



## Drought and food security in Senegal from the perspective of household access

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In the Sahel food security has been a top development priority since the abrupt onset of persistent drought caught the region by surprise in the early 1970s, causing repeated recurrences of extreme food insecurity. Research ultimately demonstrated the global climate root of drought, going so far as to partially attributing persistence to anthropogenic emissions of aerosols and greenhouse gases.

We exploit surveys collected in Senegal in the last 10 years to assess the year-to-year dynamics of household food security in relation to rainfall variability. We combine three variables from the household surveys, namely the Food Consumption Score, the Food Expenditure Share and the Reduced Coping Strategies Index, to explore the access dimension of food security. Cluster analysis on these three variables leads us to 1) classify households into categories of food security, and 2) discuss the response of each category of household to seasonality and year-to-year variability in climate.

The UN World Food Programme and in-country partner institutions normally survey thousands of households every few years, in order to assess "baseline" (as opposed to "crisis") food security conditions. However, the years that Senegal households were surveyed in this most recent decade include 2014, a year of severe, national-scale drought. Comparison with the other, non-drought years allows to directly assess the shock from the perspective of the households themselves, and to describe coping mechanisms based on "baseline" food security category. We find that in the drought year (1) more of the "average rural" households that normally do not recur to coping strategies actually did, and (2) food expenditure share increases in all but one food security category.