CASE STUDY

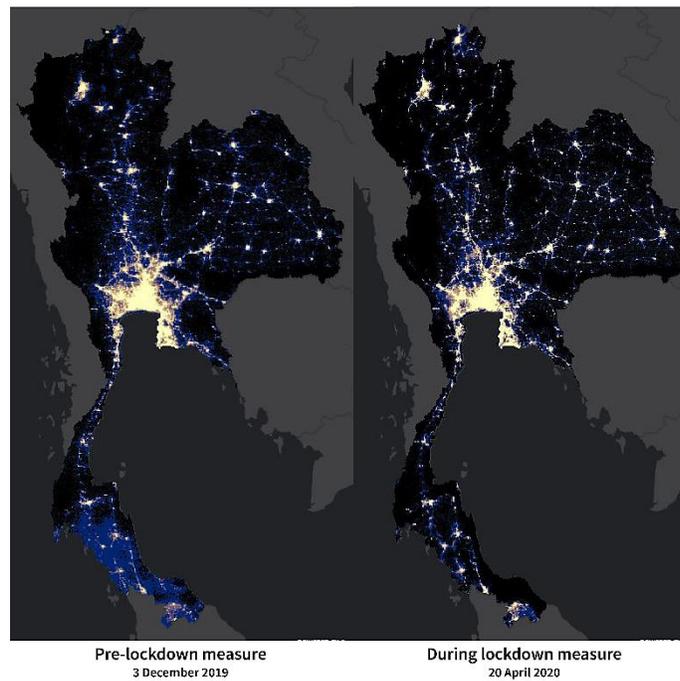# Lockdown Measure Impacts and COVID-19 iMAP Dashboard
Thailand

The Geo-Informatics and Space Technology Development Agency (GISTDA), in Thailand, used space applications to combat COVID-19, in particular to enable policymakers to utilize COVID-19 related data. GISTDA used space applications to monitor the COVID-19 situation and visualize the impact of the policies employed in the country. For example, GISTDA analysed reduced night-light images to monitor the impact from lock-down measures. A significant change can be seen in Figure 1 between the images from 3 December 2019 (pre-lockdown) and 20 April 2020 (post-lockdown measures).

Furthermore, GISTDA used satellite data to monitor nitrogen dioxide emissions and found that since the beginning of the year, most provinces in Thailand had less activities that caused emissions. These examples are some of the many sources of data for monitoring that were reported to the Thai Government.

Additionally, to support the Working Group on Data Integration and Analysis for the COVID-19 Situation, GISTDA developed a dashboard to integrate data so it can be summarized and linked to maps. This was useful for specific users, such as policymakers, and those in the field, in order to enable them to monitor the pandemic situation, medical capacity and supplies, consumer goods, and preventive and precautionary measures (Figure 2).

Figure 1. Reduced night light image of Thailand before and during the COVID-19 pandemic lockdown
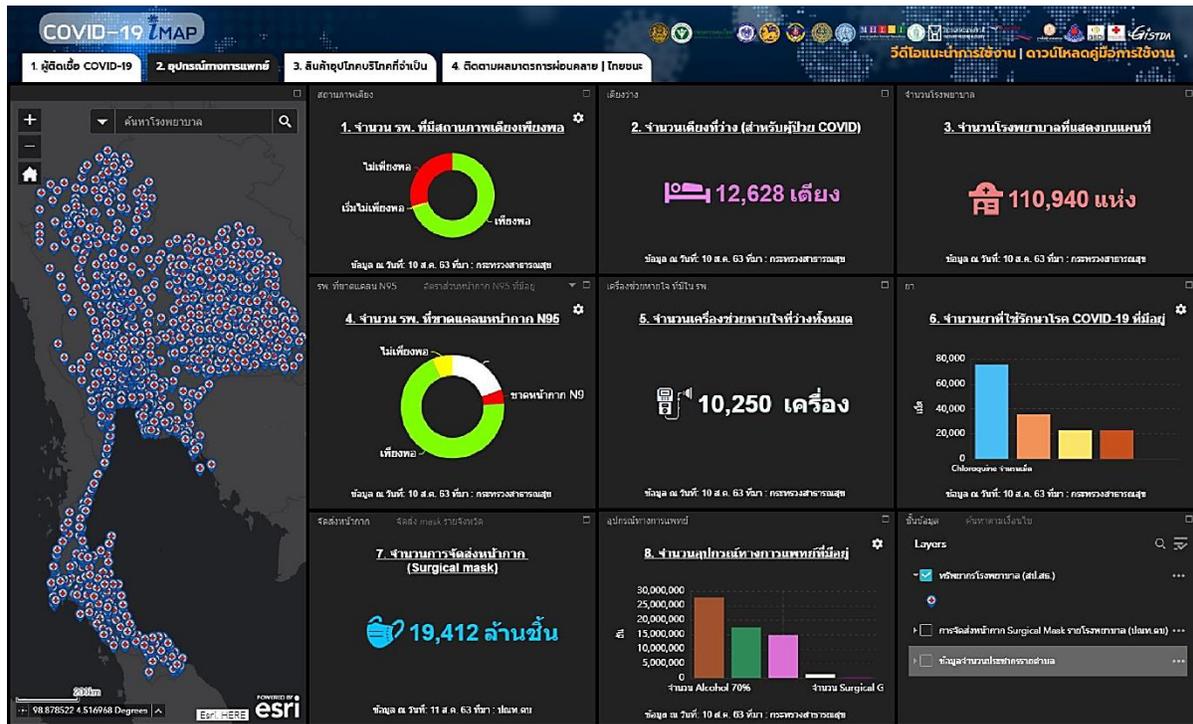

Pre-lockdown measure
3 December 2019

During lockdown measure
20 April 2020

Source: GISTDA

Disclaimer: *The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.*

Figure 2. COVID-19 iMAP dashboard, developed in Thailand

Source: GISTDA

Disclaimer: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Additional details and more practices like this can be found in *Geospatial Practices for Sustainable Development in Asia and the Pacific 2020: A Compendium*