

Cyclone Nargis: Population and Agriculture Impact, Myanmar

Purpose

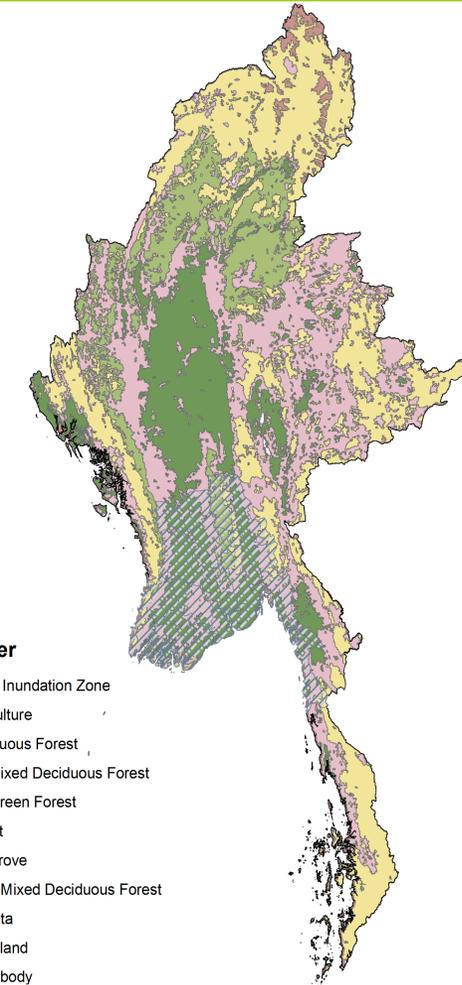
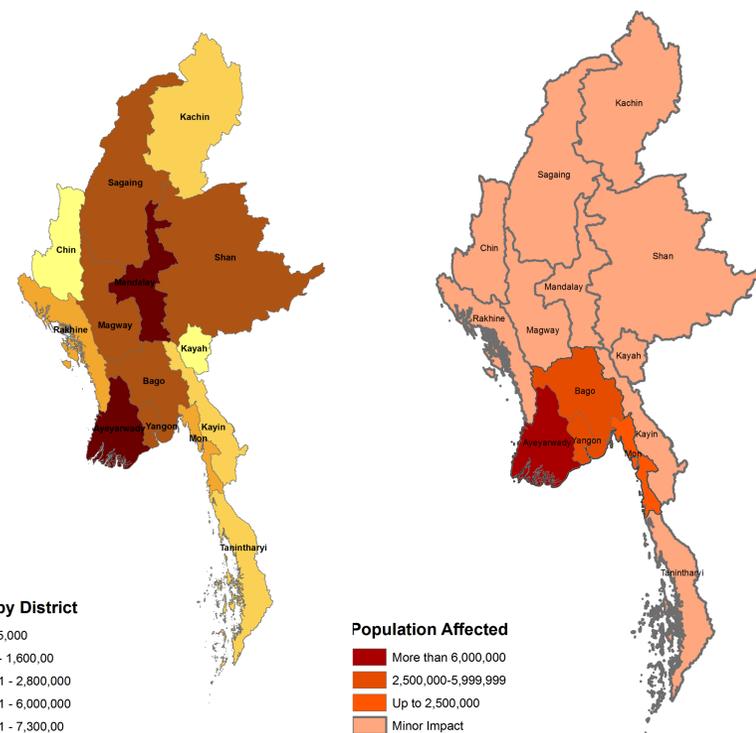
Cyclone Nargis made landfall on Myanmar on 2 May 2008. The severe tropical storm hit the Ayeyarwady (Irrawaddy) Delta region and the country's largest city, Yangon, causing catastrophic destruction and at least 138,000 fatalities. The storm impacted the most populous area of the country, as well as one of the most productive. The Ayeyarwady (Irrawaddy) Delta is a fertile rice growing region, once known as the Rice Bowl of the British Empire. Rice production has been essential to the food security of most Burmans, which was already a serious situation prior to the cyclone. The cyclone hit during the first rice harvest of the year, though most paddies had been harvested, the cyclone destroyed crops that had not yet been harvested and crops that were being stored. The second planting season began in July, but soil salinity and lack of resources for planting put that crop at risk.

The intention of this mapping is to visually represent the areas and population affected by the cyclone, and impact on agricultural area.

Cartographer: Mollie Glessner, 6 May 2011
 Data Source: UNOSAT, MIMU, FAO
 Projected Coordinate System:
 GCS_WGS_1984

Methodology

The first step in this analysis was the collection of data on population by district (2003), cyclone affected areas and landcover. Flooding inundation was limited to four districts and in order to discern the population affected, the cyclone affected area was selected out using select by location and clipped. Landcover data was overlaid with flood inundation area data to see the area affected by the flooding and the types of landcover most affected. Quantity gradient symbology was applied to show population by district.



Results

The cyclone, while making landfall over only 4 of Myanmar's 14 districts and states, impacted a significant proportion of the population. Additionally, by hitting the Ayeyarwady region, there was severe impact on agriculture, primarily rice production. The impact on food security for the country on the whole was serious as rice losses were significant.