

HAZARDS DROUGHTS AND FLOODS

ECHO2 is specifically focused at areas prone to flood and/ or drought, which are the main natural hazards in Malawi anyway. We are disregarding other potential hazards, which are normally included in INFORM, therefore.

DROUGHTS

The drought risk map was created by analyzing rainfall data in the past 20 years using standard precipitation index (SPI) , which is a widely used index in drought analysis. Based on SPI6 values for the period October-march, which is the main rainy season in Malawi. Each pixel is classified to drought or no drought for each year based on SPI6 values, drought year if SPI value for a pixel is less than -1. Next, relative frequency is calculated, the number of times drought has occurred in the considered 20 year period. This frequency is then converted to probability of drought occurrence in a given year. We validated our analysis by comparing NDVI values for the drought year against long term average values.