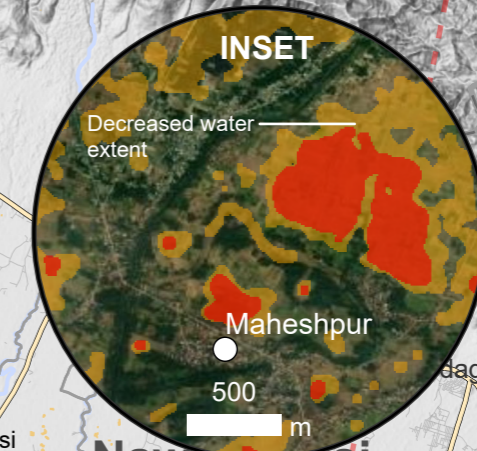
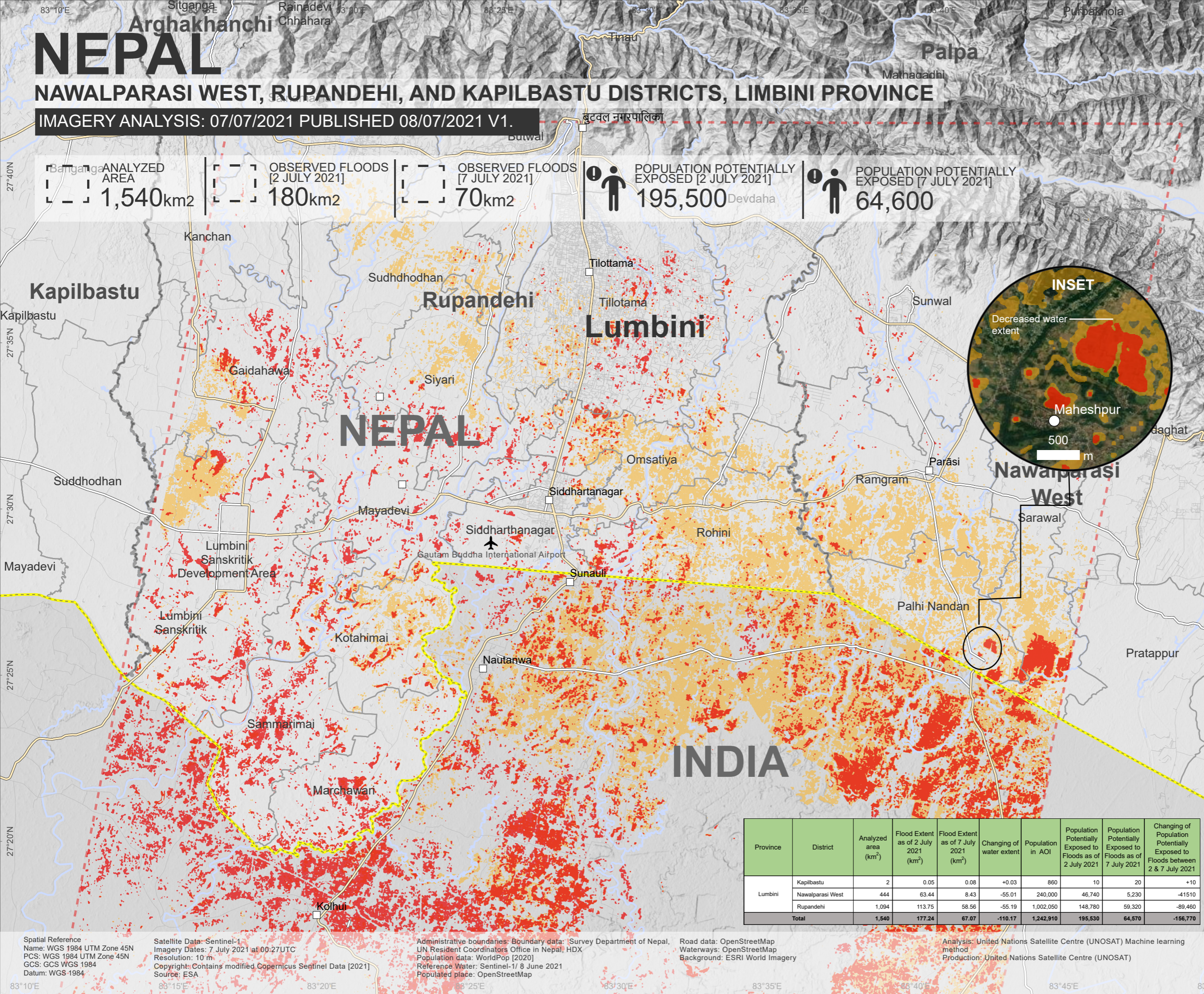


# NEPAL

## NAWALPARASI WEST, RUPANDEHI, AND KAPILBASTU DISTRICTS, LIMBINI PROVINCE

IMAGERY ANALYSIS: 07/07/2021 PUBLISHED 08/07/2021 V1.

ANALYZED AREA 1,540km <sup>2</sup>	OBSERVED FLOODS [2 JULY 2021] 180km <sup>2</sup>	OBSERVED FLOODS [7 JULY 2021] 70km <sup>2</sup>	POPULATION POTENTIALLY EXPOSED [2 JULY 2021] 195,500	POPULATION POTENTIALLY EXPOSED [7 JULY 2021] 64,600
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Satellite detected water extent over Nawalparasi West, Rupandehi and Kapilbastu districts, Lumbini province, Nepal as of 7 July 2021.

This map illustrates satellite-detected surface waters in Nawalparasi West, Rupandehi and Kapilbastu districts, Lumbini province, Nepal as observed from a Sentinel-1 image acquired on 7 July 2021 at 06:12 local time and using an automated analysis with Machine learning method. Within the analyzed area of about 1,500 km<sup>2</sup> and, about 67km<sup>2</sup> of lands appear to be flooded. The water extent appears to have decreased of about 110 km<sup>2</sup> since 2 July 2021 and moved toward India. Based on Worldpop population data and the detected surface waters in the analyzed area, the potentially exposed population is mainly located in the district of Rupandehi with ~59,000 people and Nawalparasi West with ~5,200 people.

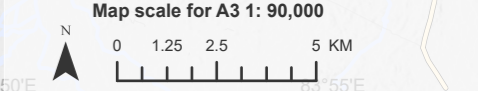
This is a preliminary analysis and has not yet been validated in the field. Please send ground feedback to United Nations Satellite Centre (UNOSAT).

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.

Province	District	Analyzed area (km <sup>2</sup> )	Flood Extent as of 2 July 2021 (km <sup>2</sup> )	Flood Extent as of 7 July 2021 (km <sup>2</sup> )	Changing of water extent	Population in AOI	Population Potentially Exposed to Floods as of 2 July 2021	Population Potentially Exposed to Floods as of 7 July 2021	Changing of Population Potentially Exposed to Floods between 2 & 7 July 2021
Lumbini	Kapilbastu	2	0.05	0.08	+0.03	860	10	20	+10
	Nawalparasi West	444	63.44	8.43	-55.01	240,000	46,740	5,230	-41510
	Rupandehi	1,094	113.75	58.56	-55.19	1,002,050	148,780	59,320	-89,460
<b>Total</b>		<b>1,540</b>	<b>177.24</b>	<b>67.07</b>	<b>-110.17</b>	<b>1,242,910</b>	<b>195,530</b>	<b>64,570</b>	<b>-156,770</b>

### Legend

- Airport
- Village
- City/Town
- Primary road
- Secondary road
- Other road
- River
- International boundary
- District boundary
- Municipality boundary
- Analysis extent
- Reference water
- Satellite detected water [7 July 2021]
- Satellite detected water [2 July 2021]



Spatial Reference: Name: WGS 1984 UTM Zone 45N, PCS: WGS 1984 UTM Zone 45N, GCS: GCS WGS 1984, Datum: WGS 1984  
 Satellite Data: Sentinel-1 Imagery Dates: 7 July 2021 at 00:27UTC, 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], Reference Water: Sentinel-1/ 8 June 2021, Populated place: OpenStreetMap  
 Road data: OpenStreetMap, Waterways: OpenStreetMap, Background: ESRI World Imagery  
 Analysis: United Nations Satellite Centre (UNOSAT) Machine learning method, Production: United Nations Satellite Centre (UNOSAT)