Landscape classification for epidemiological and geographic analyses in rural and peri-urban field sites in the Greater Mekong Subregion

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- Dengue ecology in Chbar Mon, Kampong Speu Province of Cambodia

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- Malaria ecology along the Thailand-Myanmar border

- Melioidosis ecology in Lao PDR

Dengue fever

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- Infection with dengue virus

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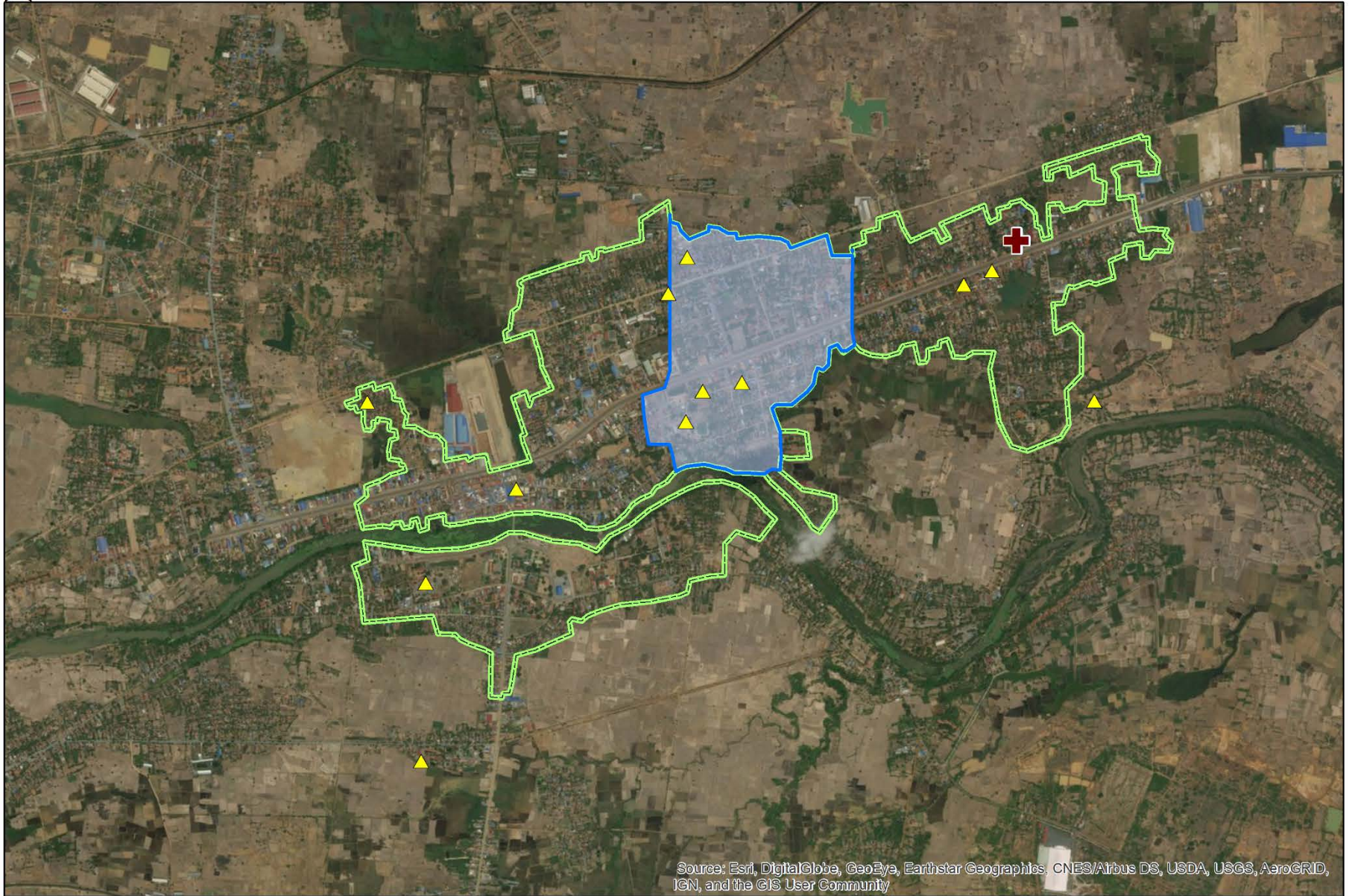- Strong environmental correlates of these mosquitoes

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  – *Aedes aegypti* is an urban mosquito

Dengue fever

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- Strong environmental correlates of these mosquitoes

  - *Aedes aegypti* is an urban mosquito
  - *Aedes albopictus* is thought to be more rural

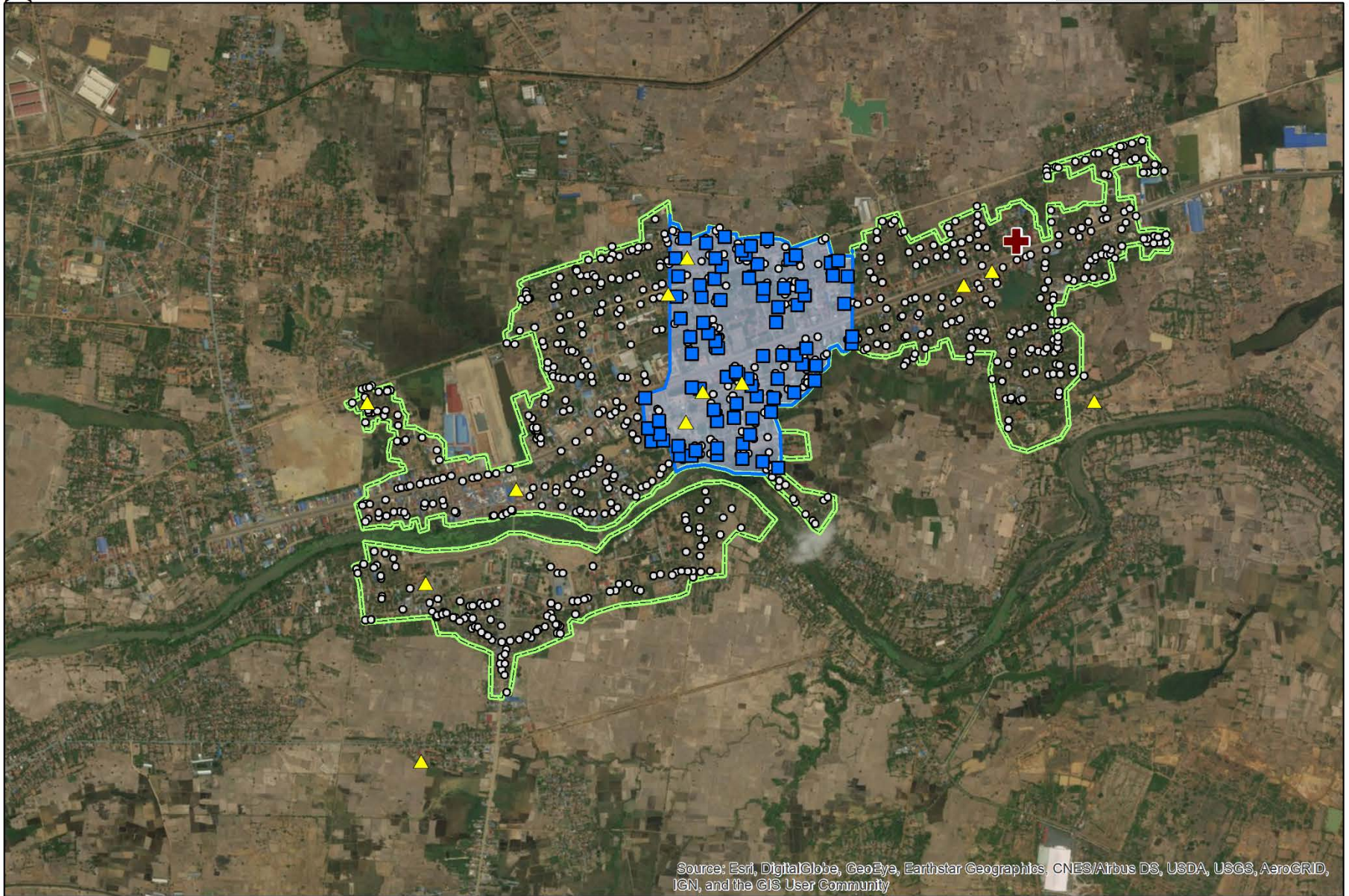# Chbar Mon

Symbol	Legend
✚	Kampong Speu referral hospital
▲	Enrollment sites (pagodas)
⬜ (green dashed)	House survey target area
⬜ (blue)	Mosquito catch site area

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

N

| | | | 0 | 250 | 500 | 1,000 Meters |

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⬚ (green dashed)	House survey target area
▨ (blue)	Mosquito catch site area
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◼ (blue)	Mosquito catch site

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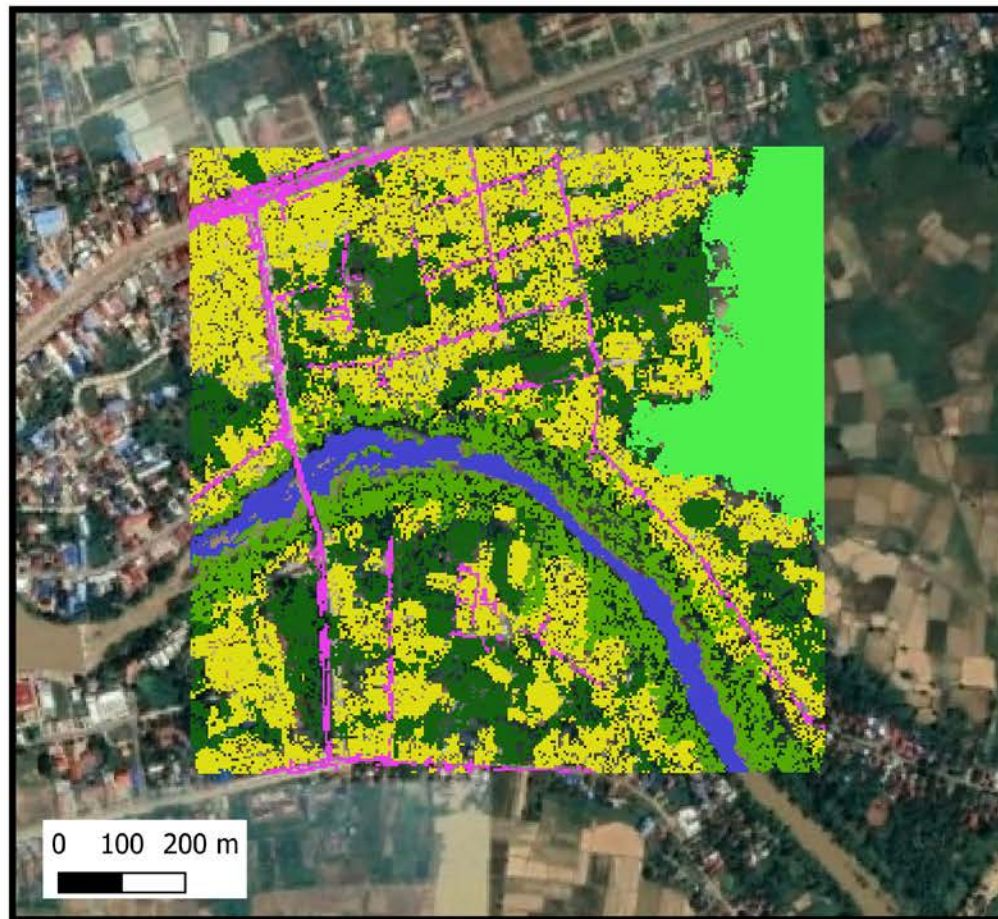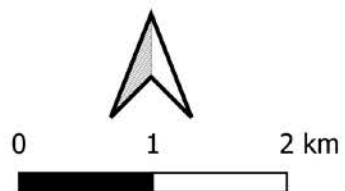 - Some other options available too

0   1   2 km
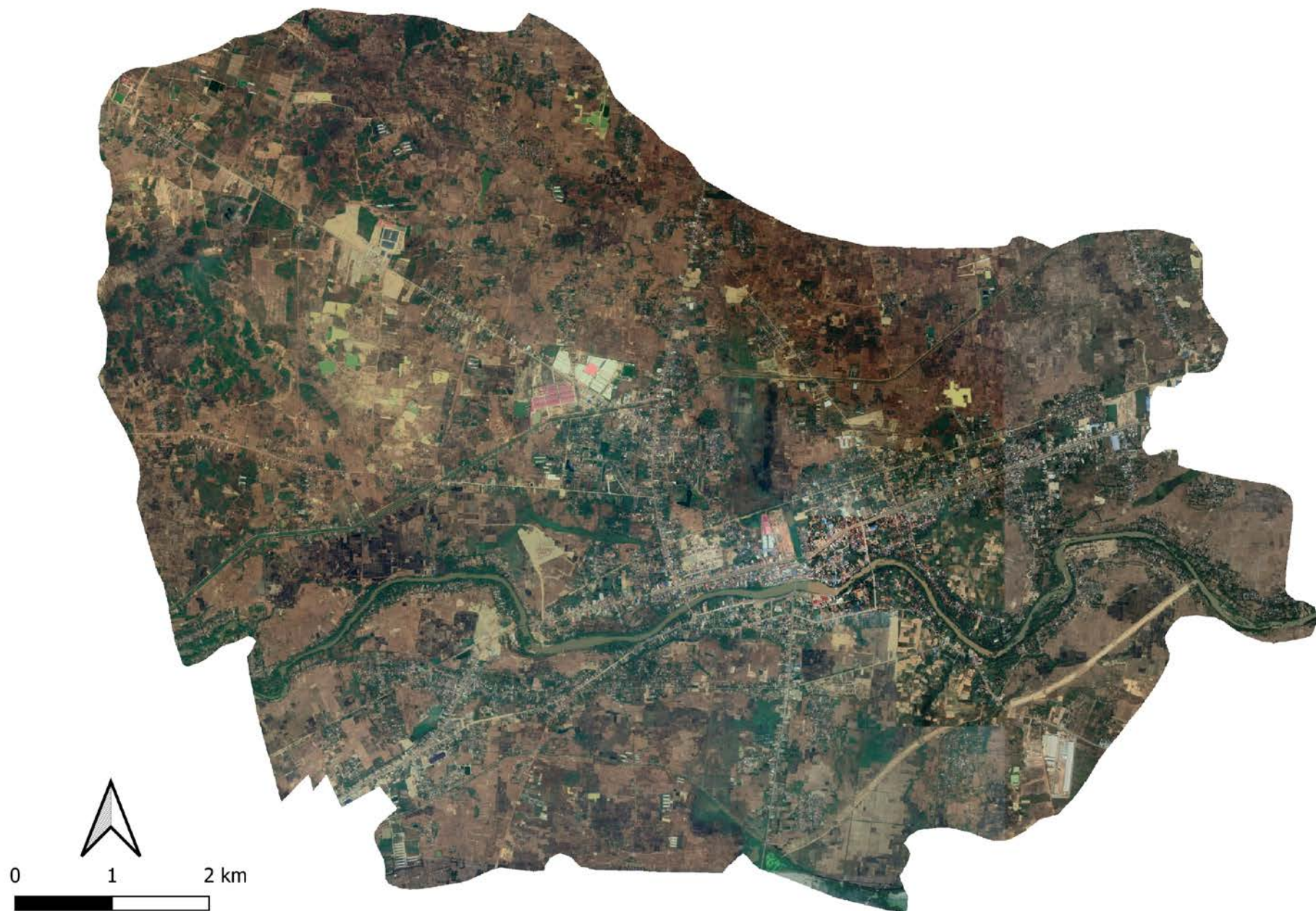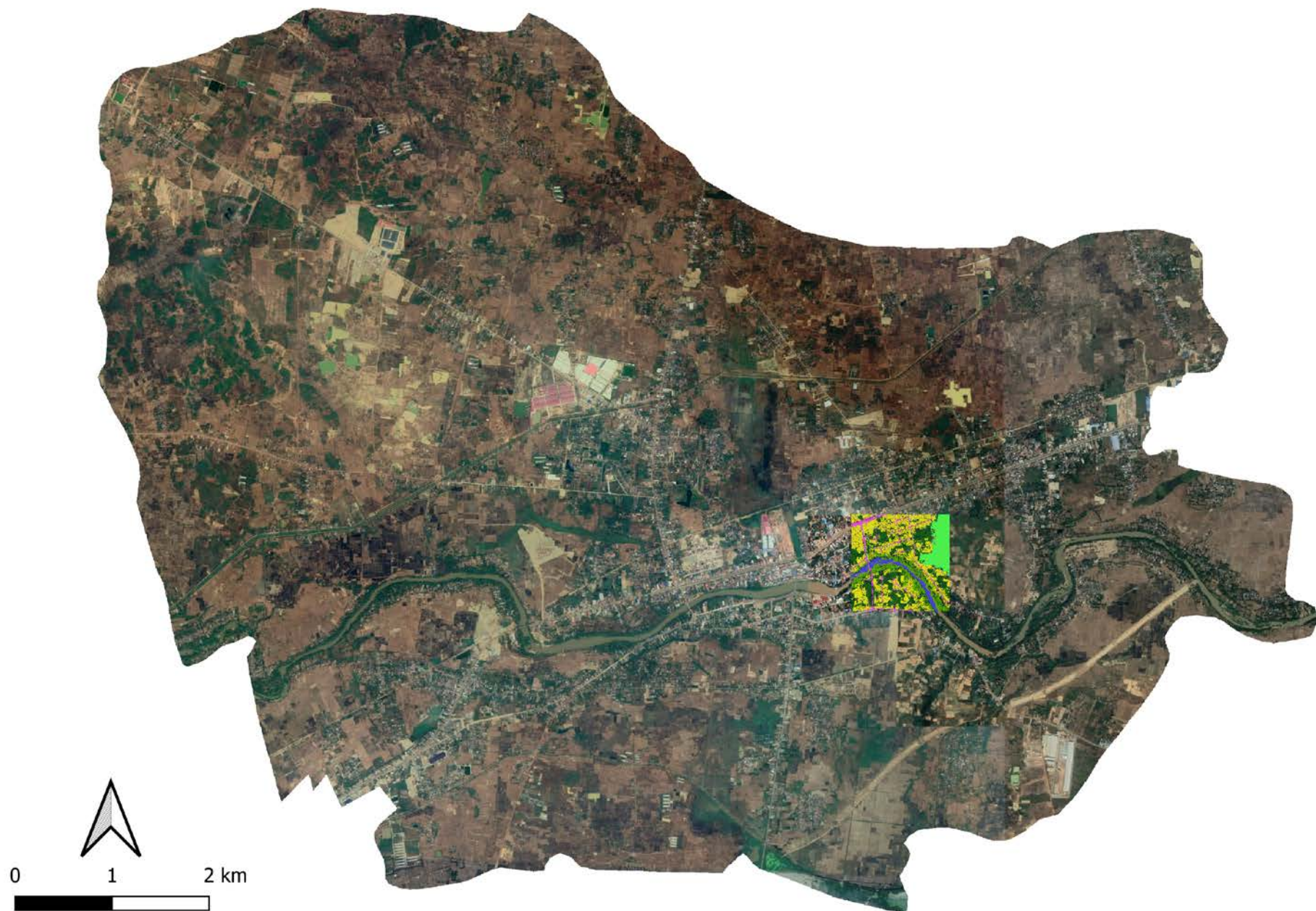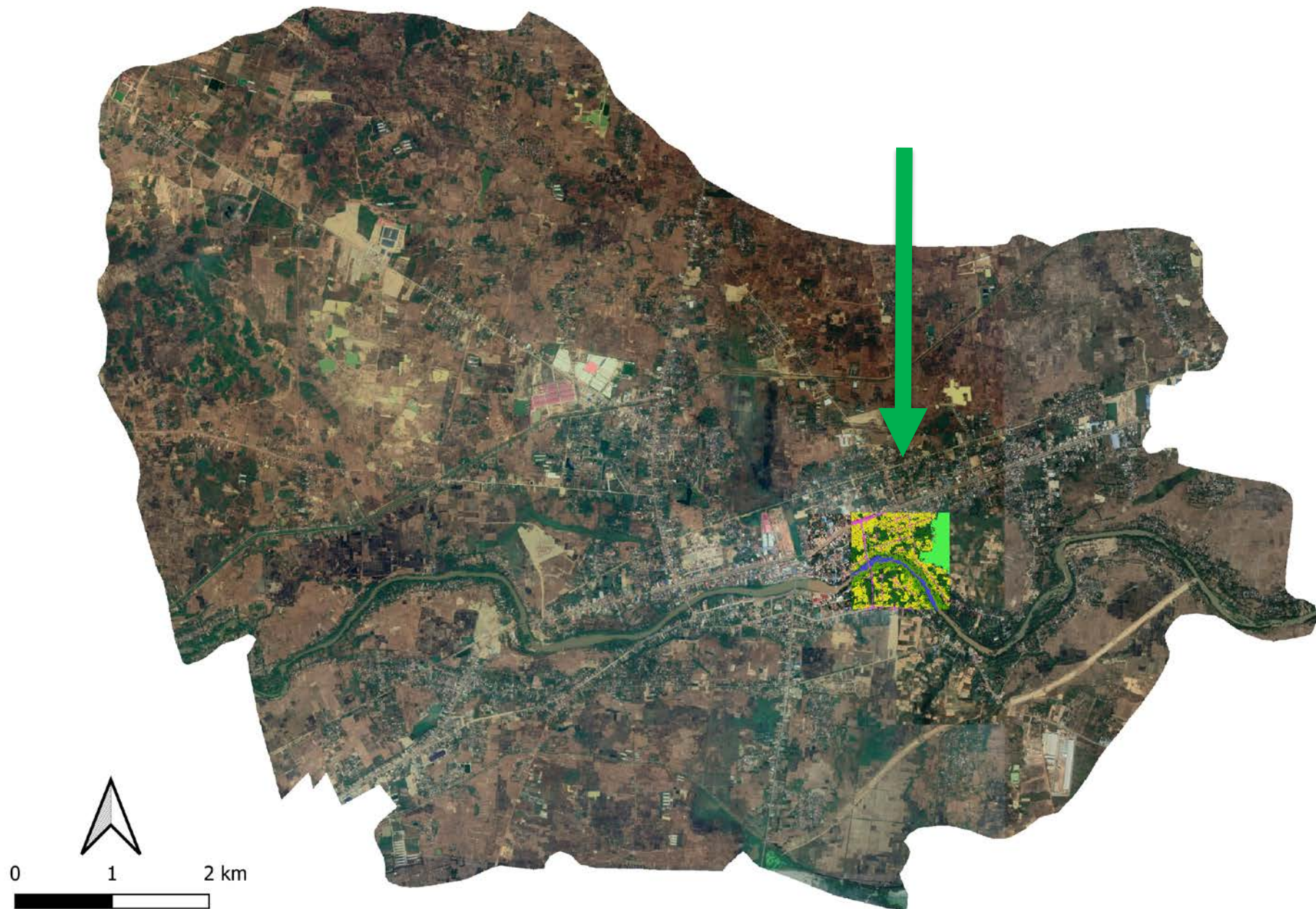
land types
- water
- rice field
- paved road
- vegetation
- trees
- buildings/houses

0   100   200 m

0   1   2 km

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- We have provided this classified raster and map of Chbar Mon town that we are interested in classifying by the land cover types we have defined

Coordinates of primary area (WGS84 in decimal degrees)

Top left

Lat: 11.524966

Lon: 104.43805

Top right

Lat: 11.524966

Lon: 104.60882

Bottom left

Lat: 11.396804

Lon: 104.43805

Bottom right

Lat: 11.396804

Lon: 104.60882

Useful free resources

- QGIS software (I recommend version 3.10) https://qgis.org/en/site/forusers/download.html
  - The QuickMapServices plugin will allow you to view satellite imagery from different sources

- Google Earth

- R cran software ("raster" package could be useful)

Other potential datasets

- Malaria on the Thailand-Myanmar border
- Melioidosis in Lao PDR

Acknowledgements

Thank you! Questions?