



# Compound Vulnerabilities Exacerbate Systemic Risks of Food

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## ABOUT THE STUDY

The effects of climate change are becoming more and more serious around the world. Simultaneous extreme weather threatens coping mechanisms such as breadbasket migration and food security. The systemic risk approach provides an important lens for guiding sustainable behavior with awareness of current and future risks. This analysis proposes a general conceptual framework for dealing with the nature of such risks. Combines data on weather-related mobility, food insecurity, and conflict to characterize the complex vulnerabilities underlying systemic risk. We use the Systemic Risk Impact Pathway (SRIP) model to show the intersection of systemic risk factors and complex vulnerabilities that have affected many countries from extreme weather events, prolonged armed conflict, political instability, and evacuation. It shows how these dynamics have created a complex area of population tension and the ability to ensure food security. To promote a risk-based sustainable development agenda, we recommend a systemic risk approach rather than a separate hazard approach.

Extreme weather, long-term droughts have helped to perpetuate armed conflict and food insecurity by disrupting traditional migration patterns at the local level, thereby exacerbating existing vulnerabilities. Complex vulnerabilities systematically endanger humanitarian needs through weak underlying governance, lack of access to food and relief services, and permanent marginalization of disadvantaged groups and herders. You can see that there is. Complex vulnerabilities are a major factor in mobility and restrain people who want to return to their original area. Internally displaced persons often hesitate to return home due to limited availability of food, social welfare, and livelihoods in their areas of origin, even in areas where conflicts have ended, or extreme weather conditions have eased. Internally displaced persons who are already vulnerable experience additional factors of vulnerability by relying on food and relief services that are severely underfunded.

Susceptibility vulnerabilities can be considered systemic risk because a variety of factors have led to protracted conflicts, including, external intervention, unemployed youth, limited financial opportunities, corruption, and ultimately armed conflict. This has become a means to an end. The catalyst for food insecurity revolves around conflicts between armed groups in less socially resilient environments due to drought, diminished livelihoods, the political elite, and the uncertain outlook for rapid conflict

resolution. Understanding the systematic nature of risk can help you better understand system links and interdependencies to promote effective governance. However, systemic risk is complex, stochastic, and non-linear, requiring a more comprehensive approach to hazard identification, risk assessment, and risk management. In terms of systemic risk, we will explain how the current food crisis is creating further instability in countries that are already vulnerable. The systemic risk underlying the food crisis cannot be considered independent of the security environment, political situation, extreme weather, and poverty.

This analysis demonstrates the importance of a programmatic approach to a systemic risk framework that recognizes complex vulnerability dependencies and manages, for example, systemic risk drivers, non-linear changes, and correlation structures. The analysis described in this analysis identified the existence of potential food security systemic risk factors such as the previous food system framework, but attempts were made to quantify the magnitude of the impact. It is reasonable to argue that such an analysis requires contextual specificity. Conceptual frameworks help provide an overview of the system and insight into system linkage. We have identified enhanced feedback loops that serve as intervention points to facilitate effective management of systemic risk when transforming a general framework into a national case study. The complex vulnerability framework and SRIP in this study are literature-based and describe a qualitative model. In the next step, you can quantify SRIP. Quantitative methods that can model systemic risk include complex event copulas, turning point analysis, or neural networks that show nonlinear dependent structures. However, these methods require longitudinal data that is not always available. Methods with lighter data requirements include the Bayesian Belief Network, which relies on expert knowledge and can correlate probabilities with causality. The definition of complex vulnerabilities is the simultaneous combination of intersecting stressors and complex drivers created by the harsh physical and climatic conditions, socio-economic barriers, poverty, and conflicts that affect the system included. Vulnerabilities addresses the systematic, interdependent, and intersecting nature of stressors by extending the existing definition of complex vulnerabilities.

Complex vulnerabilities are shaped by driver complexity rather than stressors that work independently of each other. These include the ability of the population to cope with exposure, how access and

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distribution to key resources are organized, and how institutions can provide resources to enable adaptation. Exposure refers to the extent of systemic risk and the range of natural disasters that at

the same time affect the local population. Awareness of risk and your own vulnerabilities contributes to the complexity of complex vulnerabilities.