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The Next Generation Drought Index Project

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There is ample evidence about the added-value of anticipatory financing mechanism to mitigate the impact of extreme droughts on the livelihoods of vulnerable communities. Various projects have tried to optimize parametric insurance via different methods, resulting in useful lessons learnt for both macro- and micro-level insurance. In parallel, novel satellite-derived sources of information, such as soil moisture or evaporative stress, have become available to monitor key variables of the hydrological cycle and strengthen the drought narrative via cross-validation. The Next Generation Drought Index project was funded by the World Bank to develop a generic framework and related technical toolbox that allows decision-makers to understand every step of index design, calibration and validation. An interactive dashboard is linked directly to different data sources, the outputs of financial risk models and socioeconomic information to link climate hazard and impact information. Collaboration partners range from African Risk Capacity to the United Nations World Food Programme, the START Network, the World Bank's Global Index Insurance Facility and the European Space Agency. The overall goal is to reduce basis risk without creating an analytical black box as well as to identify and use 'low hanging fruits', such as the detection of early season moisture deficits via remote sensing. The finding from Senegal suggest that the effectiveness of insurance might be improved through client centered design through participatory/crowdsourced processes, a suite of advanced satellite data and models, available government/institutional data and structured decision tree processes based on key performance indicators.

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