



12 MARCH 2020

## SATELLITE-DERIVED FLOOD ASSESSMENT IN LUAPULA AND NORTHERN PROVINCES, REPUBLIC OF ZAMBIA

STATUS: FLOODS DETECTED IN LUNGA DISTRICT

FURTHER ACTION(S): MONITORING OVER AOI COMPLETED



## OVERVIEW / BASED ON AOIs ASSESSED

Date of assessment validity:

### Impact and severity\*:

- undetected
- limited impact potentially detected
- significant impact potentially detected

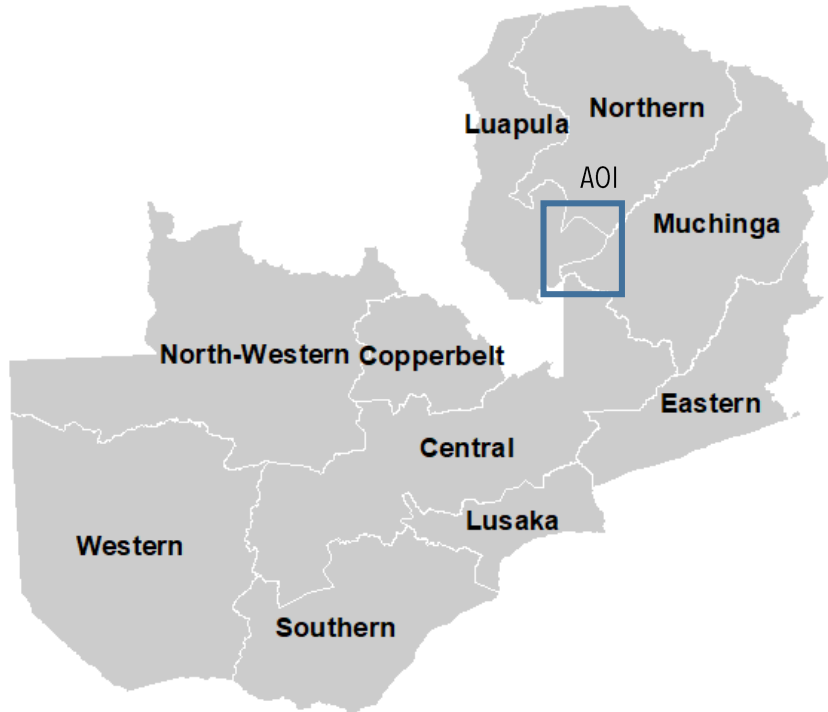
### Data sources:

- (1) pre-event (reference) image: Bing (2019)
- (2) post-event images:
  - Pleiades, 07 March 2020, © CNES (2020), Distribution Airbus DS
  - Pleiades, 09 March 2020, © CNES (2020), Distribution Airbus DS
  - Pleiades, 10 March 2020, © CNES (2020), Distribution Airbus DS
  - Resours-P, 09 March 2020, © MDA, Geospatial Services Inc. (2020)
- (3) baseline data
  - administrative boundaries: HDX

### Potentially affected elements at risk

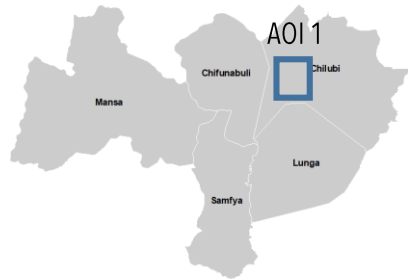
(indicate all that are applicable):

- buildings - residential
- buildings - commercial/ industry
- vulnerable structures (e.g. schools, hospitals, water, sanitation, power stations,
- internally displaced persons (IDP) camps
- transportation network
- agriculture
- other:



\* disclaimer (i.e. assessment has yet to be validated with field-based information)

# AOI 1 / CHABA CITY, CHILUBI DISTRICT, NORTHERN PROVINCE, REPUBLIC OF ZAMBIA / NO FLOODS DETECTED

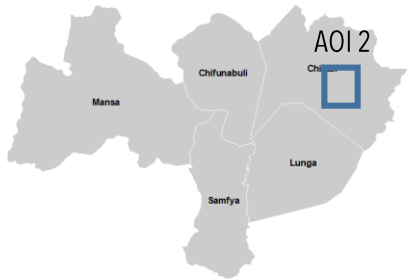


BING Basemap

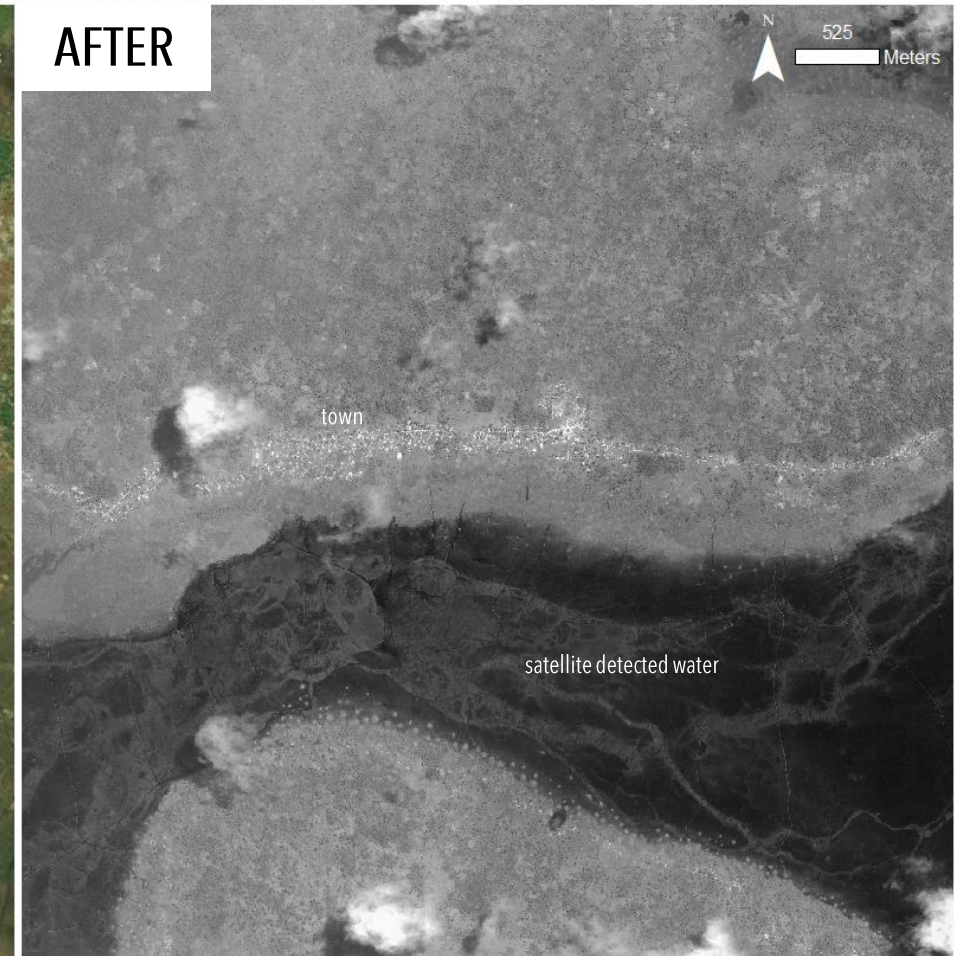


PLEIADES 09 MARCH 2020 08:05:38 UTC

## AOI 2 / MOFU CITY, CHILUBI DISTRICT, NORTHERN PROVINCE, REPUBLIC OF ZAMBIA / NO FLOODS DETECTED

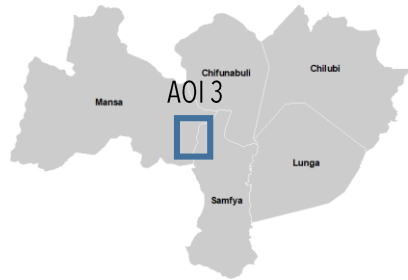


BING Basemap



RESOURS-P 09 MARCH 2020 07:40:02 UTC

## AOI 3 / SAMFYA CITY, SAMFYA DISTRICT, LUAPULA PROVINCE, REPUBLIC OF ZAMBIA / NO FLOODS DETECTED

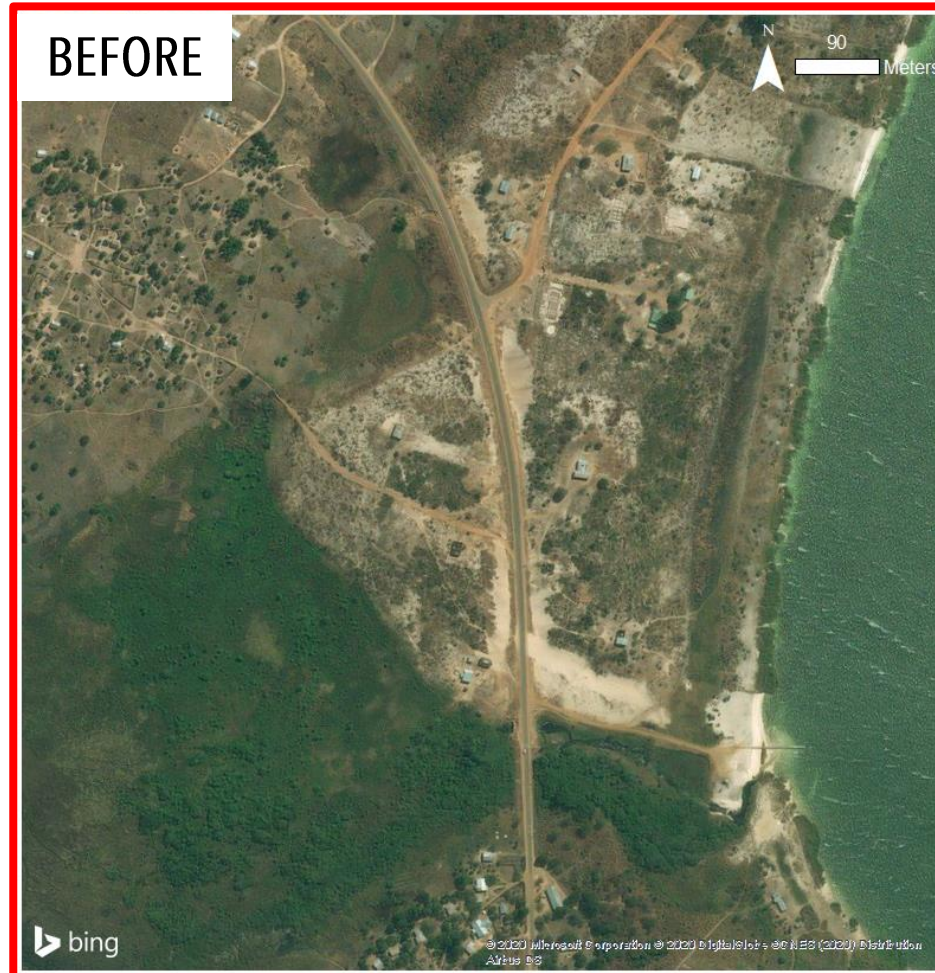
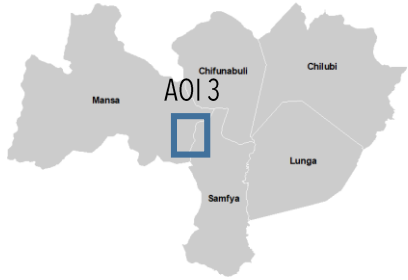


BING Basemap



PLEIADES 07 MARCH 2020 08:20:48 UTC

# AOI 3-1 / SAMFYA CITY, SAMFYA DISTRICT, LUAPULA PROVINCE, REPUBLIC OF ZAMBIA / NO FLOODS DETECTED

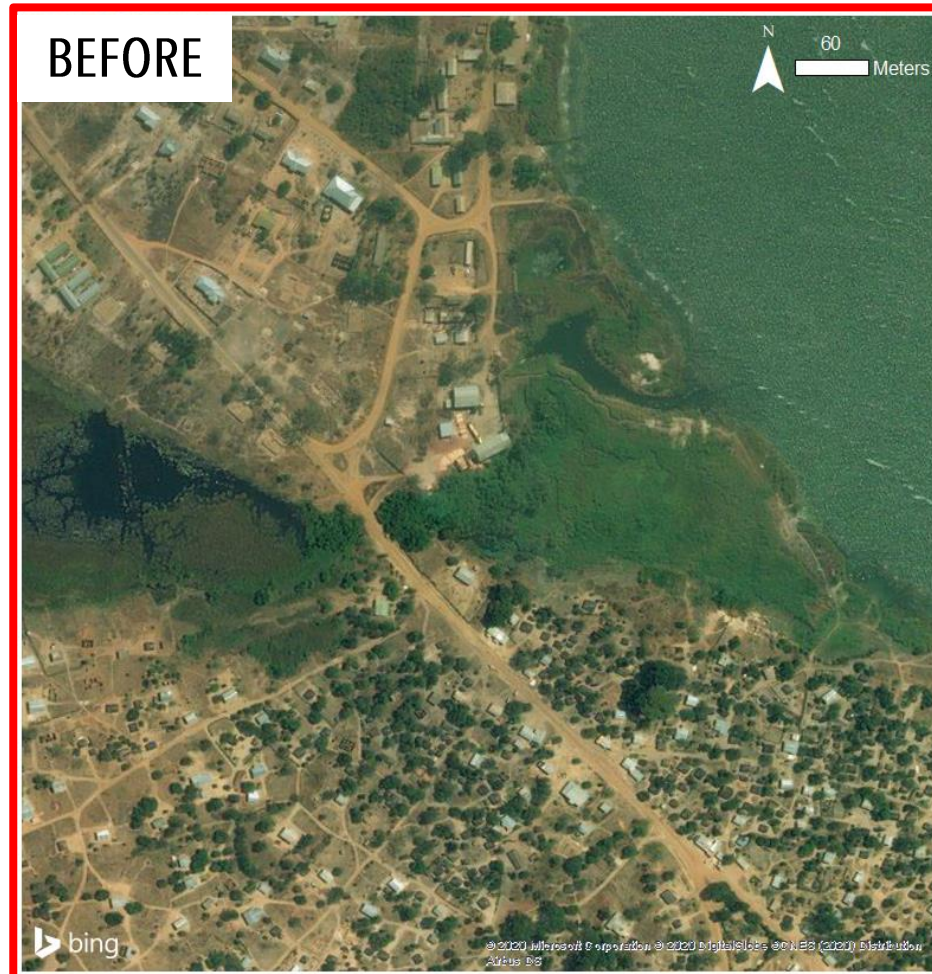
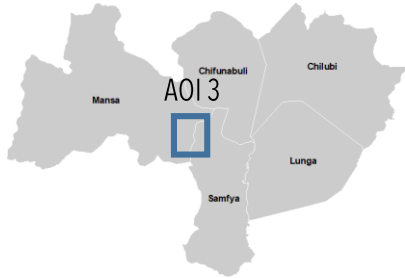


BING Basemap



PLEIADES 09 MARCH 2020 08:05:48 UTC

# AOI 3-2 / SAMFYA CITY, SAMFYA DISTRICT, LUAPULA PROVINCE, REPUBLIC OF ZAMBIA / NO FLOODS DETECTED



BING Basemap

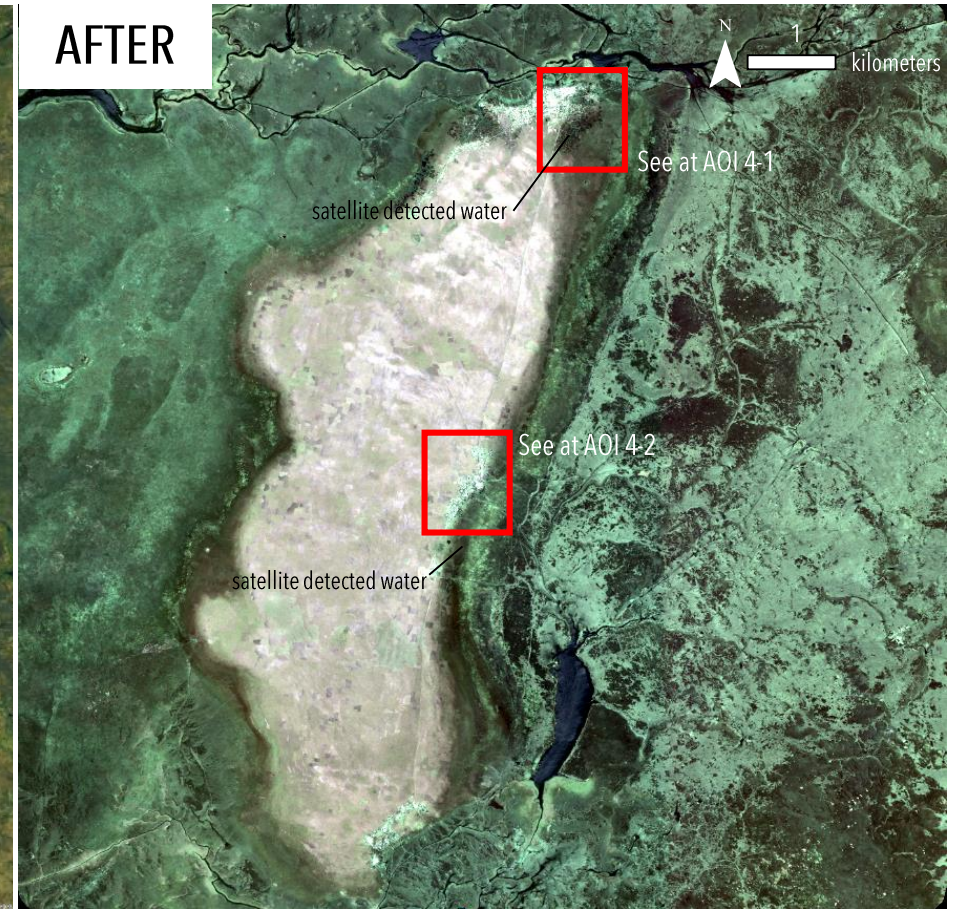


PLEIADES 10 MARCH 2020 08:47:10 UTC

## AOI 4 / NCHETA ISLAND, LUNGA DISTRICT, LUAPULA PROVINCE, REPUBLIC OF ZAMBIA / FLOODS DETECTED



BING Basemap



PLEIADES 07 MARCH 2020 08:20:57 UTC



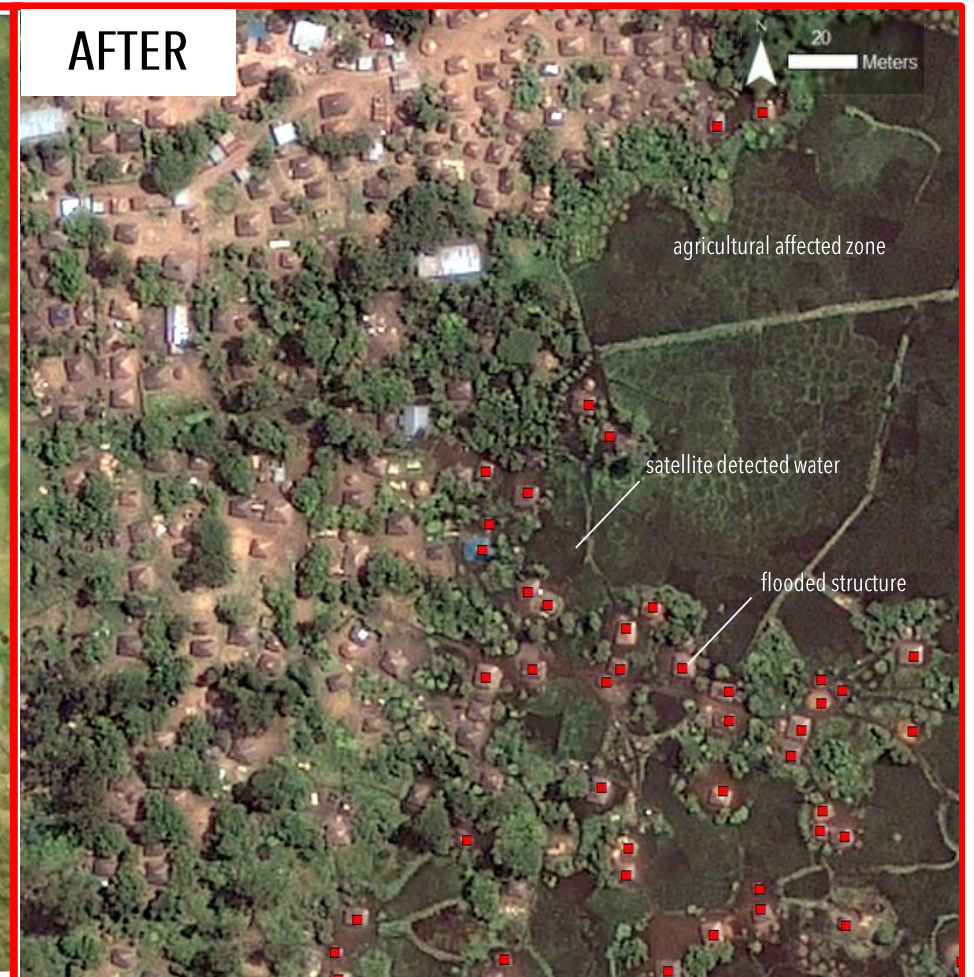
# AOI 4-1 / NORTHERN PART OF NCHETA ISLAND, LUNGA DISTRICT, LUAPULA PROVINCE, REPUBLIC OF ZAMBIA / FLOODS DETECTED



Ncheta Island



BING Basemap



PLEIADES 07 MARCH 2020 08:20:57 UTC

# AOI 4-2 / EASTERN PART OF NCHETA ISLAND, LUNGA DISTRICT, LUAPULA PROVINCE, REPUBLIC OF ZAMBIA / FLOODS DETECTED



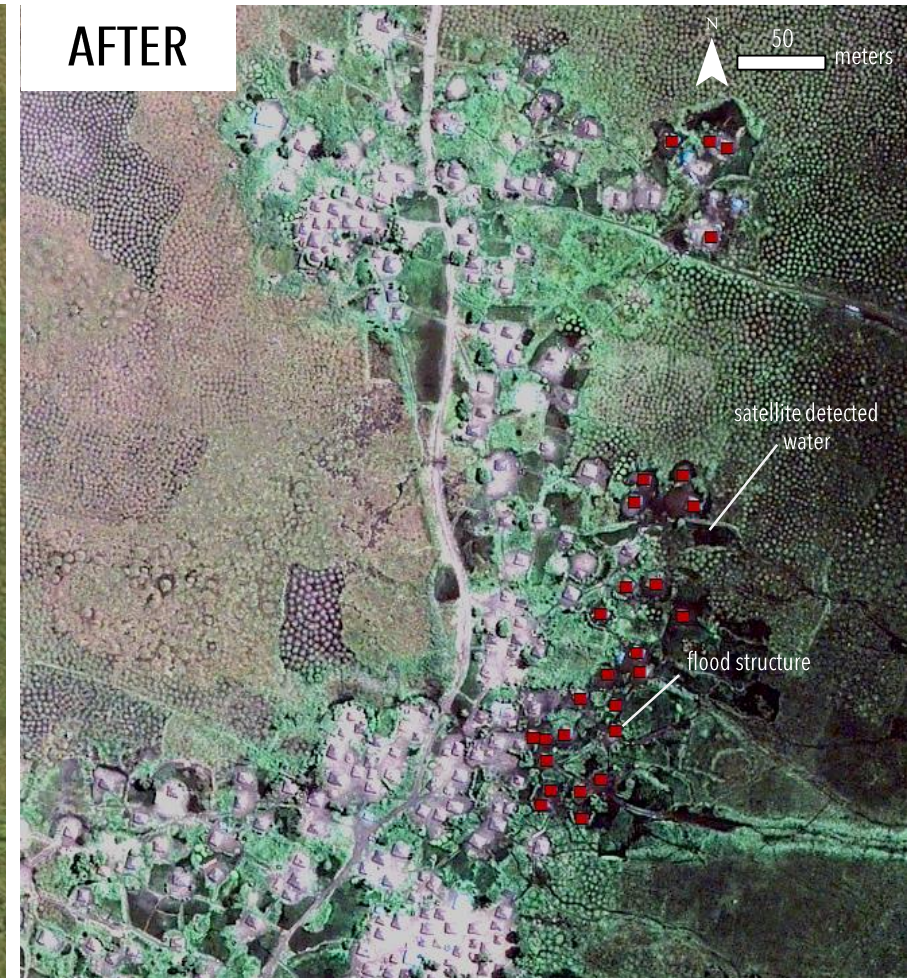
Ncheta Island

**BEFORE**



BING Basemap

**AFTER**



PLEIADES 07 MARCH 2020 08:20:57 UTC

## SUMMARY OF PRELIMINARY OBSERVATIONS AND FURTHER ACTIONS

**Date of assessment validity: 07 – 12 March 2020**

### **Preliminary observations, impact and severity \*:**

- AOI 1: No satellite-detected waters in Chaba city or its vicinity as of 09 March 2020
- AOI 2: Mofu city appears to have no evidences of satellite-detected waters as of 09 March 2020
- AOI 3: No satellite-detected waters in Samfya city as of 10 March 2020
- AOI 4: Satellite-detected waters northern and eastern part of Ncheta island affecting the agricultural fields nearby as of 07 March 2020

### **Further/ anticipated actions from UNOSAT:**

- no impact detected/ discontinue monitoring over specific AOI
- potential impact detected  continue monitoring over specific AOIs
- full assessment to be conducted
- more data and/ or information needed to confirm impact

\* disclaimer (i.e. assessment has yet to be validated with field-based information)