

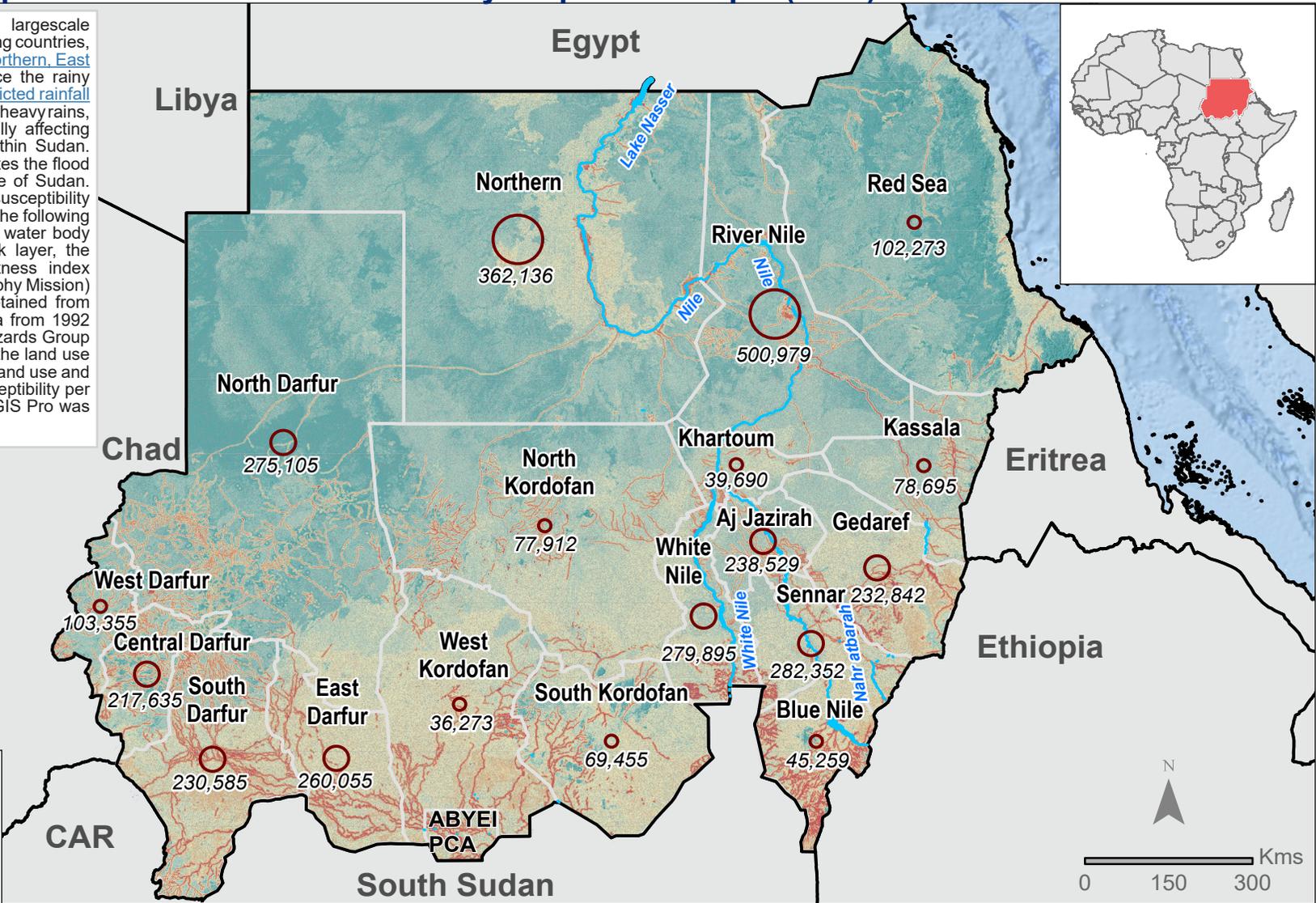
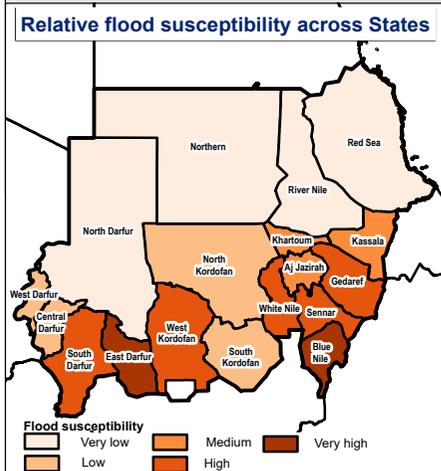
SUDAN CRISIS

Flood susceptibility map and concentration of Internally Displaced People (IDPs)

Production date: August 25th 2023

For humanitarian purposes only

The conflict in Sudan has resulted in largescale displacement within Sudan and to neighbouring countries, with the majority of IDP being in River Nile, Northern, East Darfur, Sennar and White Nile states. Since the rainy season started in June 2023 and per the predicted rainfall across Sudan, several states are experiencing heavy rains, which could lead to river flooding, potentially affecting humanitarian access to IDP populations within Sudan. The maps presented in this factsheet illustrates the flood susceptibility and level thereof in each state of Sudan. The methodology used to identify the flood susceptibility is based on a multicriteria analysis including the following eight criteria: The Proximity of the river and water body obtained from Sudan hydrographic network layer, the slope, the elevation and topographic wetness index obtained from SRTM (Shuttle Radar Topography Mission) imagery, the soil water holding capacity obtained from Soil Geographic databases, the rainfall data from 1992 to 2022 obtained from CHIRPS (Climate Hazards Group Infrared Precipitation with Station data) and the land use land cover data of 2022 obtained from ESRI land use and land cover. To identify the level of flood susceptibility per state, the zonal statistic as table tool of ArcGIS Pro was used (REACH-Mali, 2022).



Flood Susceptibility Level



Number of IDPs



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Data sources: IDP population: IOM DTM (10/08/2023)
Coordinate System: WGS 1984 UTM Zone 35N
Projection: Transverse Mercator Datum: WGS 1984
Units: Meter
File: REACH_SDN_Map_Flood_Susceptibility_per_state_August2023.pdf
Contact: reach.mapping@impact-initiatives.org

Note: Data, designations and boundaries contained on this map are not warranted to be error-free and do not imply acceptance by REACH partners, associates or donors mentioned on this map.