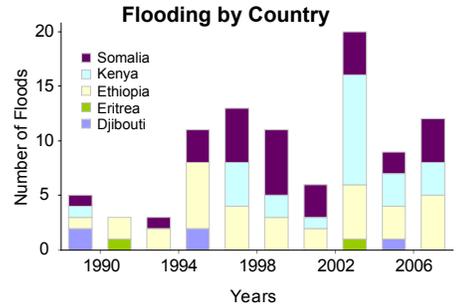
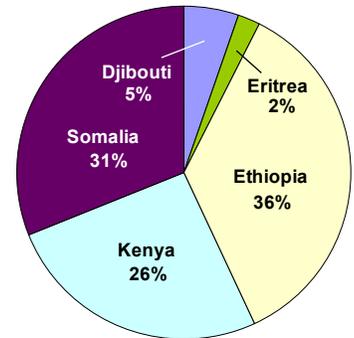


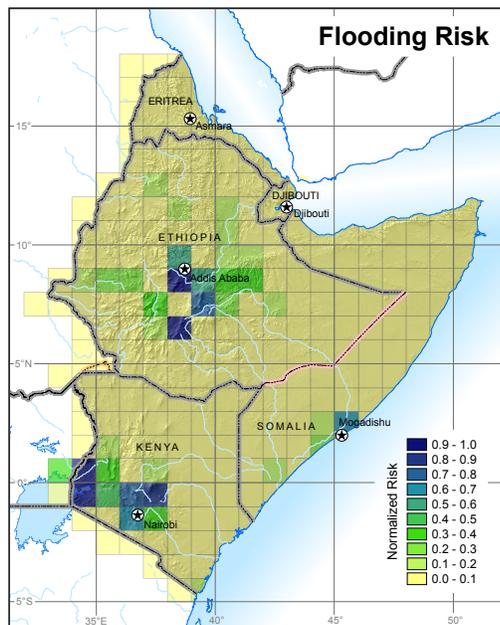
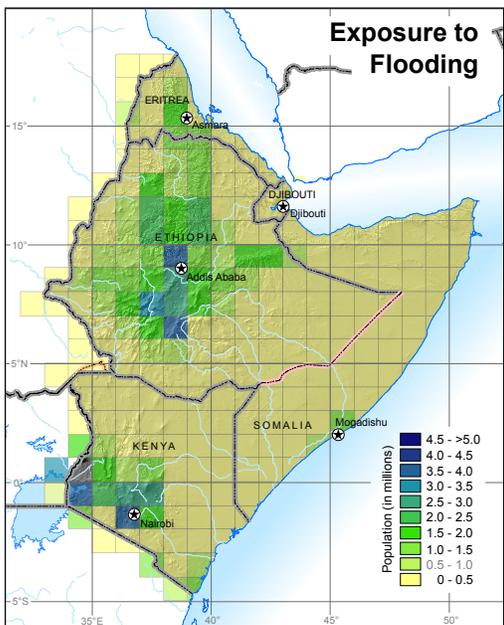
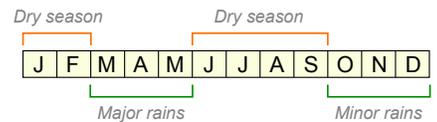
In the period from 1988-2006, the Shabeelle (20 floods), Juba (12), Awash (11) and Tana Rivers (9) were the most flood-prone rivers within the Horn of Africa. On average, the Shabeelle floods once a year and the Juba and Tana flood once every two years. Worst effects of flooding include human deaths (typically 10s to 100s), displacements (typically 1k to >100k), destroyed homes, submerged agriculture, and waterborne diseases (e.g. malaria, diarrhea, and Rift Valley fever).



Locations of Floods (1988-2006)



Generalized HOA Biannual Rainfall Calendar



Data from the Dartmouth Flood Observatory is the basis for calculating flood probability. A grid cell is considered to have flooded anytime a river intersecting that cell has flooded. Flooding in the HOA often leads to drowning, disease (cholera, malaria, Rift Valley fever), disrupted transportation and food supply, and infrastructure damage. Heavy rains, however, are often followed by bumper crop yields. The largest recent floods in the region occurred in 2006, 2001, 1998/1997, 1996, and 1988. Population density, derived from the LandScan dataset, is the measure for societal exposure to floods.