

Crop Damage Assessment along the Indus River, Sindh, Punjab, KPK and Balochistan Provinces, Pakistan

20 August 2010
FL-2010-000141-PAK
Version 2.0



This map shows flood inundated crop areas along the Indus rivers in Sindh, Punjab, Balochistan and KPK provinces based on time-series MODIS Terra and Aqua datasets from August 11 to August 19, 2010.

Results show that the flood inundated crop area is continuously increasing during the last 7 days. It is observed that the inundated crop areas increased from ~13,468.69 sq.km to ~18,517.98 sq.km from Aug 15 - Aug 19, 2010 respectively in the study area with a total change of 5049.23 sq.km in 5 days.

Crop area and pre-river line was extracted from MODIS Aqua (September 19, 2009) using supervised classification in ERDAS Imagine. 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 11-19, 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

- Inundated Crop area
- Crop area in 2009
- Pre-flood river line
- Airport
- Heliport
- Major airfield
- Minor airport
- Division / Tehsil
- Settlement
- 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**

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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.

