

The assessment of food vulnerability in Sahel countries : case of the early alert system of Niger

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Introduction

The definition of food vulnerability is « the analysis of adaptation mechanisms and reaction faced with a difficult situation. . If the mechanisms aren't effective, the household is in a temporary or structural vulnerability situation » (SAP and INS, 2010). The early alert system (EAS) of Niger has existed since 1989. The early alert system characterizes the annual vulnerability for each department and this analysis is made to determine the most vulnerable departments who will receive a monthly monitoring.

The Assessment of food vulnerability of the early alert system

Variables	Value
Pluviometric status	9
Subsistence farming situation	50*balance coefficient
Cash crops situation	50*balance coefficient
Pastoral situation	50*balance coefficient
Secondary income resource	50*balance coefficient
State of the market	10
Nutritional and health situation	6
Alert element	5
Adjustment capacity	10
Last year diagnostic	10

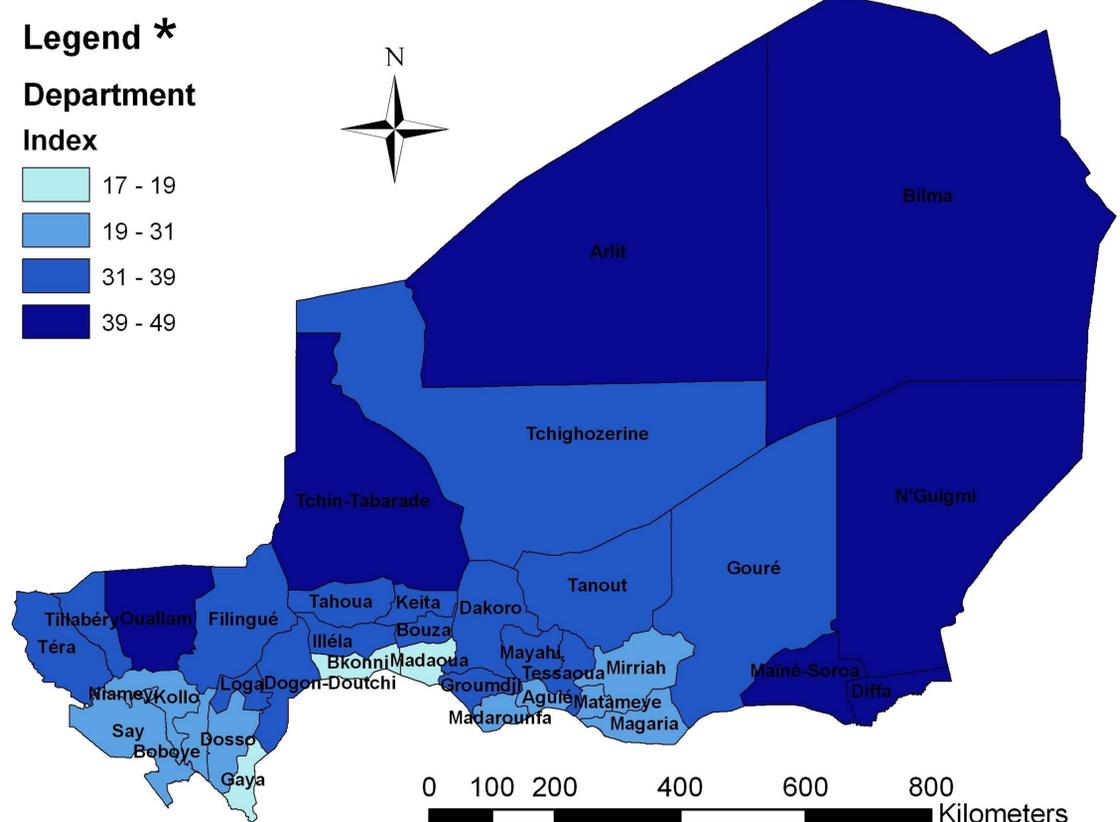
Every year, at the end of the agricultural campaign, the monitoring draws up a *vulnerability index*. This index varies between zero and one hundred. Each department is classified in four classes: famine condition (from 76 to 100) ; extremely vulnerable (51 to 75) ; vulnerable (26 to 50) ; relatively vulnerable (0 to 25). The calculation of this index is realized from data in an identification form. In this form, ten variables are identified (Table 1). The notation is obtained after application of a weighting on some variables. This assessment is the only methodology that analyzes all departments of the Republic of Niger.

Case of the assessment of the food vulnerability of the population of Niger

From 1992-2007, the index mean of food vulnerability per department of the Republic of Niger is represented in the figure 2. The Department of Tchintabaraden groups together Abakak and Tchintabaraden.

Conclusion

In conclusion, the most vulnerable departments in Niger are Ouallam, Arlit, Bilma, N'Guigmi, Diffa Department, Tchintabaraden, Abalak and Mainé Soroa. Any department is not extremely vulnerable but many departments are vulnerable. In Niger, for many reasons (cyclical and structural insecurity) the food vulnerability is very difficult to characterize. But this assessment is the only methodology common to all departments of the Republic of Niger. However, this analysis doesn't consider the economical and physical accessibility.



* The classes of this figure aren't those of EAS. They are presented because they are most representative to show the vulnerability of the departments of Niger