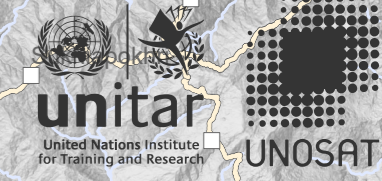


NEPAL

PROVINCE 1 AND PROVINCE 2

IMAGERY ANALYSIS: 01/07/2021 PUBLISHED 02/07/2021 V1.



ANALYZED AREA
11,000 km²

OBSERVED FLOODS
645 km²

POPULATION POTENTIALLY EXPOSED
700,000

Satellite detected water extent over Province 1 and 2, Nepal as of 1 of July 2021.

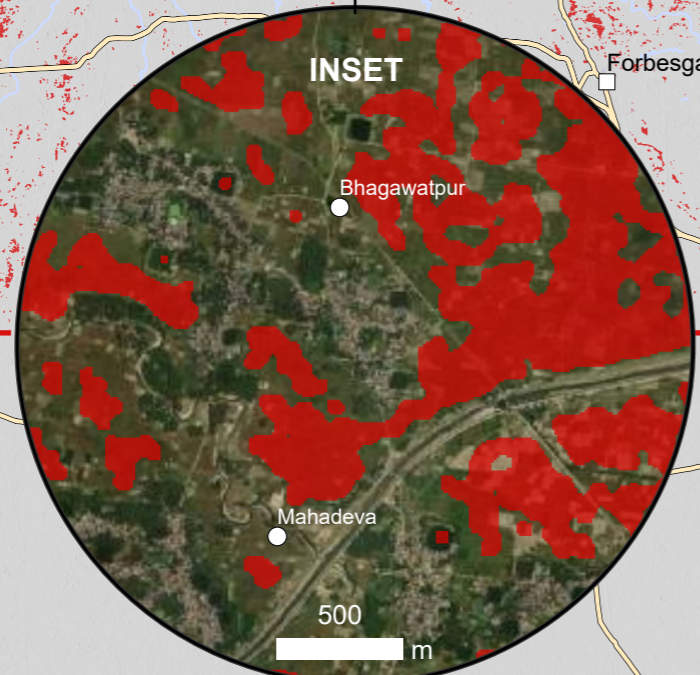
This map illustrates satellite-detected surface waters in Province 1 and 2 as observed from a Sentinel-1 image acquired on 1 July 2021 at 05:58 local time and using an automated analysis with Artificial Intelligence based methods. Within the analyzed area of about 11,000 km² and, about 645 km² of lands appear to be flooded. Based on WorldPop population data and the detected surface waters in the analyzed area, about 700,000 people are potentially exposed or living close to flooded areas. This is a preliminary analysis and has not yet been validated in the field. Please send ground feedback to UNITAR-UNOSAT.

Important note: Flood analysis from radar images may underestimate the presence of standing waters in built-up areas and densely vegetated areas due to backscattering properties of the radar signal.

Legend

- Village
- City/Town
- Primary road
- International boundary
- Province boundary
- District boundary
- River
- ▭ Analysis extent
- ▭ Reference water
- ▭ Satellite detected water as of 1 July 2021

Province	District	Analyzed area (km ²)	Flood Extent as of 1 July 2021 (km ²)	Population in AOI	Population Potentially Exposed to Floods	Population Potentially Exposed (%)
Province 1	Ilam	430	1	61,150	420	1%
	Jhapa	1,469	141	847,000	65,960	8%
	Morang	1,664	247	1,189,510	138,820	12%
	Sunsari	1,066	129	4,077,300	421,560	10%
	Udayapur	593	16	60,370	2,620	4%
Sub-total		5,222	535	6,235,330	629,380	10%
Province 2	Saptari	1,205	110	665,500	70,160	11%
Sub-total		1,205	110	665,500	70,160	11%
Total		6,427	645	6,900,830	699,540	10%



Spatial Reference
Name: WGS 1984 UTM Zone 45N
PCS: WGS 1984 UTM Zone 45N
GCS: GCS WGS 1984
Datum: WGS 1984

Satellite Data (Post-event): Sentinel-1
Imagery Date: 01 July 2021 at 12:13 UTC
Satellite Data (Pre-event): Sentinel-1
Imagery Date: 07 June 2021
Resolution: 10 m
Copyright: Contains modified Copernicus Sentinel Data [2021]

Source: ESA
Administrative boundaries: Boundary data: Survey Department of Nepal, UN Resident Coordinators Office in Nepal, HDX
Population data: WorldPop [2020]
Populated place: OpenStreetMap

Road data: OpenStreetMap
Waterways: OpenStreetMap
Background: ALOS Global DSM, ESRI World Imagery
Analysis: UNITAR - UNOSAT AI Based Methods
Production: UNITAR - UNOSAT

