

การจัดประชุมกลุ่มย่อย

โครงการศึกษาผลกระทบจากการเปลี่ยนแปลงและความแปรปรวนของสภาพภูมิอากาศ
ในอนาคต ความล่อแหลม เปราะบางและการปรับตัวของภาคส่วนที่สำคัญ

ทรรพยากรน้ำ (แผนที่ความเปราะบาง)

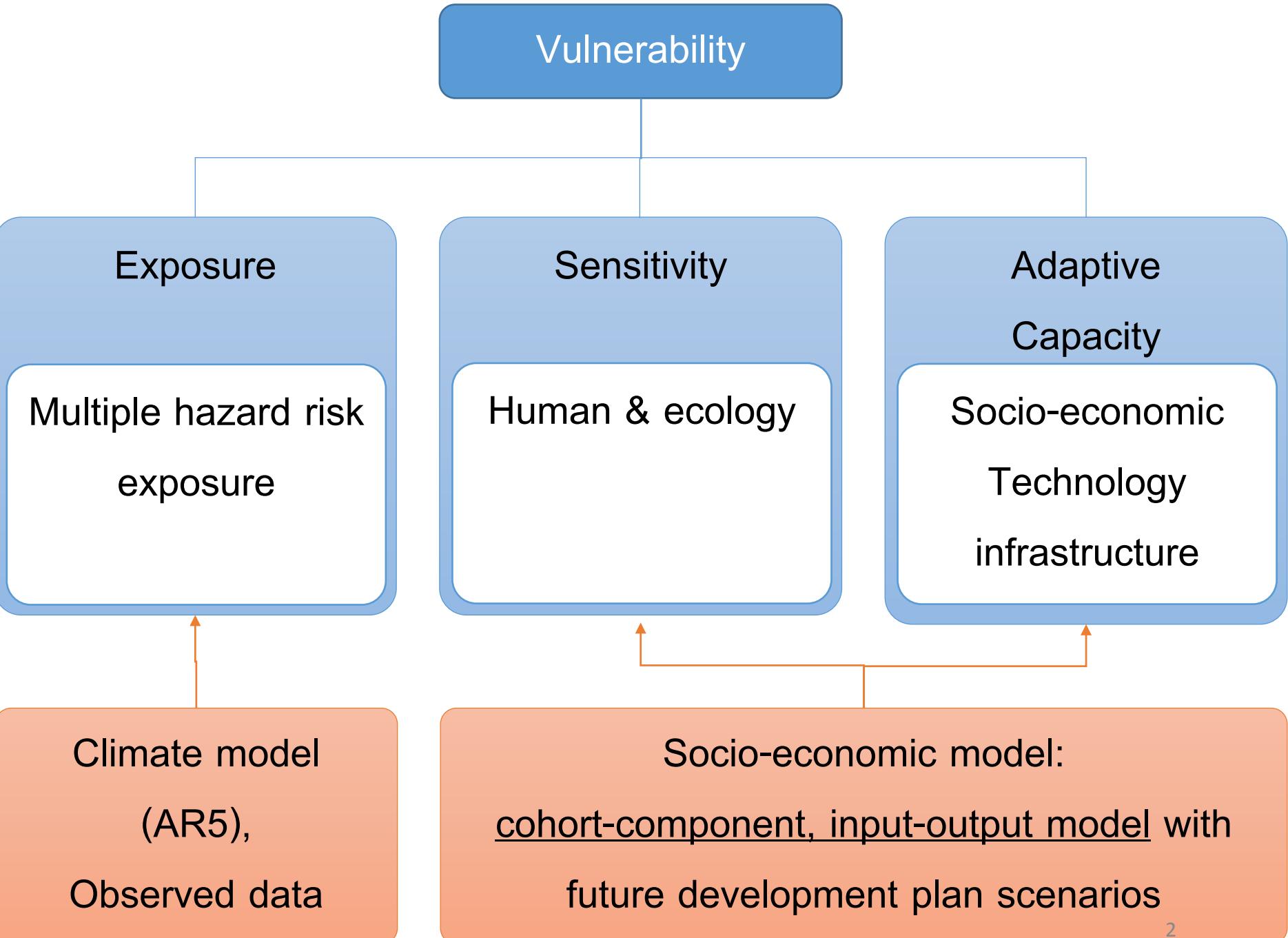
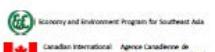
วันอังคารที่ 22 กันยายน พ.ศ. 2558

ณ ห้องบุษบา ชั้น 1 โรงแรมแมนดาริน พระราม 4 เขตบางรัก กรุงเทพฯ 10500



Climate Change
Vulnerability Mapping
for Southeast Asia

Arief Anshory Yusuf & Herminia Francisco

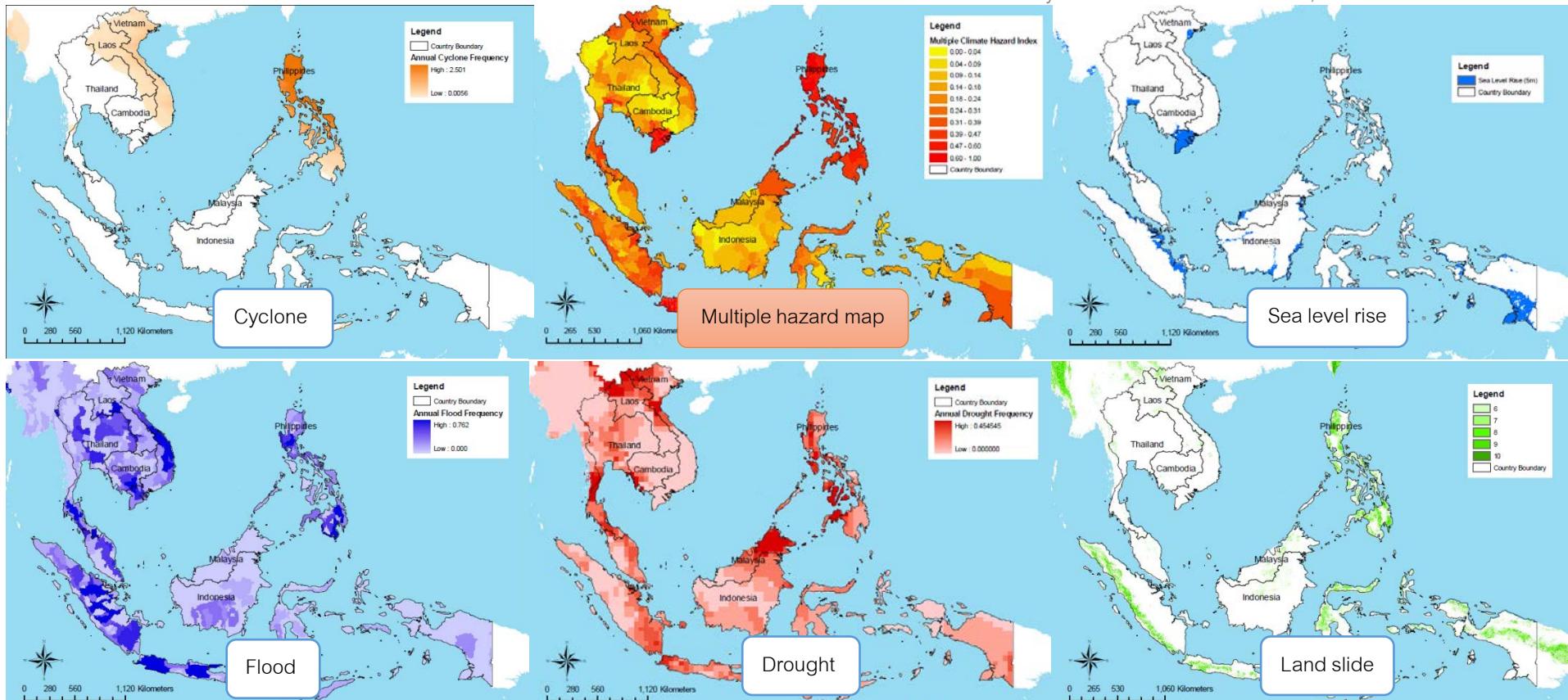


Exposure

Exposure is defined by IPCC as “the nature and degree to which a system is exposed to significant climatic variations”

Multiple hazard = f (Cyclone, Flood, Drought, Land slide, Sea level rise), weight = 0.2

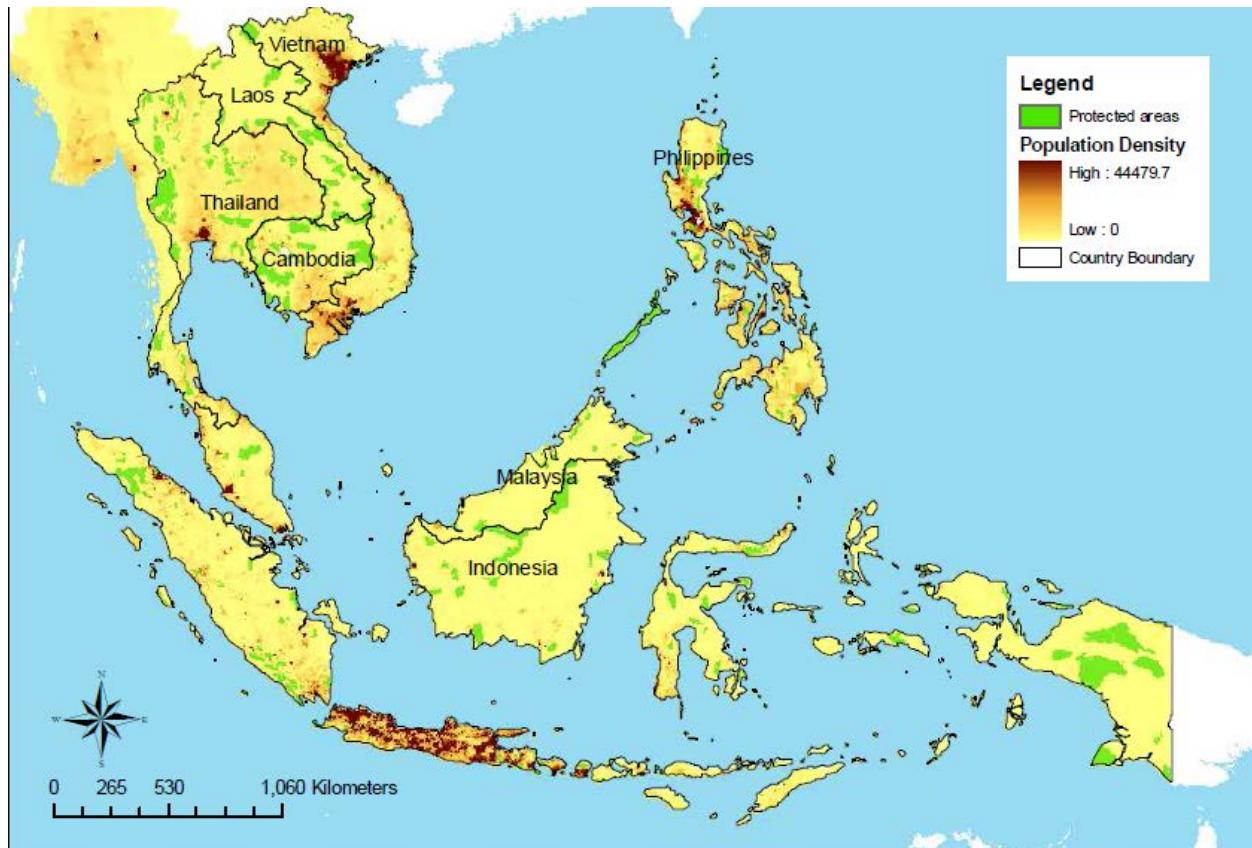
Source: Arief Anshory Yusuf & Herminia Francisco, 2009



Sensitivity

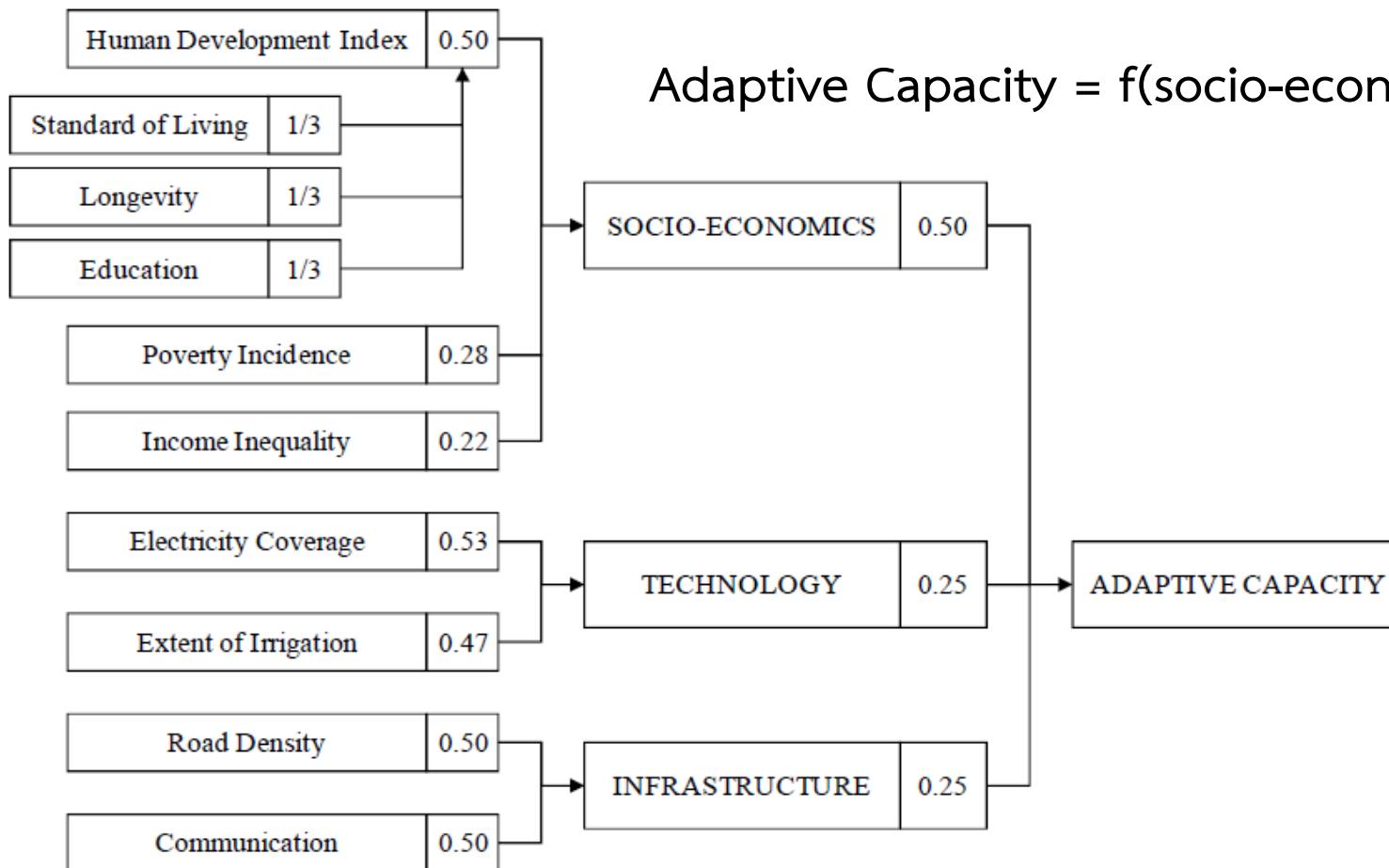
Sensitivity is defined as “the degree to which a system is affected, either adversely or beneficially, by climate-related stimuli” (IPCC)

Sensitivity = f (Human & ecology), weight = 0.7, 0.3

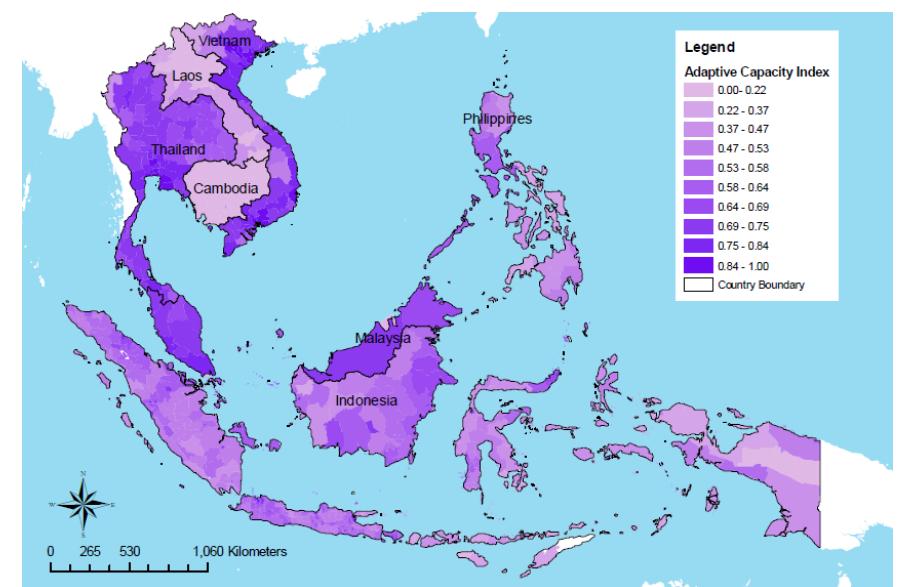


Adaptive capacity

Adaptive capacity is defined as “the ability of a system to adjust to climate change (including climate variability and extremes), to moderate the potential damage from it, to take advantage of its opportunities, or to cope with its consequences”. (IPCC)



Adaptive Capacity = f(socio-economic factors, technology, infrastructure),
weight = 0.5, 0.25, 0.25

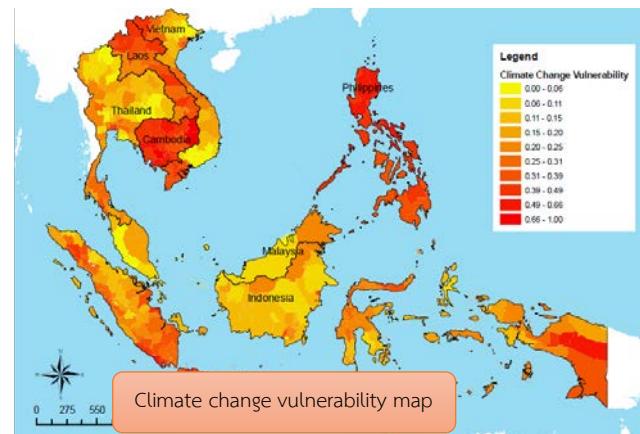


Source: Arief Anshory Yusuf & Herminia Francisco, 2009

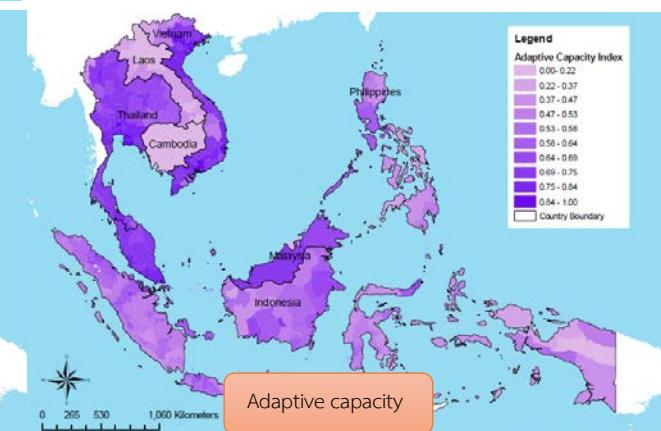
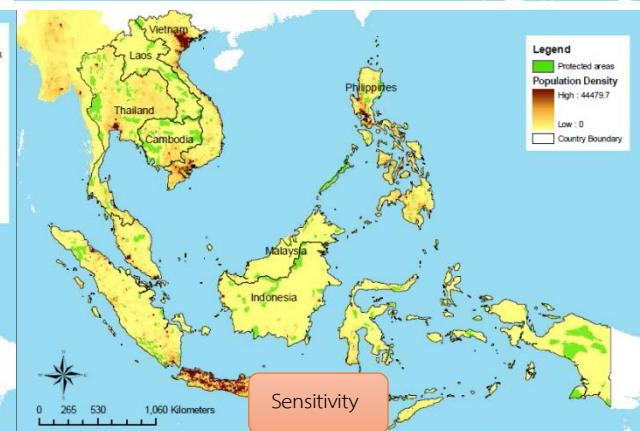
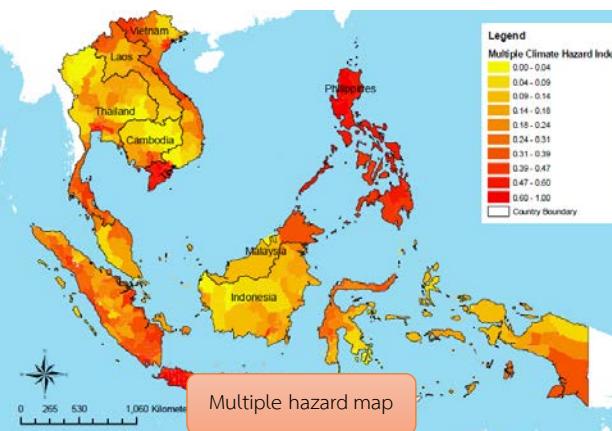
Vulnerability

Vulnerability is defined as: “The degree to which a system is susceptible to, or unable to cope with the adverse effects of climate change, including climate variability and extremes. Vulnerability is a function of the character, magnitude, and rate of climate variation to which a system is exposed, its sensitivity, and its adaptive capacity” (IPCC)

$$\text{Vulnerability} = f(\text{exposure}, \text{sensitivity}, \text{adaptive capacity}), \text{ weight} = 1/3$$



Source: Arief Anshory Yusuf &
Herminia Francisco, 2009



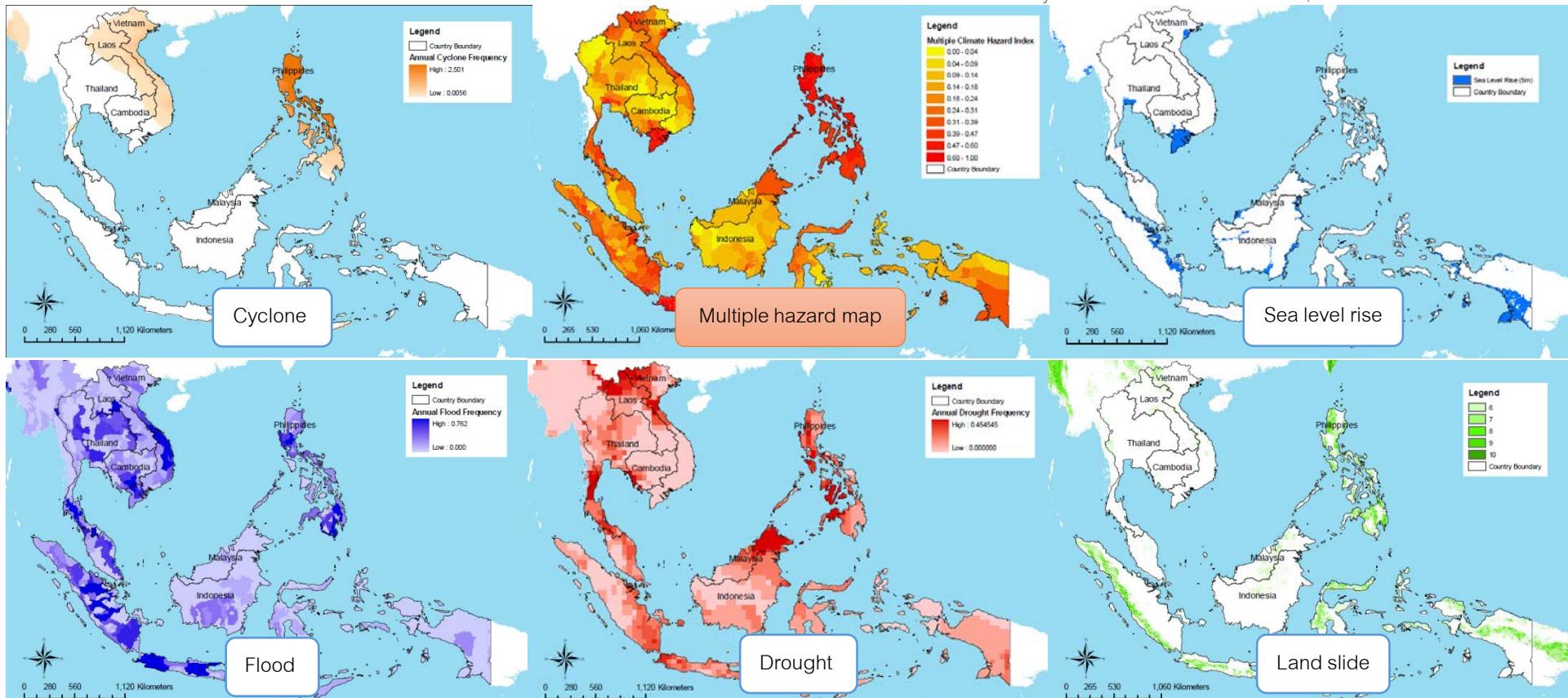
End of part II

Exposure

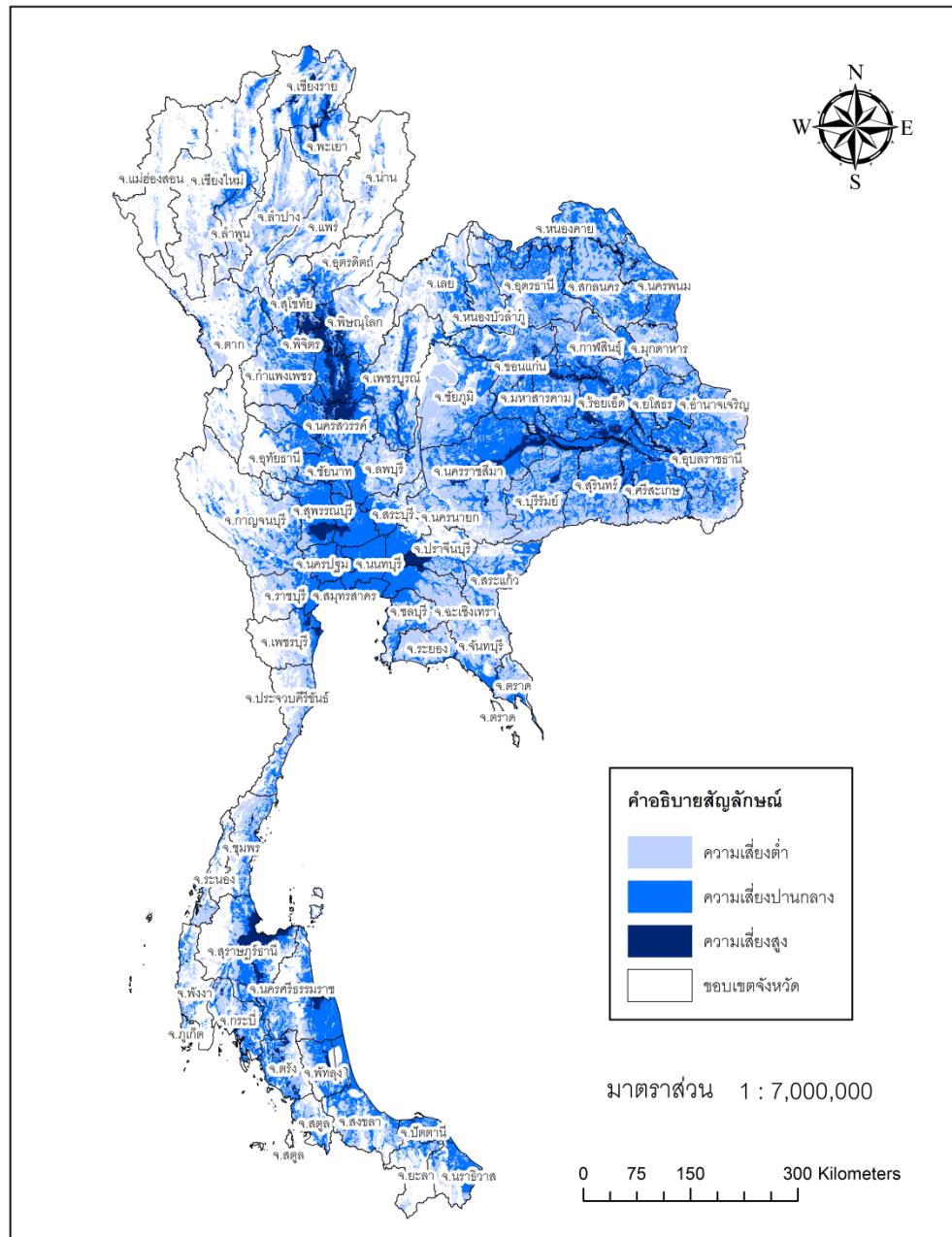
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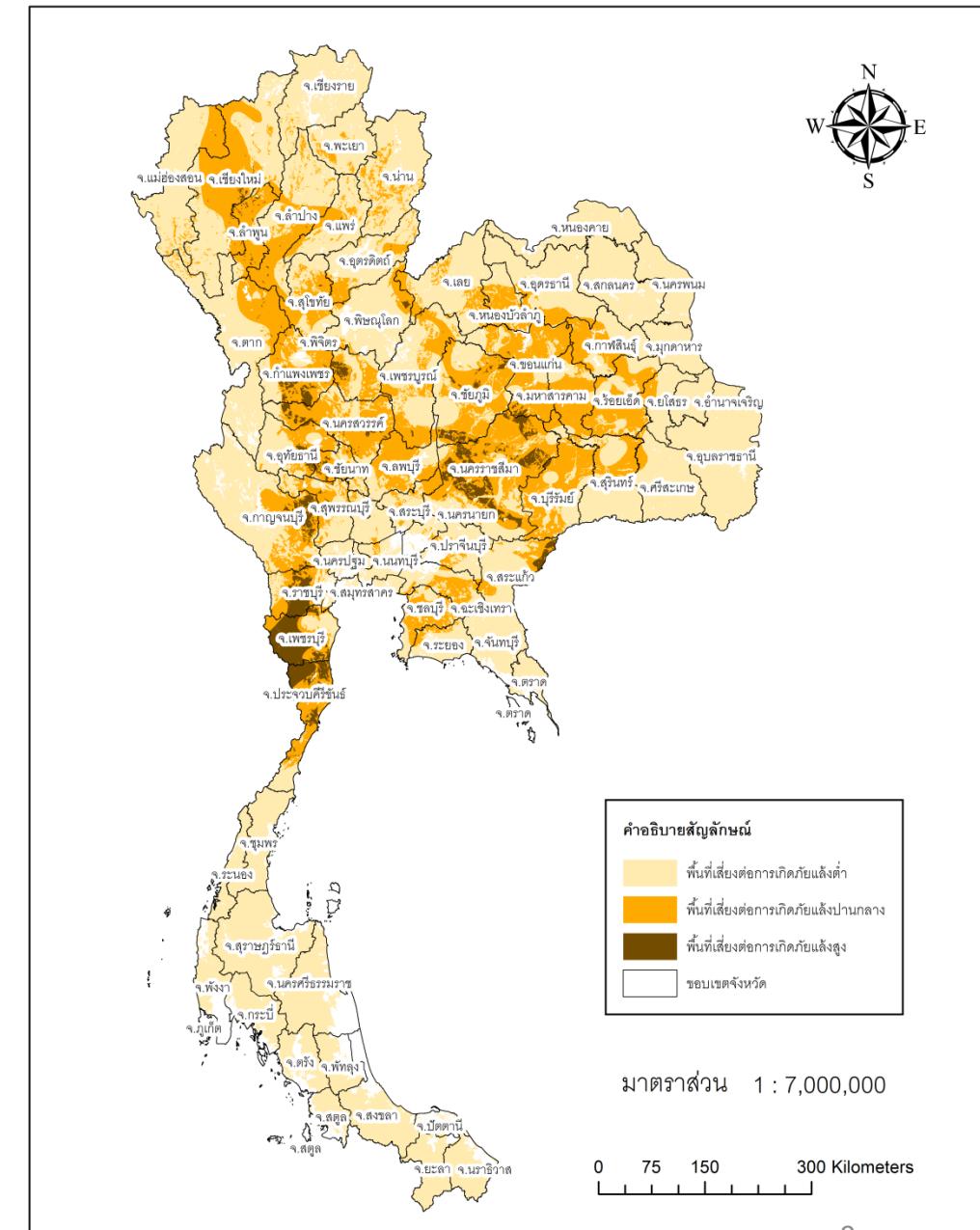
Source: Arief Anshory Yusuf & Herminia Francisco, 2009



แผนที่แสดงพื้นที่เสี่ยงภัยพิบัติ (น้ำท่วม)



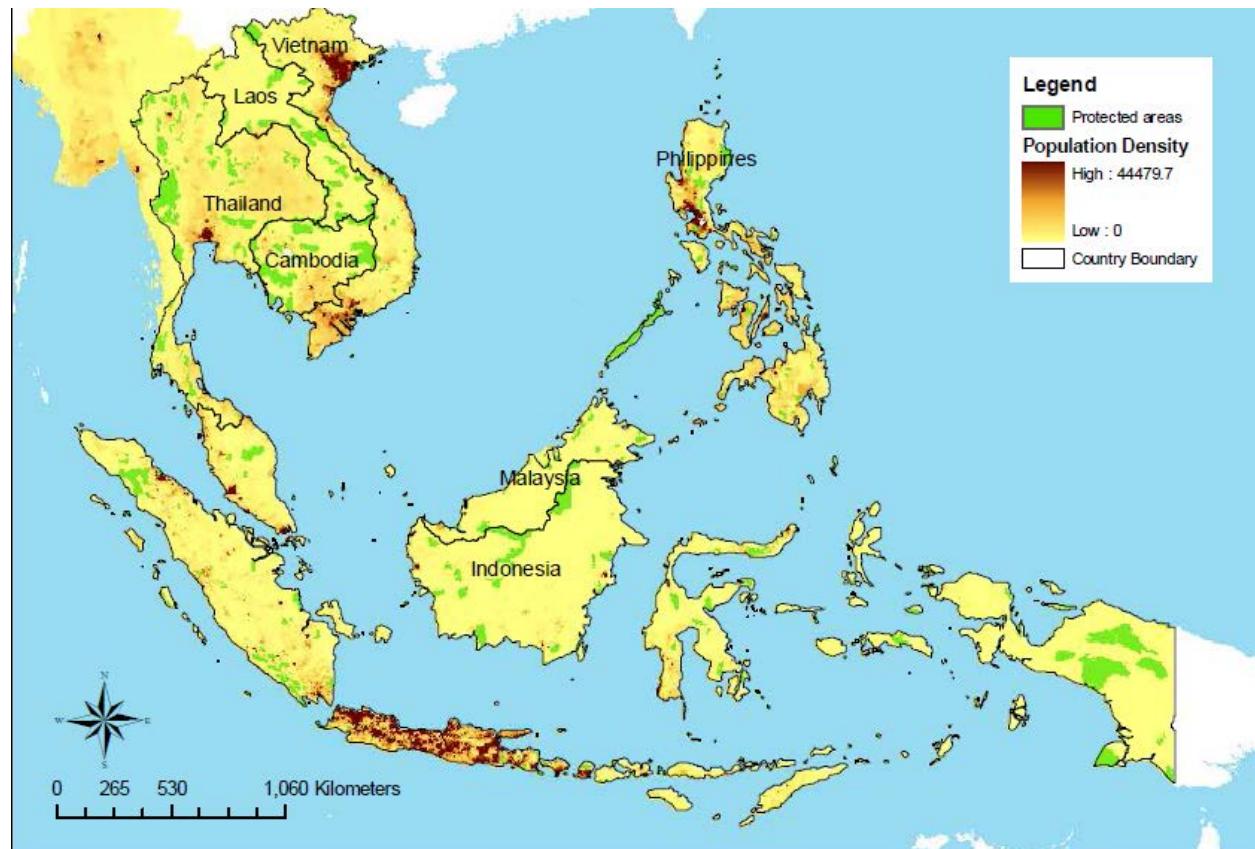
แผนที่แสดงพื้นที่เสี่ยงภัยพิบัติ (แล้ง)



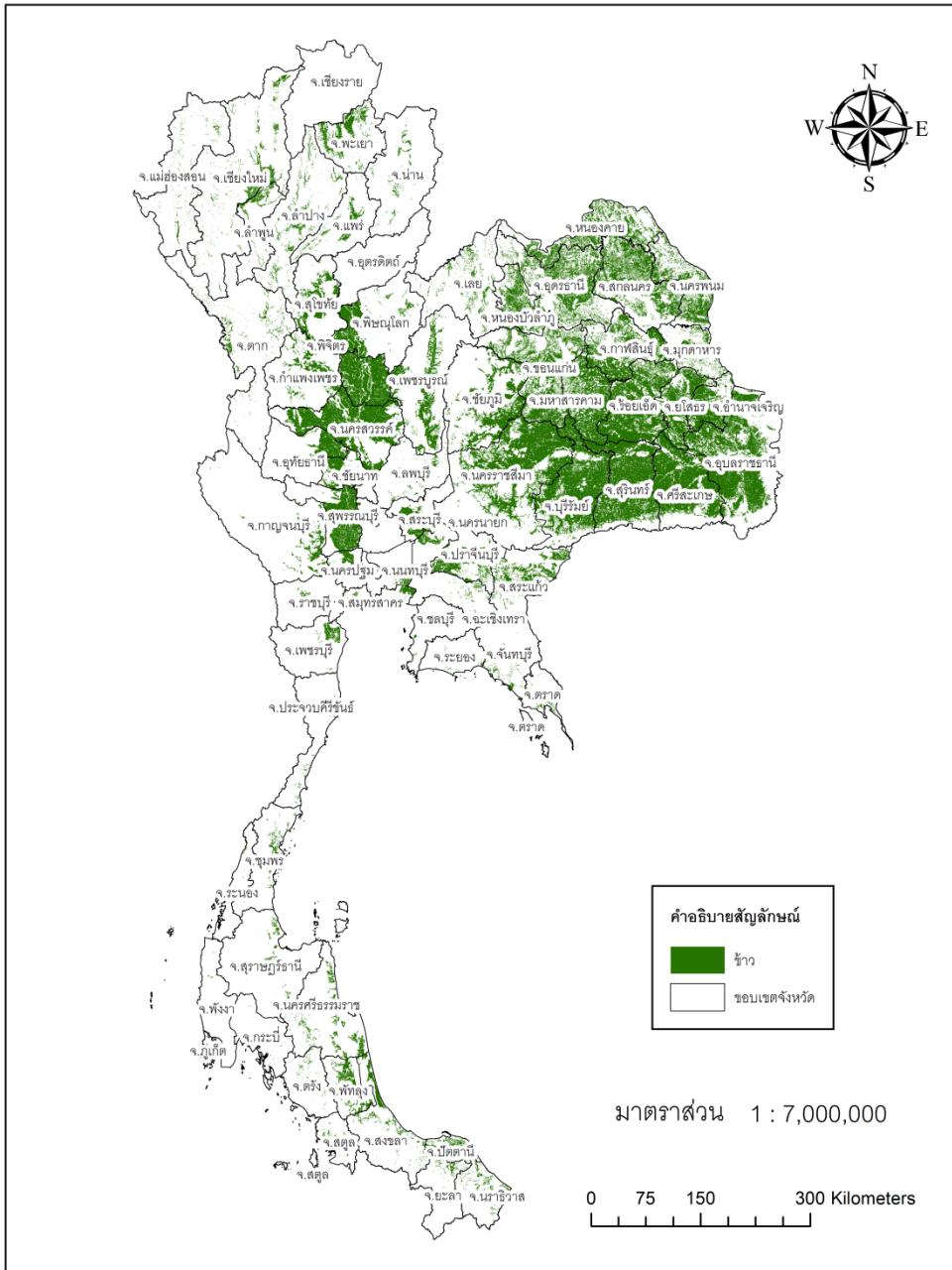
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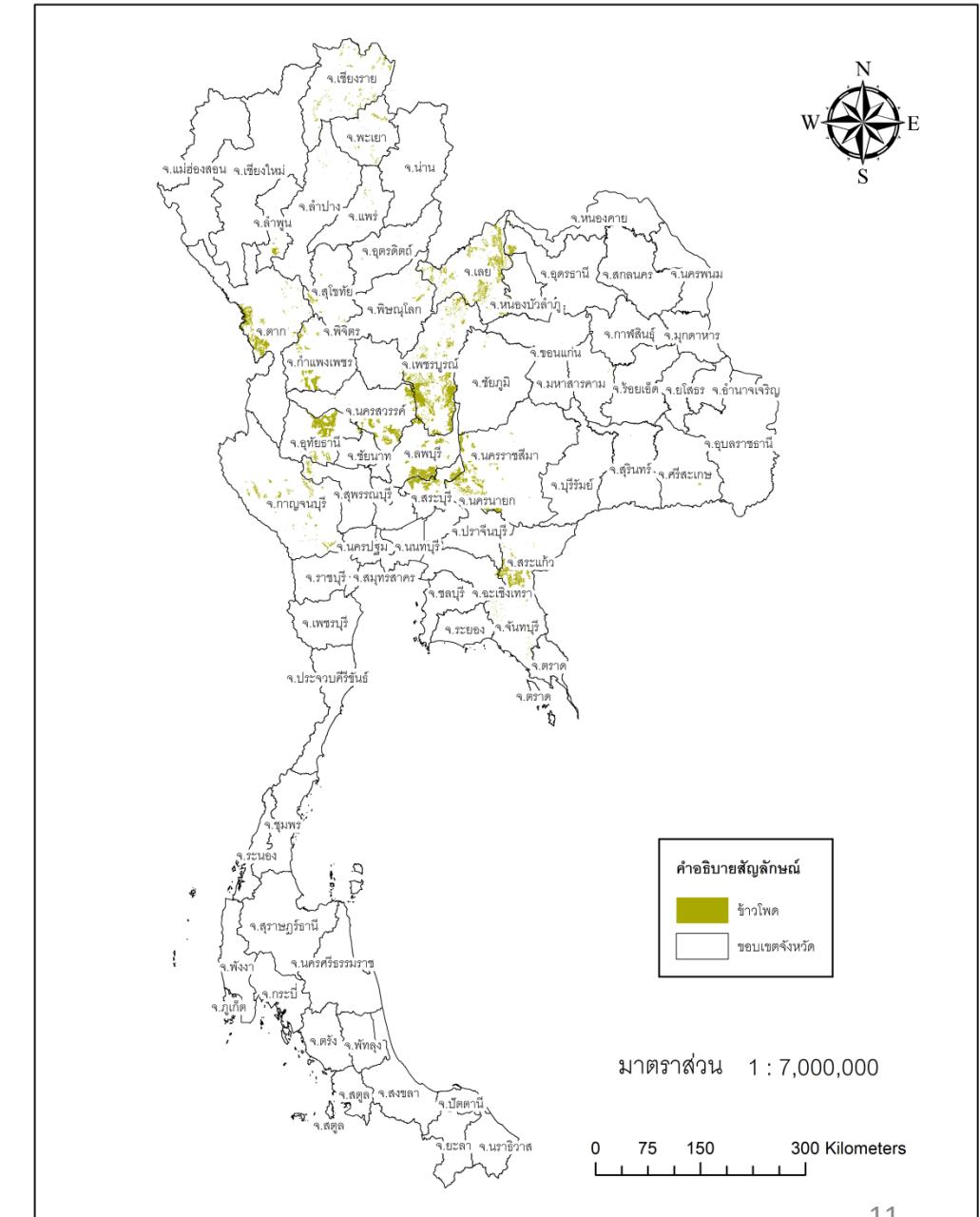
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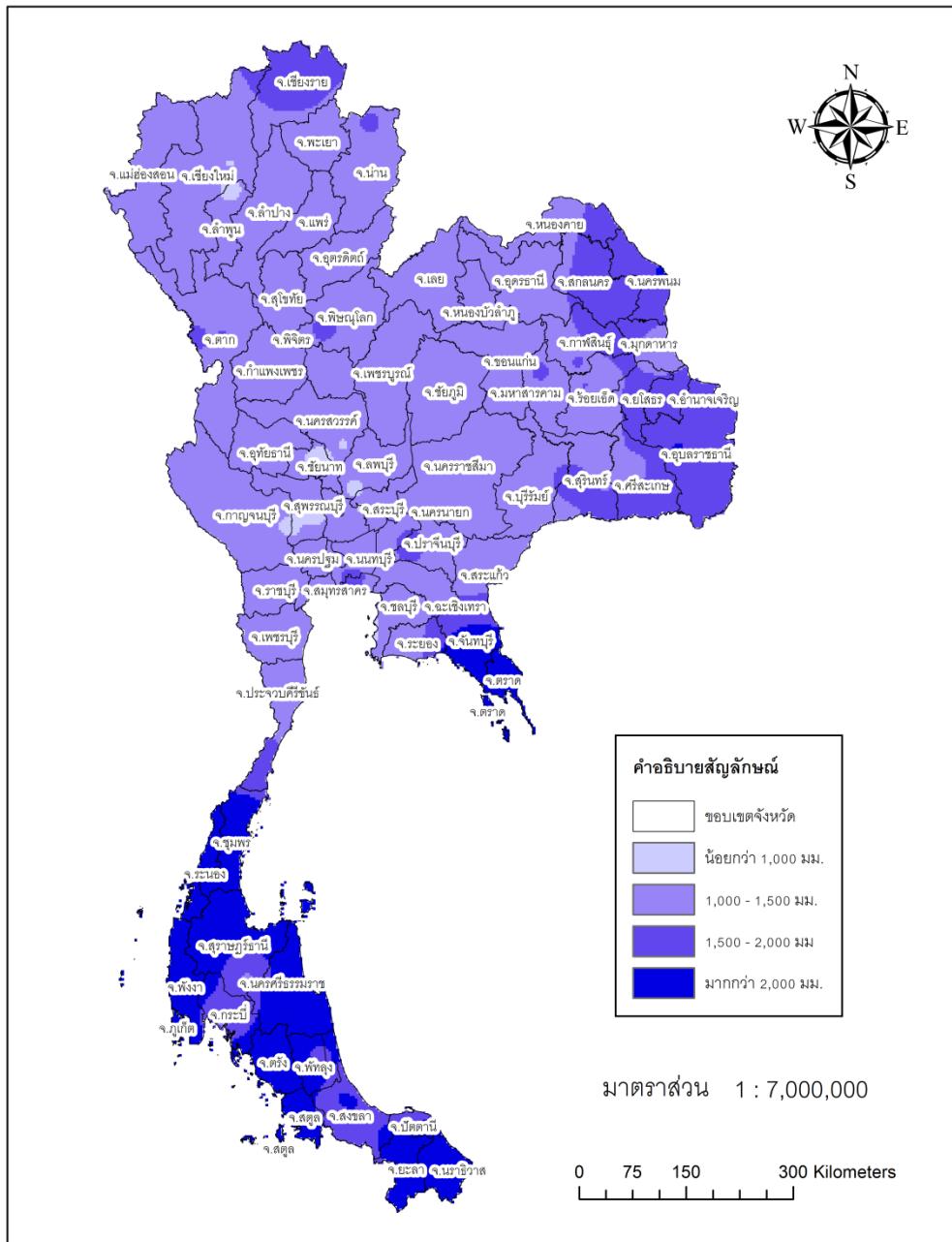
แผนที่แสดงพื้นที่ปลูกข้าว



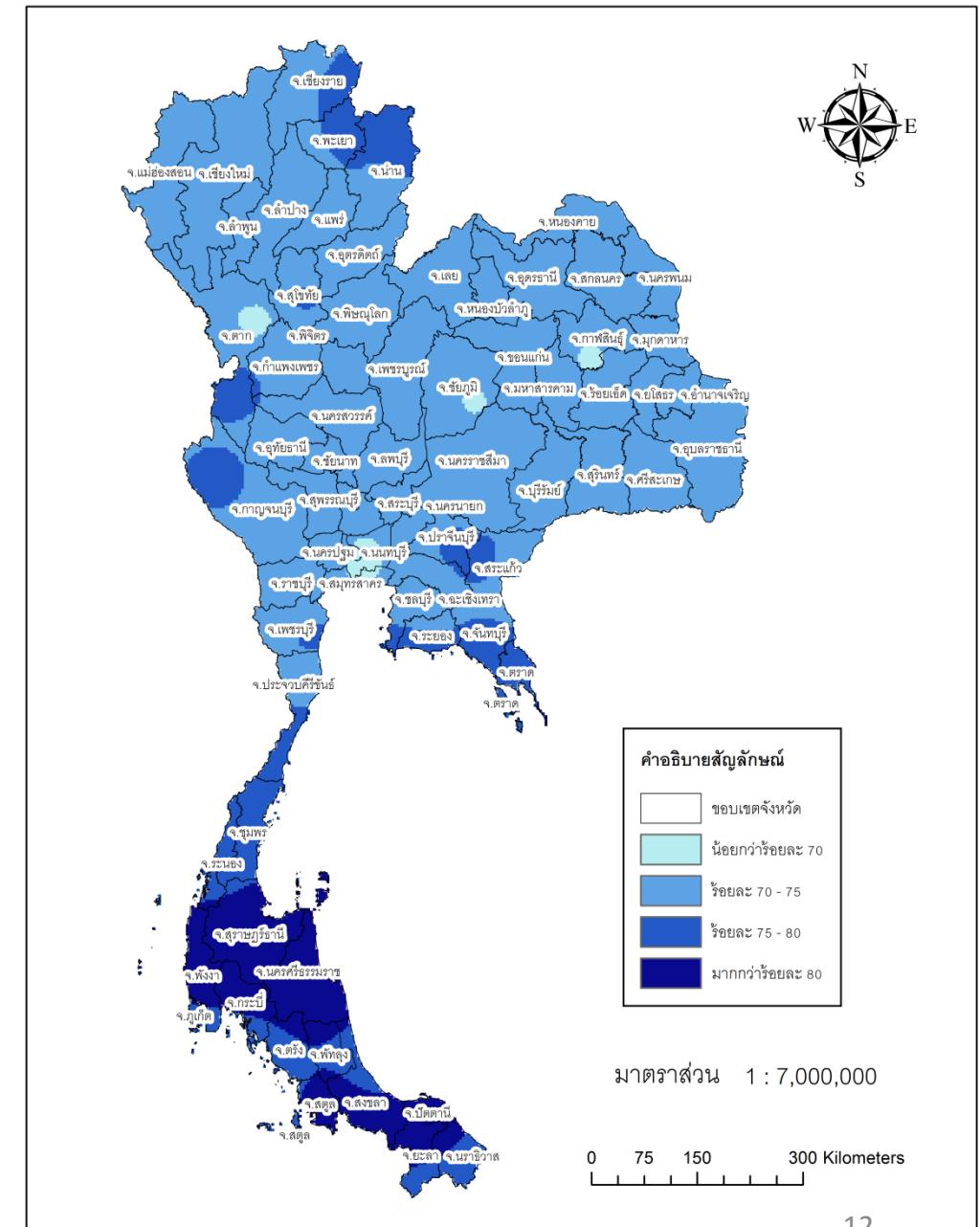
แผนที่แสดงพื้นที่ปลูกข้าวโพด



แผนที่แสดงปริมาณฝนปี พ.ศ. 2550

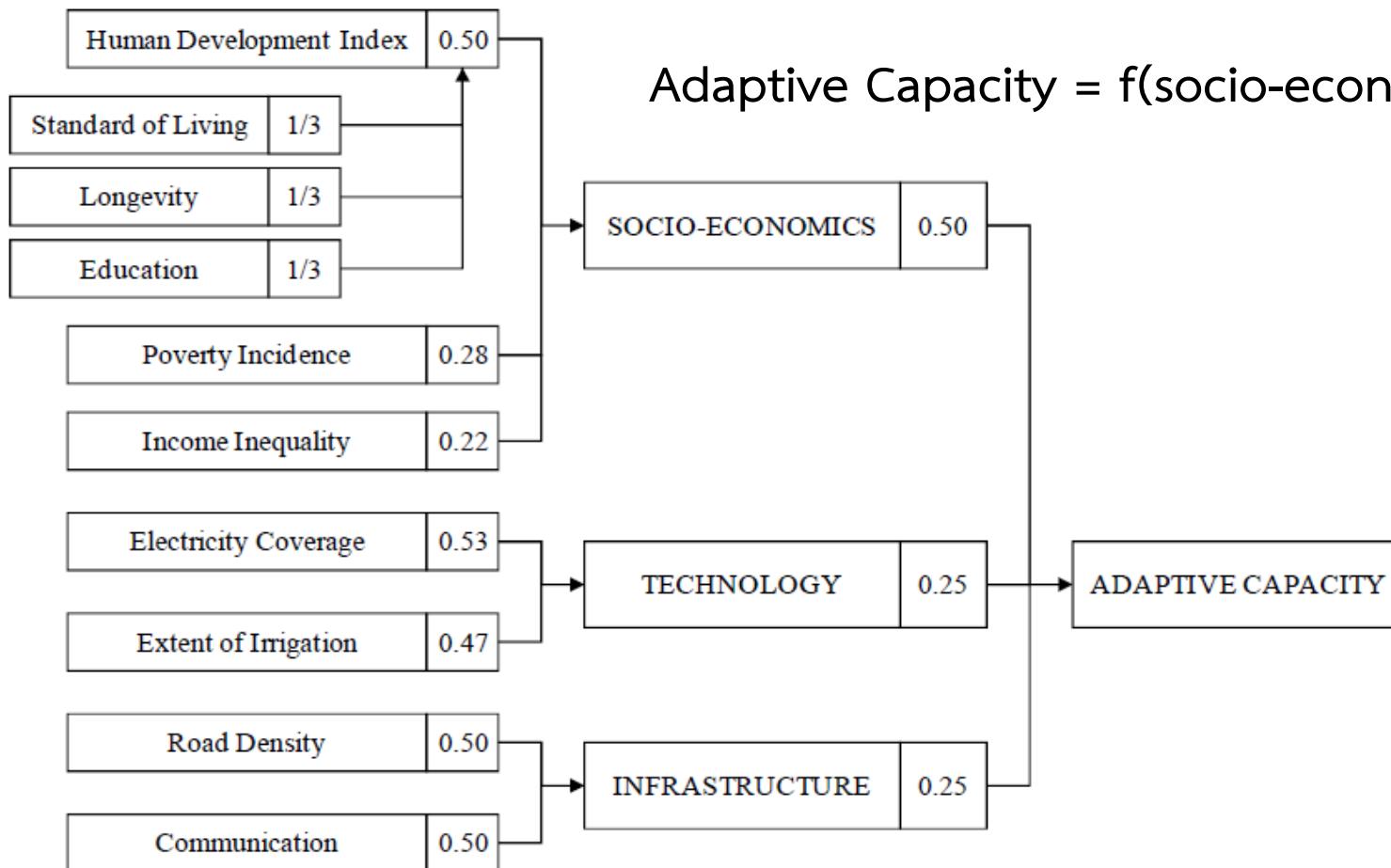


แผนที่ความชื้นปี พ.ศ. 2550

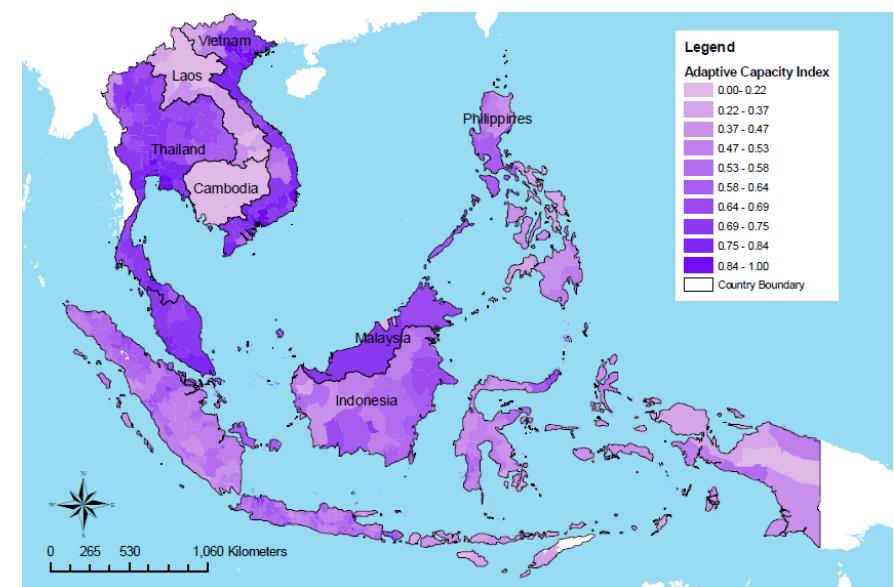


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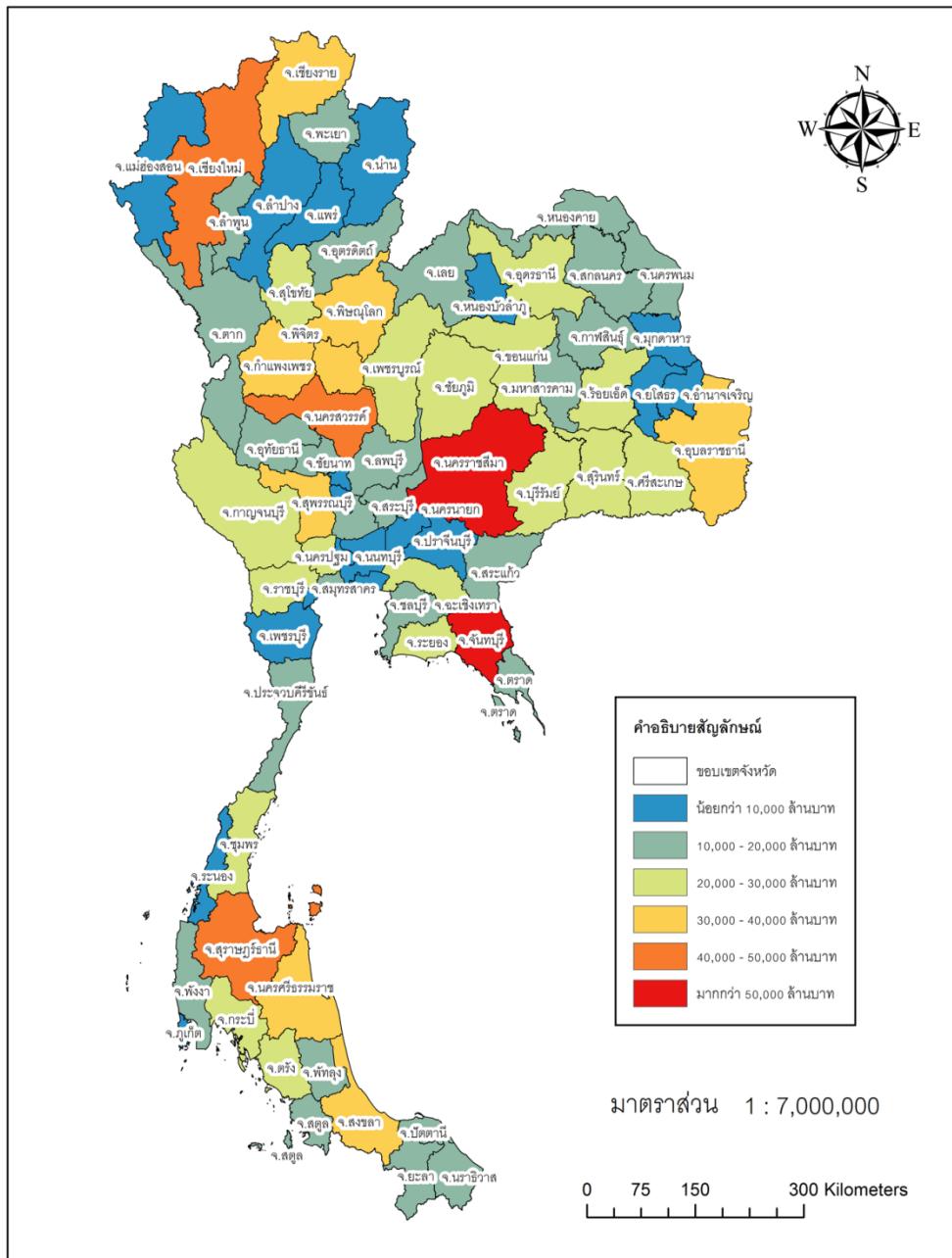


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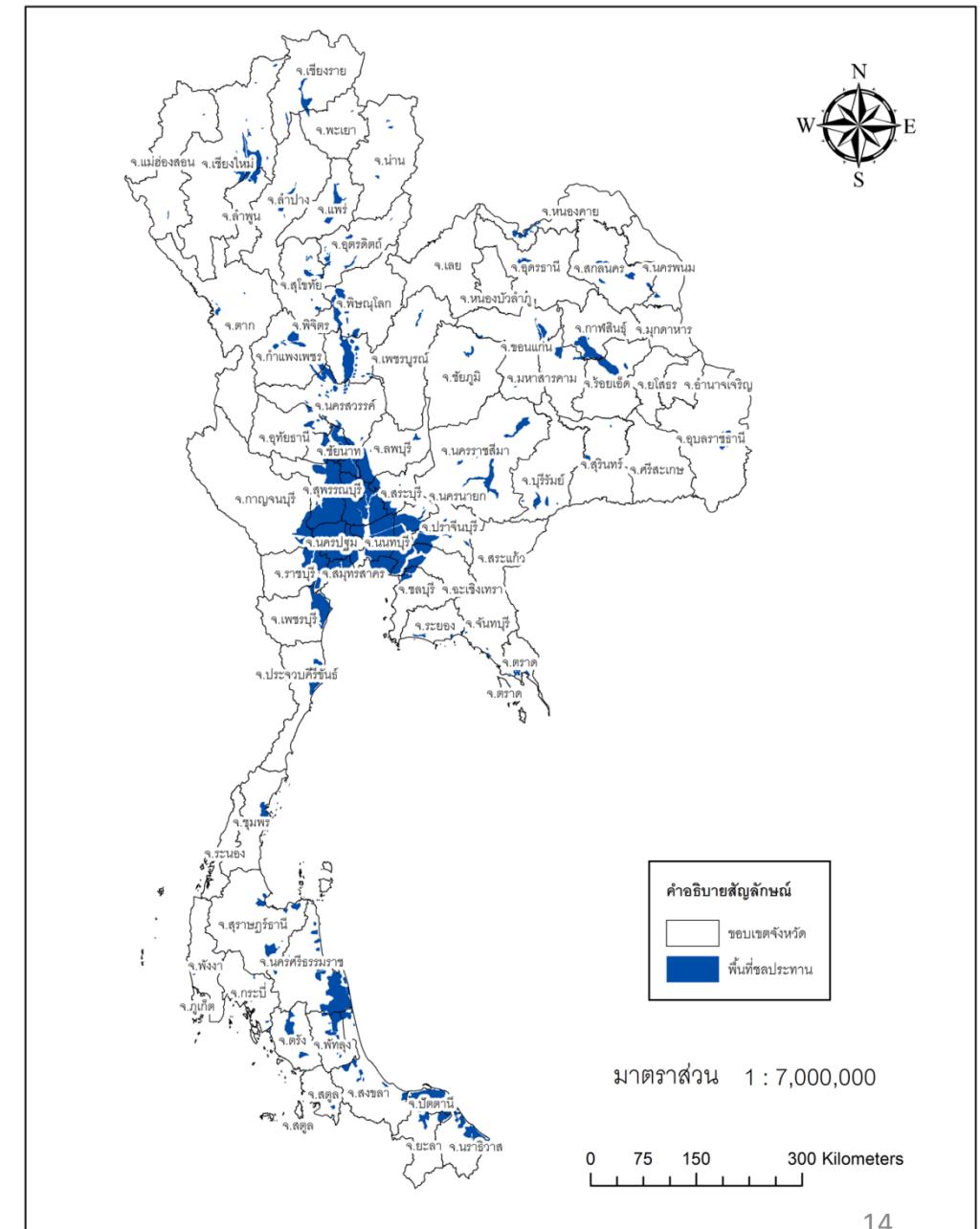


Source: Arief Anshory Yusuf & Herminia Francisco, 2009

แผนที่แสดงรายได้เฉลี่ยต่อหัว ปี พ.ศ. 2556



แผนที่แสดงพื้นที่ชลประทาน (ปี พ.ศ. 2549)



Adaptation ?

ขอบคุณครับ