Rural Households' Resilience to Food Insecurity in Niger

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Abstract : This study attempts to identify factors affecting rural households' resilience to food insecurity in Niger. For this, we first create a resilience index by using Principal Component Analysis on the following five variables at the household level: income, food expenditure, duration of grain held in stock, livestock in Tropical Livestock Units and number of farms exploited and second apply Structural Equation Modelling to identify the determinants. Data from the 2010 National Survey on Households' Vulnerability to Food Insecurity done by the National Institute of Statistics is used. The study shows that asset and social safety nets indicators are significant and have a positive impact on households' resilience. Climate change approximated by long-term mean rainfall has a negative and significant effect on households' resilience to food insecurity. The results indicate that to strengthen households' resilience to food insecurity, there is a need to increase assistance to households through social safety nets and to help them gather more resources in order to acquire more assets. Furthermore, early warning of climatic events could alert households especially farmers to be prepared and avoid important losses that they experience anytime an uneven climatic event occur.

Keywords : food insecurity, principal component analysis, structural equation modelling, resilience

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