

How multi-year prediction could impact planning for drought impacts on food security

Authors: Tamuka Magadzire, James P. Verdin

The number of food insecure people in southern Africa spiked by approximately 10 million people following two of the major droughts that affected the region in the 2015/2016 and 2018/2019 seasons. The two droughts were part of a sequence of recurring low rainfall seasons between 2014 and 2019, with significant impacts on the livelihoods of households. The likelihood of reduced rainfall associated with each of the two droughts was picked by seasonal forecasts, with lead times of 1 to 6 month. The Famine Early Warning Systems Network (FEWS NET) project regularly produces eight-month food security outlooks using a scenario development methodology that utilizes various sets of evidence, including seasonal climate forecasts. These outlooks help to guide humanitarian response plans that need to be implemented by decision makers following large increases in food insecurity, such as that caused by the 2018/2019 drought. An increase in the lead time of accurate operational climate forecasts to over a year can potentially extend the capability of food security outlooks that are used for planning for the impacts of drought. The inclusion of key sub-seasonal rainfall distribution characteristics in the extended forecasts will further increase their utility for food security outlooks.