

## ANALYSIS OF CONSTRAINTS AND COPING STRATEGIES OF WOMEN AGRIPRENEURS IN SMALL RUMINANT PRODUCTION IN THE INSURGENCY PREVALENT AREA OF YOBE STATE, NIGERIA

<sup>1</sup>R. A. Saleh., <sup>2</sup>A.S. Tidy., <sup>3</sup>I.A. Abu

<sup>1</sup>Department of Agricultural Extension, Faculty of Agriculture, Yobe State University Damaturu, Yobe State, Nigeria.

<sup>2</sup>Department of Agricultural Economics and Extension, Faculty of Agriculture, Federal University of Kashere, Gombe State, Nigeria.

<sup>3</sup>Department of Agricultural Extension, Faculty of Agriculture, University of Maiduguri, Borno State, Nigeria.

### ABSTRACT

*The study analysed the constraints and coping strategies of women entrepreneurs in small ruminant production in the insurgency prevalent areas of Yobe State, Nigeria. Multi-stage sampling procedure; involving snowball sampling techniques were employed in selecting 300 women entrepreneurs. Primary data were collected with the aid of structured questionnaire and analysed using descriptive statistics. The results showed that 39.9% of the respondents are between the ages of 35-44 in the insurgency areas and 30.5% are between the ages of 35-44 in the non-insurgency areas, most (74.2%) respondents were formally educated, and 86.3% are married amongst the respondents and that 36.6% of the women entrepreneurs in small ruminant production in the insurgency areas and 68.1% in the non-insurgency areas are into crop farming as their other source of income. The results also showed that 62.2% of the respondents consider Availability of labour as severe constraints while 78.2% strongly agree that availability of credits is a very severe constraint during the insurgency. The results further showed that relocation of their sheep and goats to safer places (3.66) was the coping strategy employed by the women entrepreneurs in small ruminant production in the study area during the insurgency. The study recommended that the Government should Provide support either in the form of funding or stock animals to the women entrepreneurs, this will be a good way in starting the livelihood programme for vulnerable women, as it facilitates more effective utilization of unpaid family labour, more stable households and increased self-reliance.*

**Keyword:** Women Entrepreneurs, Coping Strategies, Insurgency, Constraints, Ruminant

### INTRODUCTION

Entrepreneurship is a vital economic activity in which women could empower themselves towards partaking in economic development in the absence of other forms of employment. This is why agricultural entrepreneurship is a recognized as a viable enterprise for women to invest in Nigeria. Incorporation of women into agricultural entrepreneurship is a welcome development as it will contribute to the Sustainable Development initiatives. However,

this is a herculean task in Nigeria due to numerous challenges. Women often encounter an array of business challenges in many societies. For example, work hours restriction set against women, the types of job permitted for women to engage in and other socio-cultural factors pose hindrances to the successful operation of women's businesses, thereby depriving them of harnessing their own economic opportunities and contributing their part as productive members of the labour force

in Nigeria (Lawal *et al.*, 2016).

Small ruminants (sheep and goats) are of economic importance to small-holder farmers and especially women. The total income share of small ruminants tends to be inversely related to size of landholding, suggesting that small ruminants are of particular importance for landless people especially women. In some cultural settings, women are often not entitled to own land and since agriculture (crop production) provides only seasonal employment, rearing small ruminants would provide employment and income as a subsidiary occupation. Livestock are often regarded as producers of milk and meat, income generators, and reservoirs of wealth (Coppock *et al.*, 2006; Andrew and Flintan, 2007).

Insurgency could be defined as a religious or political battle launched among an organized, sponsored and aggrieved set of people in order to change the order of government in an attempt to enforce or instil a certain principle or ideology that is contrary to the will of government and the people (Abdullahi *et al.*, 2022). Insurgency in a broad sense is likened as a breach of peace and security, whether historical, religious, ethno-regional, civil, social, economic, and political that contributes to recurring conflicts, and leads to wanton destruction of lives and property (Ewetan and Urhie, 2014). Hence, protection of the environment, lives and property in this context is considered the most important element required for the sustainable production activities in agriculture to take place.

The insurgency's detrimental effects on the rural economy and way of life severely weakened the region's demographic well-being. In the northeast, there were less meaningful jobs even before the crisis, and there are even fewer now. Agriculture accounted for the majority of labour force participation (43%) as well as the non-agricultural, primarily unorganized sector (39%). Based on the submission of the World Bank (2015), the rate of labour involved in agriculture substantially declined (to about

27%) at the peak of the insurgency (2012-2014). This showed that the insurgency has considerably reduced Agricultural activity and restricted access to land for raising crops and livestock. Since agricultural production has decreased, food prices have increased and households are now more susceptible to shocks and stressors. This has caused a significant increase in unemployment, food insecurity, and poverty in the area. In real terms, the crisis caused the poverty rate to increase from 47.3% in 2011 to roughly 71% in 2019. (Eme and Ibietan, 2012; National Bureau of Statistics, 2019; Avis, 2020)

There is a severe lack of pertinent data on women's economic empowerment and gender issues in northern Nigeria, and this problem is significantly worse in the northeast. Compared to other regions of the nation, the north has a higher prevalence of women who do not participate in the official sector. But rather than a lack of economic output, their exclusion from official data is mostly the result of their invisibility. According to estimates, at least 85% of women in the north are involved in economic activities, with roughly 45% of them considered to be involved in agricultural business and 55% classified as off-farm activities (NBS, 2012). It is possible that there are more women working in agriculture. Estimates of women's productivity are significant, but given the nature of their work in northern Nigeria, which is in part influenced by the practice of seclusion among married women (Women's Income Generation in North East [WISE], 2018), more information is needed on labour dynamics, returns for work, enterprise decisions and processes, and economic relationships both within and outside of the household.

This research addressed this gap by combining the guidelines for conflict-sensitive analysis with an assessment of the components of risk faced by ruminant women agripreneurs. This knowledge can assist donors and policymakers alike in supporting resilient value chains where insurgency is a risk and determining how to

maintain investments during periods of instability. Thus, the study analysed the constraints and coping strategies of women entrepreneurs in small ruminant production in insurgency prevalent areas of Yobe state Nigeria, with the following objectives:

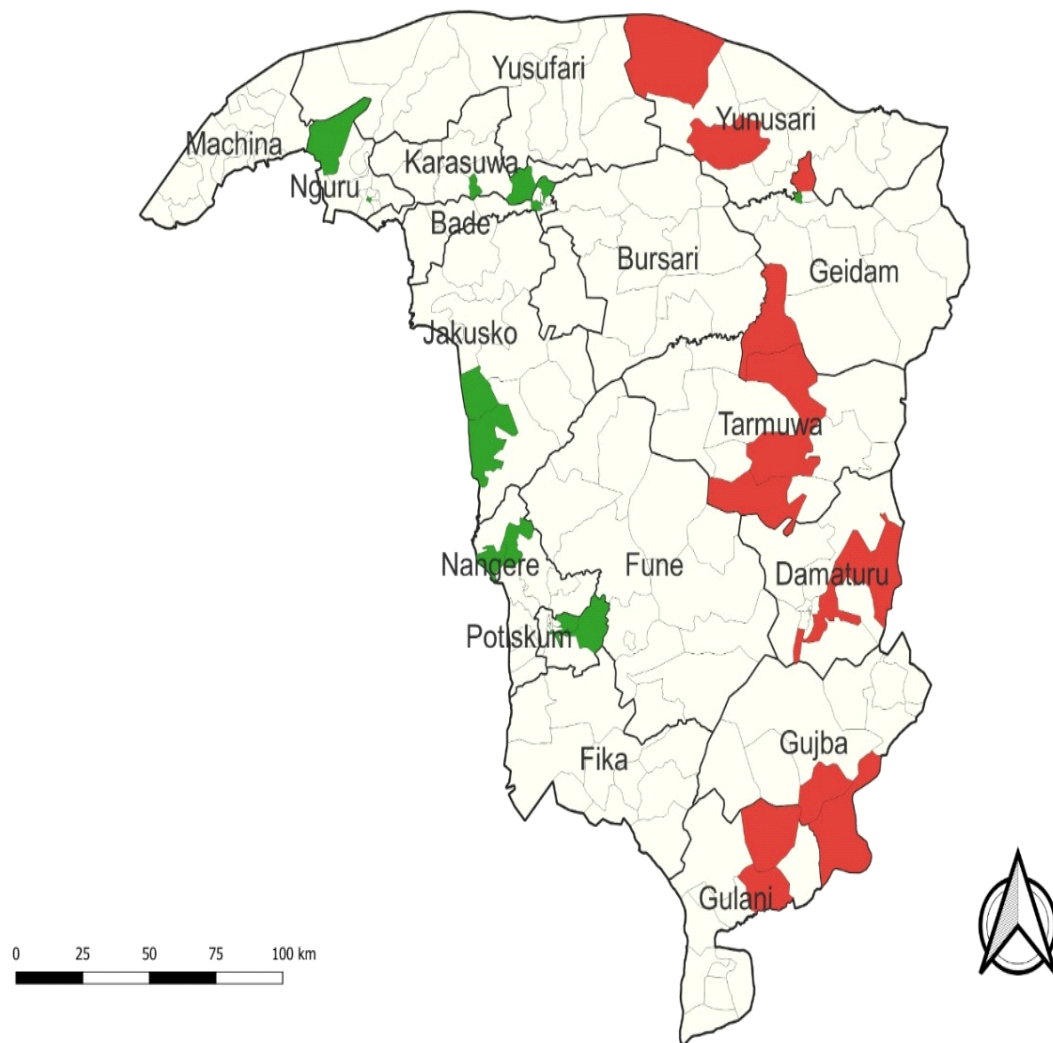
- i. describe the socio-economic characteristics of women entrepreneurs in small ruminant production in the study area;
- ii. determine the constraints of the women entrepreneurs as a result of the insurgency in the study area; and
- iii. describe the strategies adopted by the women entrepreneurs in coping with the effects of insurgency in the study area.

## METHODOLOGY

Yobe State is located on Latitudes  $11^{\circ} 45''\text{N}$  -  $13^{\circ} 30''\text{N}$  of the Equator and Longitudes  $9^{\circ} 30''\text{E}$  -  $12^{\circ} 30''\text{E}$  of the Greenwich meridian. The State shares borders with three States; to the eastern boundary is Borno State, to the west is Jigawa and Bauchi States while to the north is international border with Niger Republic (Chinedu and Olaolu, 2010). Yobe State has area coverage of about  $47,153 \text{ km}^2$  (NPC, 2007). In terms of topography, Yobe State is relatively flat, and the elevation is approximately between 450 to 480 meters above sea level (Ali *et al.*, 2014). The River Yobe, from which the State derived its name, is the biggest river in the State. It flows eastwards and drains into Lake Chad. It has a few tributaries, one of the most important being River Alkalam, where the famous yearly Bade fishing and cultural festival takes place (Komadugu Yobe Basin Project, 2006). Yobe State has hot and dry climatic features in the northern part for most of the year. In the southern part, especially in the rocky area of Gujba and Fika LGAs, it is hot between the months of March and June and cooler for most part of the year. The hottest months are March, April and May with temperatures ranging from  $39^{\circ}\text{C}$  –  $42^{\circ}\text{C}$ . The period of rainy season in the

State varies, but generally lasts for about 120 days in the north and more than 140 days in the south. Annual rainfall ranges from 500mm-1000mm and the rainy season is normally from June to September in the north and May to October in the south. The two vegetation zones in the state, namely, the Sahel in the north and the Sudan Savannah in the south have been severely under threat of desert encroachment thereby creating arid and semi-arid conditions (Ali *et al.*, 2014). The loose border between Yobe and Niger Republic has predisposed the State to attacks from insurgents as these insurgents gain easy entrance and exit through the border. Presence of border with Republics of Niger to the North, Chad to the north-east and Cameroon to the east has made the State more prone to attacks by insurgents as these insurgents have multiple borders to gain easy entrance and exit out of the State (Ibrahim *et al.*, 2014). Yobe State has an area of  $47,153 \text{ km}^2$  with a projected population of 4,166,503 million based on the 2006 National Census. The climatic conditions in Yobe state make it very suitable for cereal crop production since most cereals don't require heavy rainfall to get established. Also, low prevalence of animal diseases because of limited disease carrying insects which are usually high in forest and water-logged regions of the country have made Yobe State more conducive for animal production. The people are mainly farmers with a significant livestock population. Their main crops are sorghum, millet, maize groundnut, cowpea and vegetable while rice and wheat are grown in the Fadamas (inland valleys) and in irrigated areas (Women Farmers Advancement Network [WOFAN], 2007). The Komadugu was originally the basis for an elaborate irrigation scheme established in the late 1950s to produce wheat and residues for livestock feed. The swampy grasslands between Hadejia and Gashua have traditionally been a significant resource for Fadama cropping, fishing and livestock feed (Adams and Hollis, 1987). However, the construction of the Tiga Dam in

the mid-1980s has drawn off water into the *al.*,2014). The conducive nature of the state for Hadejia-Jama'are River Basin in Kano State, agriculture especially the cultivation of cereals reducing the flooded area west of Gashua and and rearing of livestock has made many of the leaving the KomaduguYobe virtually dry in its rural dwellers engage in agriculture as their upper reaches for most of the year (Ibrahim *et* major source of livelihood.



**Legend:**

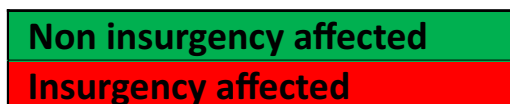


Figure 1:Yobe state showing study areas



A multi stage sampling technique was used for sample selection in the study area. The first stage involved purposive selection of Six (6) local Government areas (LGAs) from the insurgency affected areas and six (6) LGAs from non-insurgency affected areas in the study area making up a total of 12 LGAs. The LGAs selected in the insurgency affected areas are Gujba, Gaidam, Tarmuwa, Damaturu, Gulani and Yunusari while the non-insurgency areas selected are Jakusko, Nguru, Bade, Nangere, karasuwa and Potiskum. In the second stage,

two (2) villages were randomly selected from each of the 12 LGAs selected to make up a total of 24 villages for the study and each LGA was administered 25 questionnaires. In the third stage, snowball sampling technique was employed in selecting 300 (150 each from insurgency and non-insurgency areas) ruminant women agripreneurs in the study which was used as the sample size for the study. Snowball sampling technique was employed because of lack of sampling frame and to locate the population of interest

**Table 1:** Sample Size for Ruminant Women Agripreneurs

Table 1. Sample Size for Rural women Agripreneurs			
	LGA (12)	Villages (24)	Sample size
Insurgency areas	Gujba	Buniyadi	13
		BuniGari	12
	Gaidam	Gumsa	13
		Ashekiri	12
	Tarmuwa	Babbangida	13
		Chirokusko	12
	Yunusari	Bukarti	13
		Yunusarigari	12
	Damaturu	Kukareta	13
		Masandari	12
	Gulani	Bumsa	13
		Bularafa	12
Sub-Total			150
Non-insurgency Areas	Potiskum	Mamudo	13
		Yarimaram	12
	Nguru	Afunori	13
		Bulabulin	12
	Karasuwa	Jajimaji	13
		Bukarti	12
	Bade	Katuzu	13
		Lawan Musa	12
	Jakusko	Buduwa	13
		Jakusko	12
	Nangere	Kukuri	13
		Dawasa	12
Sub-Total			150
TOTAL			300

**Source:** Yobe State Agricultural Development Program (YOSADP): 2022

The cross sectional data for this study was obtained mainly from primary sources with structured questionnaire. The analytical tools used to achieve the objectives of the study were descriptive statistical tools.

## RESULTS AND DISCUSSION

### Socio-economic Characteristics of the Women Entrepreneurs in Small Ruminant Production

**Table 2:** Distribution of socio-economic characteristics of women entrepreneurs in small ruminant production (n=300)

Variables	insurgency area (n=150)		non-insurgency area (n=150)	
	Freq	%	Freq	%
<b>Age (years)</b>				
15 – 24	14	9.2	13	9.2
25 – 34	35	22.8	44	31.3
35 – 44	61	39.9	43	30.5
45 – 54	36	23.5	37	26.3
55 – 64	07	4.6	04	2.8
Mean ± standard deviation	37.8	±10.3	37.2	±9.8
<b>Highest level of education</b>				
No formal education	39	25.5	23	16.3
Primary	21	13.7	72	51.1
Secondary	37	24.2	33	23.4
NCE/OND	32	20.9	09	6.4
HND/first degree	20	13.1	02	1.4
Postgraduate	04	2.6	02	1.4
<b>Marital status</b>				
Single	06	3.9	02	1.4
Married	132	86.3	95	67.4
Widowed	06	3.9	40	28.4
Divorced	09	5.9	04	2.8
<b>Years of experience</b>				
1 – 10	101	68.2	25	86.2
11 – 20	31	21.0	02	6.9
21 – 30	16	10.8	02	6.9
Mean ± standard deviation	10.4	±7.6	5.0	±0.6
<b>Other sources of income</b>				
Trading	50	32.7	32	22.7
Crop farming	56	36.6	96	68.1
Civil service	32	20.9	09	6.4
Others	15	9.8	04	2.8

Source: Field survey (2023)

## **Socio-economic characteristics of women entrepreneurs in small ruminant production**

### **Age of respondents**

Table 2 shows that 39.9% of the women entrepreneurs in small ruminant production are between the ages of 35-44 in the insurgency areas and 31.3% are between the ages of 25-34 in non-insurgency areas. The mean age of respondents in insurgency areas is 37.8 while the mean age for respondents in non-insurgency areas is 37.2. This implies that the respondents in both categories are young and active which agrees with Olawoyeet *al.* (2021) that the mean age of most small ruminant owners (31-50 years) correspond with the productive age and especially 31-40 years which is the age of active procreation (Ugwujaet *al.*, 2008). The children are relatively young and that family responsibilities increase in terms of children schools' fees, feeding, clothing and so on. Engaging in ruminant enterprise is a means of alleviating poverty and stress.

### **Educational level of the respondents**

Table 2 depicts that 25.5% of women entrepreneurs in small ruminant production in insurgency areas and 16.3% in non-insurgency areas have no formal education. This implies that majority of the respondents are formally educated. FAO, (2011) reported that one of the rationales for improving women agripreneurs' participation in agriculture is that when a woman is educated, her children tend to be better fed and healthier. As a woman earns income, she is more likely than the man to spend it on improving the well-being of the family. This scenario can build women self-esteem and lead to a more participatory role in both public and family decision making.

### **Marital status of the respondents**

The study revealed that 86.3% are married amongst the women entrepreneurs in small ruminant production in insurgency areas 67.4% in non-insurgency areas. This finding is similar

to that of Olawoyeet *al.* (2021). in their study with small ruminants in the middle belt on Nigeriawhich showed that majority of the small ruminant owners were married (66.67%). Marriage is responsibility and might be too much for the father only hence the need for supplementary income from the women through ruminant enterprises. Thus, it becomes imperative to perceive ruminant enterprise as a means of supporting household income and alleviate some domestic expenses by a woman especially during the insurgency. This concurred with Raney's (2011) conclusion that made married women to be dominant in household small ruminant animal enterprises. It also showed that these groups of women keep these animals as a source of economic empowerment and financial security for better living.

### **Years of experience of the respondents**

Table 2 shows that majority of women entrepreneurs in small ruminant production (68.2%) in insurgency areas and 86.2% in non-insurgency areas) have 1-10 years of experience. The implication of this finding is that the experience of the respondents in their major livelihood activities is sufficiently high to bring about improvement and efficiency in their various livelihood activities.

### **Other sources of income of the respondents**

Table 2 reveals that 36.6% of the women entrepreneurs in small ruminant production in insurgency areas and 68.1% in non-insurgency areas are into crop farming as their other source of income. This finding is similar to Olawoyeet *al.* (2021) which shows that majority of the women in the middle belt were farmers (49.79%), some are traders and those with other occupation made up 48.13% and 2.08% respectively. This similarity could be because both studies were done in rural settings in Nigeria,

The findings of the study also agree with Zaridiset *al.* (2015). They found that younger women entrepreneurs of up to 30 years with a high level of education are not limited to agricultural income alone but look for other non-agricultural income. Some of these try to improve their educational level to seek non-agricultural employment in urban areas and are not satisfied from their farm income, while they believe that there are more prospects for better quality of life in a big city. A small percentage of

women entrepreneurs, mainly young ones, have the will to remain in rural area – even if they have a high level of education – under the condition that there will be a state support in order to remain on their land. The similarity could be that both studies are on rural women agripreneurs.

#### Constraints Faced by Women Entrepreneurs in Small Ruminant Production as a Result of The Insurgency

**Table 3:** Constraints faced by women entrepreneurs in small ruminant production as a result of insurgency (n= 300)

Constraints	VS	S	NS	U	Mean	Decision
Inaccessibility to output market.	53.1	18.7	26.2	2.0	3.23	NS
Inaccessibility to input market.	49.0	23.1	22.4	5.4	3.16	NS
Restriction of movement in and out to carry out productive activities.	49.0	16.7	26.5	7.8	3.06	NS
Availability of labor.	62.2	16.3	18.7	2.7	3.38	VS
Availability of credits.	72.8	21.4	3.7	2.0	3.65	VS
Overall mean					3.29	

Source: field Survey (2023) Keys: VS (Very Severe), S (Severe), NS (Not Severe)

The overall mean for the constraints faced by ruminant entrepreneurs is 3.29. Hence, all values  $\leq 3.29$  are considered as not severe constraints while values  $\geq 3.29$  are considered very severe constraints. Inaccessibility to output market, availability of credits seriously affected the ruminant markets during the insurgency. Most markets were inaccessible during the insurgency because of incessant bombings and attacks. Meanwhile, restriction of movement in and out to carry out productive activities was not a severe constraint because of the practice of seclusion by the women ruminant agripreneurs in the study area.

This finding resonates with the report of the Women's Income Generation in North East (WISE, 2018), that the nature of women entrepreneurs works in northern Nigeria, partially determined by the practice of seclusion (due to socio-cultural norms and gendered economic norms) among married women, affects their labour dynamics, returns for work, enterprise decisions and processes, and economic relationship of both within and outside of the household.



## Perception of Coping strategies adopted by Women Entrepreneurs in Small Ruminant Production

**Table 4:** Perception of Coping strategies adopted by women entrepreneurs during the insurgency (n=300)

Coping strategies	SA(%)	A(%)	U(%)	D(%)	SD(%)	Mean
Dialoguing with the insurgents	33.7	38.1	9.9	17.7	0.7	3.86
The use of CJTF	56.2	36.1	3.7	8.8	1.4	4.25
Avoidance of religious gatherings	33.3	36.7	4.1	21.4	4.4	3.73
Avoidance of outings and attendance of ceremonies	39.8	29.9	3.1	16.3	10.9	3.71
Relocation to safer places of sheep and goats	38.4	27.2	6.1	18.7	9.5	3.66
Reduction in the quantity and number of meals	36.1	32.3	3.1	17.0	11.6	3.64
Dependance on NGOs and government assistance to feed	26.2	20.4	7.8	21.1	24.5	3.03
Dependance on other family members	29.3	21.1	9.9	11.2	27.6	3.13
Overall mean						3.62

Source: field survey (2023) keys: SA (strongly Agree), A(Agree), U(Undecided), D(Disagree), SD (Strongly Disagree)

Table 4 depicts the coping strategies by women entrepreneurs in ruminant production during the insurgency. The overall mean for the coping strategies is 3.62, hence values  $\geq$  than 3.62 are considered as coping strategies while values  $\leq$  3.62 are not coping strategies.

Relocation to safer places (3.66) is a coping strategy employed by the women entrepreneurs in small ruminant production in the study area. Women as small holder entrepreneurs can move together with their livestock to neighboring towns for safe keeping. Sheep and goats are movable assets that can be transferred to safer places during the insurgency to ensure their safety.

This study also shows that majority of the women entrepreneurs (50.0%) strongly agree that the use of the civilian joint task force (CJTF) was a coping strategy during the insurgency. Civilian JTF as part of the mechanisms for combating the menace of the insurgents in Nigeria represents a veritable example of citizen-driven communal response to security challenge and an indication of how terrorism can be tackled and prevented. The civilian JTF group exploits their knowledge of the communities to identify suspected insurgents or other suspicious individuals (Okereke, 2013). Civilian JTF members have been successful in stopping many attacks through swift identification of strange faces in their communities and have also helped the

security agencies to arrest the insurgents (Okereke, 2013). The insurgents' activities included among others livestock rustling and the CJTF played a crucial role in safe guarding not just individuals lives and properties but livestock as well.

The results further shows that 39.8% strongly agree that avoidance of outings and attendance of ceremonies was how they coped with the insurgency. This implies that the women entrepreneurs can stay at home to make sure their animals are not wandering about and that security around their shelters is tightened to prevent them from attacks by the insurgents.

### Conclusion and Recommendations

The study concluded that availability of credits and labour were severe constraints faced by the respondents as a result of the insurgency and relocation to safer places together with their animals is the coping strategy employed by the

women entrepreneurs in small ruminant production in the study area. The study recommended that the Government should Provide support either in the form of funding or stock animals to the women entrepreneurs, this will be a good way in starting the livelihood programme for vulnerable women, as it facilitates more effective utilization of unpaid family labour, more stable households and increased self-reliance especially post insurgency.

Women entrepreneurs are faced with social, cultural and economic constraints. A favourable policy environment that is gender sensitive in terms of access to and control of productive and natural resources such as land, livestock, micro-credit, veterinary services and assured markets will have to be provided and socio-economic and technical constraints need to be addressed in order to strengthen women's influence and social empowerment.

### REFERENCE

- Abdullahi, I. M., Jatbong, J. N., and Idris, Y. (2022). Analysis of the Influence of Boko Haram Insurgency on Households' Food Security in Maiduguri Metropolis of Borno State, Nigeria. *Journal of Agricultural Economics, Extension & Social Sciences*, **1**(2): 70–76.
- Ali, I. N., Brian B., Richard, G.H. and Peter, C. (2014). "Changing Vegetation Patterns in Yobe State Nigeria: An Analysis of the Rates of Change, Potential Causes and the Implications for Sustainable Resource Management. *International Journal of Geosciences*, **(5)**:50-62
- AvisW. R. (2020). War economy in North East Nigeria, K4D knowledge, evidence & learning for development, Helpdesk Report 734, Institute of Development Studies, Brighton, UK.
- Chinedu, E. and Olaolu, O. (2010). Public Financial Management Performance Assessment Report for Yobe State. Company.
- Coppock, D. L., Desta, S., Tezerra, S. and Gebru, G. (2006) An Innovation System in the Rangelands: Using Collective Action to Diversify Livelihoods among Settled Pastoral Women in Ethiopia. Paper presented at Innovation Africa Symposium November 21-23, 2006 held in Kampala, Uganda.
- Eme O. I., Ibietan J. (2012). The cost of 'Boko-Haram' activities in Nigeria, *Arabian Journal of Business and Management Review (OMAN Chapter)*, **2**(2):10.
- Ewetan, O. O. and Urhie, E. (2014). Insecurity and socio-economic development in Nigeria. *Journal of Sustainable Development Studies*, **5**(1): 40-63.
- FAO (2011). Women in Agriculture - Making a Strong Case for Investing in Women. Rome: FAO
- Imasuen, E. (2015). Insurgency and humanitarian crises in Northern Nigeria: The case of Boko Haram. *African Journal of Political Science and International Relations*, **9**(7):284-296
- income in Yewa South local government, Ogun State
- KomaduguYobe Basin Project (KYBP) (2006). KomaduguYobe Basin Water Audit Report by Afremedev Consultancy Services

- Limited.
- Lawal, F. A., Ayoade, O. E. and, Taiwo, A. A. (2016). Promoting gender equality andLindenberg, M. (2002). "Measuring household livelihood security at the family and community level in the developing world". World Development, **30**(2): 301-318.
- National Bureau of Statistics (2012). "Annual Abstract of Statistics"
- National Bureau of Statistics (2019). "Annual Abstract of Statistics"
- National Population Commission (2007). "Population and Development Review". **33**(1): 206-210.
- Okereke, D. (2013). How Nigeria Can Overcome Terrorism, Insurgency and Instability, Vigilance Magazine.
- Olawoye, S. O. A. A., Adeloye, M. M., Adeyeye, F. A., Okeniyi, R. A., Animashaun, O. O., Alabi, E. M., Okon, A. I. Sambo. (2021). Rural women participation in small ruminant enterprise in the middle belt region of Nigeria., Landmark University, Omu-Aran, Kwara State Press.
- Raney, T., Anriquez, G., Croppenstedt, A., Gerosa, S., Lowder, S., Matuscke, I., ... & Doss, C.
- WISE Development (2018). Women's Income Generation in North East Nigeria: Economic Empowerment and Justice in Rural Markets, Research Study.
- UN Women (2017). "Progress of the world's women 2015-2016: Transforming economies, Realising Rights". New York: UN Women. United Nations **11**(02). ESA Working Paper
- Women Farmers Advancement Network (WOFAN) (2007). "Report of Focus Groups Discussions (FGD)" Conducted with Farmers in Eight Villages from Four Northern States of Nigeria on Adaptation to Climate Change and Radio Listening Habits. Women's empowerment for Sustainable Development in Africa. Third International Conference on African Development Issues. (CU-ICADI 2016). Covenant University Press.
- YOSADP. (2022). Yobe State Agricultural Development Programme
- Zaridis, A.D., Rontogianianni, A.S., and Karaminis, K.S. (2015). "Female Entrepreneurship in Agricultural Sector. The case of Municipality of Pogoni in the Period of Economic crises. *Journal of Research in Bussiness, Economics and Management*". **4**(486-491)