



This map shows MODIS Terra / Aqua changes in flood water extent along the Indus rivers in Sindh, Punjab, Balochistan and provinces based on time-series MODIS Terra and Aqua datasets from August 12 to August 21, 2010.

Satellite data clearly shows continuous increase in flood water extent from August 12 to 21 for the Usta Mohammad Sub-division and neighbouring Tehsils. Result show that the flood extent is continuously increasing during the last 10 days as observed in Shahdad Kot Tehsil of Sindh and Balochistan provinces covering villages of Shahdad, Jamali, Raheja, Sirra. In the Punjab provinces flood has partially increased further in Shujabad Tehsil villages of Bajuwala Tibba, Faizpur, Isanwali, Mullanajas. For the study area several villages/towns were submerged or partially flooded and infrastructure, crop area were severely damaged / affected.

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 12, 17 and 212010
Source : NASA

Baseline Imagery : MODIS Aqua Aug 21, 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 17)
- Flood Water extent (Aug 18)
- Flood Water extent (Aug 19)
- Flood Water extent (Aug 20)
- Flood Water extent (Aug 21)
- Airport
- Heliport
- Major airfield
- Minor airport
- Division / Tehsil
- Rivers
- Rural road
- Urban road
- Railways
- Urbanized area
- Administration boundary

Map Scale for 1:1,000,000
0 20 40 80 Kilometres
Map layout designed for A1 Printing (36 x 24 inch)

Map prepared by: **ICIMOD**

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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.

