

Gender Role in Food Security in Post-Conflict Area- Western Darfur State, Sudan

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Abstract: The tribal's conflicts have negative impact on the food security and livelihood of household in post conflicts areas in Western Darfur State, Sudan. There is a complex relation between gender role in food security and conflict. The main objective of this paper is to explore and investigate gender role in food security in post-conflict area (Returnee's area) in Western Darfur State, Sudan. The study carried out in 2015 in Merim-Ta village. Respondents are household headed who lost their productive assets through destruction or displacement due to triple conflict since 2003 and returned back to their village in 2008. 110 household headed were selected randomly covering all categories of the community (age, religion, tribe, male and female). Social survey method used to collect the data. The study revealed that all the returnee live in extremely poor condition characterized by high women headed household (68%) with high illiteracy rate, hard work, take both domestic and productive activities. However all the members of the household doing together, but the conflict change the system and role of their life, especially for women (who lost their assets and the male bread winner). Due to that women are responsible for food security and other needs of life.

Keyword: *Food Security, Darfur Conflicts, Gender Role.*

I. INTRODUCTION

Over the past decade, wars have engulfed the people of Somalia, Rwanda, Congo, Liberia, Sierra Leone, Chechnya, Haiti, Bosnia and Sudan. In Sudan as in most sub-Saharan Africa have a growing number of female-headed household resulting, increases of rural-urban migration of male due to drought, civil conflict, and other socio-economic factors (Ibnouf, 2009). Civil conflict result in large numbers of internally displaced people (IDPs) forcing people away from their productive land. IDPs rarely find other productive land to cultivate, but more often than that, end up in camps where substance cultivation or other income generating opportunities are extremely limited. Conflict can lead to further deterioration of already poor basic services, retarding development, displacement, increases in human disease and destitution of population (FAO, 2009).

Conflicts remove people from agriculture production and place an extra work burden on household (especially women). The long-term effects of conflict are loss of live and livestock, destruction of food crops, displacement, fighting, hunger, malnutrition and delay of or no, farming. Therefore the conflict change and/or affect the roles and responsibility of society, and the relationship between food security and gender role.

The World Food Summit stated that food security exist when all people at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active healthy life (World Food Summit Plan of Action, 1996).

The analysis of food security covers four dimensions:

- Food Availability
- Access
- Utilization
- Stability

Availability related to domestic production, import capacity, food aid and stocks. Accessibility influenced by level of income, employment, wage, food prices, income distribution, access to assets such as land and finance, the efficiency of markets, the provision of safety nets and infrastructure capacity. The utilization of food might be considered as a component of access that is how each individual is able to benefit from food, from food intake - linked to health, sanitation conditions, the nutrient component of the diet, and the quality of food. Stability of food security refers to factor affecting variability in supply and access: as price and weather variability and political environment (USDA, 2013).

Conflict can reduce the food availability disturb people's access to food, limits families access to food preparation facilities and health care, increase uncertainty about satisfying future need for food and nutrition, in addition to that, conflict induces the affected population to adopt coping strategies that reduces their food consumption and nutrition, poor nutritional state in individuals of any age makes them more susceptible to

illness and death (USDA, 2013). Conflict disturbs production, especially armed hostilities; prevent normal farming and herding operation from being carried-out. For the millions of poor house-hold whose principal source of income and much of their food supply derived from agricultural production. Conflict can inflict significant damage to livelihood and food security. For example in Darfour cutting down fruit trees and loss of crops, livestock, destroying irrigation ditches, is the way of eradicating farmers' claims to the land running their livelihood. This implies an introduction of food availability not just to production but also to the consuming population as a whole, recruitment of young males into conflict reduces the supply of labor for herding and farming. Often members of rural household in conflict zones simply flee their farmland, leaving most of their assets (including stored crops) of livelihood behind. In many cases, they end up as displace, refugee.

The data from Sudan indicate that rural women produce 60-70 % of food production in most rural areas (Elobid, 2010). The long term effects of conflict are loss of the live and livestock, destruction of food crops, displacement, fighting, hunger, malnutrition and delay of, or no farming. Therefore the conflict change or affected the roles and responsibility of society, this lead to the relationship between food security and gender, and how the conflict affect that.

Gender refers to the cultural constructions through which the differences and relationships between the sexes are understood in a given society; both men and women play critical roles in food security especially in sector of agriculture throughout the world, producing, processing and providing the food we eat. Gender analysis focuses on understanding and documenting the differences in gender role activities, and needs opportunities.

Conflicts are not new in Darfur, but the recent conflict in Darfur could be regarded as one of the main causes that disturbed the livelihood of the different communities of Darfurian areas in general. During pre-conflict the study area (Western Darfur State) was very strong through trade, in cereals, cash crops, horticultural crops and livestock export. Darfur was a net earner of foreign exchange through livestock export which generated 20% of national export (FEWS net, 2013). On other hand, the way of life of people in the study area was very simple and peaceful, kindly, all the member of the household working together and manage to cultivate a large area of different crops, cash crops, food crops, vegetables during rainy season (FAO 2010). During the past years, the study was affected by conflict which led into the destruction of resources and property, thus achieving food becomes a problem to all segments of the society (displaced, host community and Arab nomadic). The conflict change the system and roles of their life of the household specially women and children, the women become heads of their families and responsible for food security and other needs of the life. So the main objective of this paper is to explore and investigate the effect of the conflict in West Darfur on the Gender role in food security in returnee's area.

II. METHODOLOGY

The study was conducted in Beida Administrative Unit – West Darfur State – Sudan. The region covers an area of 79,460 sq. km. lies within the Sahelian climatic zone farming the north-western side of the country. The estimated population 1.41 million, 50% of them is agro-pastoralists, 15% nomadic pastoralists and 5% are involved in other activities.

The study was carried out in 2015. Population in this study is people who lost their productive assets through destruction or displacement since 2003 and returned to their village in 2008. UNHCR in West Darfur State (2013) reported that an estimated total of population of returnee is 1058. The sample was selected by simple random sampling due to the homogeneity of population. The sampling frame covered all categories of the community (age, gender, religion, tribes, male and female, household headed). 110 returnee were selected which represent 10% of returnee population. Primary data collected by questionnaire, secondary data collected from relevant documents, studies and internet.

III. RESULTS AND DISCUSSIONS:

4-1 Household Characteristics:

Table (4.1): Frequency distribution and percentage of respondents by gender headed household

Gender	Frequency	Percentage
Female	70	64
Male	40	36
Total	110	100

Source: Field Survey, 2015.

Table (4.1) shows that majority of respondents are female, household headed (64%). This result agree with the report of the United Nation, WFP (2004) which mentioned that 90% of the IDPs are women and children, in addition to that it agree with the Leader (Sheikh) in the study area during the interview, he also mentioned that

the majority of population in the study area are women (75%). That means the conflict had a real effect on the loss of men breadwinner.

Table (4.2): Frequency distribution and percentage of respondents by age

Age	Frequency	Percentage
Less than 25 years	20	18
26 – 35 years	50	45
36 – 45 years	35	32
More than 46 years	5	5
Total	110	100

Source: Field Survey, 2015.

Table (4.2) shows that about 45% of respondents their ages between 25 – 35 years. This indicates that most of respondents were in their productive age (youth) or active age. This indicates that in rural areas traditionally the youth marriage early especially women, as reflected in table (4.1) 64% were women headed household.

Table (4.3): Frequency distribution and percentage of respondents by educational level

Educational Level	Frequency	Percentage
Illiterate	70	64
Khalwa	23	21
Basic	15	13
Secondary	2	2
Total	110	100

Source: Field Survey, 2015.

Table (4.3) Indicates high percentage of the illiteracy (64%). This considered as one of important factors that promoted tribal conflict in Darfur. WFP report (2006) mentioned that a tribal conflict in rural areas in Darfur causes consequence to lack of educational services. Also I agree with WFP report (2015) who mentioned, in food utilization, educational level plays a crucial role in the dispersion of information concerning health, nutrition, child care and hygiene.

4-2 Displacement and asylum:

Table (4.4): Frequency distribution and percentage of respondents according to their resident places during the conflict

The place	Frequency	Percentage
In the State	45	41
Across the Border	65	59
Total	110	100

Source: Field Survey, 2015.

Table (4.4) shows that the majority of the respondents (59%) across the border to Chad as refugee, while 41% live in the State as IDPs during the conflict.

Table (4.5): Frequency distribution and percentage of respondents by the period they spent during the conflict

Period they spent	Frequency	Percentage
Less than 5 years	38	35
5 – 7 years	72	65
8 years and more	-	-
Total	110	100

Source: Field Survey, 2015.

Table (4.5) shows that the majority of the respondents reported that they spend between 5 – 7 years (65%), 35% spent less than 5 years.

Table (4.6): Frequency distribution and percentage of respondents by the time they return back to their villages

Time they return back	Frequency	Percentage
2008	11	10
2009	14	13
2010	51	46
2011	34	31
Total	110	100

Source: Field Survey, 2015.

Table (4.6) shows that the number of arrival of returnee increasing in 2010 (46%) and decreasing in 2011 (31%). The report of FAO, 2010 mentioned that according to the peace accord signed between Chad and Sudan, which compromised the movement of rebel groups of Sudan and Chad, is one of the hubs for returnees from neighboring.

Table (4.7): Frequency distribution and percentage of respondents by their main basic source of income before and after conflict

Source of income before conflict			Source of income after conflict	
	Frequency	%	Frequency	%
Farming	105	95.5	65	59.1
Trading	5	4.5	35	31.8
Free business	-	-	10	9.1
Total	110	100	110	100

Source: Field Survey, 2015.

Table (4.7) shows that the majority of the respondents reported that the main basic source of their income is agriculture (95.5%), so the majority of the people in study area are farmers, where natural resources available such as land with various types of soil, wadi, grazing land and water. This result agree with UNDPs report (2011) which mentioned that about 84% of people in west Darfur their main source of income and livelihood is agriculture and cattle herders, but their numbers decreases after the conflict (59.1%). Most of respondents change their basic source of income to trading. This is due to widespread destruction of assets during conflict.

Table (4.8): Frequency distribution and percentage of respondents by their income generating activities before and after the conflict

Source of income before conflict			Source of income after conflict	
	Frequency	%	Frequency	%
Handcraft	42	38.2	0	0
Collection of fire wood	30	27.3	41	37.3
Small shops	27	24.5	-	-
Non	11	10.0	69	62.7
Total	110	100	110	100

Source: Field Survey, 2015.

The result from table (4.8) shows that the majority of respondents (before the armed conflict) their income generating activities before they migrate to the State, handcraft (38.2%) followed by collection of fire wood (27.3%). If we compared with after conflict most of the respondents' loss their income- generating activities.

Table (4.9): Frequency distribution and percentage of respondents by their main food crops before and after the conflict

Main food before conflict			Main food after conflict	
	Frequency	%	Frequency	%
Sorghum	106	96.4	70	63.6
Millet	4	3.6	40	36.4
WHeat	0	0	0	0
Total	110	100	110	100

Source: Field Survey, 2015.

Table (4.9) shows that majority of respondents before the conflict their main food crops are (96.4%) sorghum and (3.6%) millet. After conflict (36.4%) of them changed to grow millet and this is due (as they said during field survey) some Arab, herded occupied the land of sorghum cultivation, insecurity situation, food, erosion of the valley.

Table (4.10): Frequency distribution and percentage of respondents by their annual income before and after the conflict

	Income before conflict SDG		Income after conflict	
	Frequency	%	Frequency	%
3001 – 3500	11	10.2	25	22.7
3501 – 4000	29	26.4	75	68.2
More than 4000	70	63.4	10	9.1
Total	110	100	110	100

Source: Field Survey, 2015.

The result from table (4.10) shows that the majority of the respondent their annual income more than 4000 SDG before the conflict (63.4%), after conflict the 68.2% of respondents their annual income is 3501 – 4000 which are the majority, this indicate that they lost their assets during the conflict and their livelihood destroyed.

Table (4.11): Frequency distribution and percentage of respondents by their number of meals before and after the conflict

	Number of meals/day before conflict		Number of meals/day after conflict	
	Frequency	%	Frequency	%
Two meals	57	51.8%	90	81.8
Three meals	53	48.2	20	18.2
Total	110	100	110	100

Source: Field Survey, 2015.

The main factor affecting nutritional security is the number and type of meals that used to eat as well as their contents, table (4.11) shows that the majority of respondents (51.8) have two meals / day before the conflict. After conflict (81.8) eat two meals /day and only (18.2%) eat three meals/day, breakfast, supper and dinner, diet composition taken were used to have daily and regularly consist of milk, fishers, eggs, vegetable, fruits and porridge because all of these product available and accessible during field survey, I observed some of the households used to keep few of breakfast (only porridge) for children and elderly in particular to eat as second meal at 3.00 o'clock. If we compare the percentage between before and after the conflict, the percentage of people who eating two meals increase from 51.8% to 81.8% and who eating three meals decrease from 48.2% to 18.2%. I believe that before the conflict the quantity and quality of food are available in their houses and accessible or they have ability to buy from market. Moreover USAID (2013) reported that the conflict affect food utilization, not only reduces both food availability and accessibility, but also perishable foods of high nutritional value, thus it is clear that there is deterioration in nutritional status of people specially women, children, because the nutritive value of meal taken before conflict were valuable. This is due to small number of people, household and/or their better income opportunities.

IV. CONCLUSION

During pre-conflict the study area was very strong through trade in cereal, cash crops, horticulture and livestock export. On other hand the way of life of people in the area very simple and peaceful, all the member of the household working together and manage to cultivate a large area of different crops, cash crops, food crops, vegetables during the past years, the area was affected by conflict which led to destruction of resources and property, thus achieving food become a problem to all segments of the society (displaced, host community and nomadic Arab). Live hood become very difficult.

There is a complex relation between gender role and conflict. It affects the existing gender role. Women work as farmers, they are hard workers, they are hard workers, and they take on both domestic and productive activities. Generally food security of household depends on subsistence production (both livestock raising and crops cultivation). However the preparation of all activities doing together by all members of household, but the conflict change the system and roles of their life specially women, due to that women became heads of their families and responsible for food security and other needs of life.

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