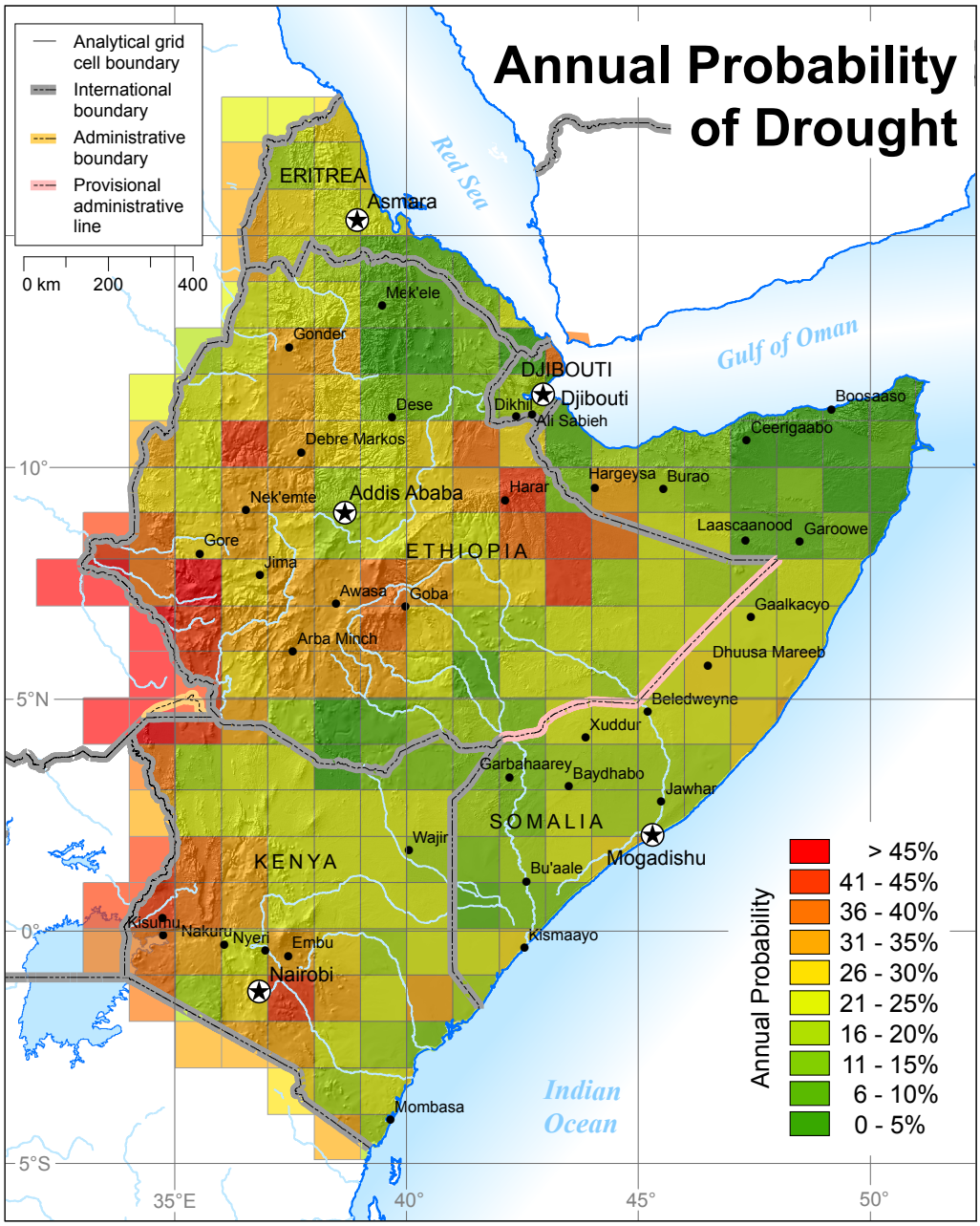
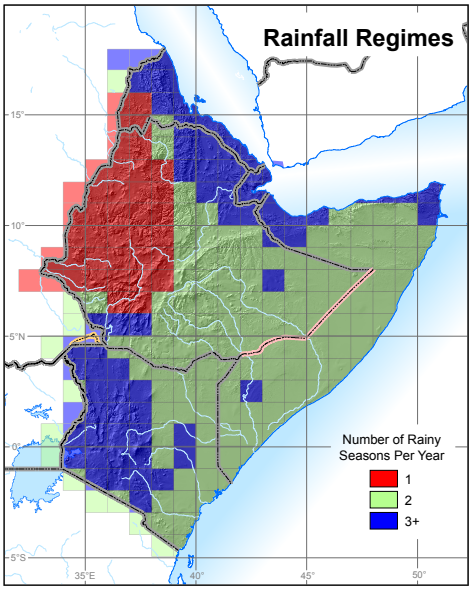
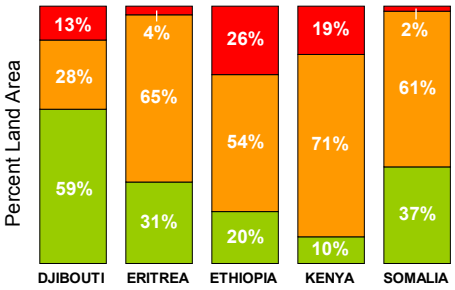
Annual Probability of Drought

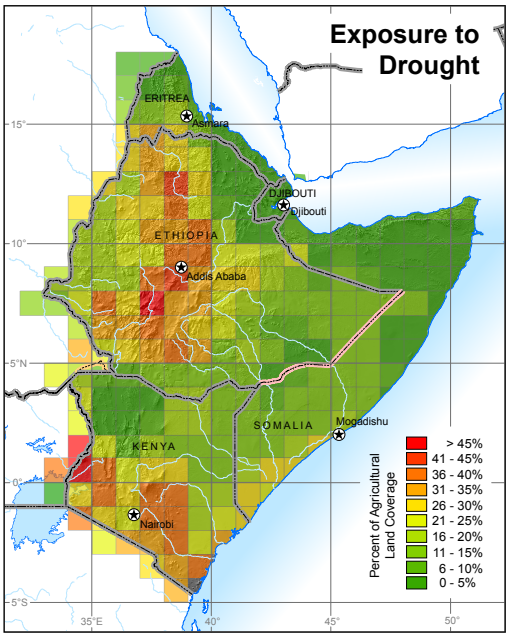


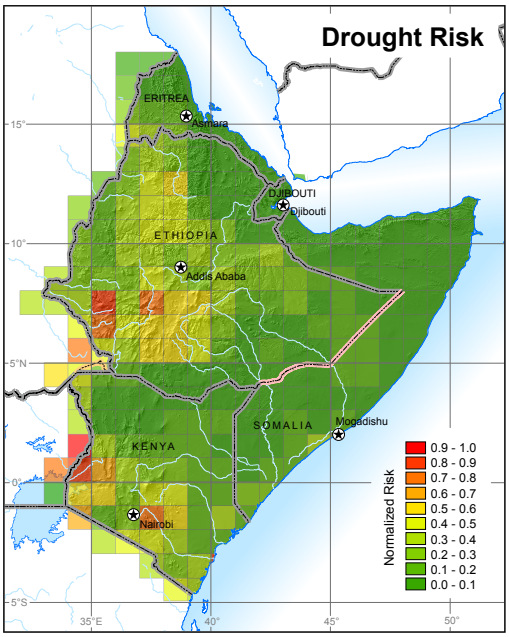
The Horn of Africa is known for frequent and severe droughts. On average, a severe drought may be anticipated once every couple of years during the months that comprise the season(s). Most recently, a two-year drought occurred in an area that covered much of eastern Ethiopia, northeastern Kenya, and southern Somalia. These droughts affect hundreds of thousands of residents and are exacerbated by the extreme poverty and persistent conflict.



Land Area and Drought Probability







This project uses the Standardized Precipitation Index (SPI) to determine the occurence of drought within the historical record. The SPI method provides a statistical characterization of anomalous rainfall in the historical data (CSU, 2005; Husak, 2005). Only droughts that occur during the agriculturally important rainy seasons are counted. Rainy seasons were uniquely defined for each grid cell based upon monthly rainfall frequencies over the period of analysis (1986-2006).