

An aerial photograph of a city skyline at sunset. The sun is low on the horizon, casting a golden glow over the city and reflecting on a river in the foreground. The city features a mix of modern high-rise buildings and lower-density urban areas. The sky is filled with soft, golden clouds.

LONG-TERM INTEGRATED SUSTAINABLE DEVELOPMENT PLANNING, THAILAND DELINATING URBAN AND RURAL

Ms. Kanjana Phumelee
Chief of Statistical Standard.
NSO, Thailand.

Source: Culture Trip, A great place to work, © [Mike Behnken/Flickr](#)

SDGs and The 20-Year National Strategy



A municipal area is a legal unit established by the Royal Decree of the 1953 Municipality Act.

There are three types of municipalities.

Urban Areas

City Municipal

areas with a population of at least 50,000 persons, and with tax revenues sufficient for the execution of municipal affairs.

Town Municipal

areas where they have a population of at least 10,000 persons and with sources of tax revenue sufficient for the execution of municipal affairs.

Subdistrict (Tombon) Municipal

the lowest level municipal unit, is no specific numerical criterion exists for places designated as tambon municipalities. Many of today's subdistrict municipalities were originally sanitation districts where they have a population of at least 7,000 persons and population density 1,500 inhabitant per km², with tax revenues 35,000 US dollars/year approximately.

With the Act to Upgrade Sanitary Districts to municipality of May 1999, though many of them did not actually meet the criteria above.

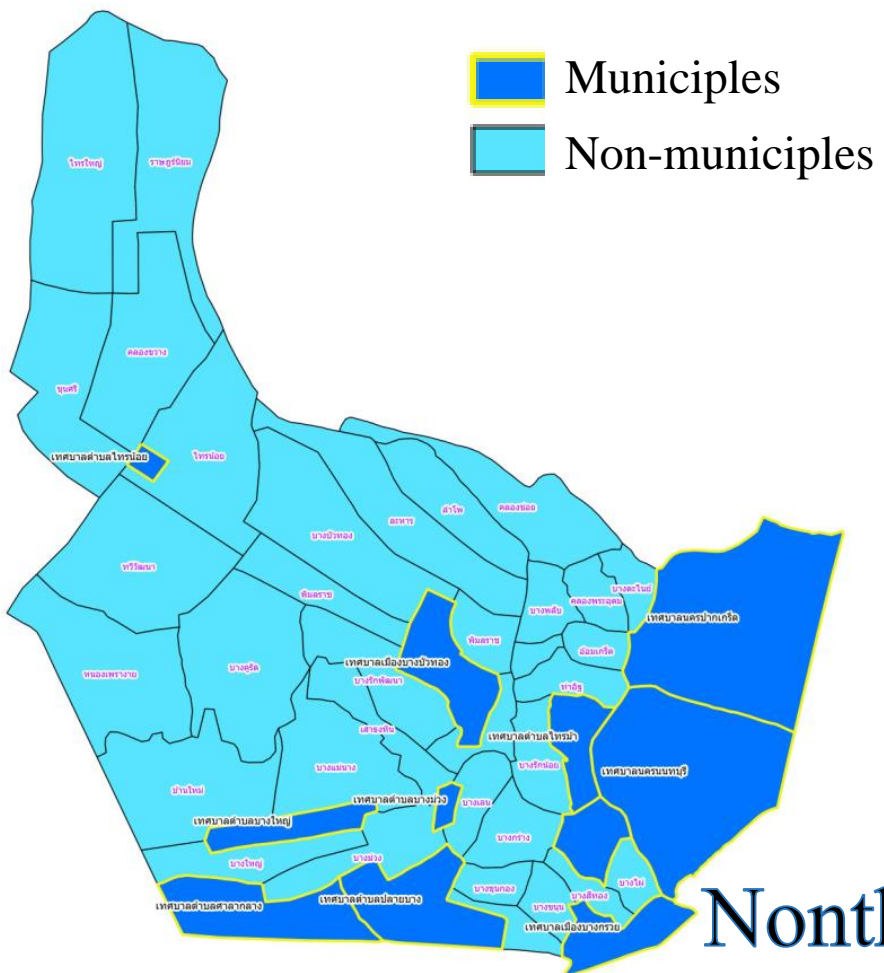
Rural Areas

Subdistrict Administrative Organization (SAO)

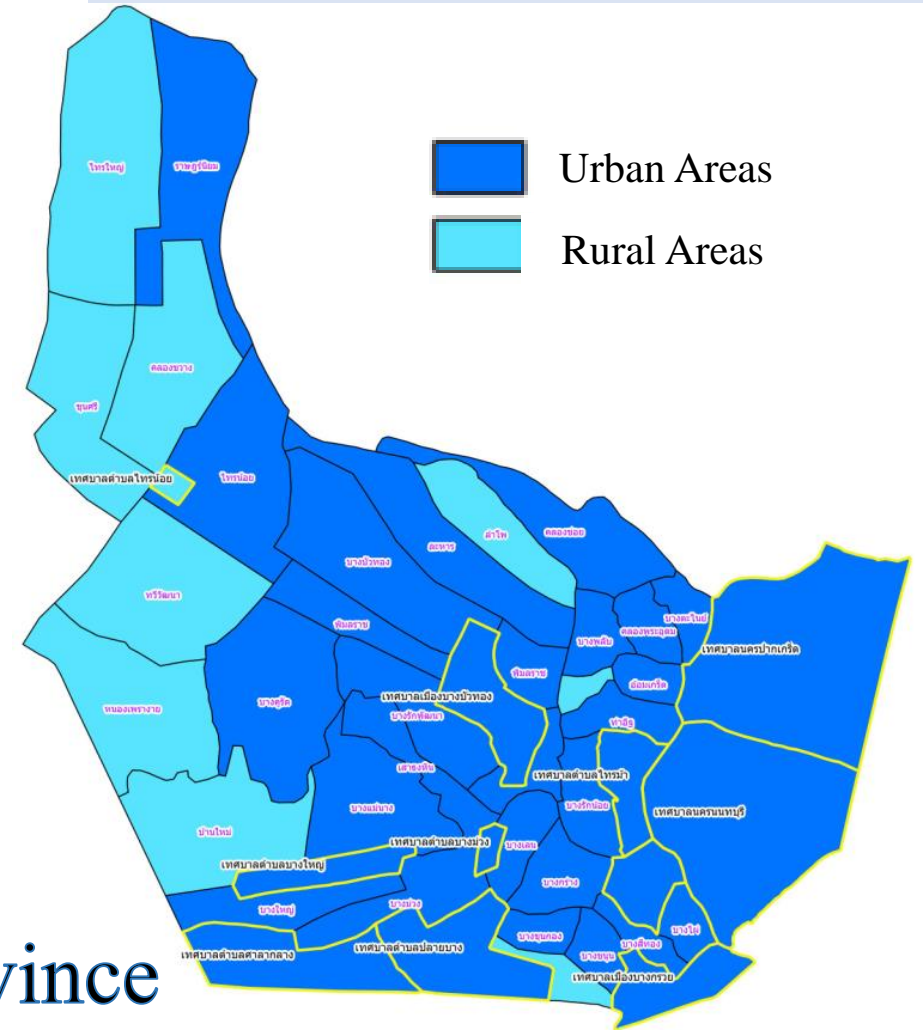
Rest of the areas not meet three kinds of municipal criteria.

Comparability between urban and rural areas by using administrative criteria and density of population criteria

Administrative criteria



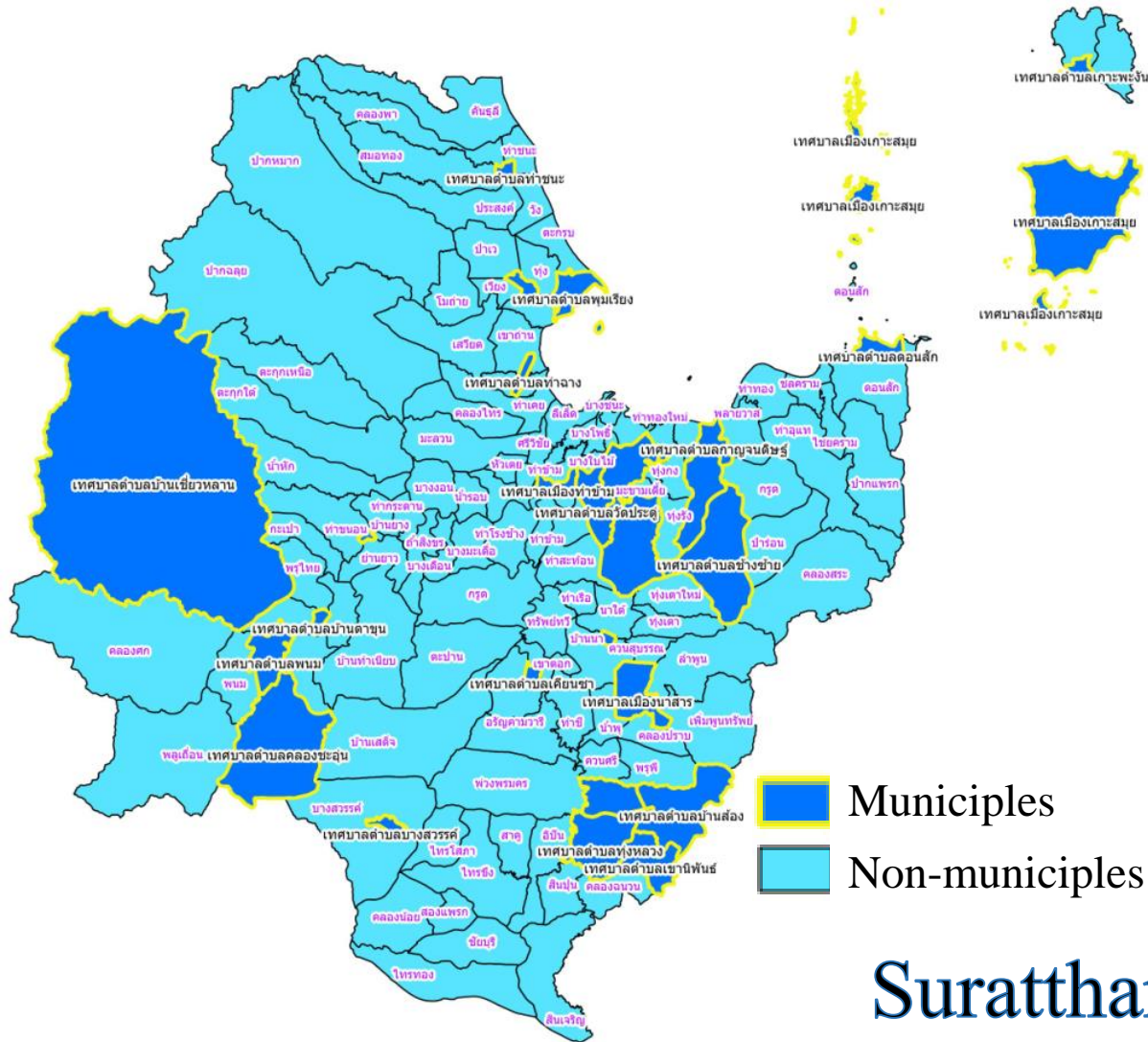
Density of population criteria (> 400 inhabitants/ km^2)



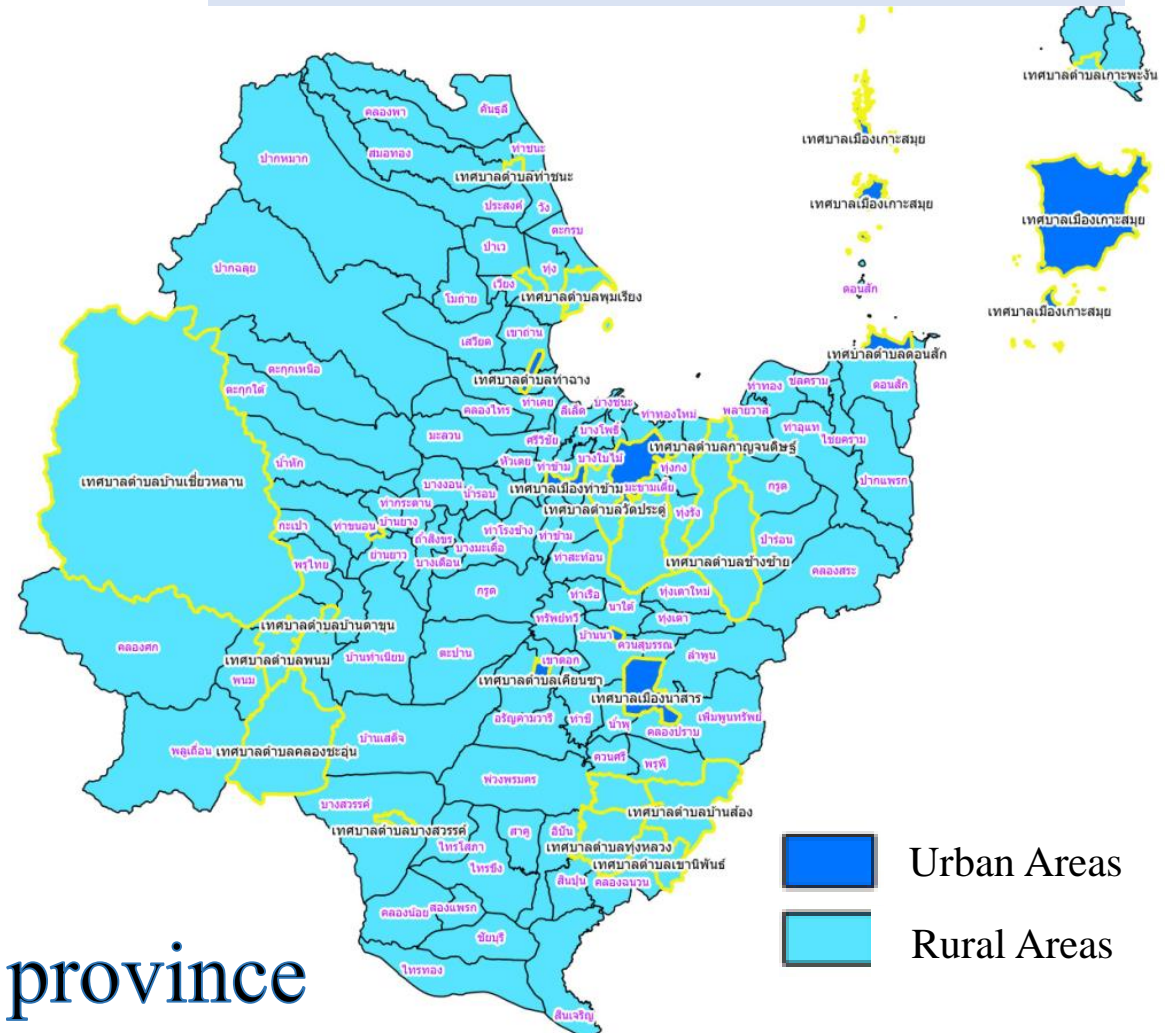
Nonthaburee province

Comparability between urban and rural areas by using administrative criteria and density of population criteria

Administrative criteria



Density of population criteria (> 400 inhabitants/ km^2)



Suratthaneeprovince

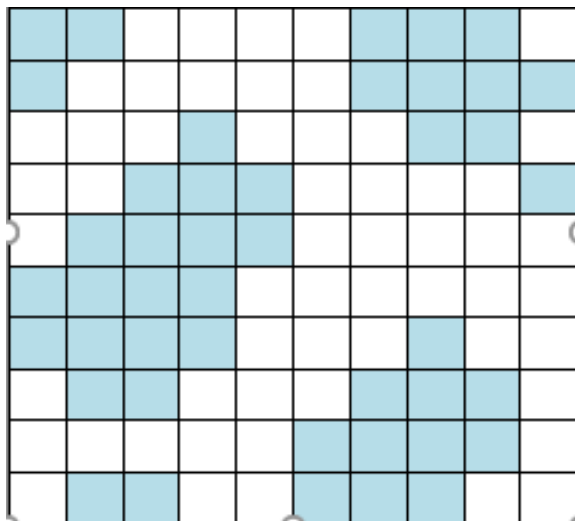
Major factors for defining urban and rural.

- population density inhabitant per km² and
- number of population in municipal and non-municipal areas.

Problems.

Size of each area (municipal and non-municipal) are obviously vary.

This new approach also uses the criterion of population density but applied to units of analysis of the same size.



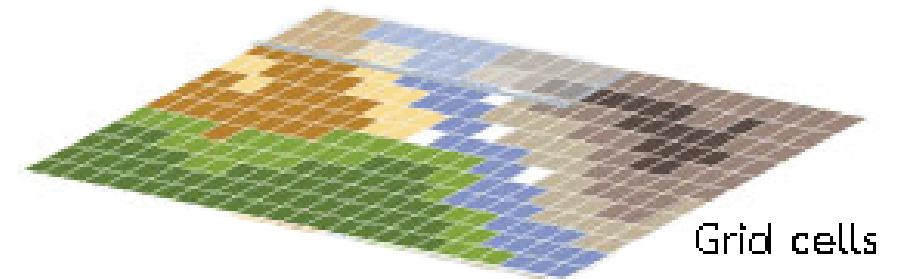
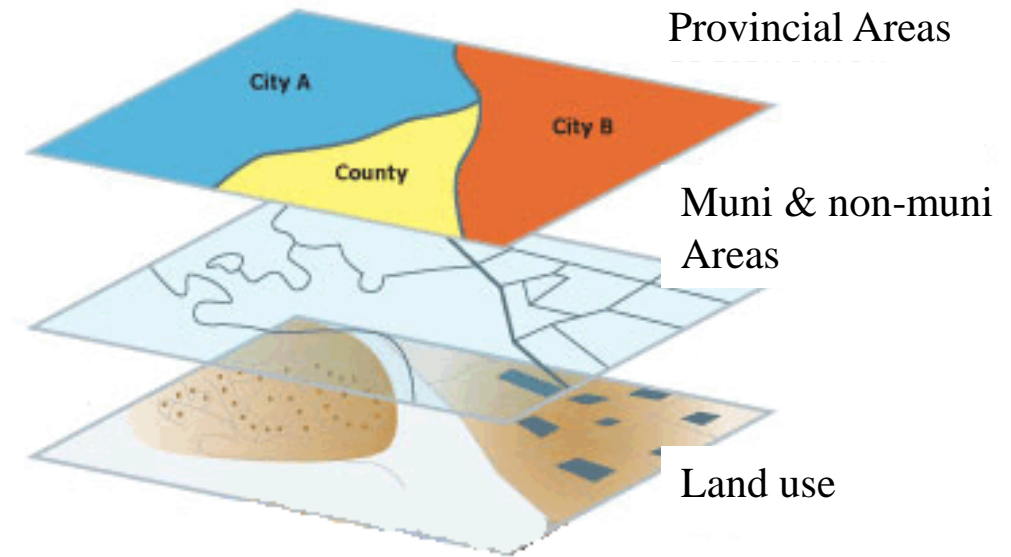
1 km² grid cells

Applying methodology for down-scaling POP Census statistic for use in measuring population exposure to hazard developed by UNESCAP

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Source of data.

Lists of data	Sources of data
1. Number of population by municipal and non-municipal area	- Population and Housing Census, NSO
2. Province, municipal and non-municipal area	<ul style="list-style-type: none"> - NSO - Department of Provincial Administration - Department of Local Administration
3. Land use	<ul style="list-style-type: none"> - GISTDA - Department of Land Development
4. GUF (Global Urban Footprint)	- Earth observation Center (provided by UNESCAP) for improve quality of data



Applying methodology for down-scaling POP Census statistic for use in measuring population exposure to hazard developed by UNESCAP

Nonthaburee province



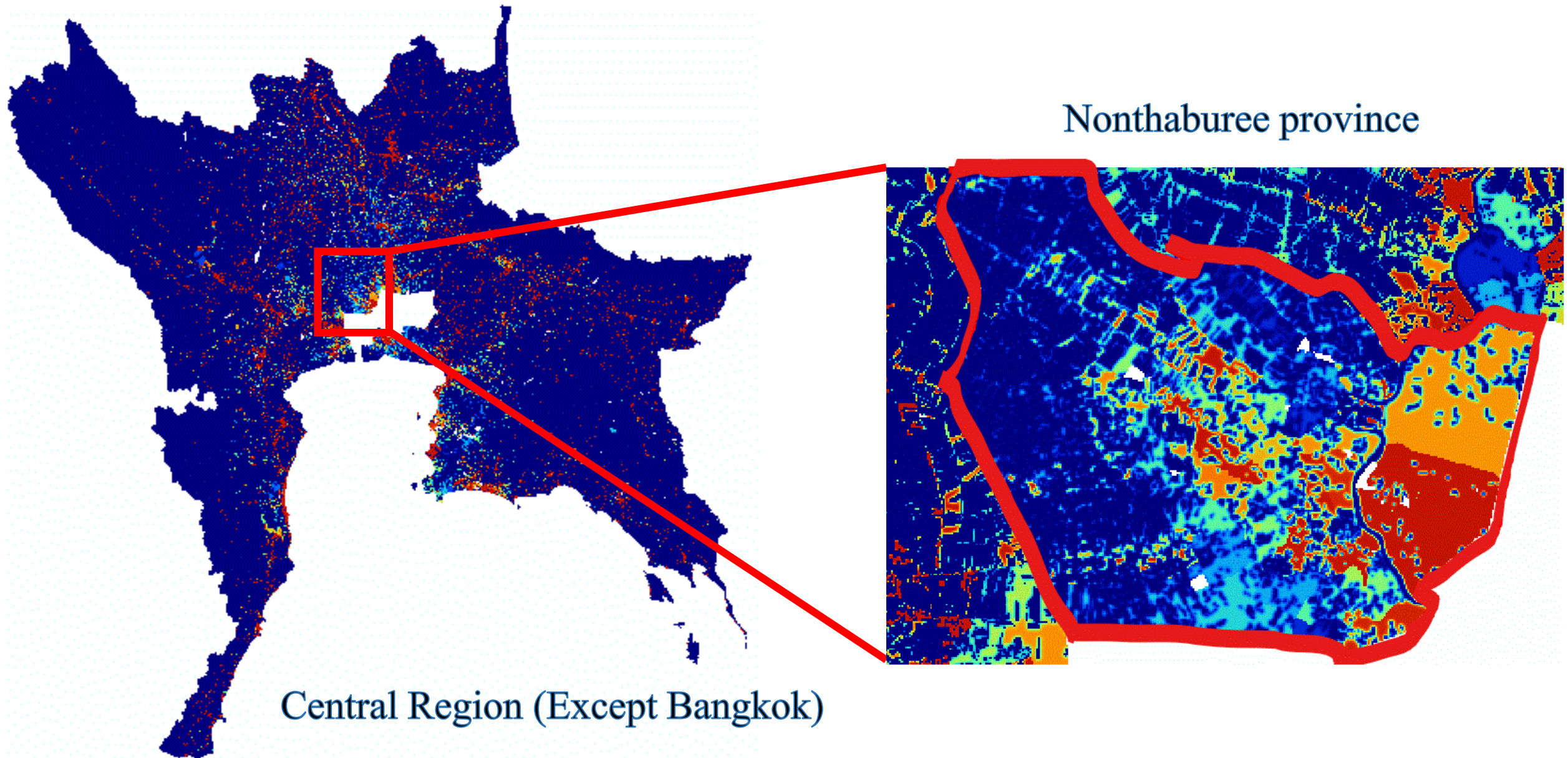
Provincial Areas

Muni & non-muni Areas

Land use in grid cells

Smoothed coefficient values
range from 0.0001 to 1.0000

Applying methodology for down-scaling POP Census statistic
for use in measuring population exposure to hazard developed by UNESCAP



DELINATING URBAN AND RURAL

The way forward

- Study and test methodology for clustering group of grid cells to be urban and rural areas
- Improve quality of used data
- Find more kinds of data to improve the urban and rural model more accuracy
- Meeting with stakeholder to make the model fit for their uses
- Bring the new update population data form the next POP census in 2020
- Conduct special survey to check quality of new urban and rural data in some areas.