Assessment of Stress Management For Women Poultry Farmers in Aguata and Awka Agricultural Zones of Anambra State, Nigeria

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ABSTRACT

Women poultry farmers play a critical role in food production in Nigeria, yet they face significant challenges that impact their mental and physical well-being, productivity, and the sustainability of their operations. The study described the socioeconomic characteristics of the women poultry farmers; identified the sources of stress among the respondents; ascertained the perceived effects of these on the respondents; and identified the coping mechanisms employed by the farmers to manage the stress. The study collected data from 60 respondents using questionnaire and interview schedule. Socio-economic characteristics of the respondents revealed that average age of the farmers was 37 years, with 58.33% of the respondents married and mean household size of 5 persons. The respondents had mean flock size of 76 birds and mean income of N200,500. Most farmers had attended 7-12 years of education (55%) and 51.67% accessed credit. About 80% of farms were family-owned, and 55% of respondents were members of cooperative society. The study identified major stressors as disease outbreaks (100%), unpredictable weather conditions (95%), feed price fluctuations (91.67%), market unpredictability (88.3%) and tedious waste disposal (81.67%). The major coping mechanisms adopted by the respondents were seeking support from family (73.33%) and diversification of farming activities (76%). Women poultry farmers in the study area face significant stress ranging from disease outbreak to exhaustion and effective stress management strategies will significantly alleviate their stress and enhance productivity. The study recommends for financial support through subsidies and grants, trainings, and provision of mental health services for the farmers.

INTRODUCTION

Anxiety and its associated stressors constitute significant mental health concerns globally, impacting various demographics and professions (Smith, 2020). In particular, women poultry farm owners represent a unique subset of the agricultural community whose mental health challenges warrant focused attention. Poultry farming, as a labor-intensive and demanding occupation, subjects its practitioners to numerous stressors, including financial instability, disease outbreaks, market volatility, and the physical demands of daily farm management (Smith, 2020). The role of women in poultry farming is both substantial and essential for local food security and economic stability. Studies have shown that women in agricultural sectors experience high levels of stress and anxiety due to the dual burden of professional and domestic responsibilities (Nwankwo, 2021).

Significant stressors for women poultry farm owners are economic instability and market volatility, fluctuations in input costs, such as feed, medication, and equipment, can significantly affect profitability

and sustainability, particularly for small-scale farmers with limited resources and access to financial capital, market unpredictability, including price fluctuations and demand variability, further compounds these challenges, forcing women farmers to navigate complex market dynamics while managing their operations (Nwankwo and Okafor, 2022).

Women in agriculture often juggle multiple roles, including household responsibilities and farming activities which can lead to significant stress (Okoli Uzochukwu and Ndubuisi 2022). Environmental factors, such as outbreak of diseases like Avian Influenza has severe economic and emotional impacts on poultry farmers (Ibe and Nwosu, 2022). A study by Chukwu and Obasi (2023) found that the physical demands of poultry farming, combined with inadequate healthcare access, result in chronic health problems that increase stress levels. Understanding the specific stressors and the prevalence of anxiety among women poultry farm owners is crucial for developing targeted interventions. Based on this, the study assessed stress management of poultry farmers in Aguata and Awka Agricultural zones of Anambra State.

METHODOLOGY

The study was conducted in Anambra State, Nigeria. Anambra is a State in South Eastern Nigeria, created in 1991 and has 21 Local Government Areas (LGAs), 4 Agricultural zones and lies within latitudes 6^0 45^l and 5^0 44^l N and 6^0 36^l and 7^0 20^l E of the area within the Greenwich meridian and the temperature ranges from 25.5 to 30.5^0C (Anizoba, Chukwuma Chukwuma and Chinwuko, 2015). The State has a population of 4,185,032 persons (N.P.C., 2006). The population of the study comprised all the women poultry farm owners in Aguata and Awka Agricultural zones of Anambra Stae. A multistage sampling procedure was used to select 60 respondents. Stage I comprised random selection of 2 Local Government Areas (LGAs) from each of the agricultural zones. Stage II involved random selection of two communities from each LGA. Lastly, 10 farmers were selected from each from the selected town communities using snowballing sampling technique. This gave a total of 60 respondents that were used for the study. Primary data used for the study was collected using questionnaire and the data was analyzed using both mean, percentage and frequency distribution.

Table 1: Sampling of respondents

Zone	LGA	Town	Number of respondents
Aguata	Aguata	Igboukwu	10
		Ekwulobia	10
	Orumba South	Umuomaku	10
		Umunze	10
Awka	Awka South	Awka	10
		Nise	10

Field Survey, 2024.

RESULTS AND DISCUSSION

Table 2 shows the percentage distribution of poultry farm owners with respect to their socio-economic characteristics. Result reveals that about mean age of the respondents was 37years implying that they were young enough to cope with the tedious poultry farming activities. Most (58.53%) of the farmers were married with an average family size of 5 persons indicating that the family could augment with family labour. Majority of the female farmers had mean flock size of 76 birds with mean income of ₦200,500 per cycle showing that they practiced small scale poultry farming. Most (55.00%) of the farmers had secondary education signifying that they could read and write. About 51.67% of the poultry farmers did not have access to credit and operated their poultry business on family land (80%) with 45.00% belonging to a cooperative society. This finding corroborates with Ezeh *et al*. (2023) who highlighted that access to credit and financial services for women entrepreneurs in the agricultural sector is very important.

Table 2: Socio-economic characteristics of farmers

Variables	Frequency	Percentage	Mean
Age			
≤30	14	33.23	**37years**
31-40	28	45.33	
41-50	14	19.00	
>50	7	02.54	
Marital Status			
Single	10	16.67	
Married	35	58.33	
Widowed	9	15.00	
Divorced/Separated	6	10.00	
Family Size			
1- 3	1	1.67	
4 - 6	44	73.33	**5 persons**
7-9	15	25.00	
Number of birds			
≤50	2	3.33	
51-100	20	33.33	**76 birds**
101-200	12	20.00	
201-500	17	28.33	
Above 500	9	15.0	
Income flow/cycle			
< ₦100,000	21	35.00	
₦101,000 - ₦300,000	23	38.33	**₦200,500**
₦301,000 - ₦500,000	9	15.00	
> ₦ 500,000	7	11.67	
Years in school			
1-6	4	6.67	
7-12	33	55.00	
>12	23	38.33	**9years**
Access to Credit			
Access credit	29	48.33	
No credit access	31	51.67	
Land ownership			
Leased	11	18.33	
Purchased	1	1.66	
Family-owned	48	80.00	
Membership in any Agricultural Cooperative or Association			
Member	27	45.00	
Non-member	33	55.00	

Field survey, 2024.

Sources of Stress among respondents

Table 3 revealed the various sources of stress in poultry farming. The farmers reported disease outbreak as the major source of stress. It implies that once there are disease outbreaks, the mortality rate will be high which will negatively affect the farmers. This finding is in line with a study by Ibe and Nwosu (2022) who reported that fear of disease outbreaks is a constant source of anxiety for poultry farmers, who often lack adequate resources to combat these issues effectively .as a major source of stress. It is

also revealed that unpredictable weather conditions (95%), high cost of feed (91.67%), tedious waste disposal (81%), inability to access loan (76.67%), conflict between farm work and household duties (45.00%) had substantial impact on farmers. According to Okoli *et al*. (2022), societal expectations and gender roles can exacerbate stress among women farmers in who are expected to manage both their homes and their farms efficiently. This balancing act often leads to mental and physical exhaustion, contributing to anxiety.

Table 3: Sources of Stress among respondents

S/No	Variables	Frequency	Percentage
1.	High cost of feed	55	91.67
2.	Inability to access loan	46	76.67
3.	Market unpredictability	53	88.33
4.	Conflict between farm work and household duties	27	45.00
5.	Poor access to veterinary services	41	68.33
6.	Unpredictable weather conditions	57	95.00
7.	Disease outbreaks	60	100.00
8.	Tedious waste disposal	49	81.67
9.	Lack of support from the government	34	56.67

***Field* survey, 2024.**

Perceived effects of stress on Respondents

In Table 4, 98.33% of the farmers experienced body pain related to stress. This is an indication that the tedious nature of poultry farming caused body aches for the farmers. The finding also revealed that 73.33% had change in their eating habits suggesting that a notable majority experienced stress-related alterations in their dietary patterns. It was also reported that only 13.3% had issues with concentration, indicating that stress affects focus for a smaller portion of the respondents. These findings with that of Chukwu and Obasi (2023) who found that the physical demands of poultry farming, combined with inadequate healthcare access, result in chronic health problems that increase stress levels. The percentage of respondents that abused drug (31.67%) suggests a significant concern regarding coping mechanisms related to stress. Finally, 80% experienced burnout reflecting a notable effect of stress on strength of some individuals.

Table 4: Perceived effects on Respondents

Variables	Frequency	Percentage
Body pain	59	98.33
Change in eating habits	44	73.33
Loss of concentration	52	86.67
Drug abuse	19	31.67
Exhaustion	48	80.00

Field survey, 2024.

Coping Mechanisms for Farmers

The findings in Table 5 showed that 73.33% of farmers received family support, indicating that a substantial majority had a good support system. This is in line with Ume and Okoye (2023) who revealed that social support networks, including family and community groups, play a vital role in mitigating stress. Also, 76.67% engaged in other income-generating activities indicating non-reliance on a single type of farming which may increase vulnerability to market or environmental changes. This finding corroborates with that of Okoli *et. al.* (2022) who identified coping strategies in poultry farming as forming cooperative societies, seeking support from family and community members, and engaging in alternative income-generating activities. Only 5% of the respondents utilized modern techniques, suggesting that the farmers are not exposed to innovations that can enhance productivity. The study reveals that only 26.67% had a financial strategy, highlighting the need for financial literacy that could help farmers manage resources more effectively. On mental health, only 3.33% sought for mental health support, indicating that a majority are yet to recognize the importance of mental well-being. The percentage of respondents that participated in training programs was (35%) involved in such programs, suggesting an opportunity for increased skills and knowledge that could enhance farming practices. This

agrees with Onwuka and Ede (2023) who emphasized that providing women farmers with access to microcredit and financial management training has shown promising results in reducing financial stress and anxiety.

Table 5: Common Coping Mechanisms for Farmers

Variables	Frequency	Percentage
Support from family	44	73.33
Diversification of farming activities	46	76.67
Modern farming techniques or technology	3	5.00
Good Financial management plan	16	26.67
Accessed mental health service	2	3.33
Attended training programs	21	35.00

Field Survey, 2024.

CONCLUSION AND RECOMMENDATION

The socio-economic data reveals that women poultry farmers had modest-sized families, with many facing income constraints. Stressors like disease outbreaks, feed price fluctuations and market unpredictability are critical, leading to emotional and physical strain. The results also highlights a gap in coping mechanisms, where a large portion of the women did not sought for mental health services and proper financial management strategies. In terms of stress responses, the majority of the women had body pains, as changes in social habits and others which bothered not just on the physical well-being but emotional well-being. Hence, the study recommends for more structured support through subsidies and grants, capacity building workshops, emotional support and mental health interventions.

REFERENCES

Anizoba, G. O. Chukwuma, Chukwuma, E. C. and Chinwuko, E. C. (2015). Determination of Aquifer Characteristics from Geo-electrical Sounding data in parts of Anambra State, Nigeria. *International Journal of Innovation and Applied Studies*, 11(4): 832-843.

Chukwu, M., and Obasi, K. (2023). Health challenges and stress among poultry farmers in Nigeria. *Journal of Rural Health*, 39(1): 80-95.

Ezeh, P., Nduka, A. and Aniche, I. (2023). Financial constraints and stress among women farmers in Nigeria. *African Journal of Business Management*, 17(1): 45-60.

Ibe, E. and Nwosu, O. (2022). Environmental stressors in poultry farming: Implications for farmer well-being. *Journal of Environmental Psychology*, 55(2): 102-115.

Nwankwo, C., and Okafor, J. (2022). Economic stress and mental health among farmers in Nigeria. *Journal of Agricultural Economics*, 34(2): 145-159.

Nwankwo, I., Umeh, M. and Okafor, P. (2021). Gender dynamics and mental health in Nigerian agriculture. *African Journal of Agricultural Research*, 16(4): 587-598.

Okoli, C. Uzochukwu, M. and Ndubuisi N. (2022). Gender roles and mental health in agriculture: A study of women poultry farmers in Awka. *Gender Studies Quarterly*, 29(3): 210-225.

Onwuka, J. and Ede, C. (2023). Empowerment programs for women farmers: Impact on stress and productivity. *International Journal of Agricultural Extension*, 21(2): 115-130.

Smith, J. (2020). Occupational stress and mental health in the poultry industry. *Poultry Science Journal*, 99(7): 3187-3195.

Ume, J. and Okoye, A. (2023). Social support and coping mechanisms among women farmers in Nigeria. *Community Mental Health Journal*, 59(3): 301-315.