012). Against this backdrop, the specific roles and contributions of the different gender groups and the challenges they face in raising village chicken, (women, men, boys and girls) must be understood. Hence, this study sought to ascertain gender roles and challenges in village chicken keeping in Enugu State, Nigeria.

MATERIALS AND METHODS

The study was conducted in Enugu State, Nigeria. The State is one of the 36 states in Nigeria, located in the southeast geopolitical zone of the country. It lies between Latitudes 5° 56´ North and 7° 06´ North of the equator and Longitudes 6° 53´ East and 7° 55´ East of the Greenwich meridian. The state is bounded on the North by Kogi and Benue States, in the East by Ebonyi State, in the South by Abia and Imo States and in the West by Anambra State (Ezike, 1998).

The study population was free ranged village chicken (*Gallus gallus*) keepers. In most of the households, the chickens are let free during the day time to scavenge around the

homestead for food from the surroundings and kept indoors during the night in small poultry shelters or within the family accommodation. Chicks are hatched by the hens and are reared by them until when they are two to three months of age. Feeds may be occasionally supplemented by provision of household table scraps and grains.

A multistage sampling technique was used for the study. In the first stage, Nsukka and Enugu-Ezike Agricultural Zones were selected from the six agricultural zones in Enugu State using simple random sampling technique. In second stage, two blocks (Nsukka, Uzuwani, Igbo Eze North and Igbo Eze South blocks) were selected through simple random sampling technique from the 3 blocks in each zone giving a total of 4 blocks in the state. In stage three, five cells (Ehaalumona, Obukpa, Obagwaani/edem, Okpuje Okutu/alouno, Ogurugu, Umulokpa, Opanda/abbi, Ukpabi/nimbo, Nkpologu, Amaechara, Umuopu/umueze, Igogoro, Aji, Umuida, Ibagwa aka, Iheaka, Uhunowere, Alor agu and Iheakpu awka) were selected through simple random sampling technique from all the cells in each block giving a total of 20 cells in the state. In stage four, a list of farmers involved in village chicken keeping was compiled by the help of community leaders and extension agents. Out of the list provided, five farmers were randomly selected from each cell to give a total of one hundred farmers. Quantitative primary data was collected from farmers using structured interview schedule, while qualitative data was collected using observations. The interview schedule was validated by some experts in the Department of Agricultural Extension, University of Nigeria, Nsukka. A pilot study was carried out to test the reliability of the instrument. Information on gender roles was elicited by asking respondents to select from a list of possible activities in village chicken keeping presented to them, the role(s) they play in village chicken keeping e.g. building and cleaning of chicken houses, marketing of chicken, feeding and watering of chicken among others. To ascertain perceived challenges to village chicken keeping, a list of 21 possible challenges were presented to the respondents and they were asked to indicate their opinions on each possible challenge on a three-point Likert-type scale of 3 = very serious, 2 = serious and; 1 = not serious challenge. These values were summed up to 6 and then divided by 3, to obtain a mean score of 2.0. Variables with mean score ≥ 2.0 were regarded as perceived challenges to village chicken keeping. Descriptive statistics were used to present frequencies, percentage and mean scores. Data were then coded and analyzed using Statistical Product for Service Solution (SPSS) software.

RESULTS AND DISCUSSION

Socioeconomic characteristics of respondents: The average age of respondents was 52.7 years and most (93.0%) of them were females (Table 1). This shows that older farmers dominate village chicken farming in the area and as such, may be faced with the challenge of applying modern management practices. Also, the majority of the respondents in the study area were predominantly females. This may be as a result of men considering indigenous chicken production as women’s role.

Table 1: Distribution of respondents by socio-economic characteristics

Variables	Percentage (%)	Mean
Age (years)		
21 – 30	15.0	
31 – 40	15.0	
41 – 50	12.0	52.7
51 – 60	23.0	
61 – 70	25.0	
71 and above	10.0	
Sex		
Male	7.0	
Female	93.0	
Marital status		
Single	6.0	
Married	57.0	
Widow	36.0	
Divorced	1.0	
Educational level		
No formal education	42.0	
Primary school attempt	18.0	
Primary school completed	7.0	
Secondary school attempt	4.0	
Secondary school completed	17.0	
OND/NCE holder	6.0	
HND/First degree holder	6.0	
Years of farming experience		
1 – 10 years	44.0	
11 – 20 years	13.0	19.0
21 – 30 years	25.0	
31 and above	18.0	
Household size		
1 -5 persons	54.0	
6- 10 persons	41.0	6.0
11 persons and above	5.0	

Indigenous chicken production are regarded and considered to fall within women’s domain (Swatson *et al.*, 2001). Majority (57.0%) of the respondents were married with an average farm experience of 19 years. Hence, they are likely to have high labour force for poultry production activities, like getting assistance from family members in feeding and catering for the birds. Up to 42% of respondents had no formal education. This indicates that the respondents generally have low educational level and this could impact negatively on indigenous chicken production. This is because education would enable the farmers to acquire, accept and use information on improved method of indigenous chicken production (Mekonnen, 2007).

Table 2: Distribution of respondents according to the flock size and structure of village chicken

Variables	Percentage of respondents	Mean
Flock size		
1 -10	53.0	14
11 – 20	32.0	
21 – 30	11.0	
< 31	4.0	
Flock structure		
<i>Cocks per flock</i>		
1-5	76.0	5
6-10	14.0	
>11	10.0	
<i>Hens per flock</i>		
1-5	84.0	4
6-10	13.0	
>11	3.0	
<i>Growers per flock</i>		
1-5	85.0	4
6-10	10.0	
>11	5.0	
<i>Chicks per flock</i>		
1-5	68.0	9
6-11	16.0	
>11	16.0	

Flock size and structure of village chicken: The average flock size recorded in this study is 14 birds (Table 2). This finding is similar to that of Fisseha *et al.* (2010) who reported a flock size of 13 local chickens per household in Bure district of Amhara region in Ethiopia. The fact that an average of 14 birds were reared per year (Table 2) indicates that

majority of the farmers were small scale village chicken producers. According to Paul *et al.* (2003), almost every family of rural dwellers is involved in backyard poultry keeping and they maintained between 6 and 10 chickens. This shows that the farmers are small scale producers. Several factors may be attributed to this small flock size and they include: poor housing condition, poor feeding, disease, poverty and lack of vaccination. Each flock contained an average of 5 cocks, 4 hens, 4 growers and 9 chicks (Table 2). This observation is contrary to the result obtained in Western Kenya where chicks constituted 50% of the flock and cocks were fewer because they were sold off or used for home consumption (Kaudia and Kitalyi, 2002). In another study in Western Kenya Ochieng *et al.* (2013) reported flock structure consisting of chicks (30.2%), hens (17.8%) and cocks (5.6%).

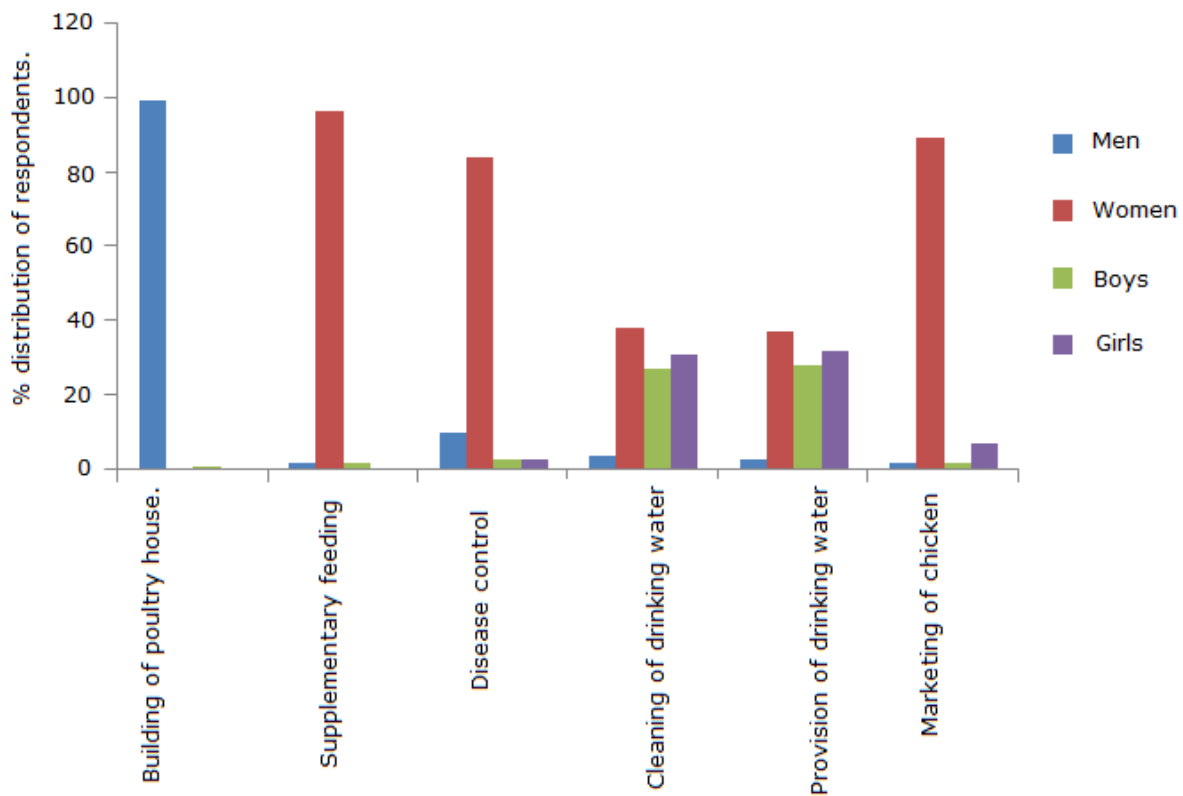


Fig. 1. Gender roles of village chicken keeping in Enugu state

Gender roles in village chicken keeping: The distribution of the respondents according to the various traditional tasks performed by men, women, boys and girls is presented in Fig 1. Nearly all (99%) of the respondents indicated that building of chicken house is a task performed by men while provision of supplementary feed (96%), marketing of chicken products (85%) and disease control measures (84%) were carried out by women. Cleaning of chicken houses and provision of drinking water to the chickens were performed by

women, boys and girls even though women carried out more of these functions. This is because since most farmers allow chicken to stay in the kitchen and women do their daily chores around the kitchen, they first sweep it before proceeding in their house chores. This is the reason why women were involved in cleaning chicken house more than other members of the household. Furthermore, women are involved in marketing all agricultural products more than any other member of the family. The observation in this study that men are the major stakeholders in the construction of chicken houses agrees with Moreki (2003) who noted that adult and young males are the major contributors in building of poultry houses. The women were indicated to play significant roles in all aspects of chicken production except building of chicken houses. This finding is in line with Ndegwa *et al.* (1996) who stated that women are known to care for both men and animals in the family. Swatson *et al.* (2001) also pointed out that women are concerned in taking care of the health needs of family members and poultry while men are concerned with the provision of the basic family needs. In this study, sale of chicken was predominantly done by women, a finding that is similar with that of Dinkia *et al.* (2010) in Ethiopia and Okitoi *et al.* (2007) in Western Kenya. Thus, information on marketing of chicken in the study area should target women.

Perceived challenges to village chicken keeping: Eleven (52.4%) variables were perceived by the respondents as challenges to village chicken keeping in Enugu State, Nigeria (Table 3). Perceived production challenges on poultry production recorded in this study were also reported in Western Kenya (Ochieng *et al.*, 2013) and Rift Valley of Oromia, Ethiopia (Dinka *et al.*, 2010) as challenges to village chicken keeping. Studies have indicated that chickens not housed are exposed to rain, cold, predators, theft and pose management difficulties in detecting signs of ill health, treatment and vaccination against disease (Kebede *et al.*, 2012; Ahlers *et al.*, 2009). According to Njike (2001) diseases and prey had continued to retard the productivity of the poultry industry, particularly the scavenging village chickens. Mekonnen (2007) reported that theft contributes to 1% of the total losses in flocks under free range production system. Predators such as wild birds, cats, dogs and wild animals are carriers of disease agent and they have been identified as the major causes of diseases in the village poultry in Rift Valley of Oromia, Ethiopia (Dinka *et al.*, 2010). Provision of adequate housing for the village chickens will aid in curbing theft and losses due to disease, predators and harsh climatic conditions.

Table 3: Respondents’ perceived challenges to village chicken keeping

Challenges	Mean	Std. Deviation
Disease and parasitic infestation	2.98*	0.200
High cost of feeds and drugs	2.18*	0.845
High mortality rate of chicken	2.56*	0.671
Predators such as hawks, cats, dogs, snakes	2.92*	0.367
Unavailability of market	1.06	0.312
Poor sales of chicken products	1.96	0.963
Poor income to purchase inputs for chicken production	2.02*	0.964
inadequate access to information on chicken	2.13*	0.872
Theft of chicken	1.28	0.653
Lack of knowledge on skills on poultry production	2.22*	0.760
Lack of adequate scavenging area	1.22	0.596
Inadequate access to credit	1.93	0.844
Inadequate extension services	2.26*	0.597
Poor protection from adverse climatic condition due to poor housing	2.00*	0.739
Inadequate veterinary services	2.33*	0.604
Poor participation in farmers or poultry organizations	1.53	0.858
Scarcity of chicken stock from available sources	1.53	0.834
Lack of good breeding stock	1.67	0.900
Poor egg production	1.99	0.980
Problem of transportation to markets	1.24	0.653
Poor weight gain/poor growth rate	2.94*	0.312

* Perceived challenges

Poor weight gain or growth rate was reported as one of the major challenges of village chicken in the study area. This poor weight gain may be attributed to the genetic makeup of the village chickens. Cross breeding of village chickens with improved exotic chicken breeds may improve the growth rate of the indigenous birds. Adequate nutrition by way of provision of good quality feed will also improve the growth rate of the chickens. Unfortunately, the respondents indicated poor income as one of the challenges to village chicken keeping. Poor income on the part of the chicken producers has a serious negative effect on village chicken keeping - inability to provide good quality feed, medical care and housing. Inadequate veterinary and extension services as well as lack of access to information on village chicken keeping were also identified as the challenges to village chicken keeping in the state. Limited access to veterinary and extension services probably accounts for the lack of access to information on chicken production as indicated by the respondents. According to Fawole (2006), the coverage of farm families is still limited,

despite the fact that extension institutions and various sources of information abound in many developing countries.

As conclusion, village chickens are excellent sources of livelihood to the rural farm families. In Enugu State, village chicken keeping activities are largely in the hands of women. Women should therefore be the target of any intervention aimed at improving indigenous chicken production in the State. The venture is faced with a plethora of changes which revolve essentially around poor gain/growth rate and high disease incident/mortality. In order to increase the production and income generating base of the rural dwellers, there is need to set up breeding centers where the genetic makeup of the village chickens can be up graded. Also, in order to reduce/prevent diseases and reduce mortality, farmers should be encouraged to use veterinary drugs and vaccines. This could be achieved through mounting of village chicken vaccination and treatment campaigns and improvement on the availability of veterinary vaccines and drugs. The need to strengthen the veterinary extension delivery services through improved training for veterinary extension officers cannot be over emphasized. Provision of adequate housing facilities will reduce risks of predators and exposure to harsh climatic conditions. This will in turn result in improved veterinary care, nutrition and conversion of feed to tissues; which will ultimately culminate in improved growth rate and weight gain and an increase in the socioeconomic live of the chicken keeper.

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