



This map shows daily variation in flood water extent along the Indus rivers in Sindh, Punjab, Balochistan and KPK provinces based on time-series MODIS Terra and Aqua datasets from August 15 to August 19, 2010.

Result show that the flood extent is continuously increasing during the last 5 days. Over 700 villages and 80 towns were identified as severely affected by flood waters and analysis was performed using geospatial database received from University of Georgia, google earth and GIS data of NIMA (USGS). Approx. 600 kilometres stretch of national highway and link roads are submerged or partially inundated by flood water.

This analysis also used Pre river line MODIS data for September 19, 2009 to show identify flood water only. Please note that water bodies likely reflect an underestimation of all flood-affected areas within the map extent due to cloud, atmospheric variations and other reasons. This analysis has not yet been validated in the field. Please send ground feedback to ICIMOD / MENRIS.

Crisis Satellite data : MODIS Terra / Aqua
 Resolution : 250m
 Image date : August 15-19, 2010
 Source : NASA
 Pre-flood Image : MODIS Terra / Aqua
 Resolution : 250m
 Image date : September 19, 2009
 Source : NASA
 Baseline Imagery : MODIS Aqua Aug 19, 2010
 Source : NASA
 GIS Data : University of Georgia, USA
 Flood Analysis : ICIMOD
 Projection : Geographic, WGS84

Legend

- Pre-Flood River Line (2009)
- Flood Water extent (Aug 15)
- Flood Water extent (Aug 16)
- Flood Water extent (Aug 17)
- Flood Water extent (Aug 18)
- Flood Water extent (Aug 19)
- ✈ Airport
- ✈ Heliport
- ✈ Major airfield
- ✈ Minor airport
- Location
- Rivers
- Rural road
- Urban road
- Railways
- Urbanized area
- Administration boundary

Map Scale for 1:1,000,000
 0 25 50 100 Kilometres
 Map layout designed for A1 Printing (36 x 24 inch)

Map prepared by: **ICIMOD**
 Supported by: **USAID**, **SERVIR Himalaya**, **NASA**

The depiction and use of boundaries, geographic names and related data shown here are not warranted to be error-free nor do they imply official endorsement or acceptance by the ICIMOD.

