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Challenges to Women Participation in Poultry Production in Jos North Local Government Area of Plateau State, Nigeria

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Abstract:

This study assessed the challenges to women participation in poultry production in Jos North local government area of Plateau state, Nigeria. The data were collected by means of structured questionnaires from 100 respondents randomly selected and analysed using descriptive and chi-square statistics. The result showed that, majority (67%) of the respondents fell within the age range of 30-49, 66% had formal education, 71% were married, 55% had 1-5 years of experience, and 55% have 6-10 people in the family. The result also revealed that, majority (71%) of the respondents participated more in feeding and watering of birds, 85% depend on personal savings as their source of capital. The chi-square test also showed that, initial capital, education and extension advice were significant at $p < 0.05$, while marital status was significant at $p < 0.01$. The study discovered that, women participation in poultry farming was constraint by high cost of feeds, inadequate capital, and high cost of labor among others. However, provision of credit facilities and farming incentives and improved extension services, can serve as a solution to their problems.

Keywords: Challenges poultry, participation and women

1. Introduction

1.1. Background of the Study

Nigeria is endowed with substantial natural resources. These include 68 million hectares of arable land, fresh water covering 12 million hectares, and ecological diversity ranging from forest in the south to the Sahel in the north, which enable the country to produce a wide variety of crops, forestry, livestock and fishery products. Backed with oil wealth, Nigeria has the potential of becoming one of the strongest agricultural economies in Africa (Umar, *et al*, 2006). Similarly, Central Bank of Nigeria [CBN] (2002) revealed that Nigeria is endowed with large expanse of fertile agricultural land, rivers, streams, lake and forest as well as grass land resources. Backed by its diverse climate and large variant population, the country can sustain a highly productive and profitable agricultural sector capable of ensuring self sufficiency in food and raw material production for the industrial sector as well as providing gainful employment for the population and generally foreign exchange through export.

Despite all these aforementioned potentials Nigerian agriculture is relatively under developed where majority of the farmers operates at subsistence level cultivating averagely less than five hectares for family consumption. However, various policies were introduced by government in an attempt to ameliorate this precious problem.

Given the decline in agricultural activities and the consequence rise in food import bills from the early 70s, Federal Government introduces some notable programmes which include Food and Agriculture Organization (FAO) of the United Nation, Sponsored Fertilizer Trends, National Accelerated Food Production Programme (NAFPP), Operation feed the Nation (OFN), Green Revolution Programme, River Basin Development Authorities (RBDAs), Agricultural Development Programme (ADPs), and Directorate of Food, Road and Rural Infrastructure (DFFRI) among others.

The importance of food and agricultural production to the world requires a combine effort of both women and men. The effort observed from researches was apparently considered in favour of one gender over another, but these could be vocational difference

(Onanomadu, 2000). The National Population census reported that about 49.96% were male and 50.03% were female, (Census 2006). It was related that women had not benefited as much as men from economic development programmes. This is because women are found to have limited opportunities to access and control over productive resources. Welfare to farmers is a must to improve the overall agricultural development of the country. For this, it is necessary to increase women participation in training programme on improved agric-technology friendly to women (Rabindra, 2008).

1.2. Statement of the Problem

One of the main problems faced by women in Nigeria poultry production is low productivity and high mortality rate due to disease predation. Other impeding problems include supply of inputs and services and marketability stage. However, remedies to these problems include; improved disease control, vaccination, improved feeding with local ingredients, improved housing, specialized village level hatchery, market linkages with local restaurant, large number of improved breed (greater than 400), use of concentrate feeds with vitamins and minerals improved housing, etc (Tegene, 2010).

Despite the documented evidences of the role of women in agriculture, both in the past and present effort in terms of planning and implementation of agricultural programmes have failed to direct need from inputs to the women, since most policy makers and service providers have neglected the decision making process, poor women education, inadequate mechanization technology for women, limited access to land resources and poor agricultural development cultivated by poor involvement of women decision making process.

However, to realize sustainable agricultural development gender mainstreaming is imperative towards boosting food production in Nigeria. The critical issue which requires elicit involvement or otherwise. This is important for two reasons. Firstly, the study of women would be an assessment of the success or otherwise of the contribution they made towards agricultural development in the country. Secondly, sustainability of economic development in the long run hinges objectively on the performance of the agricultural sector.

Unlike before, the contribution of agriculture in Nigeria continues to suffer a downward trend for 3 – 4 decades (Abubakar et al, 2006). However, women participation in poultry is still low visible compared to that of women in Plateau State. However, inadequate or lack of adequate empirical data on this subject area in the state necessitated the need for this study.

1.3. Purpose of the Study

The research was conducted to investigate the challenges towards women's participation in poultry production in Jos North Local Government Area of plateau state. The specific objectives include:

- i. To describe the demographic factors of women involved in poultry production in the study area.
- ii. To describe the factors influencing women participation in poultry production in the study area.
- iii. To assess the constraints to women participation in poultry production in the study area.

2. Research Methodology

2.1. The Study Area

The study area was Jos-North Local Government Area of Plateau State, Nigeria. Still as a source of contention the ownership of Jos north is contended by the Hausa, Biroms and Jarawa with current population put 429, 300 with a total number of 217,160 males against 212,140 females (Census, 2006). The Jos Plateau is the highest flat form with an elevation of 1500 – 1800m above the sea level. Jos north area is a great hydrological center or watershed with a radial pattern of drainage in which many rivers takes their sources. It has a total land area of 219 km². Plateau State is located in the middle belt region of Nigeria. Jos north lies between a latitude of 8° 24' N of the equator and 8° 32' and 10° 38' East of the longitude (Ames, 2000). Though Jos north is situated in the tropical zone, a higher altitude indicates that Jos has an average temperature of 18° – 22°C (Mahmoud, 2007). The people in Jos north are mainly engaged in trading, transportation, artisan, while few are engaged in farming especially those located in the outskirts of the town. In addition Jos is a notable in poultry production (Sani, 2011).

2.2. Sampling Procedure

The type of sampling methods that were used for this study was the simple random sampling and purposive sampling techniques. Simple random sampling was employed in the selection of communities while purposive was used in the choosing women poultry farmers in the study area. However, 100 women poultry farmers were selected as sample size in the study area.

2.3. Analytical Technique

The research utilized primary field data collected by means of structured questionnaires distributed to 100 women in the study area. Data collected were analyzed using both descriptive and inferential statistics. Descriptive statistics such as frequency tables and percentage were used to achieve objectives I and III. Chi-square statistics was an inferential tool used to analyzed objective II. Chi-square is the measure of the discrepancy existing between the observed and expected frequencies (Murray et al, 1999).

$$\text{Chi-square is given by } \chi^2 = \frac{\sum(f_o - f_e)^2}{f_e}$$

Where χ^2 = Chi-square

F_o = Observed frequencies

F_e = Expected frequencies

3. Result and Discussion

3.1. Socio-Economic Characteristics of Respondents

According to result in Table 1 majority (48%) of the women fell within the age category of 30-39 years. This result indicate that a higher percentage of the women participation in poultry production in the study area were physically active. The result agrees with the findings of Adisa *et al* (2001) who found that, the women are capable of performing rigorous operation involved in commercial poultry. The result also showed that most (76%) of the women in the study area were averagely educated. It might be due to the fact that poultry farming requires high level of literacy standard and precision for correct administration of drugs, feed, and record keeping and taking of prompt management decision. This result goes in line with that of Akinkunmi, *et al* (2012) who observed that good educational background of the respondents can improve and widen their business horizon and enhance their creativity expansion. The result further revealed that most (72%) of the respondents were married, implying that most of the women involved in poultry business are responsible for caring individuals with good mothering ability which required in maintaining a good managerial standard in poultry work. This is similar with the findings of Owonnibi, (2008) who revealed that most of the women in poultry production have responsibilities place on them due to large number of family size and family members.

The findings also showed that most (89%) of the women had 1 – 10 years of experience in poultry farming in the study area. This result indicates that their low level of farming experience may be due to the fact that most of the women poultry business is a relatively new enterprise. The results disagrees with the findings of Akinkunmi *et al* (2007) who found that majority of the respondents have more than 10 years of farming experience due to their high level of educational of the respondents in the study area. As shown in the result most (86%) of the respondents had family members of 6 and above people. This result indicates that the size of the family may influence the level of their participation, and family members can contribute to adequate family labor. However, this is similar with a study conducted by Ibrahim *et al.* (2007) who found that the number of children in the farm household influence, labor availability for farm operations.

Variable	Frequency	Percentage
Age (yrs)		
20-29	16	16
30-39	48	48
40-49	23	23
50 and above	13	13
Total	100	100
Educational Level		
Never been to School	13	13
Non Formal Education	11	11
Primary Education	26	26
Secondary Education	32	32
Tertiary Education	18	18
Total	100	100
Marital Status		
Married	72	72
Single	15	15
Divorced	07	07
Widowed	06	06
Total	100	100
Years of Experience		
1-5	55	55
6-10	34	34
11 and above	11	11
Total	100	100
Household Size		
1-5	13	13
6-10	55	55
11-15	15	15
16-20	11	11
21 and above	06	06
Total	100	100

Table 1: Distribution of Respondents based on Socioeconomic Characteristics
Source: Field Survey, 2012

3.2. Respondents' Participation in Poultry Activities

The result in Table 2 revealed that most (71%) of women in the study area participated mainly in the feeding and watering of birds. The result also showed that 56% were involved in brooding chicks while 14.5% were engaged in disinfecting equipments. This result indicates that women participate mainly in feeding and watering of the birds because it doesn't require high level of knowledge about poultry production like brooding of chicks, medication among others. Their involvement in feeding and water supply helps rapidly in enhancing the productivity and welfare status of the bird. This finding agrees with that of Rahman, *et al* (2007) who asserted that women mostly performed daily routine activities of poultry in Kaduna State. The result in Table 2 further showed that majority (69%) of the respondents in the study area do not consider poultry production as their primary occupation, while only 31% engage in poultry production as their primary occupation. This reason may be due to inadequate capital, space and proper knowledge on poultry production.

Variable	Frequency	Percentage
Activities		
Brooding of chicks	56	56
Feeding and Watering of Birds	71	71
Medication	38	38
Disinfecting Equipment	28	28
Occupation		
Poultry Farming	31	31
Crop Farming	24	24
Civil Service	13	13
Others	69	69

Table 2: Distribution of respondents according to activities they participate in poultry production
Source: field survey 2012 * Multiple responses recorded as percentages >100%

3.3. Respondents' Accessibility to Productive Resources

As shown in Table 3, it can be observed that the respondents have a very low rate of accessibility to productive resources such as capital, extension and veterinary advice. This finding agrees with that of Rahman *et al*, (2007) who reported the level of accessibility to productive resources was as low as 28.7%. However, most (85%) of poultry farmers in the study area acquire capital through their personal savings, with only 1% accessed capital through bank facility. This indicates that formal source of credit to poultry farming is very low relative to informal credit in the study area. The study also revealed that 76%, 73% and 50% of poultry farmers accessed poultry equipment, feed and drugs from the market respectively. On the other hand, 87% of the respondents procured their day old chicks (DOC) from certified poultry dealers. The result further disclosed that most (83% and 63%) of the respondents do not have contact with veterinary doctors and extension workers. This finding goes in line with Okohn (2007) who stated that low rate of accessibility to resources was due to poor extension services to educate farmers on the use of such resources.

Productive Resources/Items	Frequency	Percentage
Source of Capital		
Personal	85	85
Friends and relatives	14	14
Loans from banks	1	1
Total	100	100
Source of Poultry Equipment		
Market	76	76
Others	24	24
Total	100	100
Source of Poultry Drugs		
Market	50	50
Veterinary	49	49
Co-operatives	1	1
Total	100	100
Extension Advice		
Yes	37	37
No	63	63
Total	100	100
Extension Advice		
Yes	37	37
No	63	63
Total	100	100

Source of feed		
Market	73	73
Co-operative	10	10
Local media	17	7
Total	100	100
Source of D.O.C		
Extension agent	03	03
Friend	05	05
Certified dealer	87	87
Directly from hatchery	05	05
Total	100	100

Table 3: Distribution of respondents according to accessibility to productive resources

Source: field survey 2012

3.4. Chi-Square Test Showing the Influence of Socio-Economic Characteristics on the Level of Participation in Poultry Production

The result of Chi-square analysis showed that level of education, extension advice and initial capital were significant at $p < 0.05$ in influencing women participation in poultry production in the study area. This is in accordance with a priori expectation that adoption of new technologies is influenced by educational level and contact with extension agents. Similarly, marital status was significant at $p < 0.001$ in influencing women participation in poultry production in the study area. This is similar with that of Ogunlade (2009) who also found that the educational status of the respondents was significant in influencing women participation in poultry farming in western Nigeria. Conversely, the finding contradicts that of Nor, *et al.* (2010) who related that education among others was not significant in influencing women participation in poultry production.

Variables	Chi-square value	Degree of freedom	Level of significance	Decision
Age	58.26	5	0.20	NS
Farming experience	70.24	13	0.34	NS
Education	15.70	4	0.030**	S
Marital status	1.67	4	0.000***	S
Occupation	14.40	1	0.220	NS
Initial capital	58.26	40	0.030**	S
Extension advice	6.76	1	0.010**	S

Table 4: Chi-square Test on the influence of socioeconomic characteristics on the level of participation in poultry production

NS = Not significances, S = Significance, ** = Significance @ 5%, ***=Significance @ 1%

Source: field survey 2012

3.5. Constraints to Poultry Production

The result in Table 5 indicates that 78% of the respondents were faced with the problem of the high cost of feed, 71% with inadequate capital, 52% with the high cost of labor, 48% with inadequate space, incidence of pest and diseases 46 and 30% with poor quality breeds among others. However, high cost of feed was probably due to their poor access to credit facilities and inadequate awareness about sources of funds that can support their production. Oke *et al* (2007), emphasized that, poultry farmers are seldom considered by extension agents, to visit and motivate them on the need to improve their level of production, provide training, that would improve their potential capabilities and information on technological advancement regarding poultry production would and improvement in their output.

Constraints	Frequency	Percentage*	Rank
Inadequate capital	71	71	2 nd
High cost of feed	78	78	1 st
Insufficient extension services	32	32	8 th
Incidence of pest and diseases	40	40	7 th
Poor quality of breeds	30	30	9 th
Inadequate space	46	40	5 th
High cost of labor	52	52	3 rd
Problem of weather variability	48	48	4 th
High mortality rate	42	42	6 th

Table 5: Constraints faced by respondents in poultry production

Source: field survey 2012

4. Conclusion

Base on the research findings, it can be concluded that women are willing and do participate in poultry production in the study area, but the level of participation in poultry production by women in the study area is significantly affected by constraints such as high cost of feed (1st by rank) inadequate capital (2nd by rank), high cost of labor (3rd by rank), problem of weather availability (4th) and the problem of inadequate space (5th) among others. These numbers of problems may be as a result of certain factors such as:

- Poor or inadequate agricultural programmes for women empowerment.
- Continuous resistance of discrimination and/or gender inequality between the female and their male counterparts.
- Poor extension services and awareness of women on the importance of poultry production in the growth of economy and increase in the level of protein in the nation.

Therefore, unless, these factors are tackled or minimized both at subsistence and commercial level, else the problem will continuously, cumulate which will in turn affect the level of food security as well as protein availability in the country.

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