

The Impact of Darfur Conflicts on Food Security of Nomads in North Darfur State.

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Abstract: The study was conducted in North Darfur state in the pastoral areas area of Kabkabyia, Malha, and Kuma localities, during the period from March 2011 to July 2011. The objective of the study was to investigate the impact of conflict on nomads food security in North Darfur State. A case study approach was used for estimating types and numbers of livestock, staple food source, and food coping strategies for the nomads in the study areas. Data were obtained through field observations; focus group discussion, key informants interviews and filling questionnaires. The main results from the study were; a great loss of livestock owned by households due to the insecurity and many families shifted from camel grazing to sheep and goats grazing and generally livestock grazing is an important source of the Nomads. The conflict has affected the food security of the nomads through restricting of livestock movement on routes and closure of the main livestock markets which resulted into decline of livestock prices in productions areas and increase of the prices in consumption areas.

Key words: Cope strategies, Wealth ranking, Well-off

Introduction

Darfur region occupies an approximately area 500.000 km², in the western part of Sudan. The desert covered an area of about 145000 km², which represents 28% of total area of the Region (Fadul, 2006). According to Abdalla (2008) and the rainfall in the region consists of four main climatic zones, firstly, the rich savanna in the south with an average of rainfall between 400 mm to 800 mm per year, the rainy season extends between four to five months, secondly the poor savanna in the middle of the region, with average annual rainfall that ranges between 200 to 400 mm and rainy season ranging between three to four months, thirdly, is the arid zone which occupies the middle of the north parts of the region, the rainfall in this zone is limited, with high fluctuations and ranges from 100 to 300 mm per year, the fourth, is the desert zone and it is characterized by lack of rainfall.

Young *et al.*, (2009) reported that, in Darfur region livelihood systems are closely linked with migration. Rural production systems are predominantly based on sedentary cultivation

(farming) or transhumant pastoralism. According to the Ministry of Animal Wealth (MOAW) North Darfur (2011) the total population of livestock in North Darfur was estimated to be 29.778.130 heads, about 6.63.675, 3.595.343, 2.827.979 and 484.592 heads of cattle, sheep, goats and camels respectively. Ajeeb *et al.*, (2010) reported that , livestock production in Sudan in general and in Darfur particularly is based on transhumant pastoralism and communal grazing, that organized by native administration from sedentary(farmers) and nomads through animal routes (*massarat*), that are certain tracks followed by livestock during their movement searching for water and pastures. Yousuf (2005) stated that North Darfur comprises three ecological zones (desert, semi desert and low rainfall savannah) with different nomadic groups such as the Arabs camel nomads (*Abbala*). While in South Darfur, there are a series of Arabs cattle nomads (*Baggara*).

Fadul and Ismail (2011) stated that historically food security strategy of the Nomads communities in the Malha and Kuma localities is based on livestock and livestock products.

Milk is directly consumed or exchanged for staple food with the neighboring millet farming areas like Saiyah and Malleit. The beginning of the drought in 1970s which culminated by 1984\5 famine resulted in loss of considerable numbers of livestock, cattle were most affected especially in Kuma locality.

This Study aimed to investigate the effects of protracted Darfur conflicts in the food security of the nomads within the new context of Darfur after the ongoing conflict.

Study Methodology

The case study involved 200 households of nomads of which 50 were women headed household. The data collected through three levels:

- Focused group discussion; three discussion group for men and one group for women in each locality.
- Key informant interviews with native administration, herders` union and veterinary officers.

- Filling of 200 household questionnaires that were distributed to respondents.
- Review of the former reports and studies on food security of the pastoralists` communities in Darfur and other areas
- Wealth ranking approach was used to help or guide in quantifying the status of the households, well-off, middle, poor and very poor. The wealth ranking criteria was agreed upon by the communities. Livestock holdings and assets was used to describe the status of the households

Results and Discussion

Numbers of livestock owned by the households

The average numbers of different livestock species, owned by household in the study area were 407±182.1 and 55±3.1 before the recent Darfur conflicts and during the conflicts respectively, with significant differences, see (Table 1).

Table 1. The Number of livestock before and during the conflicts

Issue	Before the conflicts	After the conflicts
Camels	168.4±27.7*	11.46±6.2*
Sheep	230±92.3*	9.27±2.17*
Goats	173.5±123.2*	27.8±12.1*
Cattle	9.5±7.01	1.63±0.6
Total	407±182.1	55±3.1*

*significant ≤0.05

A sharp reduction occurred in the numbers of animals during the conflict from 407 heads for household to 55 heads (about 86.5% the animals were lost) mainly due to looting and distress selling. Even those who managed to save their livestock could not manage to keep them anymore and finally they been forced to sell them even for low prices to provide food and money in cash

Livestock ownership in the study areas

The main livestock grazed in the study areas were camels, sheep, goats cattle represented

the highest percentage before the conflicts with 38.5% that was because of the economic importance of sheep in family income. There was a significant increase in production of goats during conflict from 36% before the conflict to 52% during the conflict, that because goats are the first livestock type used for acquiring staple food or sold for home income, more over women headed households are the main goats keepers, because goats are cheaper and easier to be manage and look after as it is called the poor man cow.

Table (2) livestock Types in the study areas

No	Livestock type	Before the conflict		During the conflict	
		Frequencies	Percentage	Frequencies	Percentage
1.	Camels	31	15.5	18	9
2.	Sheep	77	38.5	68	34
3.	Goats	72	36	104	52
4.	Cattle	20	10	10	5
Total		200	100%	200	100%

High reduction occurred in the percentages of camel from 15.5% before the conflict to 9% during the conflicts, while cattle percentage fell from 10.6% to 5% due to looting and distress selling because of chaos and insecurity.

Wealth ranking of the nomads in the study area

Focused group discussions and key informant persons on wealth ranking, they mentioned that the categories of ordering wealth ranking are: Rich (well-off) households, that owned above 100 heads of camels or 150 heads of cattle or above 250 heads of sheep, Middle household who owned 50 heads of camels or cattle or 100 heads of sheep and poor households that owned less than 10 heads of camels or sheep.

Goats and donkeys are not included in wealth ranking measurements. The study revealed that wealth ranking in the study area as follows: Well-off 25%, middle 37.5%, poor 27.5% and very poor 25% before the present conflict in Darfur, but during the conflict the situation has changed appearing 10%, 21.5%, 55% and 25% for well-off, middle, poor and very poor respectively.(Figure.1). These results agreed to what had been reported by Save the SCF.UK (2004) where the households in the pastoral zone were ranked as, poor households 45-55%, middle 25-35% and better-off 15-25%. Thus the protracted present conflict in Darfur has increased the poverty rate among the nomads' communities which severely affected the food security of nomads in the study area.

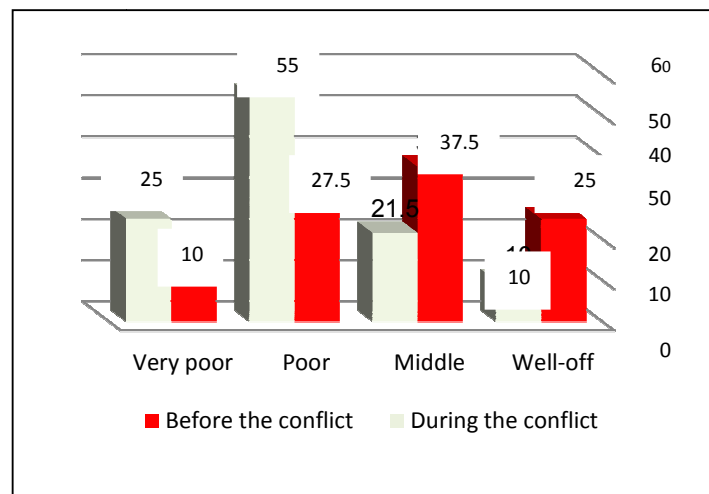


Figure (1) Wealth Ranking of nomads Household in the Study Area

Sources of stable food in the study areas

The main source of income for the nomads is selling animals to buy stable food. This represents 61% before the conflict and 33.8% during the conflict. The second source of stable is cultivation (mainly) Millet with percentages of 39% and 46.2% before and after the conflict respectively. Relief from World Food Programme (WFP) was not a part of food sources in the nomad area before the ongoing conflict in Darfur but during the conflict it represents of

20%. The effects of conflict in the nomad's food security in the study area appeared through handicapped transport and animal movement which resulted in a decrease in animal prices in remote areas, therefore the terms of trade between cereal grains of stable food and livestock started to be more important. In Malha three male goats two years of age needed to be sold to buy one sack of millet (80Kg) in year 2010. Hence poor families will lose most of their livestock especially goats for providing stable food.

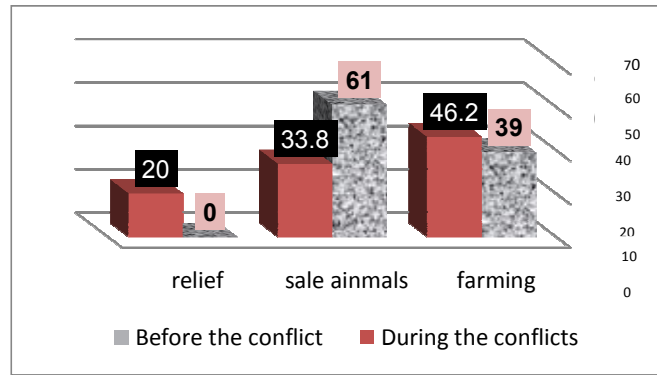
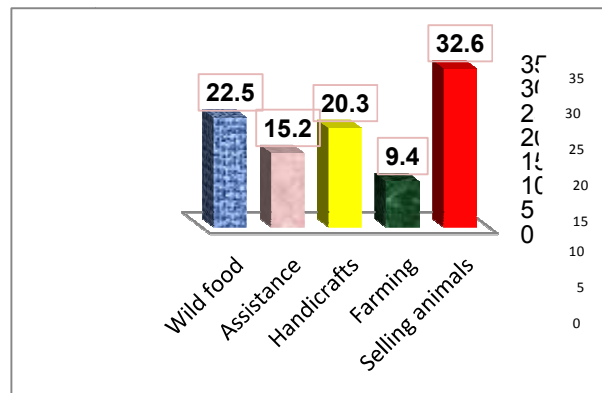


Figure (2) Sources of stable food in the study area.

Food security coping strategies

The nomads have development many coping strategies to sustain their food security and

livelihoods in the context of North Darfur within the ongoing conflict, which affected severely the food security of the nomads.



Figure(3) Main food security coping strategies in the study areas

Sales of animals to buy food are the main coping strategy for the nomads (32.6%) especially for the well-off sector. Wild food and handicraft are the main source of food for

the poor, which represented in 22.5% and 20.3% for wild food and handicraft respectively. That is because most households (especially women headed households) were

forced to sell their animals for purchasing food during the protracted present conflict in Darfur. Assurances through remittances from some of the family members working abroad also has an effective role in coping strategies of food security of nomads which represents 15.2%. But farming represents only 9.4% of coping strategies that due to insecurity and fluctuations of rainfall.

Conclusion

Livestock represents the main source of food security for nomads through selling animals or animals products to buy millet, which led to a decrease in numbers and types of livestock owned by the household. Insecurity and selling animals to obtain the price of food has contributed to a change in the types of animals that are owned by the families e.g. a reduction in camels and an increase in small ruminants.

Recommendations

- Raising awareness of nomads into reduce the numbers of livestock to increase rearing of good productive livestock.
- Introduce more recent animal production systems e.g. ranching
- Solving the overall insecurity problems in Darfur region.

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أثر النزاعات في دارفور على الأمن الغذائي للرحل في ولاية شمال دارفور - السودان

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المستخلص:

أجريت الدراسة في المنطقة الرعوية في شمال دارفور في كباكية، المالحة والكومة في الفترة من مارس الي يوليو 2011م لتحري أثر النزاع في دارفور على الأمن الغذائي للبدو الرحل في شمال دارفور. أُستخدَم منهج دراسة الحالة تقدير أعداد وأنواع الثروة الحيوانية ومتابعة مصادر الغذاء والأستراتيجيات المتبعة لمجابهة نقص الغذاء. تم الحصول على البيانات من خلال الملاحظات الميدانية ومجموعات النقاش واللقاءات مع الأعيان وملء الأستبانات. أهم النتائج التي توصلت إليها الدراسة هي: حدوث فقد كبير في عداد الحيوانات التي تملكها الأسر بسبب التقلت الأمني , كما إنّ العديد من الأسر غيرت من رعاية الأبل إلي رعاية الضأن والماعز وأنّ الرعي هو اهم مصادر الغذاء للأسر الغنية والمتوسطة . كما أثر النزاع على امن الرحل عبر أعاقه تنقل الماشية في المراحيل وقفل اسواق الماشية مما أدى إلي تدني اسعار الماشية في مناطق الانتاج وارتفاعها في مناطق الأستهلاك .