

Impact of the Security Situation on Cereal Production in Burkina Faso : The Case of Sourou Province (Burkina Faso)

KONKOBO Jacques, Université Norbert ZONGO, (Burkina Faso),
konkobojaques@ymail.com

SOMÉ Nifababé Jean, Norbert ZONGO University, somejean19@gmail.com

SOMÉ Yélézouomin Stéphane Corentin, Norbert ZONGO University (Burkina Faso),
some_y@yahoo.fr

DOI: 10.56201/ijssmr.v9.no5.2023.pg54.62

Abstract

Agriculture is the main socio-economic activity of the population in Sahelian countries. However, agricultural production conditions do not provide assurance, as farmers are regularly faced with an upsurge in natural adverse weather conditions, which are manifestations of the effects of climatic variability and soil poverty. In Burkina Faso, these constraints on agricultural production are exacerbated by the security situation, with repeated attacks in farming areas causing farmers to abandon their fields. The aim of this study is to analyse the impact of the security situation on cereal production in Sourou province. The methodological approach is based on documentary research, and the collection and analysis of quantitative data on the areas of fields sown and on cereal production in tonnes from the 2005-2006 agricultural season to the 2020-2021 season. The results of the analyses show that field areas and cereal production in tonnes fell sharply together during the 2014-2015 crop year, corresponding to the start of the security crisis in Burkina Faso. From 2015 to the present day, Sourou province has counted almost 5,000 displaced people living in 46 villages in the communes of Toéni, Gomboro, Toughan, Di and Komboro. All these people have fled attacks by unidentified individuals, forcing them to abandon their villages and fields. As a result, there is a correlation between the fall in the area sown and the fall in cereal production.

Key words: agriculture, cereal production, security crisis, Sourou, Burkina Faso

Introduction

In recent years, Burkina Faso has been facing an unprecedented humanitarian crisis linked to a sudden increase in violence (OCHA, 2019). Recurrent armed attacks have led to the internal displacement of more than 300,000 people. The areas most affected by the security crisis are the Centre-North, the East, the North and the Sahel (FAO, 2021). In the country, security incidents against the security forces and civilians are almost a daily occurrence, forcing people to abandon their fields, especially in and around the Sahel region (COMMODAFRICA, 2019). At the start of the season, farming activities were reduced by 70% in most communes in Soum province and by 20-50% in neighbouring communes (COMMODAFRICA, 2019). According to the US agency, the situation is more deplorable in the northern half of the country, where agricultural production is already below average. For households that were able to produce, more than 38 per cent estimated in March 2021 that

their stocks would not cover more than three months, i.e. they would run out in May, compared with June in the typical year. Many miners have moved to the quieter areas in the south of the country to pan for gold. Although the expected rainfall conditions are favourable for crop development, the insecurity is disrupting farming activities and will lead to a drop in agricultural production compared with the average before the crisis, especially in the regions concerned.

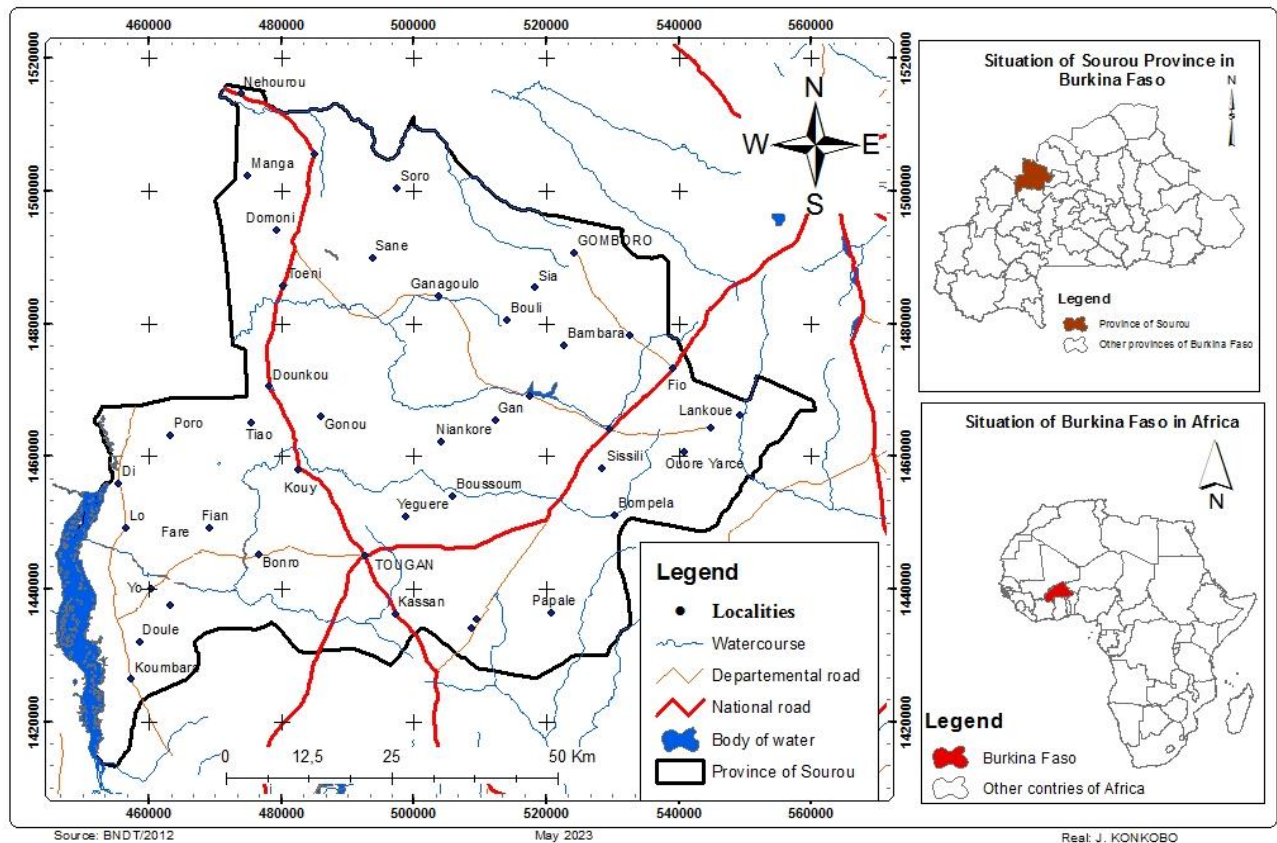
In addition, during the previous agro-pastoral season (2019-2020), the country recorded cases of food shocks (localised or generalised) of low, medium or high severity linked to the security situation, attacks by army worms in the autumn and pockets of dry spells. The presence of internally displaced persons (IDPS) is a major concern, especially in the Sahel, East, Centre-North, Boucle du Mouhoun and North regions (Cadre harmonisé d'analyse et d'identification des zones à risque et d'estimation des populations en insécurité alimentaire au Sahel et en Afrique de l'Ouest, 2019). It is therefore urgent to assess the current state of agricultural production in the country in order to anticipate possible food crises, or even widespread famine. To paraphrase Sun Tzu, "He who excels in solving difficulties does so before they arise". This study is a contribution to understanding the impact of the security situation on agricultural production in Sourou province, one of the areas most affected by attacks by unidentified armed men.

1- Methodological approach

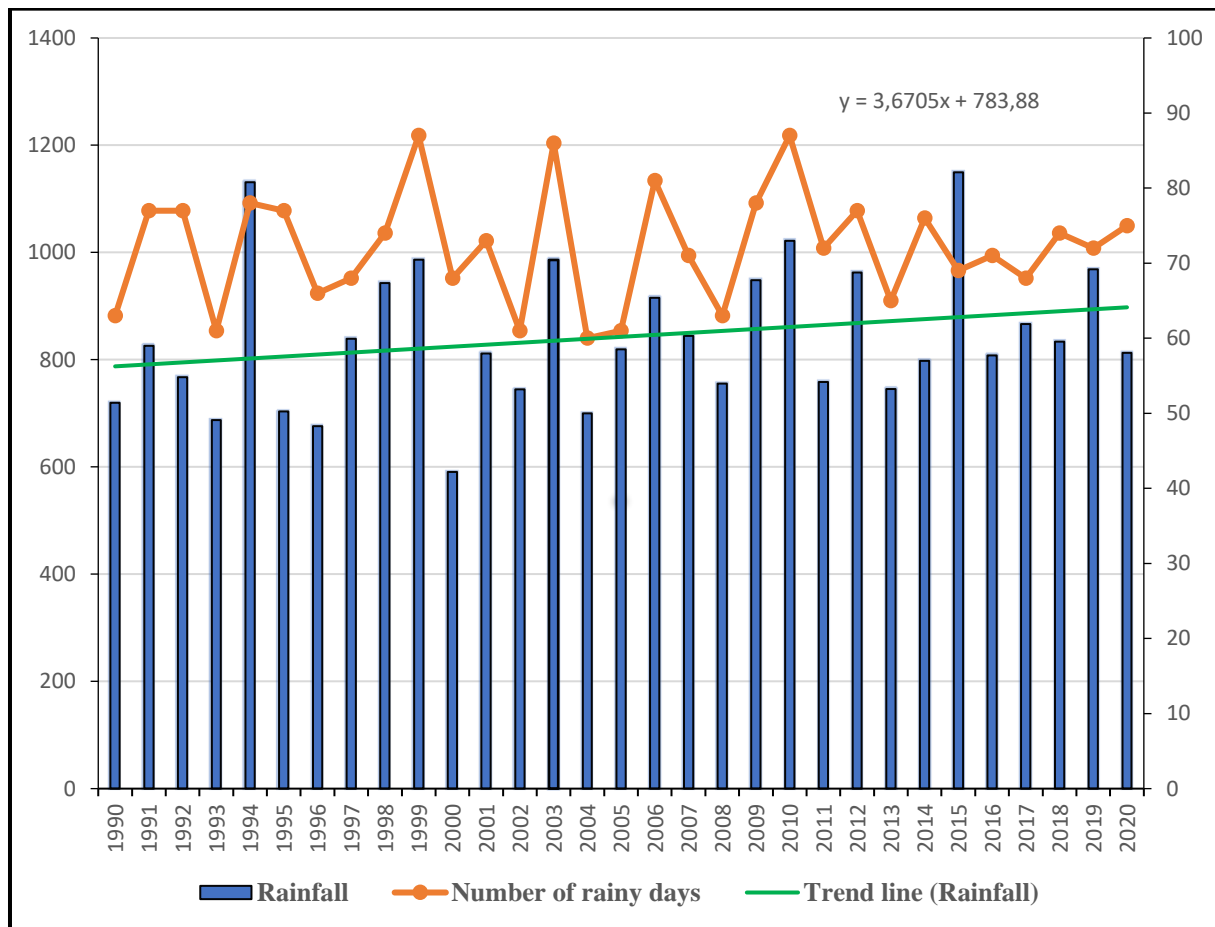
1-1- Presentation of the study area

Sourou province is located in the Boucle du Mouhoun region. It lies between 13°04'00" to the north and 3°04'00" to the west (Figure No.). The province covers an area of 5,977 km². It borders the Nord region to the east, Mali to the north and west, Kossi province to the south-west and Nayala province to the south. It is part of the Gondo plain. Its population was estimated at 220,622 in 2006 (RGPH, 2006) and 28,4947 in 2019 (RGPH, 2019).

Map: Location of Sourou Province



Sourou province is influenced by the characteristics of the Sudano-Sahelian climate according to the thermoclimatic breakdown of Burkina Faso, with an average annual rainfall of 842.60 mm for the period 1990-2020. Between 1990 and 2020, rainfall varied between 1149.2 mm in 2015 and 590.6 mm in 2000, a difference of 558.6 mm, compared with an average of 842.60 mm for the period. However, this average masks a number of disparities. Years such as 1994, 2003, 2010 and 2015 show exceptional peaks above the average. Meanwhile, the years 1996, 2000, 2011 and 2013 have averages that are exceptionally below the series average (Figure 1). This indicates inter-annual variations in rainfall. These variations in rainfall influence the surface condition due to the lack or excess of water. For the whole of the series concerned, there is an upward trend in rainfall, with the directing coefficient of the trend line being positive (Figure 1, equation of the trend line). Examination of the curve described by the moving average gives an idea of the pattern of rainfall variations. It shows a sawtooth pattern. Rainfall is therefore unstable from one year to the next.



Source: Dedougou synoptic station

Figure 1: Change in rainfall and number of rainy days

Agriculture, which employs around 90% of the working population, is the population's main socio-economic activity. The dominant production method is traditional and extensive. However, the province of Sourou has a developed valley that bears its name. Before the security crisis, the valley was increasingly used for agricultural production. The Sourou valley owes its name to the Sourou river, which flows north-east to south over a distance of around 120 kilometres, from Toroli (Mali) to Léry (Burkina Faso), where it meets the Mouhoun river. The Sourou River is a tributary/defluent of the Mouhoun River. The soil survey revealed a variety of soils covering an area of 302,000 ha, suitable for a range of uses, particularly hydro-agricultural development. The Sourou valley attracted a great deal of interest because of its irrigation potential. Here, the aim was to promote modern agriculture, using the upper Sourou riverbed for flooded rice growing. These initiatives have led to the introduction of a number of crops, including rice, sugar cane and wheat. However, the security crisis that began in 2015 has had a negative impact on farming in the province in general and in the Sourou valley in particular.

1-2- Data and analysis method

Quantitative data were collected from the Boucle du Mouhoun regional office for the purpose of analysing changes in the area sown to cereals and cereal production in the study area. These data are from the department dealing with statistics on agricultural

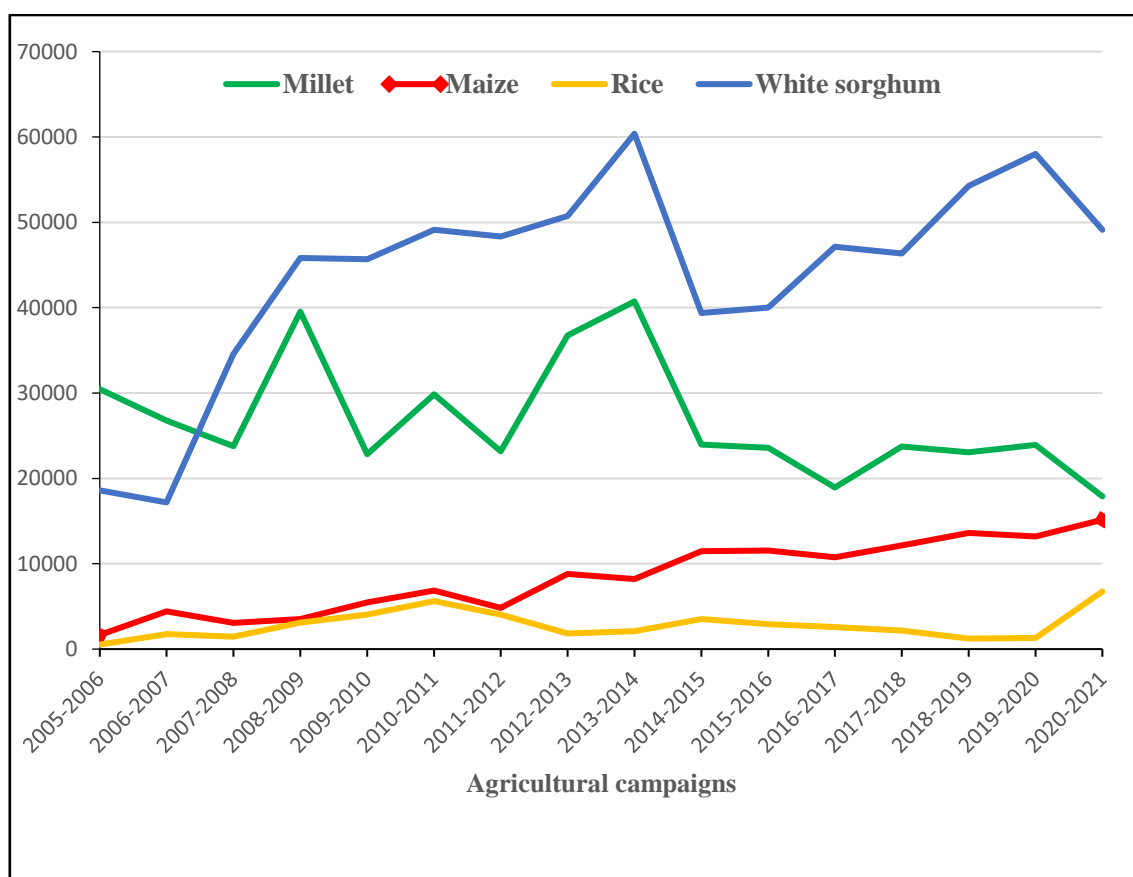
production in the region, based in Dédougou, the capital of the Boucle du Mouhoun region, located in the north-west of Burkina Faso. The data covers the 2005-2006 to 2020-2021 agricultural seasons. The choice of this period is linked to the availability of these data at the level of this service compared to previous years. The data were used to analyse changes in field area and cereal production over time.

The areas (millet, white sorghum, red sorghum, rice and maize) in ha and production in tonnes (millet, white sorghum, red sorghum, rice and maize) in the study area were analysed using descriptive statistics (mean values) and graphical representations using Excel 2016. This analysis made it possible to understand and assess changes in sown areas and production in tonnes between 2005 and 2021.

2- Results

2-1- Areas sown for cereal production

The area sown to cereals has followed a rollercoaster pattern (Figure 2). The trend was upwards, particularly for millet and sorghum, from 2005 to 2014, before falling sharply in the 2014-2015 crop year. This sharp fall in the area sown is linked to the attacks carried out by unidentified individuals in localities from 2015 onwards, when people had to abandon their villages to save their lives. The absence of people from their villages meant that the fields were not cultivated or were abandoned.



Source : Boucle du Mouhoun Regional Department of Agriculture, statistics department, January 2022

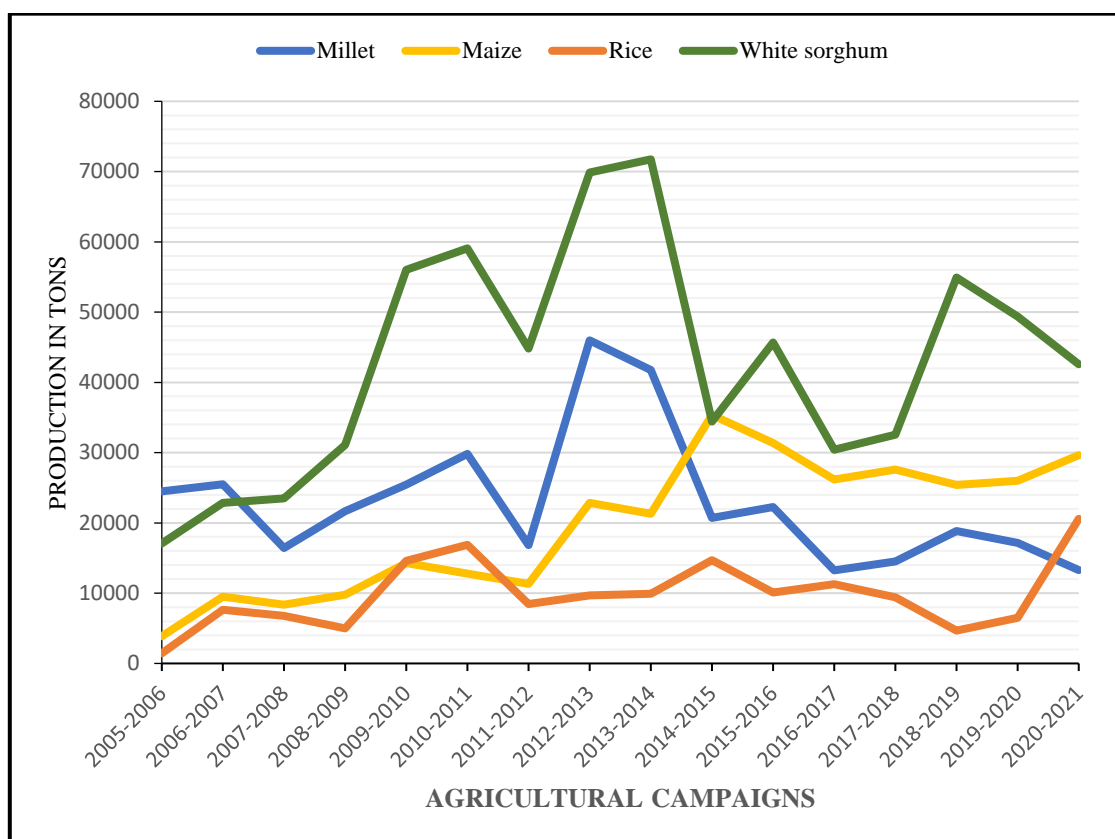
Figure 2: Area under cereal crops

2-2- Cereal production

In terms of cereal production, farmers in Sourou province produce sorghum, millet, maize and rice, in order of importance. Cereal production varies greatly from year to year. The last fifteen crop years have seen several major breaks. These breaks can be seen in the 2007-2008, 2011-2012 and 2014-2015 crop years. The dips seen in Figure 3 in 2008 and 2012 can be explained by the droughts experienced by Burkina Faso in those years. Rainfall and the number of rainy days were at their lowest. Burkina Faso did indeed face a food crisis in 2008 and 2012 due to a poor agricultural season caused by poor rainfall.

However, in 2015, while rainfall reached its peak, cereal production (millet, rice, sorghum) fell sharply, with the exception of maize. Admittedly, this drop in cereal production can be explained by a number of factors, but for Sourou province, This situation is due in particular to the insecurity that the province has experienced since 2015, causing thousands of farmers to flee and move. This is borne out by the fall in the area sown to cereals over the same period (Figure 2). Repeated assaults on producing localities, the destruction of crops and the abandonment of production factors such as fields have led to a drop in agricultural production.

In the Boucle du Mouhoun region, the provinces of Kossi and Sourou are the worst affected by the security crises. In Sourou, the communes of Toéni and Gomboro are the worst affected. The populations of these communes are being displaced en masse to Tougou, the provincial capital. According to surveys carried out by the Terre des Hommes Foundation (2019: 1) of the 43 villages in Sourou province and 34 others in Kossi province, the communes of Barani and Kombori have received 2,154 people displaced by insecurity.



Source: Boucle du Mouhoun Regional Department of Agriculture, statistics department, January 2022

Figure 2: Cereal production in tonnes

3- Discussion

Burkina Faso is an agricultural country, where more than 80% of the population derives its livelihood from the exploitation of the land and other environmental resources. Despite the efforts made by farmers, the cereal balance sheet is almost always in deficit, posing food security problems at local, regional and national level. This shortfall in production is the result of climatic variability, poor spatial and temporal distribution of rainfall, low soil fertility, dwindling natural resources and population growth, but the security situation is also partly responsible for the decline in agricultural production in Burkina Faso today.

The loss of human life is the main deplorable impact of crisis situations. In addition, there are the many physical and psychological injuries, and the loss of homes, leading to the displacement of people to less affected areas. This finding is confirmed by the UNHCR report (2021), which states that the incidents caused by attacks are threats followed by damage to physical integrity and property; damage to physical integrity, threats and intimidation. According to other sources, the current security crisis has led to the displacement of more than 300,000 people (JARRY J.P., 2021). Nearly a million people have been internally displaced, more than 40% of them from the Centre-North (FAO, 2021). According to the same source, non-state armed groups are killing civilians and looting livestock in the provinces of Oudalan and Seno. Insecurity is having a significant impact on agricultural production, particularly in the Centre-North, with a drop of almost 40 per cent in the area

sown to market gardening and difficult access to fields, which is significantly exacerbating food insecurity among the population.

Given the state of cereal production in Burkina Faso in general, and in Sourou province in particular, the security situation is likely to lead to a rise in food prices. Difficult access to foodstuffs will further weaken the food situation of households, which depend mainly on the markets for their supplies. This result is not unique to Burkina Faso, as the CILSS (2020), in its study of food security in West Africa and Cameroon, noted sharp rises in the price of staple foods in certain areas, notably Sierra Leone, Liberia, Niger and Nigeria. We agree with this author that this situation is attributable to the COVID-19 pandemic and the precarious security situation prevailing in these countries, as in Burkina Faso. This observation contradicts COMMODAFRICA (2019), which estimates that in the centre, south and west of the country, food prices have been reduced by 30% due to the abundance of stocks held by traders and the start of the new harvest. However, two facts should be noted: the situation needs to be put into context, as COMMODAFRICA's results predate most of the attacks in these areas. Added to this is the fact that these localities are among the country's "granaries", and therefore major producers. Under these conditions, stocks are available and accessible, but only at local level. There is therefore no reason to be satisfied, as food security goes beyond the mere aspect of availability.

Conclusion

The deteriorating security situation in Burkina Faso particularly affects rural areas, where 80 per cent of the working population depends on pastoralism and agro-pastoralism for their livelihood. The vulnerability of rural populations makes them extremely vulnerable to attacks by unidentified armed groups. Repeated assaults on farming localities, the destruction of crops and the abandonment of production factors such as fields have led to food insecurity in the province. In the context of a complex and multidimensional crisis, it is essential to carry out activities aimed at ensuring food security, resilient livelihoods and improving the nutritional status of vulnerable sections of the displaced population and those in the host areas.

References

- Harmonised framework for analysis and identification of areas at risk and estimation of food insecure populations in the Sahel and West Africa (2019). Results of the analysis of current and projected acute food insecurity, Burkina Faso, 9 p.
- CILSS. (2020). Sahel, West Africa and Cameroon: Results of the analysis of acute food insecurity in the current situation from October-December 2020 and projected from June-August 2021. In Cadre Harmonisé d'identification des zones à risque et des populations en insécurité alimentaire et nutritionnelle, CILSS, 7p.
- COMMODAFRICA. (2019). Burkina Faso : politique et juridique, in <http://www.commodafrica.com/29-10-2019-au-nord-du-burkina-faso-linsecurite-fait-chuter-de-70-la-production-agricole>. Accessed November 2022
- FAO/Burkina Faso. (2021). Food security and risk analysis in the Centre-North, East, North and Sahel. In Bulletin d'information n°1, FAO, 4p.
- JARRY Jean Philippe (2021). Burkina Faso: Covid-19 and the terrorist threat aggravate food insecurity. In <https://www.fes.de/fr/section-afrique/nouvelles-de-la-section->

afrique/burkina-faso-covid-19-and-terrorist-threats-worsen-food-insecurity. Accessed November 2022.

The Famine Early Warning Systems Network (2021-2022). Burkina Faso Perspectives sur la sécurité alimentaire, 16 p.

Terre Des Hommes (2019). Rapport de la mission de cartographie des populations déplacées dans la province du Sourou et de la Kossi, 5p.

UNHCR. (2021). February protection report for the Boucle du Mouhoun region, 18p.