

# Survival Strategies for Climate Change Induced Stress Among Women Farmers in Benue State, Nigeria

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#### **Abstract**

Benue State, Nigeria was submerged by flood in the year 2012. The women farmers in the State were hardly hit by that ugly event. The study investigated the survival strategies used by the women in coping with the challenge. A simple random sampling technique was used to select a sample size of 120 women farmers. Data were collected through the use of structured interview schedule and analyzed using percentage. The results showed that the losses the women faced ranges from loss of houses (60.0%), farmland (60.0%) to loss of human lives (10.0%). As means of surviving the flood, some (35.0%) of the respondents resorted to begging alms, migration to neighboring communities (30.0%) while a majority (70.0%) are left to fate without any meaningful survival strategies. The study recommends that Benue state Government, Non-Governmental Organization and well spirited individual should take a census of the affected women and disburse some funds to them as this will help to economically empower them.

**Keywords:** climate change, strategies, women farmers, stress, Benue State.

## 1. Introduction

Climate change is popularly seen by scientists as change in climate which is attributed directly or indirectly to human activities that alter the composition of the global atmosphere and which are in addition to natural variability observed over comparable time periods (Intergovernmental Panel on Climate Change (IPCC) 2007). The adverse impacts of climate change are already felt in many areas, including in relation to, inter alia, agriculture and food security; biodiversity and ecosystems; water resources; human health; human settlements and migration patterns; and energy, transport and industry (UN Women Watch (2009). In Nigeria, empirical evidences of the unpleasant impact of climate change abound; these include increased cases of flooding and numerous gully erosion sites which have resulted to loss of farmlands, farm stead, biodiversity etc (Agwu & Okhimamhe, 2009). The gradual fading away of the 2 to 3 weeks traditional break in rainfall "August break" and its replacement by 2 to 3 days break in the eastern humid zone of Nigeria is also attributed to climatic change (Chineke, Jagtap &Nwofor 2010). Not long ago, many parts of Nigeria were submerged by flood during the raining season between the months of July and October, 2012. This caused a great national concern as farmers' homes and farms were submerged. It also disrupted transportation and business activities, even in the Federal capital territory, Abuja. This subjected many farmers to stress.

Benue State is one of the thirty six (36) states in Nigeria. It is majorly an agricultural state and a major producer of food. This earned her the name 'Food Basket' of the Nation. Between July and October 2012, most part of Benue State was submerged with flood ravaging farmlands and farm stead leaving many farmers homeless. Climatic change among others were attributed the major cause of the flood. Women were vulnerable to the flooding than men—primarily as they constitute the majority of the world's poor and are more dependent for their livelihood on natural resources that are threatened by climate change. The vulnerability of women to such disasters is also increased because women are usually at higher risk of being placed in unsafe, overcrowded shelters, due to lack of assets, such as savings, property or land. Women are particularly affected because of socially ascribed roles resulting from entrenched feudal-patriarchal discrimination on them. They also face social, economic and political barriers that limit their coping capacity. When coupled with unequal access to resources and to decision-making processes, limited mobility places women in a position where they are disproportionately affected by climate change. Exacerbating this effect, they often avoid using shelters out of fear of domestic and sexual violence, and become even less mobile as primary family care-givers. In the context of floods, and other disasters that require mobility, cultural constraints on women's movements may hinder their timely escape, access to shelter or access to health care. It is on this background that it becomes pertinent to address the following research questions: how many of the women were affected and displaced during the flooding in the year 2012? What was the nature of their losses? How have they been surviving since the ugly incidence?

# Purpose and objectives

The overall purpose of the study was to examine the survival strategies for climate change induced stress among women farmers in Benue State, specifically the objectives were to:

1) describe the socioeconomic profile of the respondents;



- 2) describe the nature of loss experienced by the respondents;
- 3) describe the survival strategies employed by the women

## 2. Methodology

## 2.1 Study area

Benue State is one of the 36 states in Nigeria. It lies within the lower river Benue trough in the middle belt region of Nigeria. Its geographic coordinates are Longitude 7° 47' and 10° 0' east and Latitude 6° 25' and 8° 8' north. It shares boundaries with five other states namely: Nassarawa to the north, Taraba to the east, Crosssouth. Enugu to the south-west and Kogi to (http://www/fao.org/ag/agp/agpc/doc.). The state also shares a common boundary with the Republic of Cameroun on the south-east (www.benuestate.gov.ng.). Benue State has a population of 4,780,389 (National Population Commission, 2006) and occupies a landmass of 32,518 square kilometres. The State has two distinct seasons, the wet/rainy season and the dry/summer season. The rainy season lasts from April to October with annual rainfall in the range of 100-200 mm. The dry season begins in November and ends in March. Temperatures fluctuate between 23 - 37° C.

Agriculture is the mainstay of the economy, engaging over 75% of the state farming population. Benue State is the nation's acclaimed 'food basket' because of its rich agricultural produce which include yams, rice, beans, cassava, potatoes, maize, soya beans, sorghum, millet and cocoyam. She also produces fish in large quantities because of the river Benue which is the second largest river in Nigeria.

## 2.2 Population and sampling procedure

The targeted population of the study comprised all the women farmers in Benue State. The state is divided into three (3) agricultural zones namely: (1) Central zone- made up of eight blocks (Ogbadibo, Oju, Ado, Obi, Okpokwu, Agatu and Otukpo) (2) Eastern zone made up of eight blocks (Kastina-ala, Ushongo, Kwande, Ukum, Logo, Konshisha, Vandeikya and Aadikpo) and (3) Northern zone made up of six blocks (Guma, Buruku, Gwer-west, Makurdi, Gwer-east and Gboko.

Multistage sampling was used to select the sample for the study. In the first stage, two (2) blocks were randomly selected from each of the three agricultural zones giving a total of six (6) blocks. For stage two, two (2) circles were randomly selected from each block giving a total of twelve (12) circles. In the third stage, ten (10) women farmers were randomly selected from each of the twelve circles giving a total sample size of one hundred and twenty (120) women farmers.

## 2.3 Instrument for data collection and statistical data analysis

Interview schedule was used for data collection. The questions developed for the interview were based on the objectives of the study. The data were analyzed with percentage.

## 3. Results and Discussion

## 3.1 Socio-economic characteristics of the respondents

Entries in Table 1 show that majority (50.0%) of the respondents were within the age range of 31-40, 30.0% were within the age range of over 40 years while 20.0% were within 21-30 years. The mean age is 35 years. This implies that the respondents were young and in their productive years. Majority (80.0%) of the respondents were married, 15.0% were widowed, 4.0% were single while 1.0% were divorced (Table 1). This result represents family oriented respondents.

The Table also shows that 40.0% had no formal education, 30.0% had primary school education, 22.0% had secondary school education whereas 8.0% had tertiary education. This shows that the respondents are illiterates. Furthermore, the Table shows that 45.0% of the respondents had a household size of 1 to 5 persons, 35.0% had 6 to 10 persons while 20.0% had more than 10 persons as members of their households. The mean household size was 5 persons. This shows that the respondents had large households. Large households could aggravate the stress the respondents go through. The table further shows that majority (50.0%) of the respondents had 10 to 19 years of farming experience, 20.0% had above 19 years, while 30.0% had less than 10 years farming experience. The mean farming experience was 15 years. This implies that the respondents have been in farming business for quite a long time.

## 3.2 Nature of loss experienced by the respondents

The result shows that majority (60.0%) of the respondents lost houses and farmlands. It also shows that fifty (50.0) % lost household properties, 40.0% lost livestock while only 10.0% lost human lives (Figure. 1).

## 3.3 Survival strategies used by the respondents

Table 2 shows that majority (70.0%) of the women had no survival strategies which means they are residing to fate. It also shows that 35.0% of the respondents resorted to begging alms as a means of survival while 30.0% have migrated to neighbouring communities.

This result implies that at the moment, the women have nothing meaningful doing and this is inimical to



the economy of their families in particular and that of the state in general. It is a known fact that women all over the world and Benue state women inclusive produce 80 to 90 percent of all food consumed by their families and comprise over 70 percent of the agricultural labour force. But the stress imposed on the respondents at the moment would not allow them achieve this task.

#### 4. Conclusion

The flooding had exposed women farmers in Benue State, Nigeria to a lot of stress. The study shows that the women farmers lost farm lands, homes and household items to the flood. Over a year after the flooding, majority of the women farmers have no meaningful strategies on how to survive or cope.

The study recommends that Benue state Government, Non-Governmental Organization and well spirited individual should take a census of the affected women and disburse some funds to them; this will help to economically empower them.

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Table 1. Socio-economic Profile Distribution of Respondents

Variable	Percentage (%)	Mean (M)
Age		
21-30	20.0	
31-40	50.0	35.5
41 and above	30.0	
Marital status		
Married	80.0	
Widowed	15.0	
Single	4.0	
Divorced	1.0	
Educational status		
No formal education	40.0	
Primary education	30.0	
Secondary education	22.0	
Tertiary education	8.0	
Household size (persons)		
1-5	45.0	5.0
6-10	35.0	
Above 10	20.0	
Farming experience (years)		
Less than 10	30.0	15
10-19	50.0	
Above 19	20.0	

Source: Field survey, 2013.



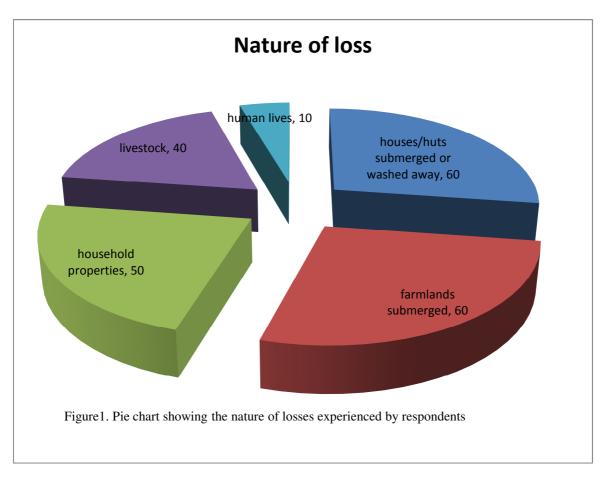


Table 2: Distribution of Respondents Based on Survival Strategies

Variables	%	
Migration to neighbouring communities	30.0*	
Begging for alms	35.0*	
No survival strategy yet	70.0*	

<sup>\*</sup>Multiple responses