


19 Apr. 2022




PRELIMINARY SATELLITE-DERIVED FLOOD AND LANDSLIDE ASSESSMENT



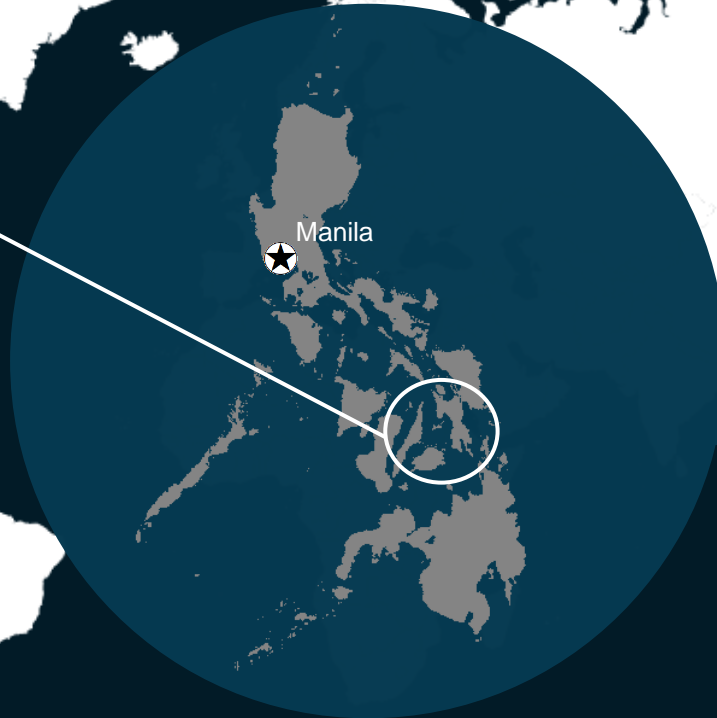
Leyte and Southern Leyte Provinces, Philippines



 Status: : Extensive damage to structures and road including agricultural area observed

 Further action(s): Continue monitoring



PHILIPPINES



 AREA OF INTEREST
 PROVINCE BOUNDARY

FLOODS OVER PHILIPPINES

Philippines



Legend

- Region boundary
- Province boundary
- River
- Cloud mask
- Area of interest
- Minimum floodwater extent
- Maximum floodwater extent
- 5-day VIIRS composite
[13 to 17 Apr. 2022]



30 m

Background: ESRI Basemap

AOI1-1 NEAR BUNGA VILLAGE, CITY OF BAYBAY, LEYTE PROVINCE, REGION VIII

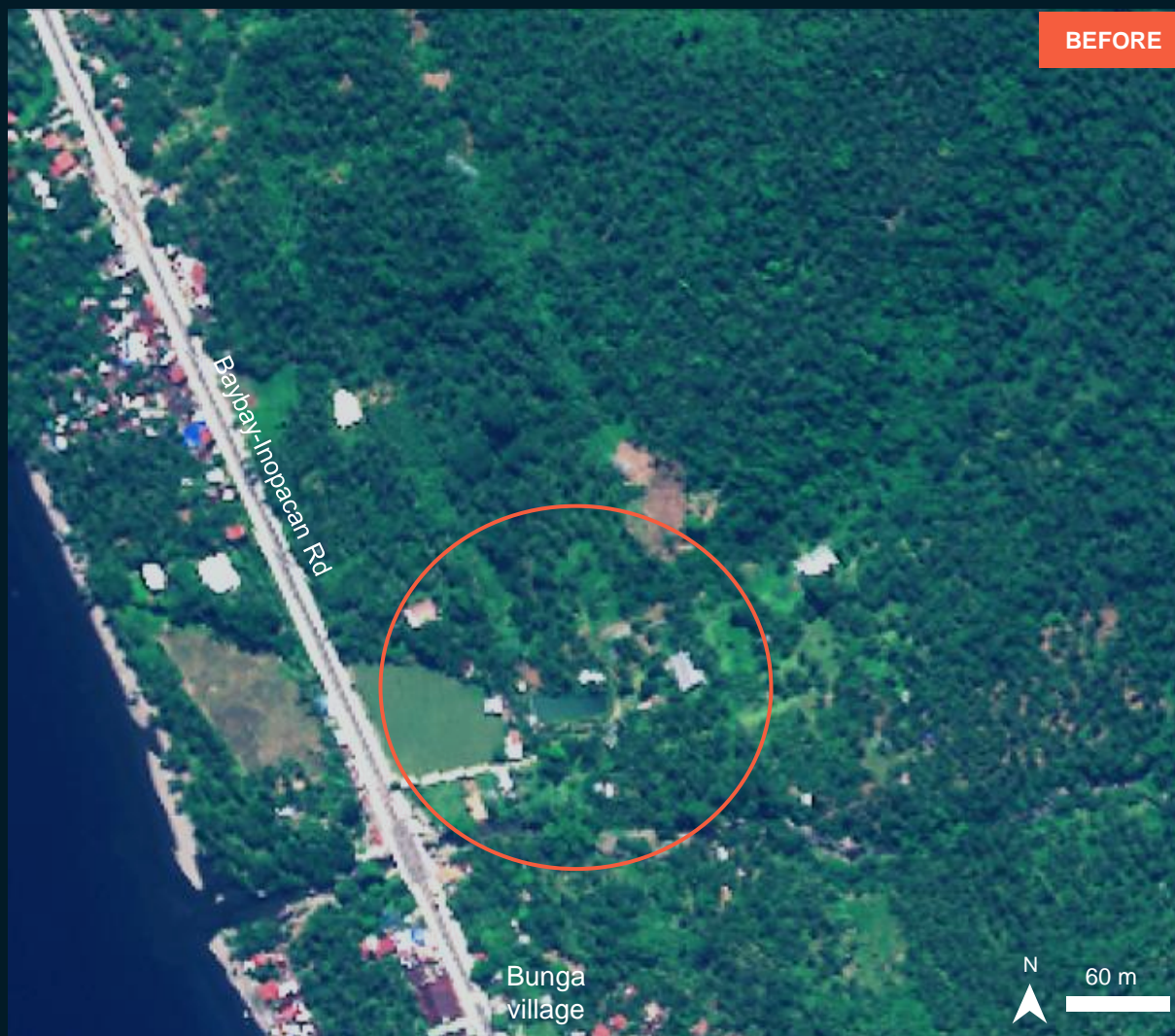
Extensive damage to Bunga village and road



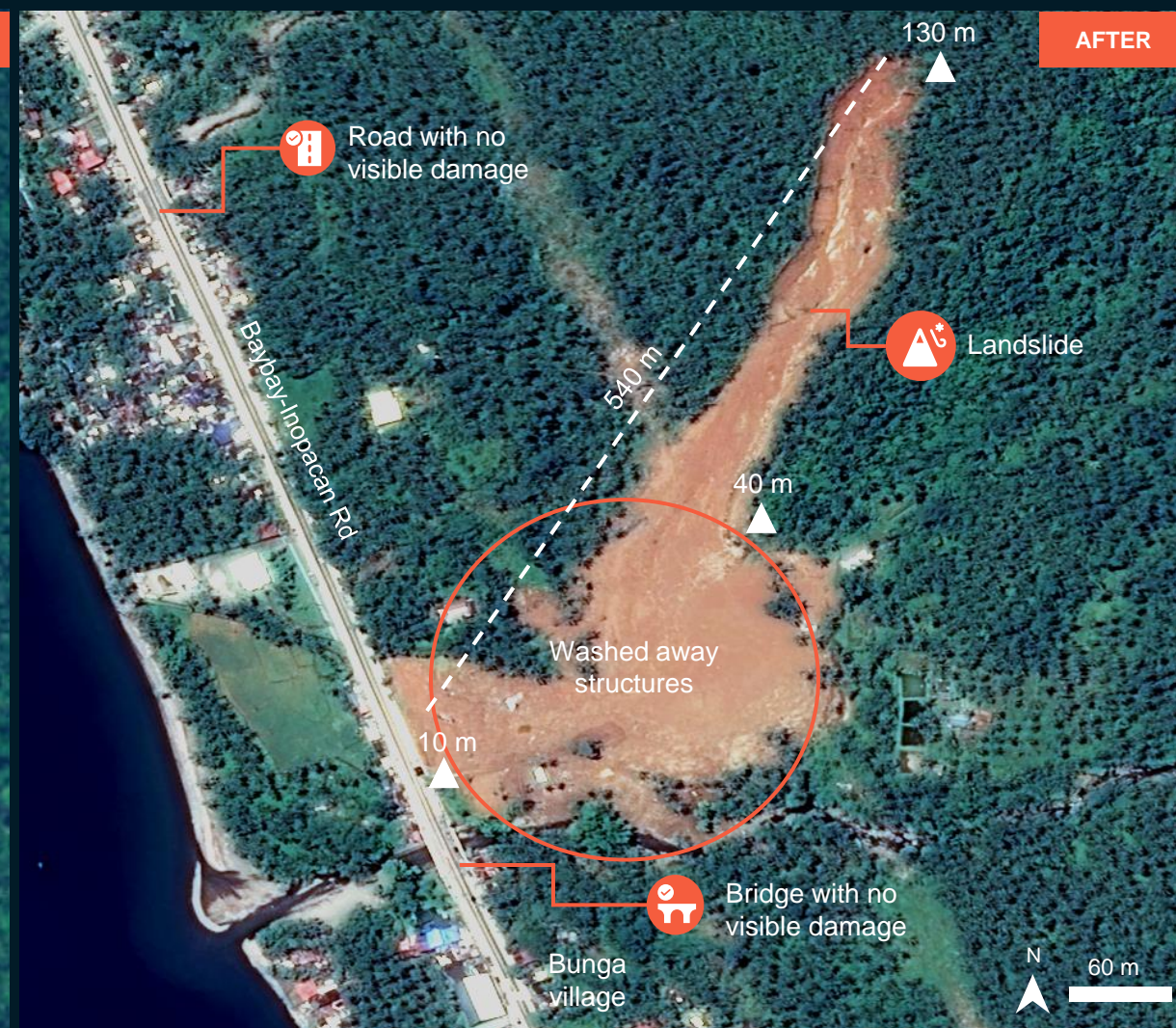
AOI1-1 BUNGA VILLAGE, CITY OF BAYBAY, LEYTE PROVINCE, REGION VIII

Washed away structures caused by the landslide

Image center:
124°46'54.157"E
10°47'2.891"N



WorldView-2/ 24 May. 2020



Pleiades / 14 Apr. 2022

AOI1-2 CITY OF BAYBAY, LEYTE PROVINCE, REGION VIII

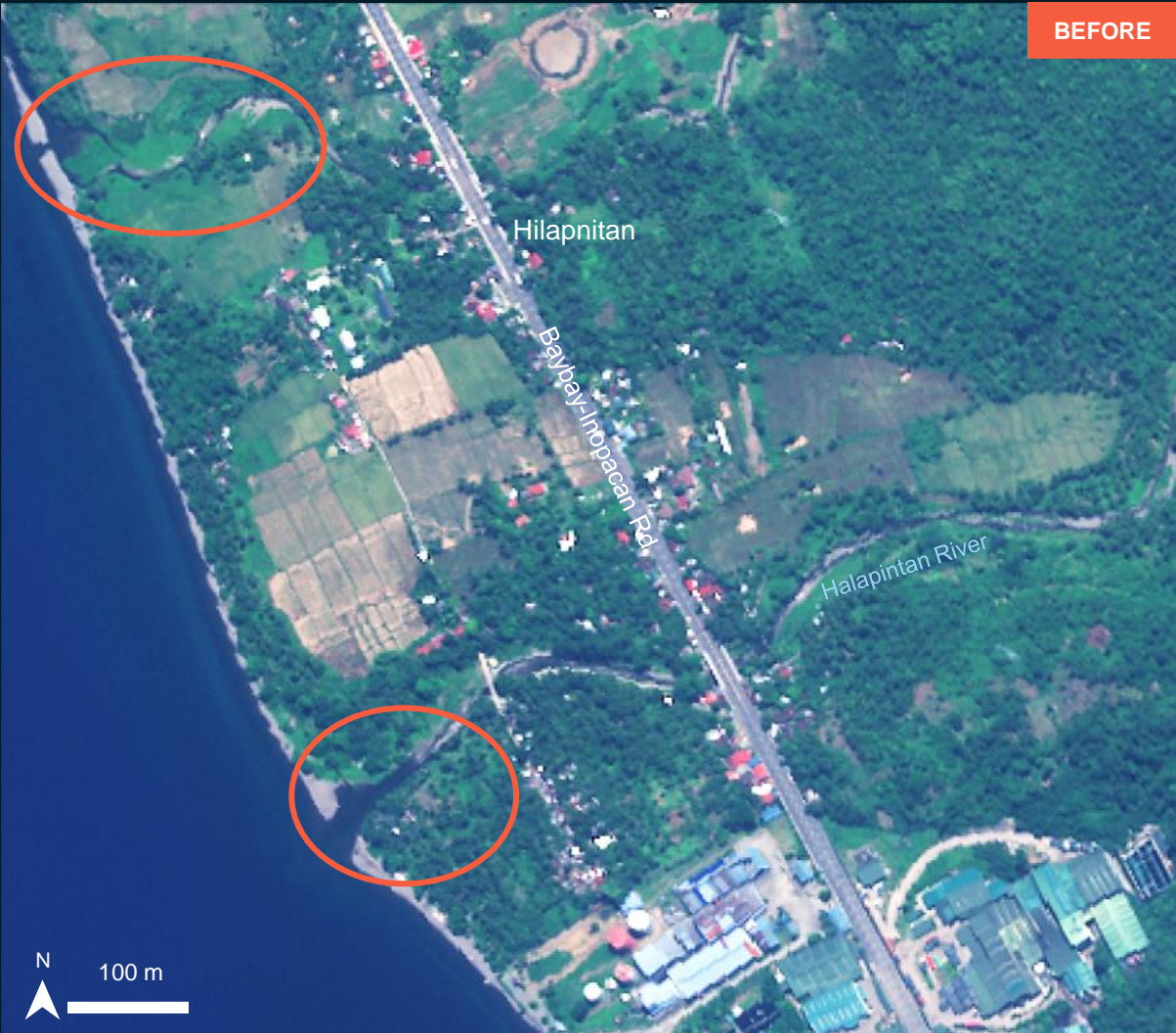
Image center:
124°46'22.657"E
10°47'52.705"N



Leyte
Province



Riverbanks erosion along the rivers

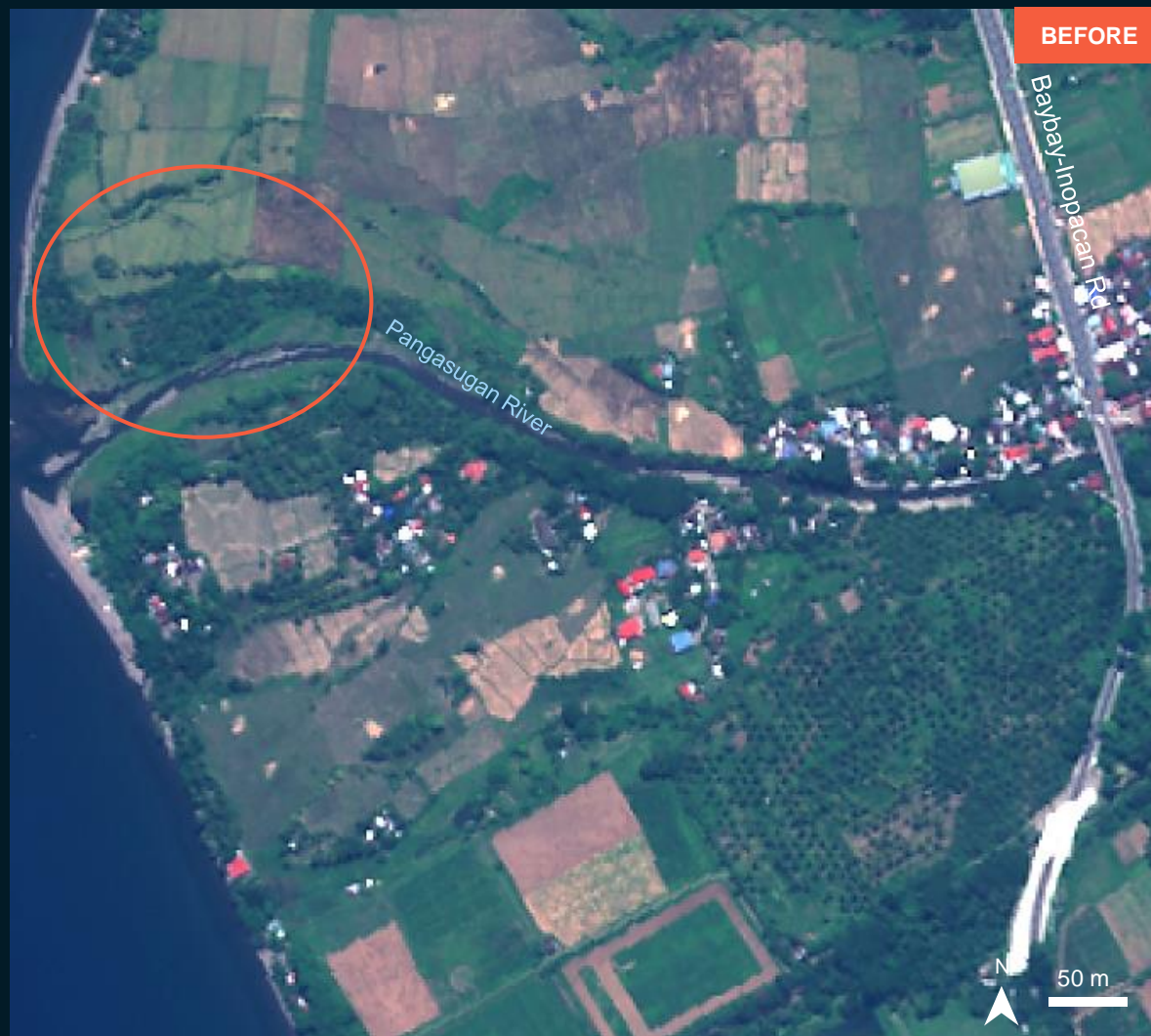


AOI1-3 CITY OF BAYBAY, LEYTE PROVINCE, REGION VIII

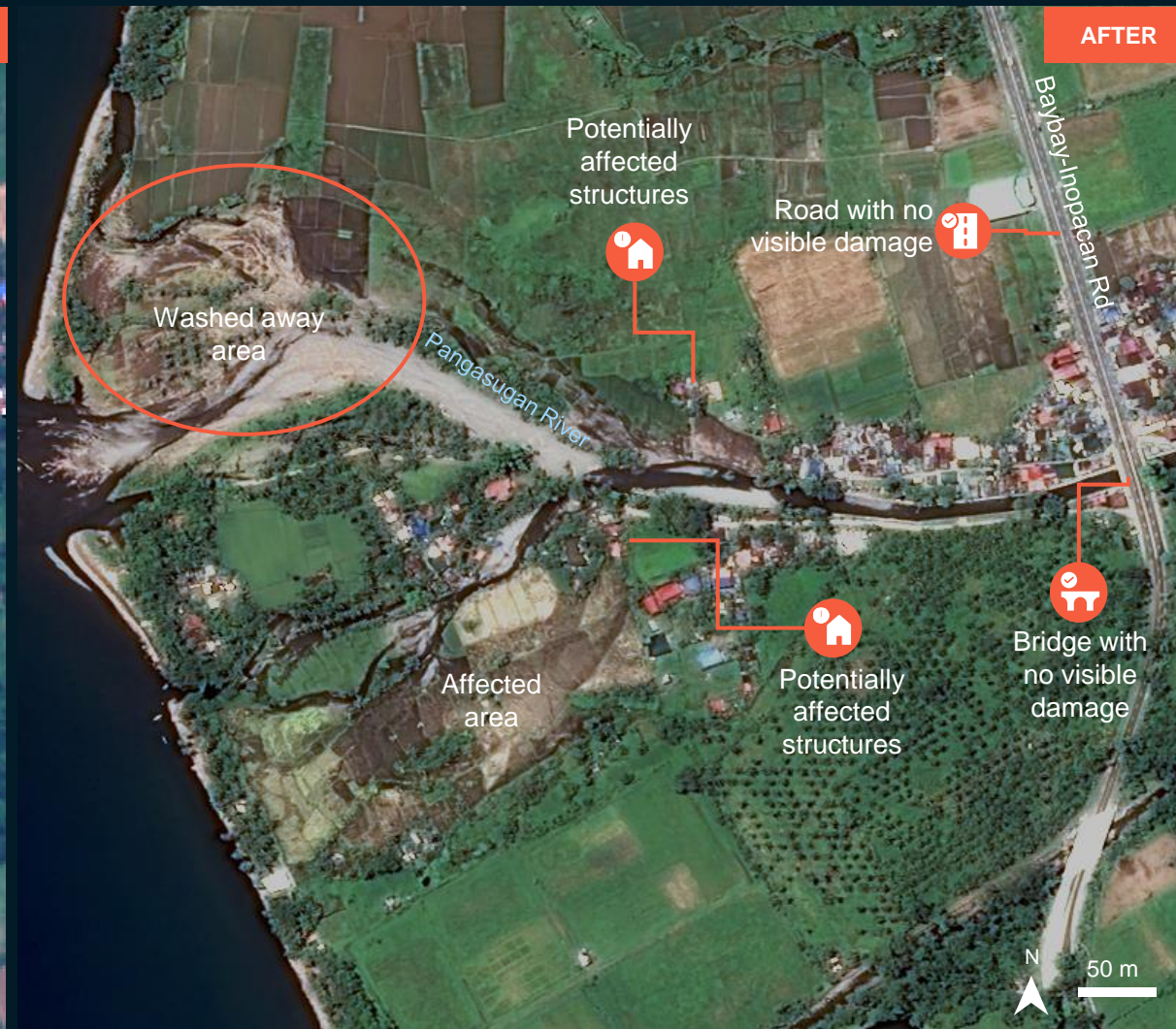
Image center:
124°47'16.324"E
10°44'57.948"N



Riverbanks erosion and potentially affected structures along the rivers



WorldView-2/ 24 May. 2020



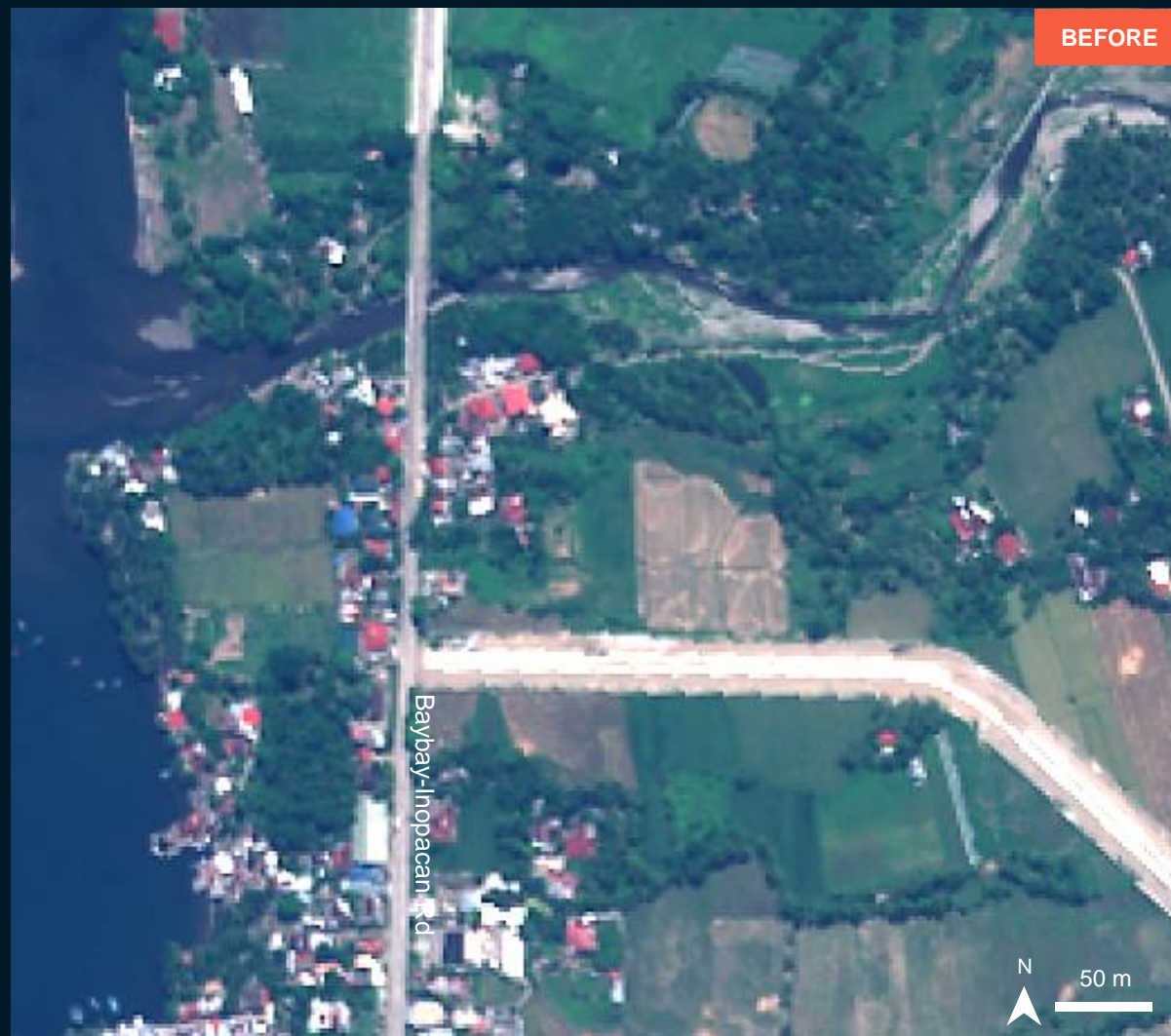
Pleiades / 14 Apr. 2022

AOI1-4 CITY OF BAYBAY, LEYTE PROVINCE, REGION VIII

Image center:
124°47'48.101"E
10°43'14.55"N



Riverbanks erosion and potentially affected structures along the rivers



WorldView-2/ 24 May. 2020

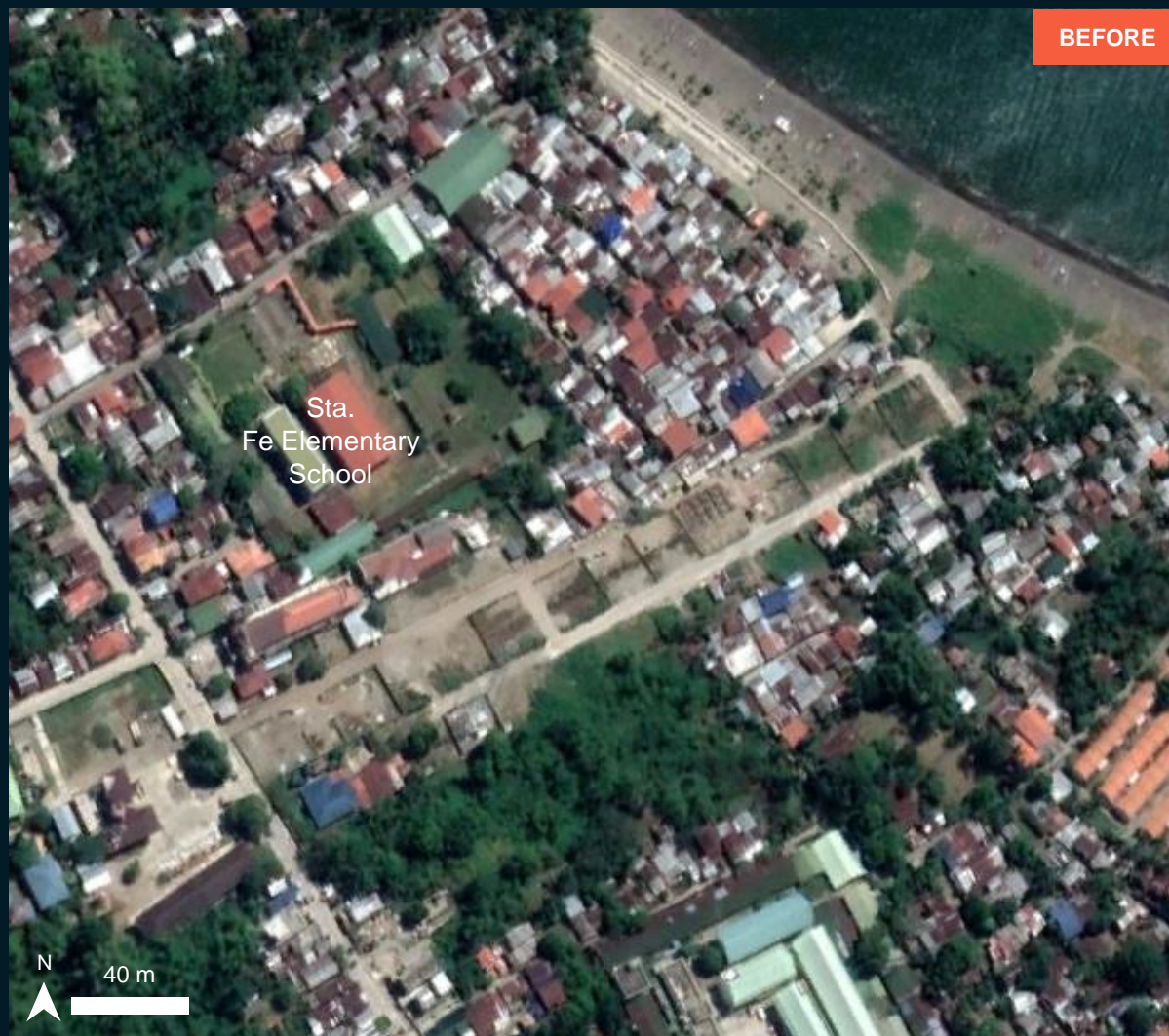


Pleiades / 14 Apr. 2022

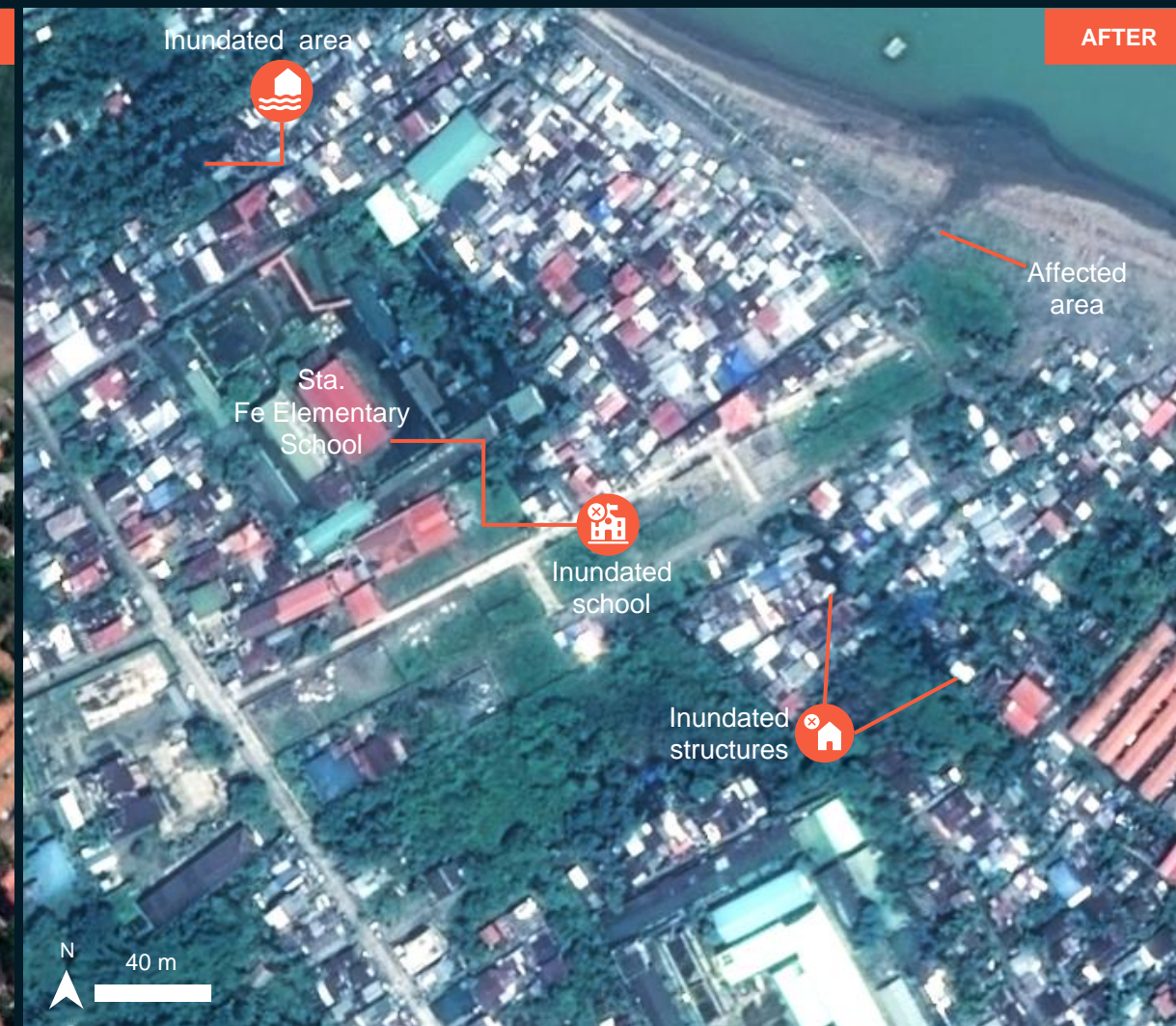
AOI2-1 SANTA FE VILLAGE, ABUYOG MUNICIPALITY, LEYTE PROVINCE, REGION VIII

Inundated school and inundated structures

Image center:
125°1'5.586"E
10°44'25.747"N



WorldView-2/ 29 Jul. 2021



Pleiades / 17 Apr. 2022

AOI2-2 TINALI-AN VILLAGE, ABUYOG MUNICIPALITY, LEYTE PROVINCE, REGION VIII

Flood waters in agricultural area and Potentially affected structures

Image center:
125°0'3.255"E
10°42'34.661"N



WorldView-2/ 29 Jul. 2021

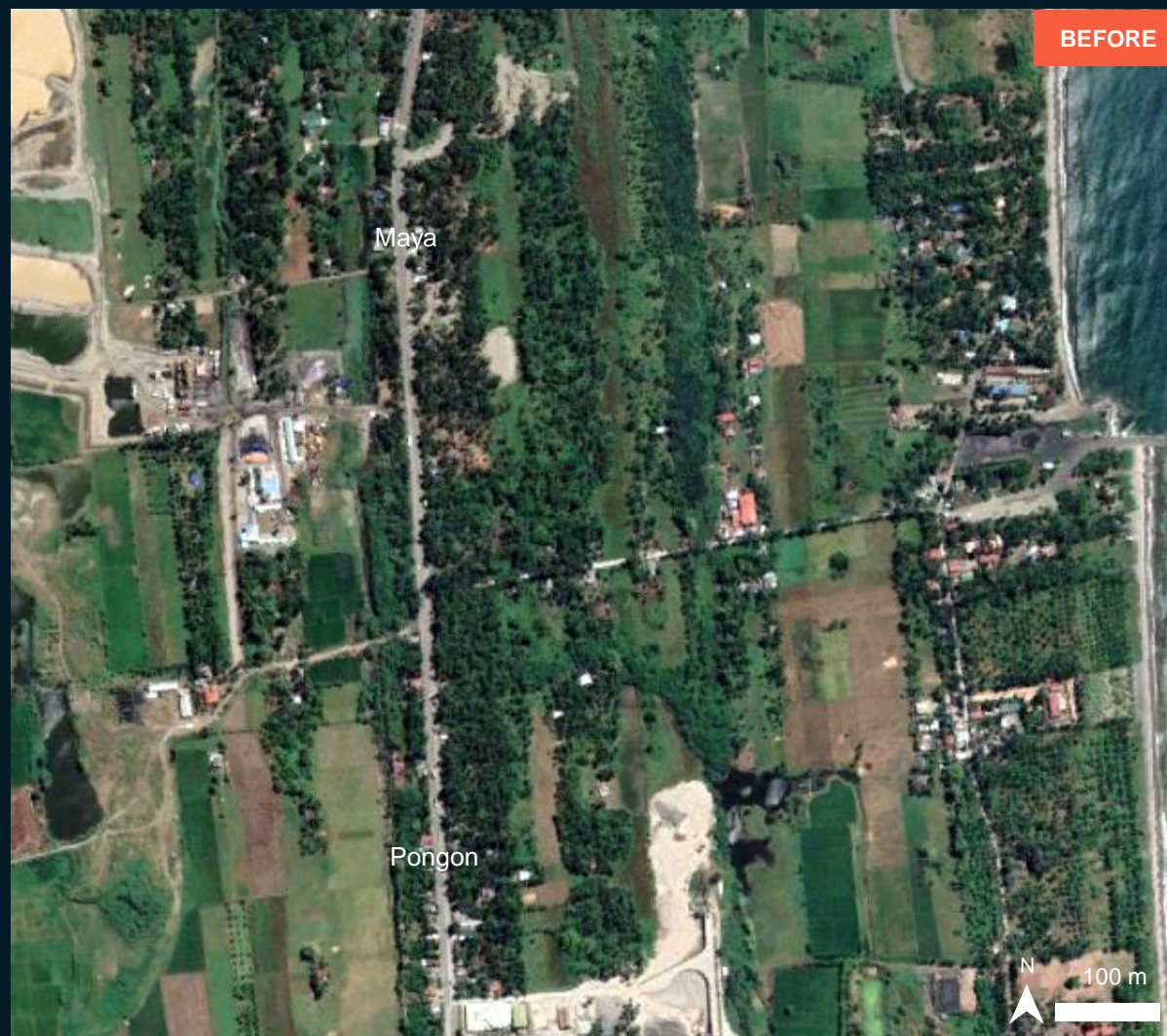


Pleiades / 17 Apr. 2022

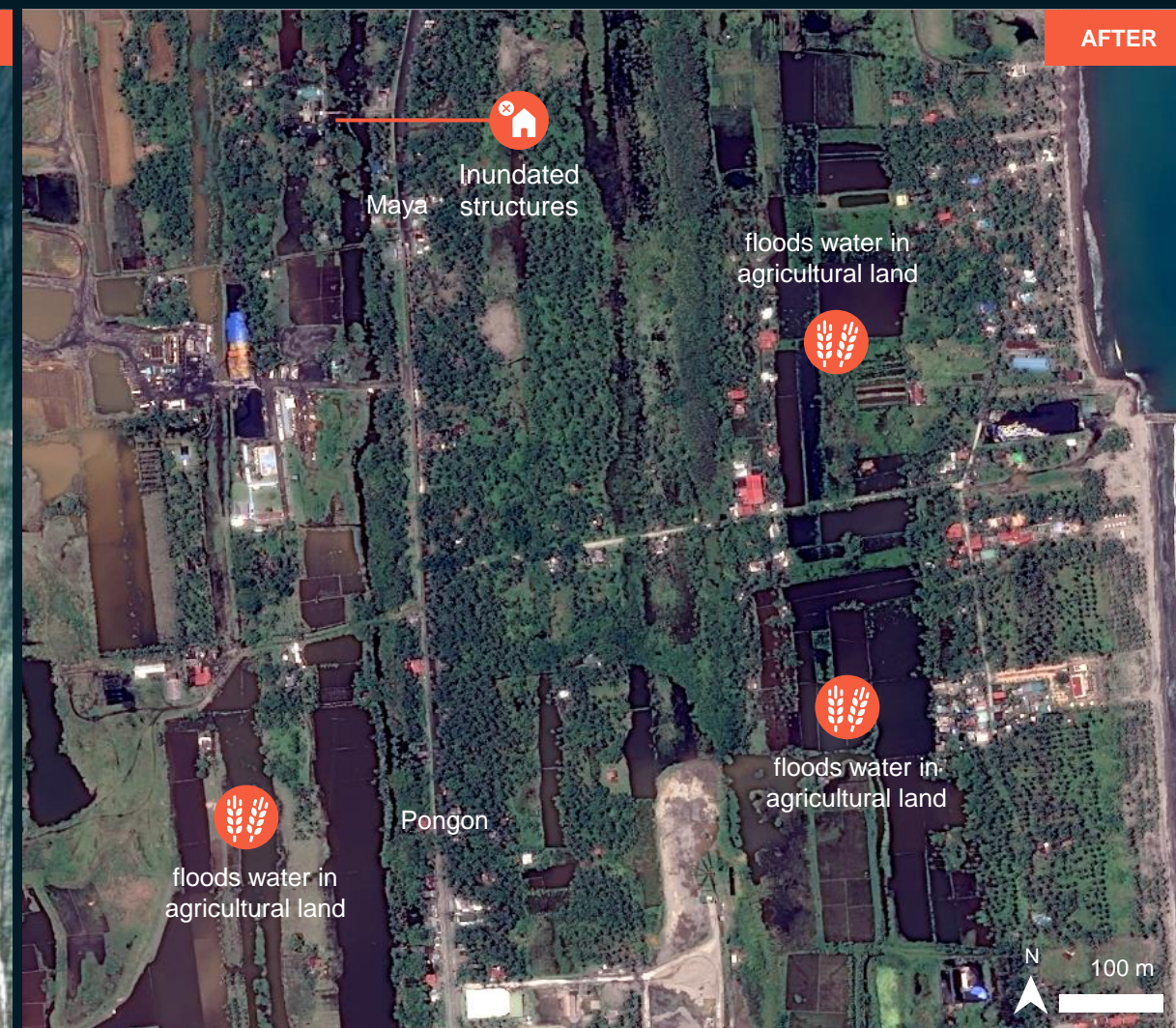
AOI2-3 MAYA AND PONGON VILLAGES, MACARTHUR MUNICIPALITY, LEYTE PROVINCE, REGION VIII

Flood waters in agricultural areas and Inundated structures

Image center:
124°59'55.27"E
10°48'3.821"N



WorldView-2/ 29 Jul. 2021

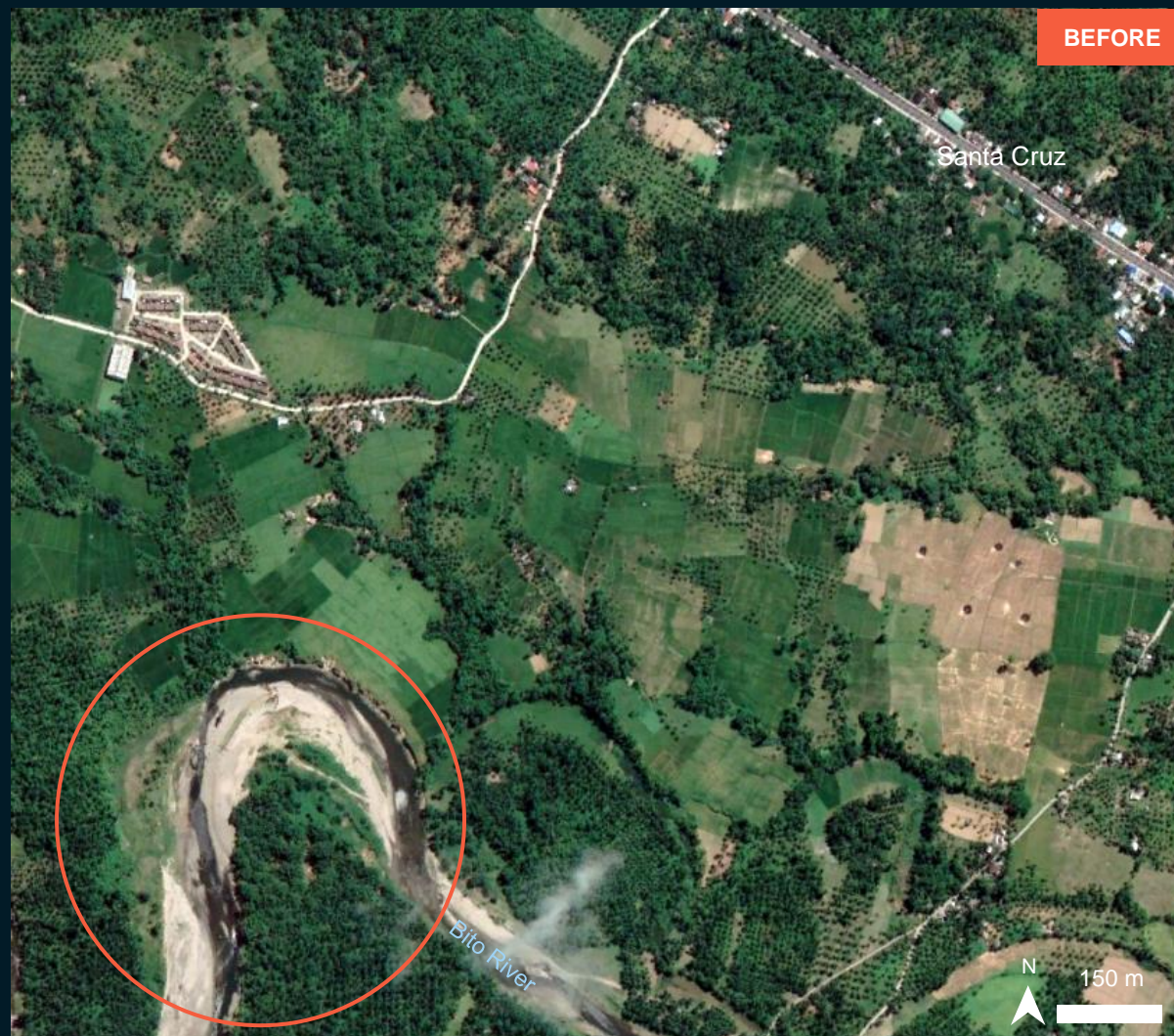


Pleiades / 17 Apr. 2022

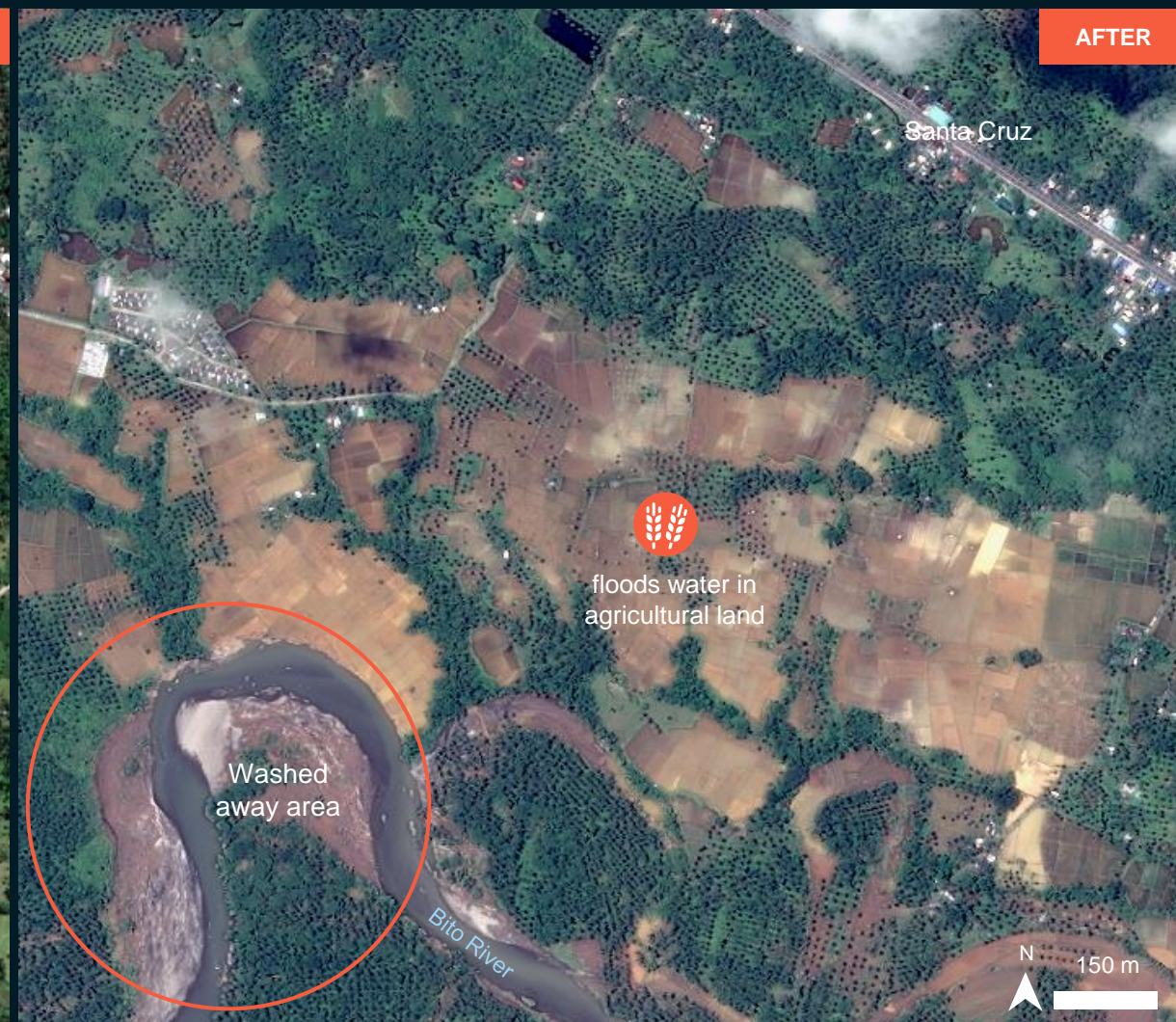
AOI2-4 MAYA AND PONGON VILLAGES, JAVIER MUNICIPALITY, LEYTE PROVINCE, REGION VIII

Flood waters in agricultural area

Image center:
124°56'47.063"E
10°46'32.191"N



WorldView-2/ 29 Jul. 2021



Pleiades / 17 Apr. 2022

AOI3-1 KANTAGNOS VILLAGE, CITY OF BAYBAY, LEYTE PROVINCE, REGION VIII

Extensive damage to Kantagnos village, road and affected agricultural area

Leyte Province

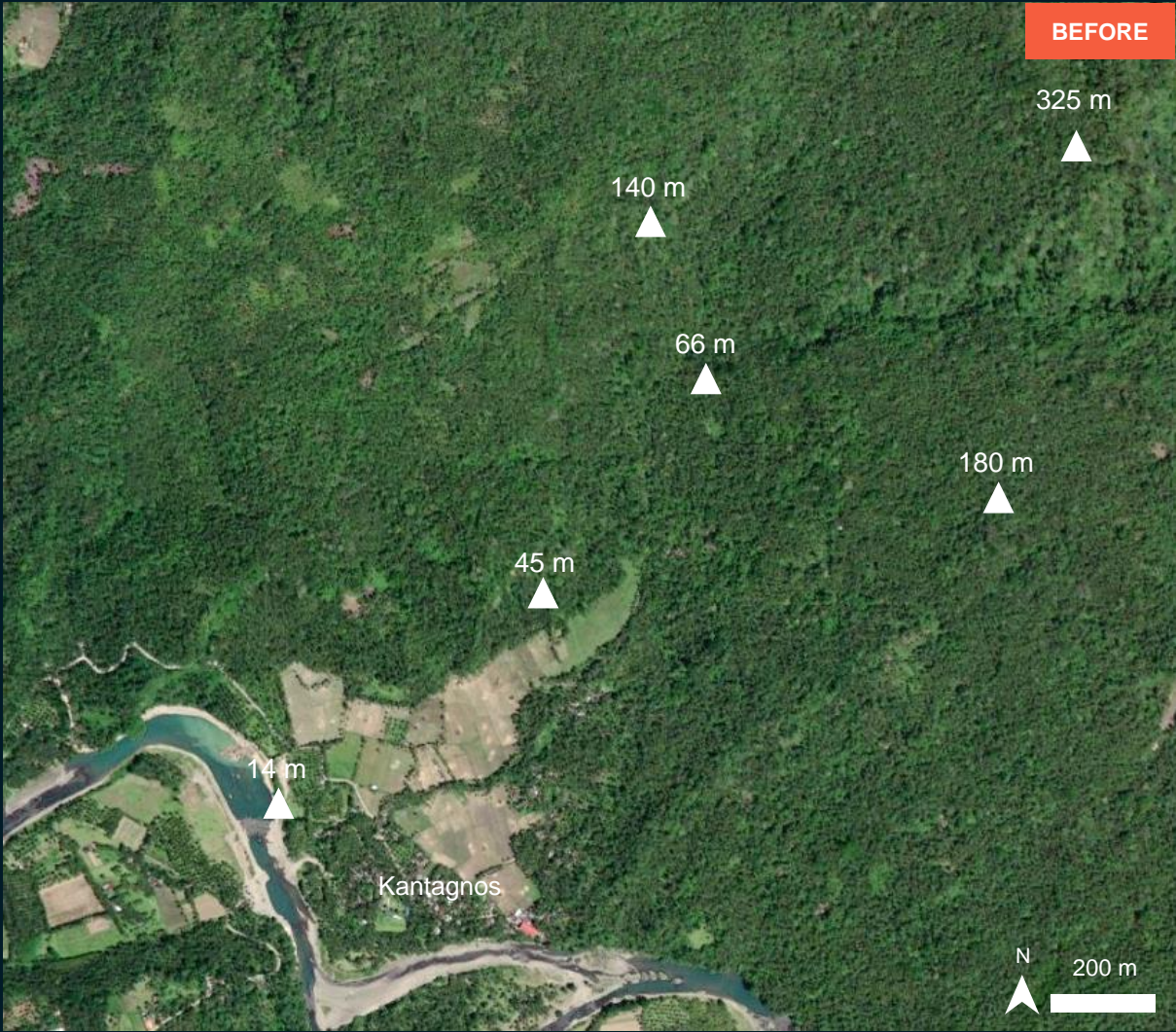


200 m

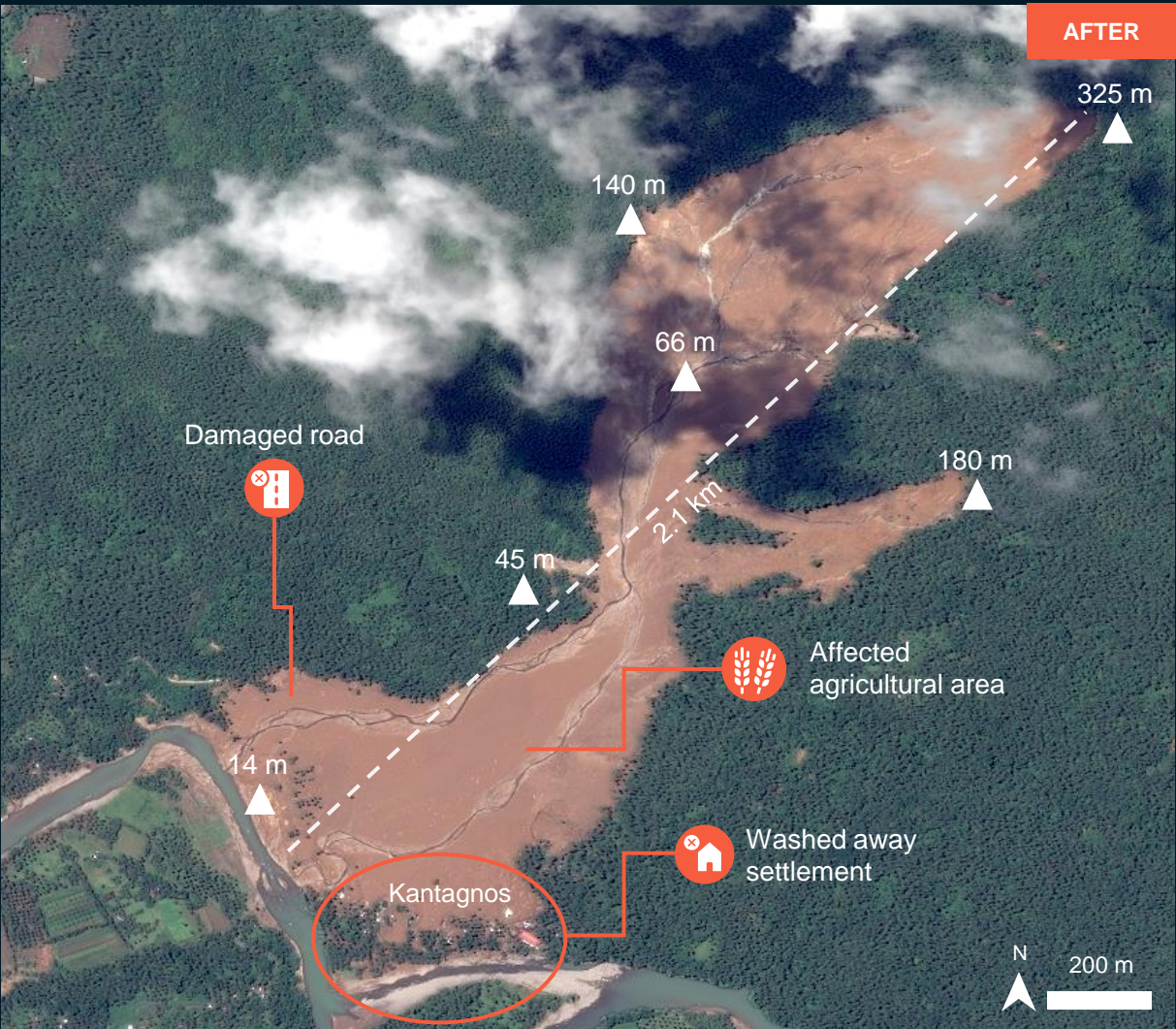
AOI3-1 KANTAGNOS VILLAGE, CITY OF BAYBAY, LEYTE PROVINCE, REGION VIII

Washed away settlement by landslide

Image center:
124°51'9.443"E
10°40'38.116"N



ESRI Basemap/ WorldView-2/ 20 Apr. 2019

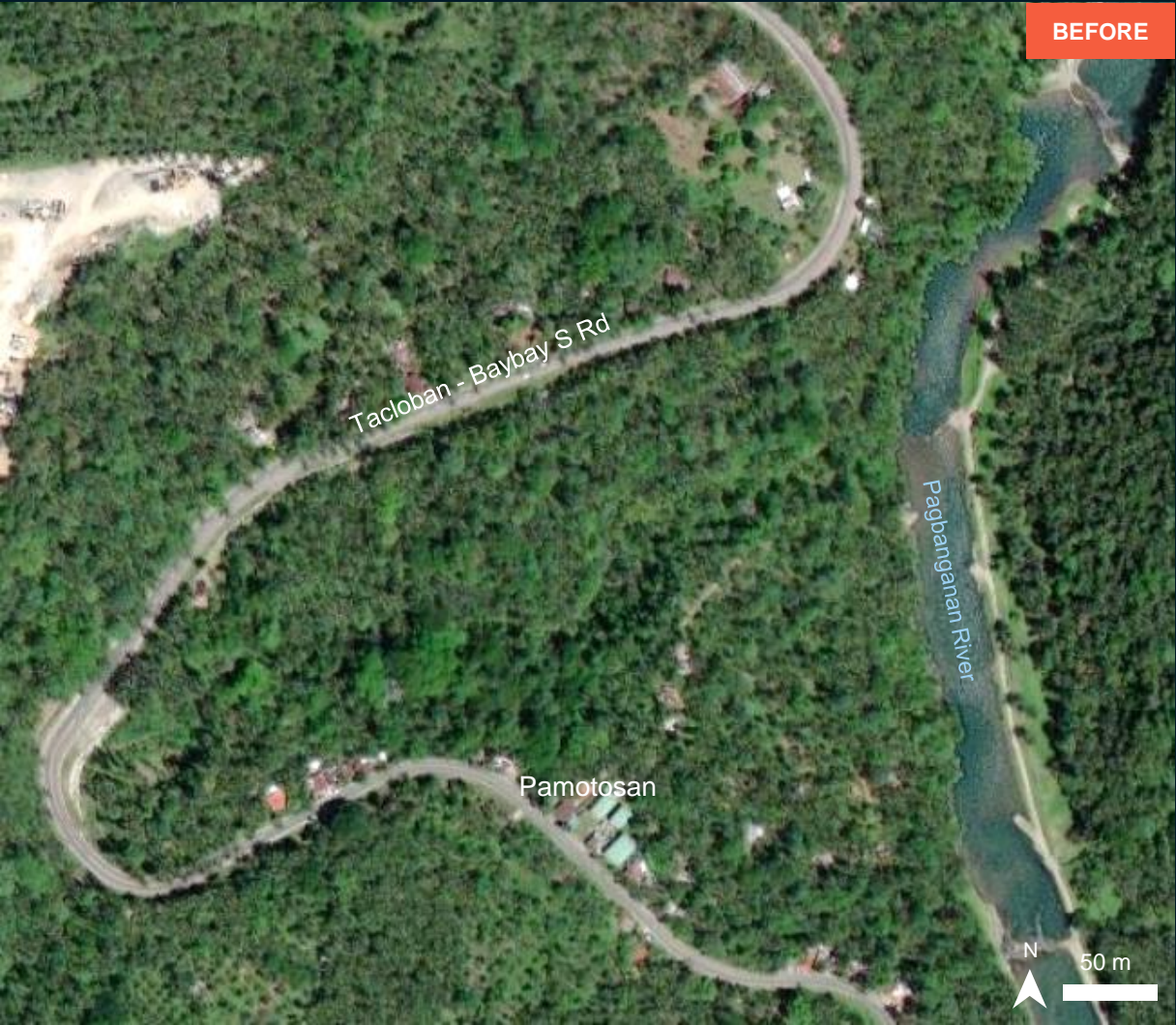


Pleiades / 17 Apr. 2022

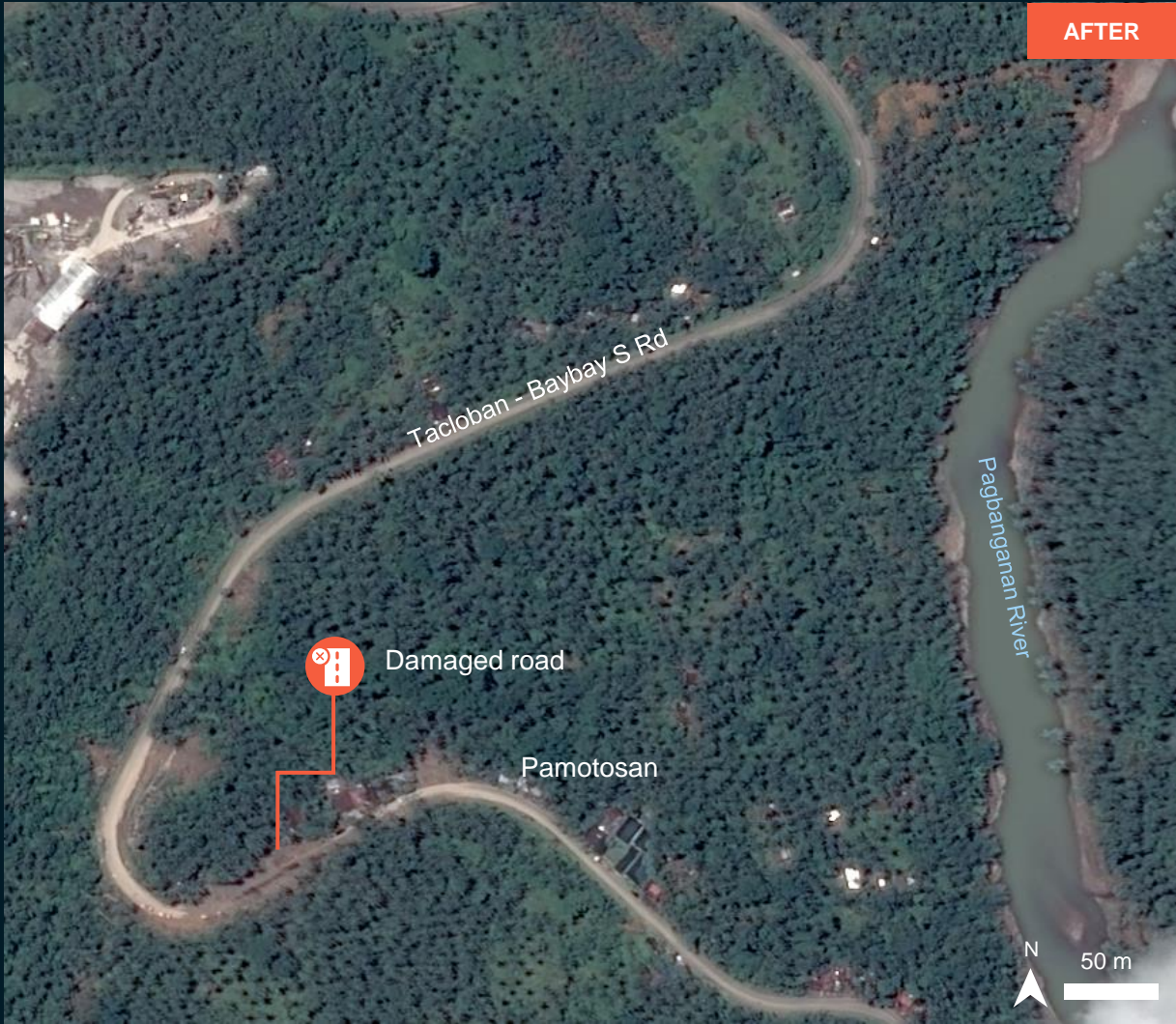
**AOI3-2 PAMOTOSAN VILLAGE,
CITY OF BAYBAY, LEYTE PROVINCE, REGION VIII**

Damaged road

Image center:
124°51'34.582"E
10°38'48.441"N



ESRI Basemap/ WorldView-2/ 20 Apr. 2019



Pleiades / 17 Apr. 2022

AOI3-3 CITY OF BAYBAY, LEYTE PROVINCE, REGION VIII

Image center:
124°50'15.563"E
10°40'49.001"N



Potentially damaged structures



ESRI Basemap/ WorldView-2/ 20 Apr. 2019



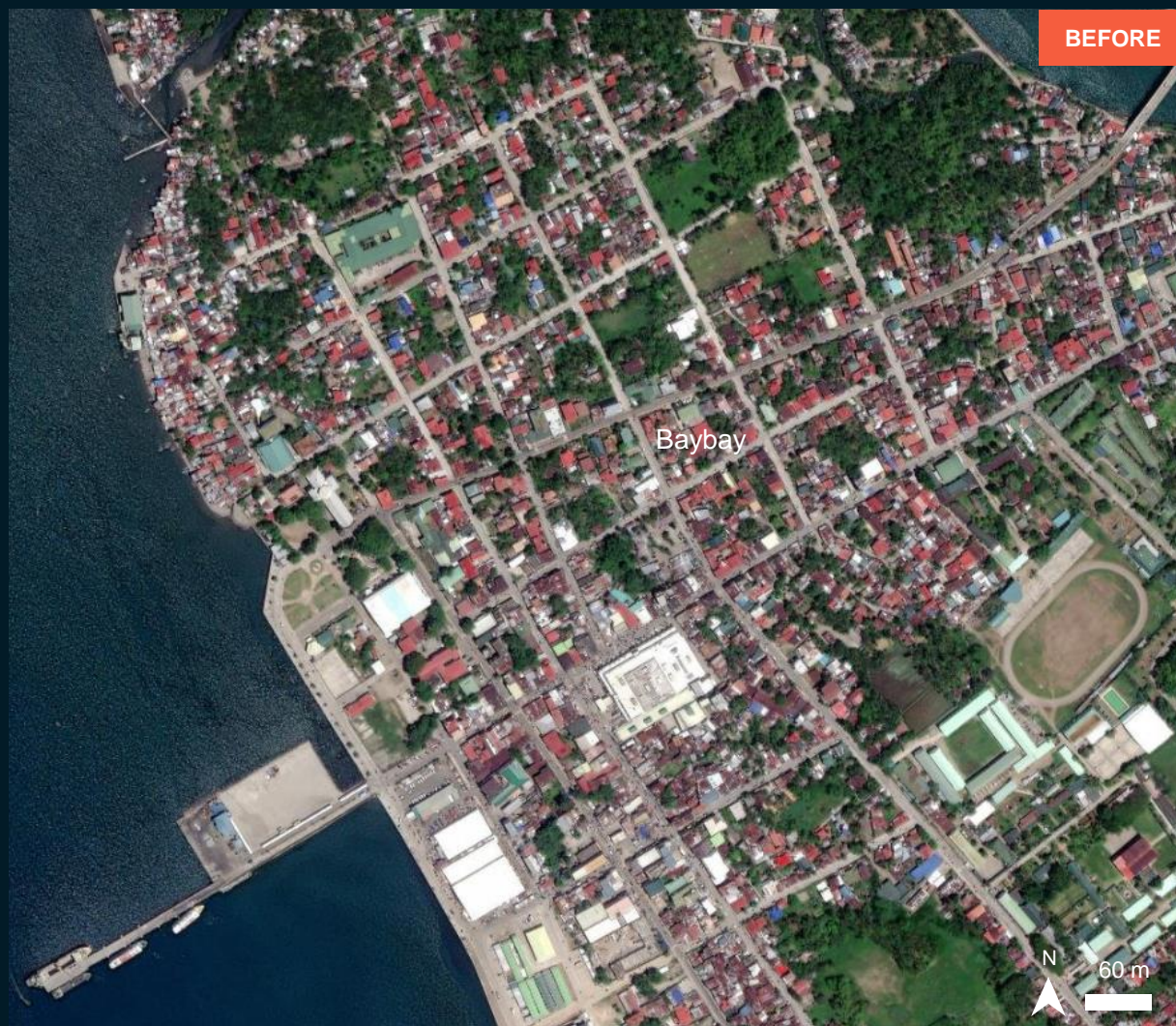
Pleiades / 17 Apr. 2022

AOI3-4 CITY OF BAYBAY, LEYTE PROVINCE, REGION VIII

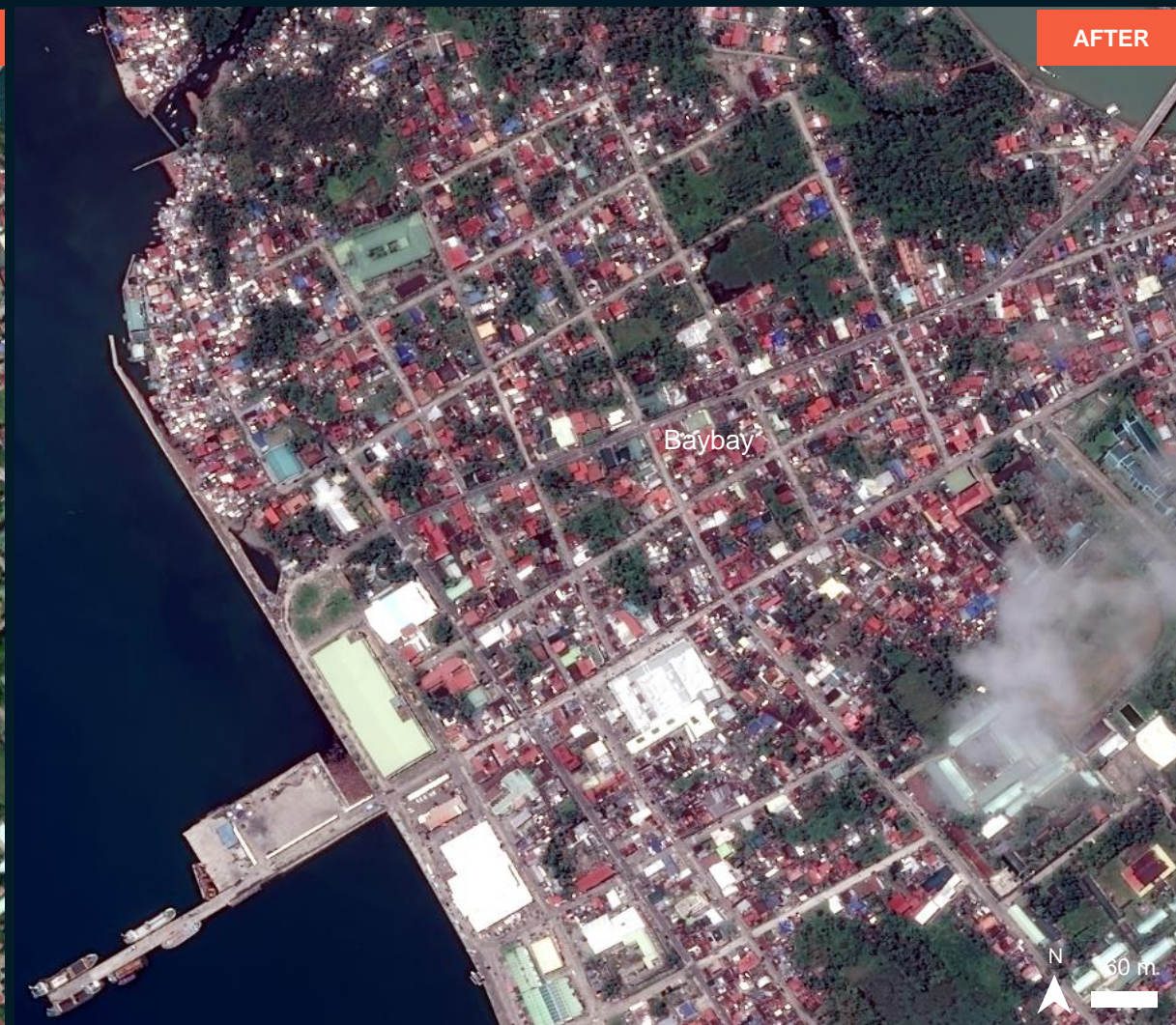
Image center:
124°48'0.057"E
10°40'43.194"N



No visible damaged



ESRI Basemap/ WorldView-2/ 20 Apr. 2019



Pleiades / 17 Apr. 2022

AOI4-1 MAHAPLAG MUNICIPALITY, LEYTE PROVINCE, REGION VIII

Potentially damaged structures

Image center:
124°58'0.26"E
10°31'31.239"N



ESRI Basemap/ WorldView-2/ 11 Jul. 2014



Pleiades / 16 Apr. 2022

AOI4-2 SOGOD MUNICIPALITY, SOUTHERN LEYTE PROVINCE, REGION VIII

Damaged road and riverbanks erosion

Image center:
125°1'39.986"E
10°26'15.969"N



ESRI Basemap/ WorldView-2/ 20 Apr. 2019



Pleiades / 16 Apr. 2022

SUMMARY OF FINDINGS

City of Baybay, Leyte Province

- No major floods observed in Baybay city, City of Baybay, Leyte Province, Region VIII observed as of 17 Apr. 2022;
- Landslides in Banga and Kantagnos villages, City of Baybay, Leyte Province, Region VIII as of 14 and 17 Apr. 2022;
- 20 structures near Banga village are heavily damaged and/or destroyed as of 14 Apr. 2022;
- 83 structures in Kantagnos village are heavily damaged and/or destroyed as of 17 Apr. 2022;
- Riverbanks erosion and potentially affected structures along the rivers in City of Baybay, Leyte Province, Region VIII observed as of 14 Apr. 2022;
- Damaged road in Pamotosan Village, City Of Baybay, Leyte Province, Region VIII observed as of 17 Apr. 2022;
- Potentially damaged structures observed in City of Baybay, Leyte Province, Region VIII as of 17 Apr. 2022

Javier, Macarthur, Abuyog Municipalities, Leyte Province

- Inundated Sta. Fe Elementary School and inundated structures in Abuyog Municipalities, Leyte Province, Region VIII observed as of 17 Apr. 2022;
- Affected agricultural land in Javier, Macarthur, Abuyog Municipalities, Leyte Province, Region VIII observed as of 17 Apr. 2022;
- Affected road and affected structures by floods in Macarthur and Abuyog Municipalities, Leyte Province, Region VIII observed as of 17 Apr. 2022;

Mahaplag Municipality, Leyte Province

- Potentially damaged structures along the river In Mahaplag Municipality, Leyte Province, Region VIII observed as of 16 Apr. 2022;

Sogod Municipality, Southern Leyte Province

- Damaged road and Riverbanks erosion along the Subangdaku River In Sogod Municipality, Southern Leyte Province, Region VIII observed as of 16 Apr. 2022

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Data sources:

(1) Satellite Image (Post-event)

Satellite : Pleiades
Imagery Date : 14, 16, and 17 April 2022
Resolution : 50 cm
Copyright: © CNES (2022), Distribution Airbus DS.
Source: Airbus DS

(1) (2) Satellite Image (Pre-event)

Satellite : WorldView-2
Imagery Date : 24 May. 2020
Resolution : 50 cm
Copyright: © DigitalGlobe, Inc. (2020)
Source: USGS

Satellite : WorldView-2
Imagery Date : 29 Jul. 2021
Resolution : 50 cm
Copyright: © DigitalGlobe, Inc. (2021)
Source: USGS

(3) Ancillary data

Administrative boundaries: National Mapping and Resource Information Authority (NAMRIA), Philippines Statistics Authority (PSA)

Populate place: OSM
River data: OSM

Analysis: United Nations Satellite Centre (UNOSAT)
Production: United Nations Satellite Centre (UNOSAT)

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