In Thailand…

6.7 million people live within 20% of the national poverty line and are at risk of becoming impoverished if the economy slows. According to the latest economic model promoted by the Royal Thai Government, Thailand is trapped as a middle income nation. This means Thailand must overcome several economic challenges, such as the decrease of the economic growth rate and economic inequality. To have sustainable growth and development, it is key that the Royal Thai Government identifies poverty levels in order to create effective strategies and prevention plans during policy making. Previously, most studies of poverty in Thailand were conducted by deriving poverty indicators from statistical data and surveys. These have inaccuracies and are costly in terms of time and budget due to the nature of door-to-door surveys. This project introduced the use of night-time lights (NTL) from NASA’s Suomi National Polar-Orbiting Visible Infrared Imaging Radiometer Suite’s Day Night Band (Suomi NPP VIIRS DNB) from the years 2013 to 2015, to analyze poverty in Thailand. Studies measuring NTL emissions as a proxy for poverty indicators have been conducted in Africa and China. However, it has never been done in Thailand.

This project aimed to identify where poverty is occurring and what groups of the population are at risk through the use of satellite data. Additionally, the project explored how NTL intensity varies depending on a number of factors, such as seasons, distance from roads, distance from cities, and land-cover type. Monthly composite Suomi NPP VIIRS DNB products for 2013 to 2015 were used to create an enhanced poverty index. The final products of this project can serve as a basis for future poverty analysis research throughout surrounding Asian countries, and help inform and support poverty reduction, and aid poverty relief efforts.

When: Tuesday, August 15, 2017
Where: OSU’s Page Hall, Room 130
Time: 9:30 - 10:30 am
Other: Coffee and Donuts Provided!!!
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