



3 May 2023

PRELIMINARY SATELLITE-DERIVED FLOOD ASSESSMENT



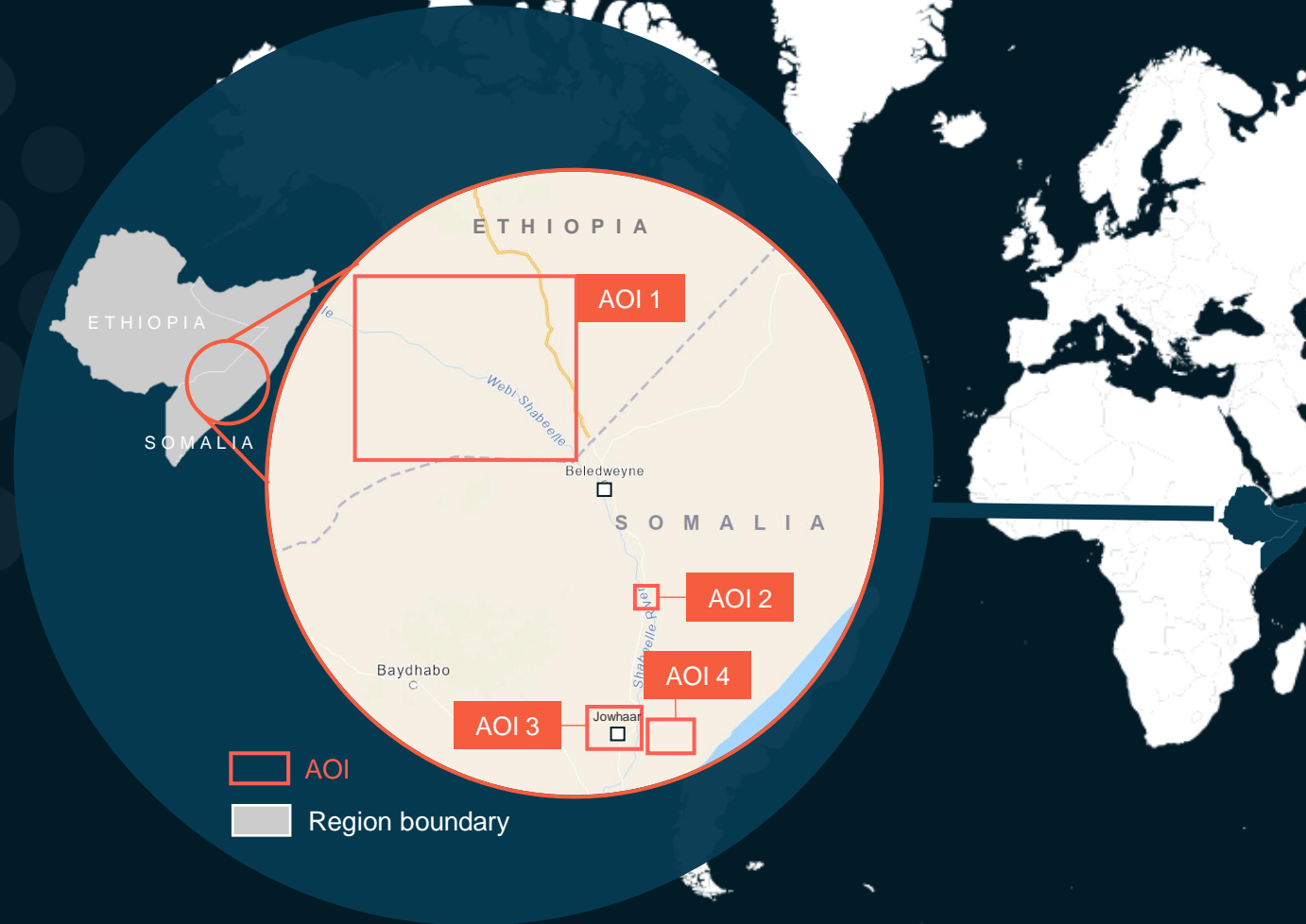
Bulo Burto City, Hiraan Region and Jowhaar City, Middle Shebelle Region, Somalia

 Status: Increased of water extent along Shabelle River observed in Somalia

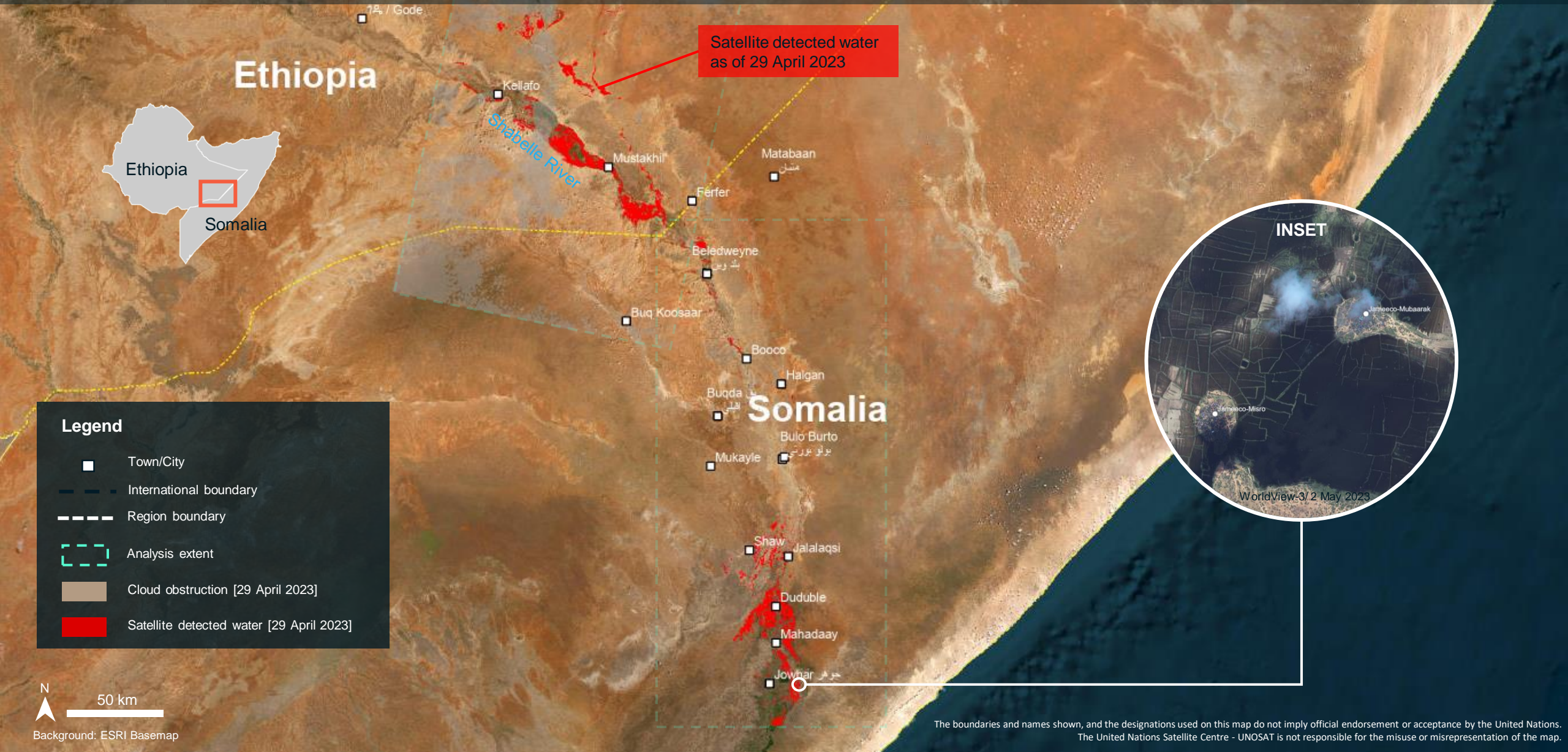
 Further action(s): Continue monitoring

SOMALIA & ETHIOPIA

3 May 2023



FLOODS ALONG THE SHABELLE RIVER

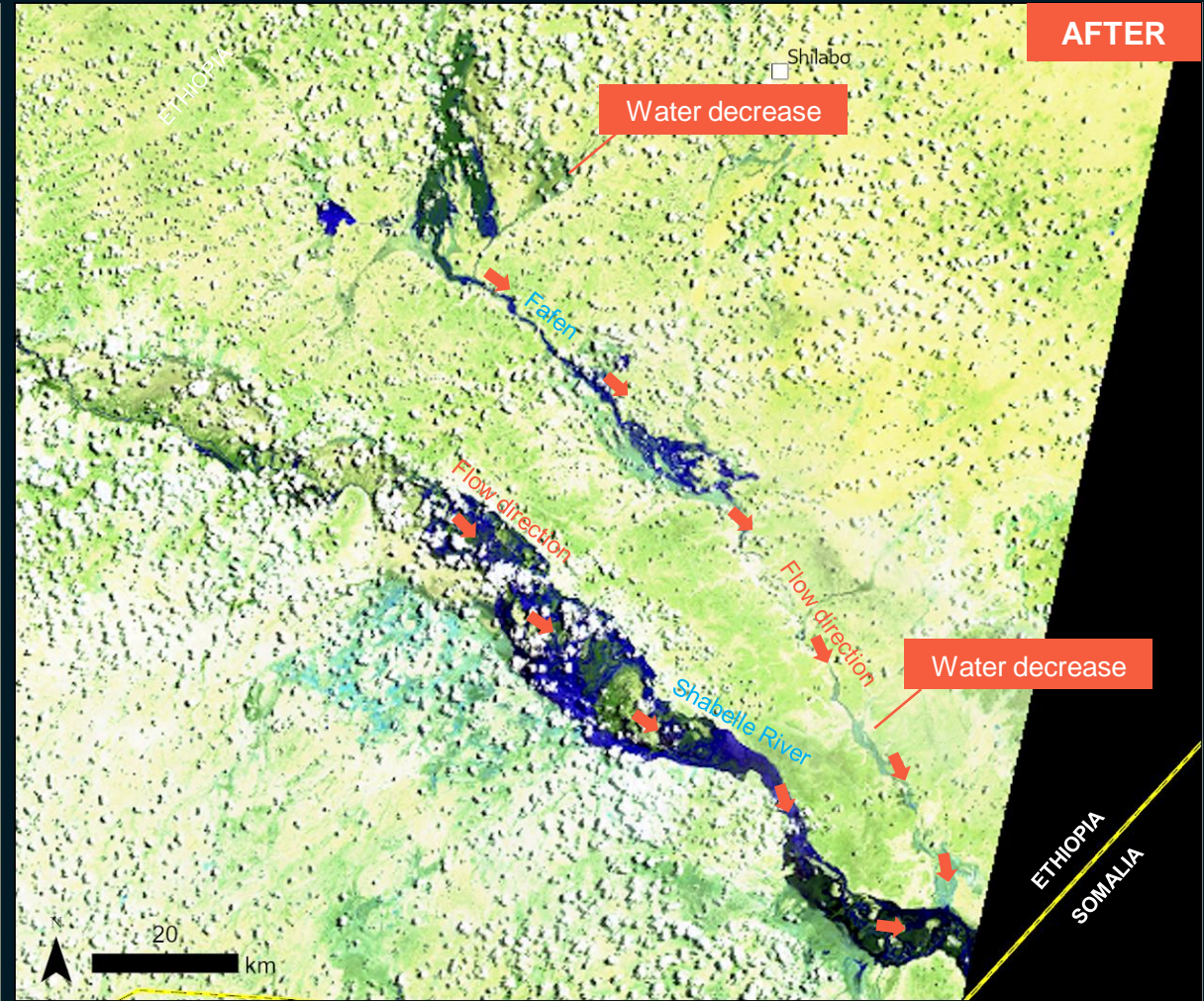
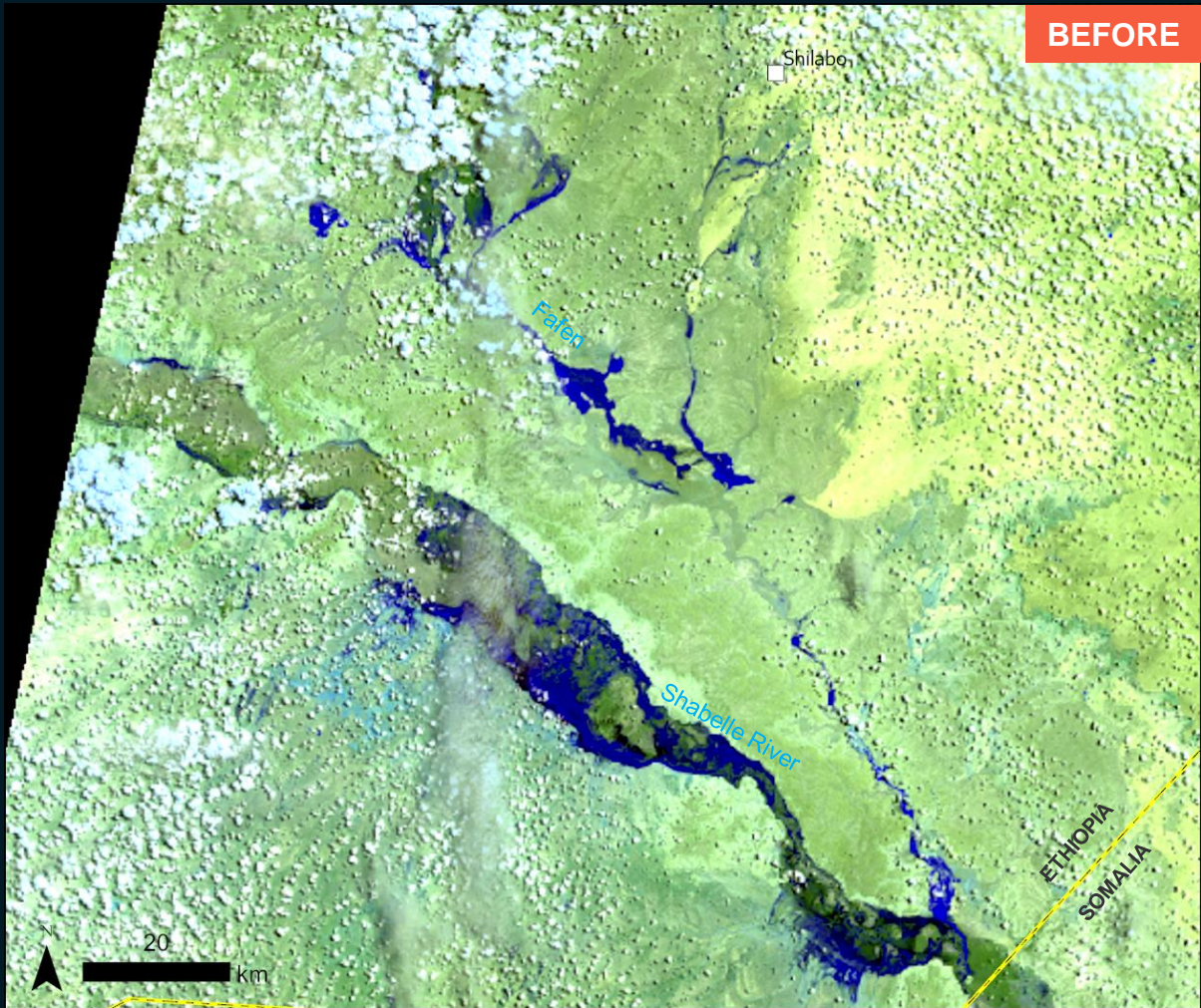


AOI1-FLOODS ALONG THE SHABELLE RIVER, SOMALI REGION, ETHIOPIA

Water decrease and moved down toward Somalia



Image center:
44.5588180°E
5.6010660°N

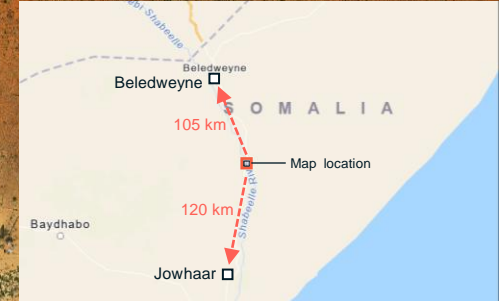
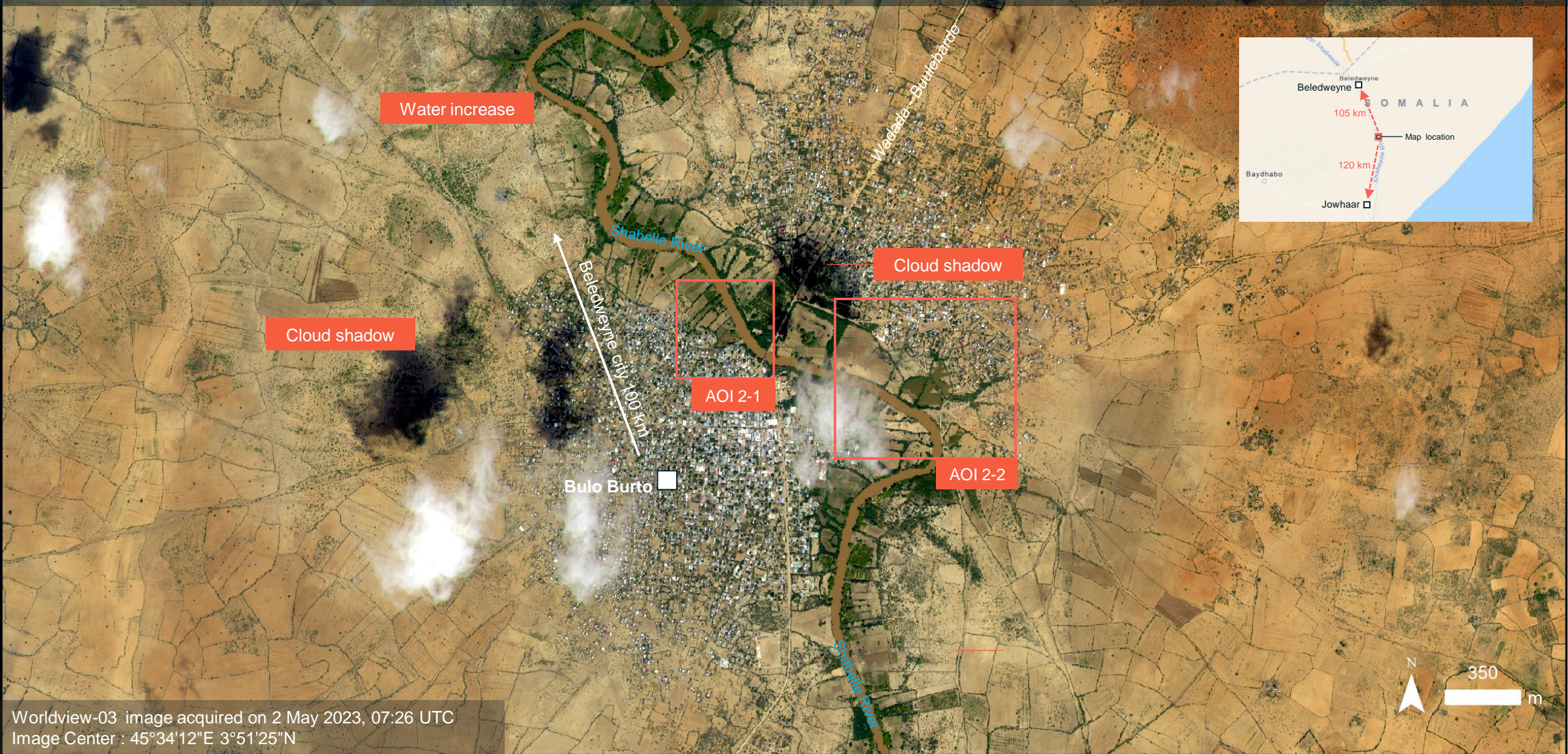


Landsat-9 / False colour composite / 29 April 2023

Sentinel-2 / False colour composite / 2 May 2023

AOI2 BULO BURTO CITY, BULO BURTO DISTRICT, HIRAAN REGION, SOMALIA

Increase of water extent along the Shabelle River



AOI2-1 BULO BURTO CITY, BULO BURTO DISTRICT, HIRAAN REGION, SOMALIA

Increase of water extent along the Shabelle River

Image center:
45°33'59"E
3°51'27"N



ESRI Basemap



WorldView-3 / 2 May 2023

AOI2-2 BULO BURTO CITY, BULO BURTO DISTRICT, HIRAAN REGION, SOMALIA

Increase of water extent along the Shabelle River

Image center:
45°34'26.9"E
3°51'19.9"N



ESRI Basemap



WorldView-3 / 2 May 2023

AOI3 JOWHAAR CITY, MIDDLE SHEBELLE REGION, SOMALIA

Increase of water extent along the Shabelle River



Cloud shadow

Inundated agricultural areas

Cloud shadow

AOI 3-1

AOI 3-2

Jowhaar

Shabelle River

Beledweyne city 100 km

AOI 3-3

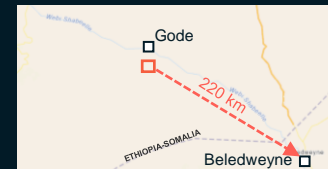
Inundated agricultural areas



AOI3-1 JOWHAAR CITY, MIDDLE SHEBELLE REGION, SOMALIA

Inundated roads in urban areas

Image center:
45°30'24"E
2°46'58"N



GeoEye-1 / 4 March 2023

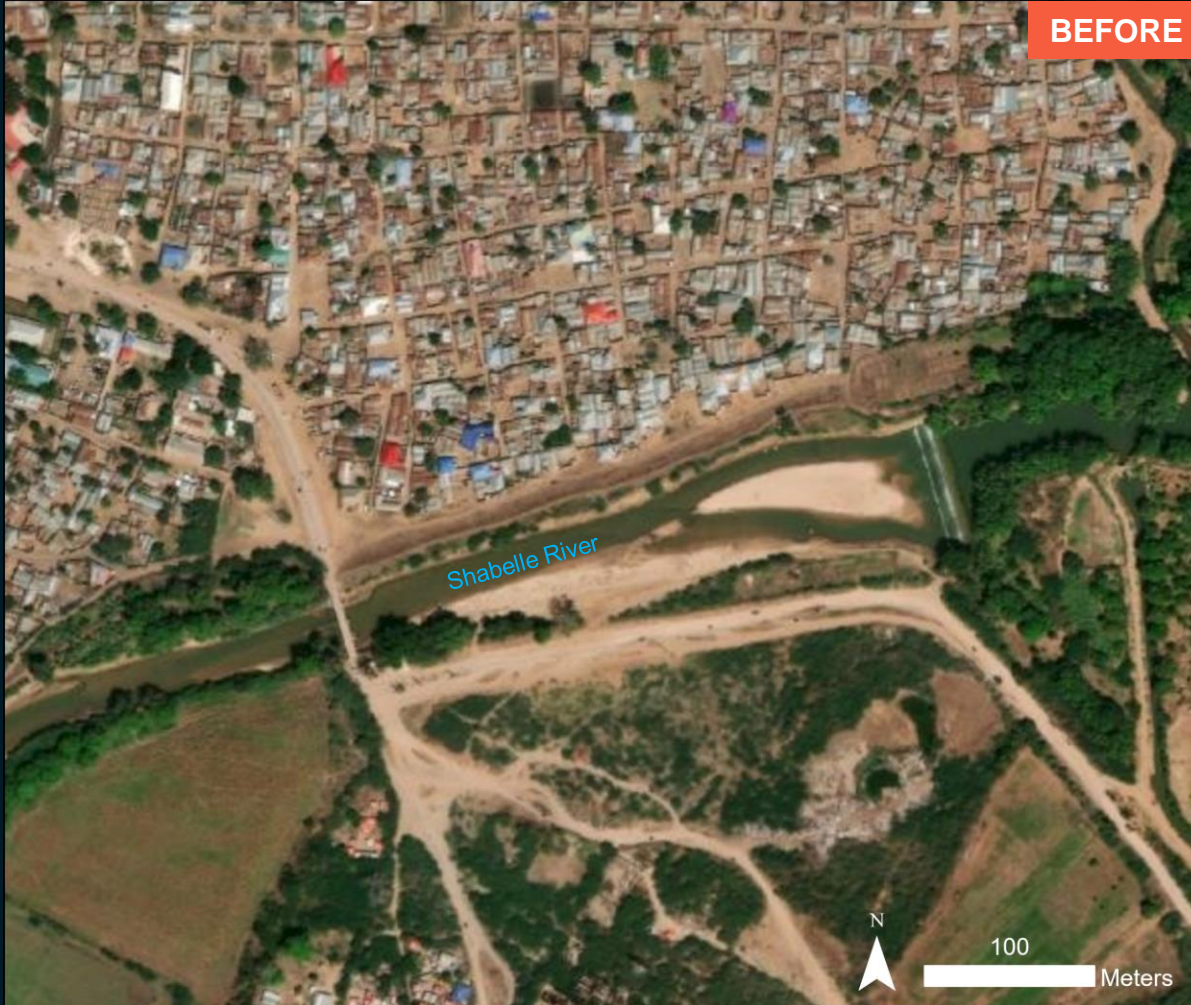


WorldView-3 / 02 May 2023

AOI3-2 JOWHAAR CITY, MIDDLE SHEBELLE REGION, SOMALIA

Increase of water along the Shabelle River

Image center:
45°30'24"E
2°46'44"N



AOI3-3 JOWHAAR CITY, MIDDLE SHEBELLE REGION, SOMALIA

Inundated agricultural areas and increase of water extent along the Shabelle River

Image center:
45°30'05"E
2°46'09"N



AOI3-4 JOWHAAR CITY, MIDDLE SHEBELLE REGION, SOMALIA

Flooded agricultural area

Image center:
45°29'58"E
2°44'08"N



WorldView-2 / 3 April 2023



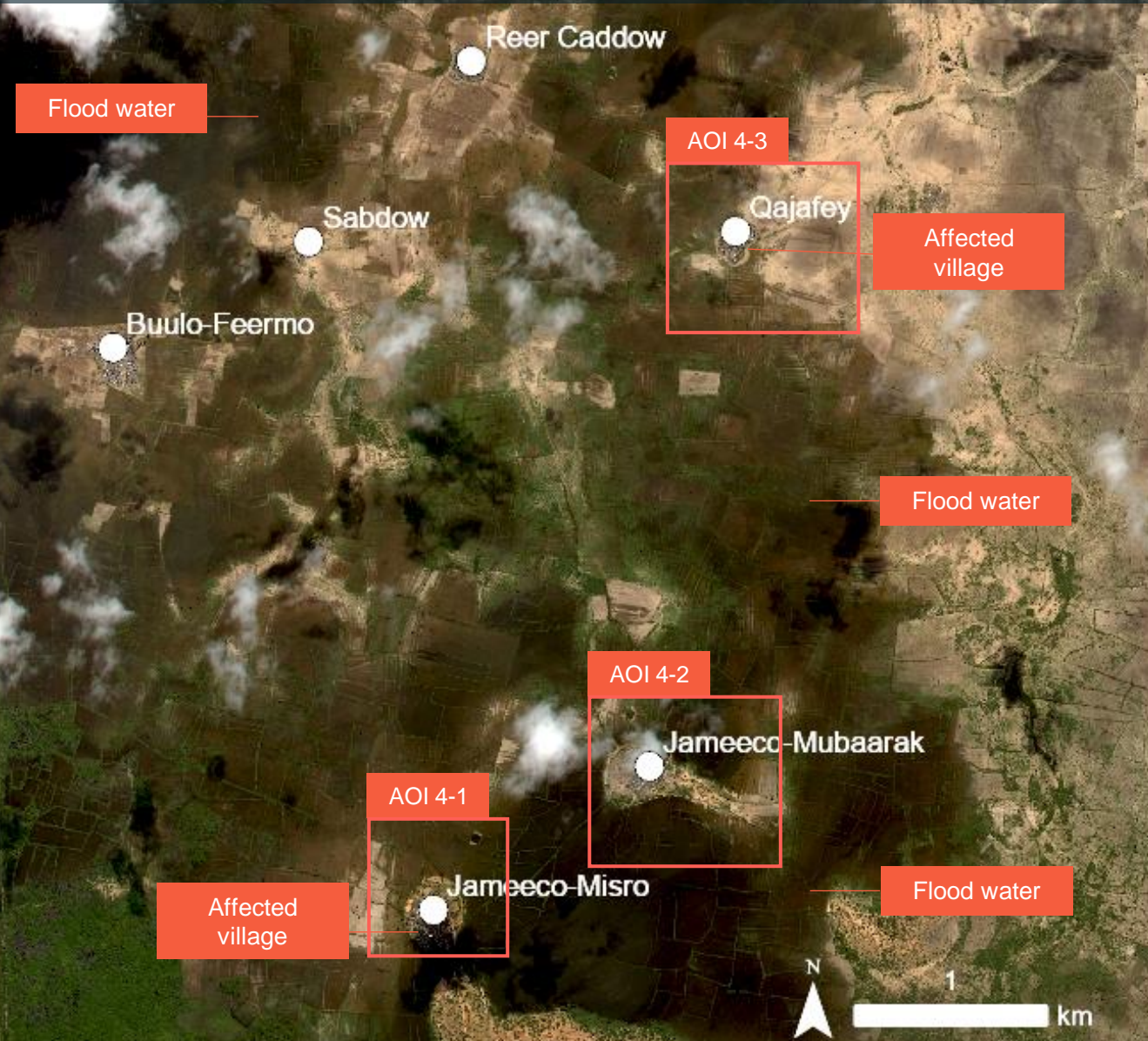
WorldView-3 / 27 April 2023

AOI4 SOTHEAST OF JOWHAAR CITY, MIDDLE SHEBELLE REGION, SOMALIA

Floods waters observed surrounding villages



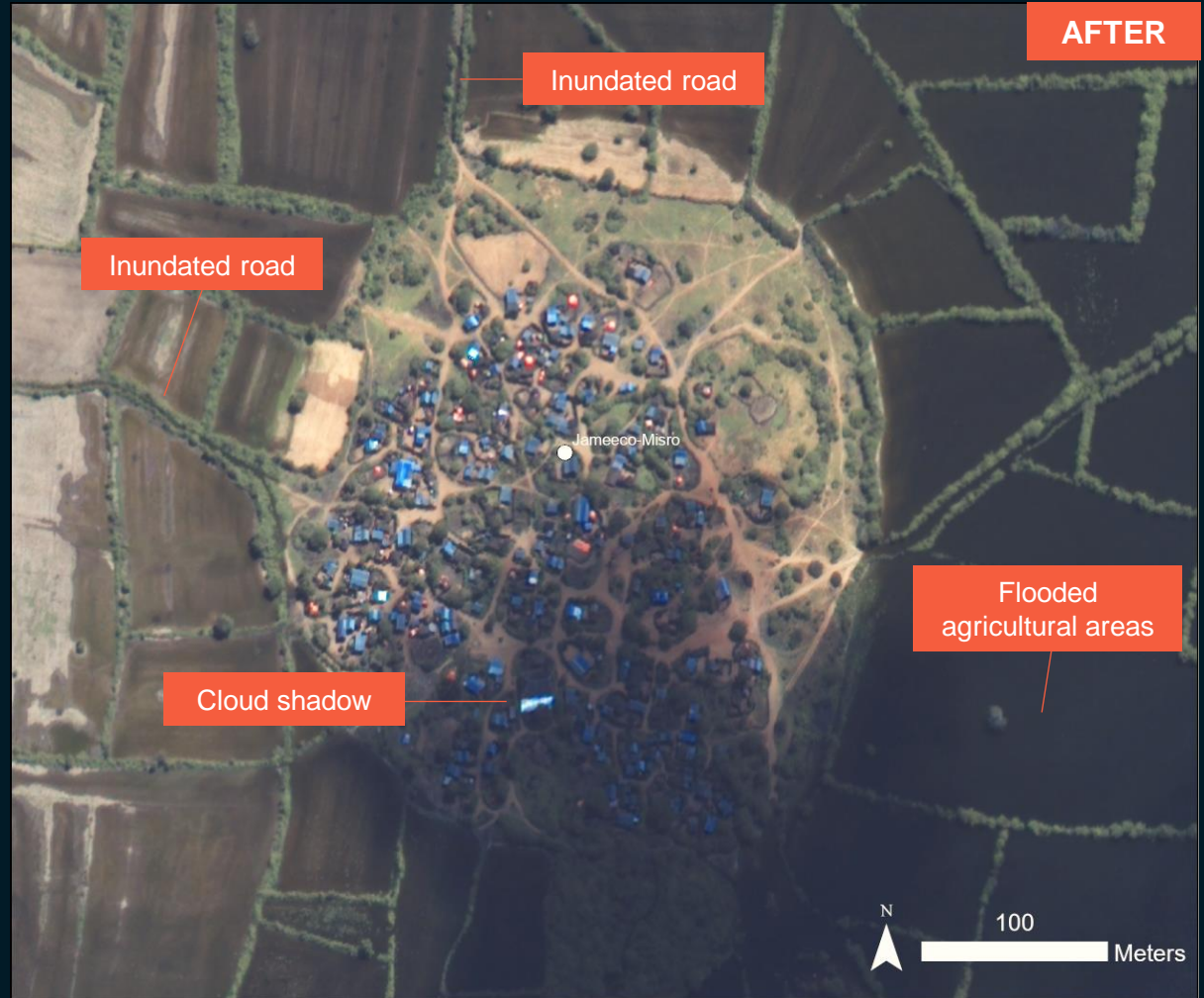
11 km (To Jowhaar City)



AOI4-1 JAMEECO-MISRO VILLAGE , MIDDLE SHEBELLE REGION, SOMALIA

Flooded agricultural area and Inundated road

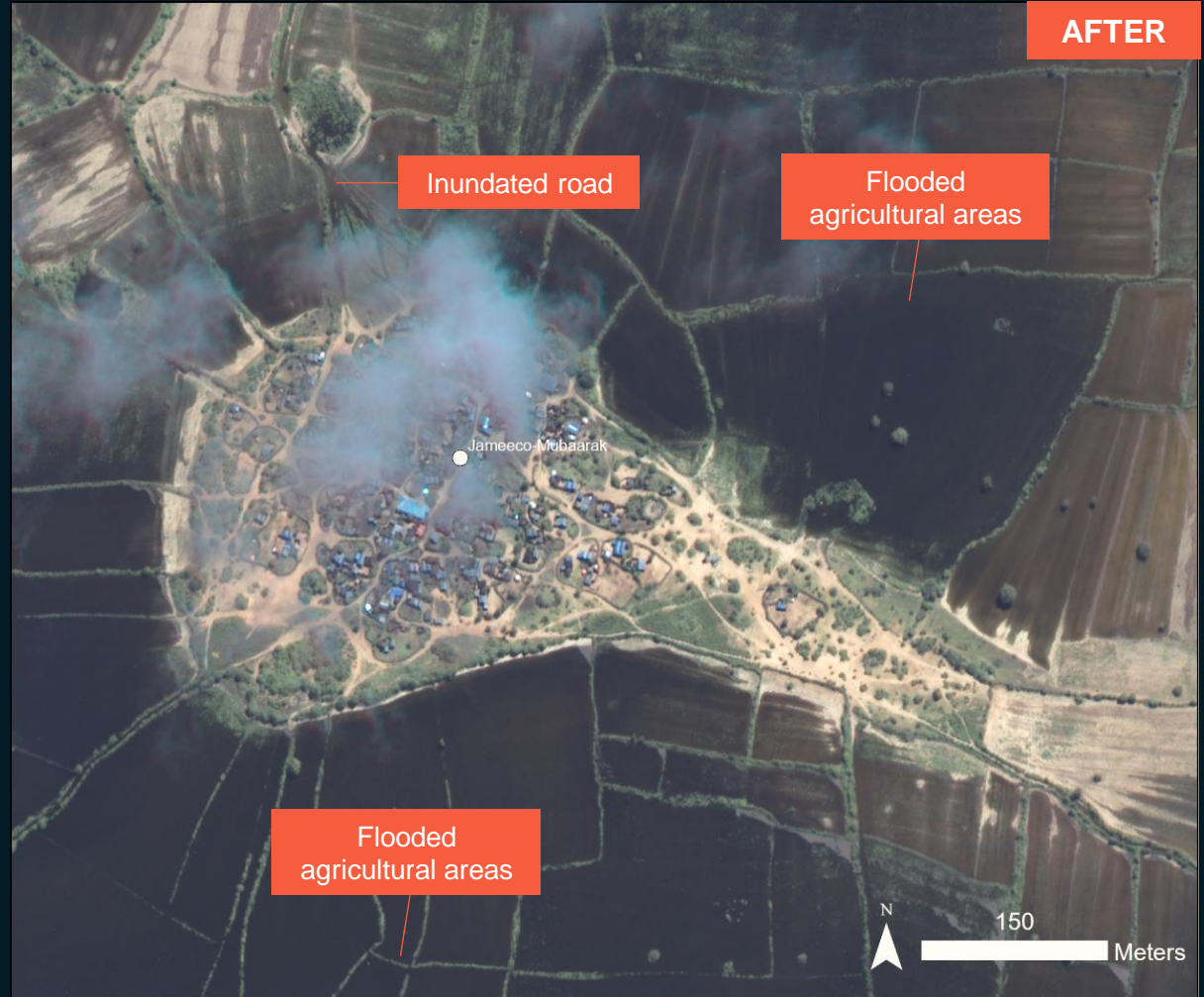
Image center:
45.6243143°E
2.7063850°N



AOI4-2 JAMEECO-MUBAARAK VILLAGE , MIDDLE SHEBELLE REGION, SOMALIA

Flooded agricultural area and Inundated road

Image center:
45.6347711°E
2.7131920°N



AOI4-3 QAJAFEY VILLAGE , MIDDLE SHEBELLE REGION, SOMALIA

Flooded agricultural area and Inundated road

Image center:
45.6384357°E
2.7385077°N



SUMMARY OF FINDINGS

- Flood water along the Shabelle River in Somali Region, Ethiopia decrease and moved down toward Somalia as of 2 May 2023;
- Increase of water extent along the Shabelle River observed in Bulo Burto City, Bulo Burto District, Hiraan Region, and Jowhaar City, Middle Shebelle Region, Somalia as of 2 May 2023;
- Inundated agricultural areas observed in Jowhaar City and surrounding, Middle Shebelle Region, Somalia as of 2 May 2023;
- Inundated roads in urban areas observed in Jowhaar City and villages surrounding, Middle Shebelle Region, Somalia as of 2 May 2023;
- Floods waters observed surrounding villages of Jameeco-Misro, Jameeco-Mubaarak, Qajafey, Buulo-Feermo, Sabdow, and Reer Caddow, Southeast of Jowhaar City, Middle Shebelle region, Somalia as Of 2 May 2023;

COPYRIGHTS & SOURCES

Data sources:

(1) Satellite Image (Post-event): Sentinel-2

Acquisition date: 2 May 2023

Resolution: 10 m

Copyright : Contains modified Copernicus Sentinel data [2023]

Source : ESA

(2) Satellite Image (Post-event): Worldview-3

Acquisition date : 2 May 2023

Resolution: 50 cm

Copyright: © 2023 DigitalGlobe, Inc., Longmont CO USA 80503.

Source: USGS

(3) Satellite Image (Pre-event): Worldview-2

Acquisition date : 3 April 2023

Resolution: 50 cm

Copyright: © 2023 DigitalGlobe, Inc., Longmont CO USA 80503.

Source: USGS

(4) Satellite Image (Pre-event): GeoEye-1

Acquisition date : / 4 March 2023

Resolution: 50 cm

Copyright: © 2023 DigitalGlobe, Inc., Longmont CO USA 80503.

Source: USGS

(5) Satellite Image (Pre-event): Landsat-9

Acquisition date : 29 April 2023

Resolution: 30 m

Copyright: USGS/NASA Landsat Program

Source: USGS

ESRI Basemap

(6) Ancillary data

Administrative boundaries: OCHA Regional Office for Southern and Eastern Africa (ROSEA)

Populated place: OpenStreetMap

Waterway: OpenStreetMap

Analysis: United Nations Satellite Centre (UNOSAT)

Production: United Nations Satellite Centre (UNOSAT)

The boundaries and names shown, and the designations used on this map do not imply official endorsement or acceptance by the United Nations. The United Nations Satellite Centre - UNOSAT is not responsible for the misuse or misrepresentation of the map.

 **@UNOSAT**

 **@UNITAR.unosat**



UNOSAT, United Nations Institute for Training
and Research (UNITAR)
7 bis, Avenue de la Paix, CH-1202 Geneva 2,
Switzerland

T +41 22 917 4720
E unosat@unitar.org
www.unosat.org