



# Hot or not? On the current and future role of cycling in ASEAN megacities: a case study on Bangkok and Metro Manila

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# OBJECTIVE

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- Assessing the current situation for cycling for transportation in two ASEAN megacities
- Identify factors enabling and blocking an increase in modal share
- Provide policy recommendations



## WHY CYCLING IN ASEAN?

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- ASEAN Kuala Lumpur Transport Strategic Plan 2016 – 2025: sustainable transport include action: ‘Institute coordinated approach to further promote non-motorised and public transport in ASEAN cities’
- Regional Action Plan on Healthy ASEAN Lifestyles (2012)
- National and urban strategies in several countries aim to increase the role of cycling
- Recognition in role of cycling in promoting sustainable (urban transport): space efficiency, energy, climate change, health, air pollution reduction, etc.

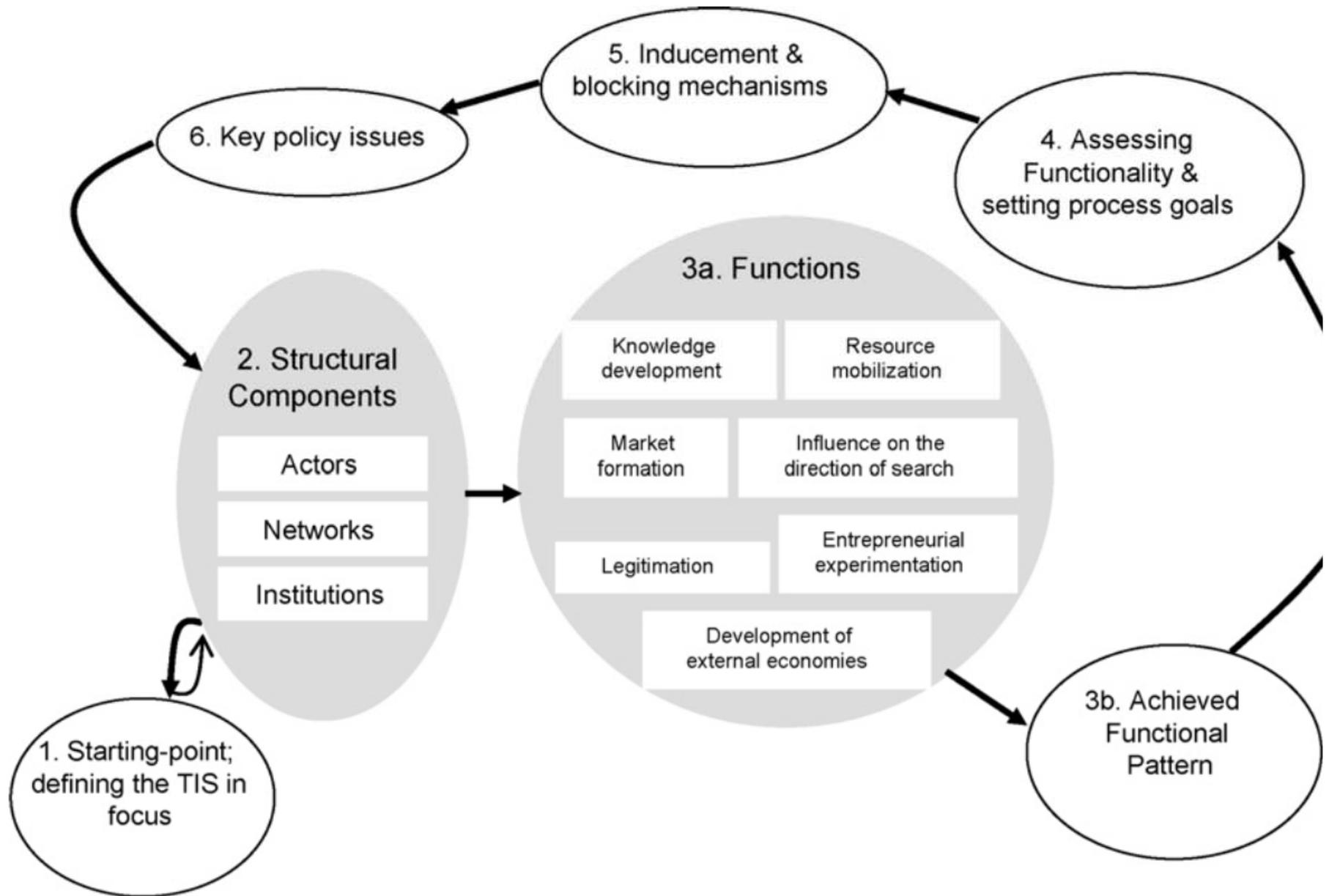


# THEORETICAL FRAMEWORK: TECHNOLOGICAL INNOVATION SYSTEMS (TIS)

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- Used to characterise what key functions in an innovation system are fulfilled in a particular region or country
- Provides recommendations to policy makers as to what elements should be strengthened
- Predominantly used for new technologies (CO2 capture and storage, hydrogen vehicles)
- Has not been used to assess the system of cycling and bikes





# METRO MANILA / THE PHILIPPINES

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- Low bicycle ownership (23% of households)
- Modal share <2%
- Pedicabs common last-mile mode
- National Environmentally Sustainable Transport Strategy 2011:  
*‘Reform the transport sector to reduce the consumption of fossil fuels. The new paradigm in the movement of men and things must follow a simple principle: “Those who have less in wheels must have more in road.” For this purpose, the system shall favor non-motorized locomotion and collective transportation system (walking, bicycling, and the man-powered mini-train).’*
- Over 70 km bike infrastructure



# METRO MANILA: CYCLING INFRASTRUCTURE

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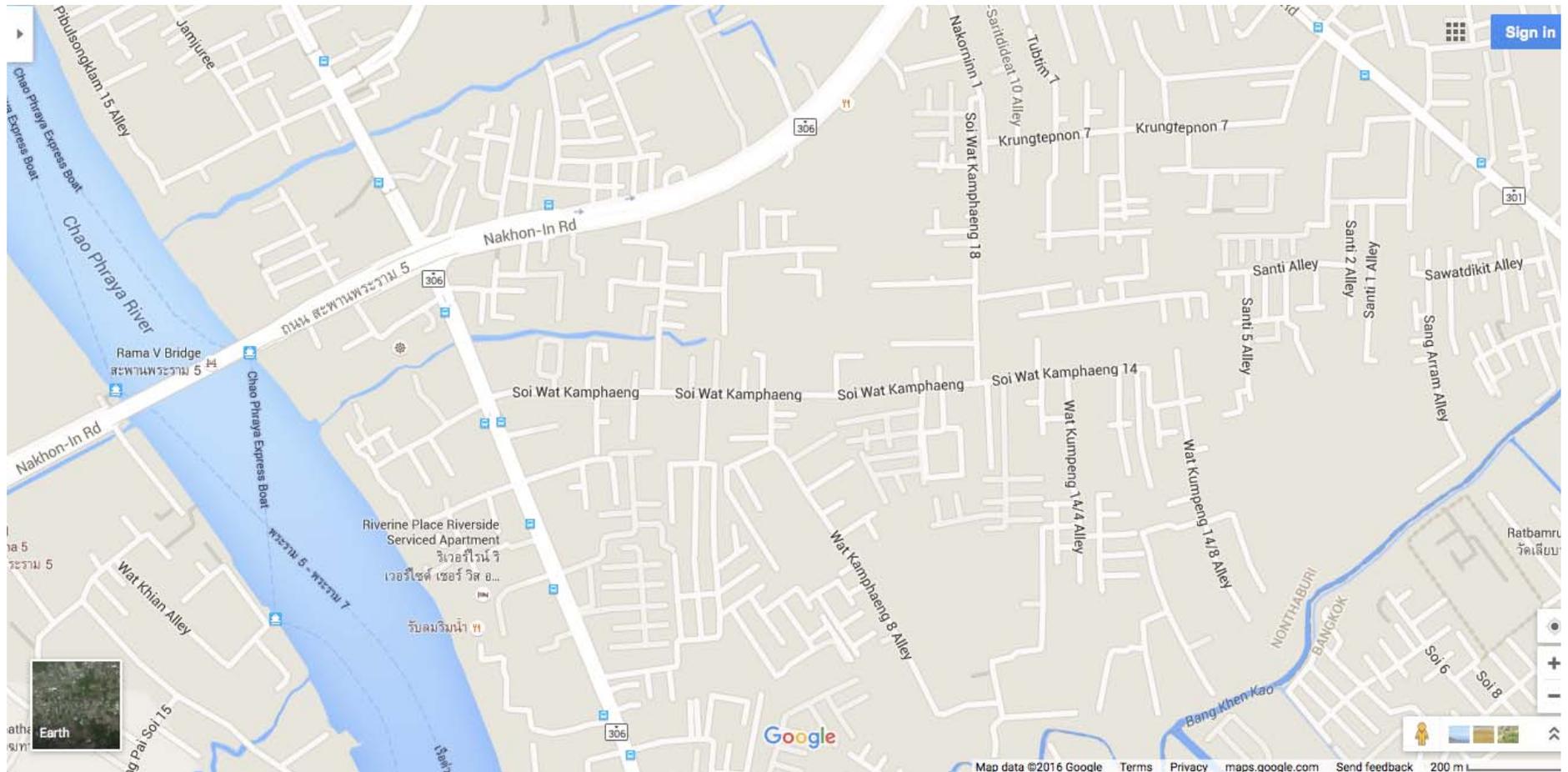
# BANGKOK

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- Sois (small streets): many are suitable for cycling
- Crosswalks in bad shape
- Few traffic lights (and long cycle times)
- Non-motorised tricycles in outskirts, banned in city
- Bike sharing: 50 stations
- Over 200 km of bikelanes (various categories)



# BANGKOK: CUL-DE-SACS



# BANGKOK: CYCLING INFRASTRUCTURE



# TIS FUNCTIONS (1)

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- Lack of knowledge and capacity for cycling-inclusive planning
- Limited knowledge exchange at local, regional and global level
- E-bikes not popular, knowledge limited
- Thailand: Annual Bike and Walk Forum since 2013
- Policy activity
  - Thailand: high-level statements, policy documents and initial budget for bikelanes (\$40 million in 2015)
  - Philippines: bottom up policy initiatives seeking regulations on cycling-inclusive planning
- Bicycle industry significant
- Bicycle shops and bike-themed cafes, fashion symbol
- Car-oriented planning



## TIS FUNCTIONS (2)

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- Social acceptance (limited evidence):
  - Bikelanes ok if not interfering with motor vehicles
  - Association of bicycle with poor people
  - Trendy and associated with a healthy lifestyle
  - Spill-over effects from recreational to transport cycling unclear
- It's very media-chic at the moment, including social media
- Bicycle events very popular (esp. Bangkok)
- Active advocacy groups
- Universities and university students embrace cycling
- Many commuting trips long distance, other trips can be 1-5 kms



# INDUCEMENT MECHANISMS

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- Increased congestion, could build momentum for 'alternative' mode
- Investments in public transport, cycling access/egress mode
- Framing of cycling: 'healthy city', 'livable city', 'people-oriented'
- Climate change, fits into e.g. 'low-carbon society'
- Other policy objectives, such as well-being, equity, air quality, noise reduction
- Flat terrain
- 'Incremental' infrastructure improvements



# BLOCKING MECHANISMS

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- Willingness of population to cycle (no conclusive evidence)
- Climate: temperature, humidity, precipitation, sunlight
- Personal benefits of cycling are not well communicated
- Air pollution and general environmental condition of the cities
- Lack of willingness to take 'unpopular' measures (TDM, traffic management)
- Lack of coordinated and high-quality planning, lack of budget or policy low priority
- Isolated measures taken for image rather than comprehensive vision and planning
- Competition with motorcycles and relatively convenient paratransit, which is a politically powerful interest group
- Current advocacy coalitions may not be sufficiently powerful



# POLICY ISSUES (1)

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- Invest in quality infrastructure based on cycling-inclusive planning
  - improvements can be incremental
  - high-quality: show commitment, 'status' for the cyclist
  - follow a plan towards a comprehensive network
- Education and communication promoting cycling to the public as a 'normality' and convenient daily transport mode
- Analyse propensity to cycle of urban population
- Implement traffic management and TDM measures, potentially including restrictions or disincentives for paratransit and motorcycles



## POLICY ISSUES (2)

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- Engage private sector in e.g. bike sharing, rental and bicycle parking, as well as bike industry
- Ensure sufficient staff in local governments dedicated to cycling and build capacity for planning
- Work with and strengthen the advocacy coalition
- Support knowledge development by funding research programmes, conferences, curricula
- Adopt targets related to increasing cycling modal share, gather data and develop monitoring system



# CONCLUSIONS

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- Currently niche mode of transport in most ASEAN cities
- Remarkable attention from media, public and policymakers
  - Fashionable, popular with recreational cycling groups
- Barriers: lack of knowledge; car-oriented planning; social acceptance; weather; weak advocacy coalition
- If cycling is to be common transport mode, many aspects need to be improved
- Policymakers should focus on e.g. cycling-inclusive planning, education and communication, transport demand management, knowledge development, e-bikes, data and monitoring
- Technological Innovation Systems can be used for assessing the cycling system and provides helpful insights



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THANK YOU

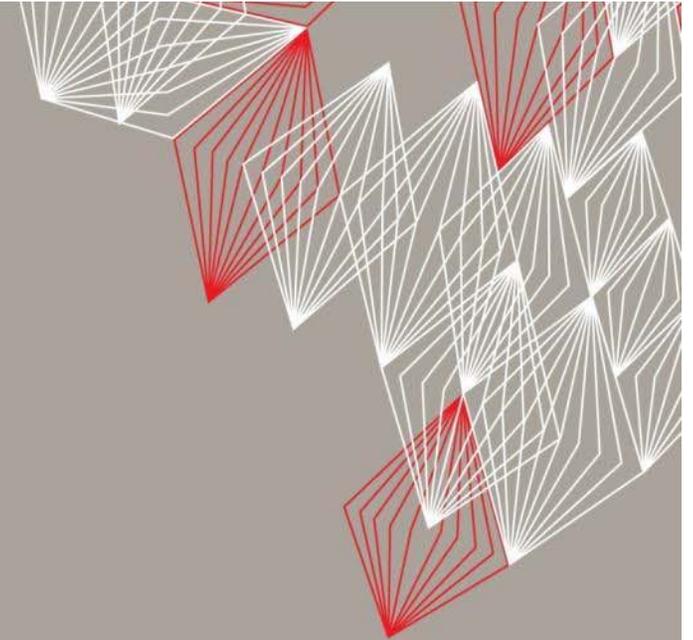
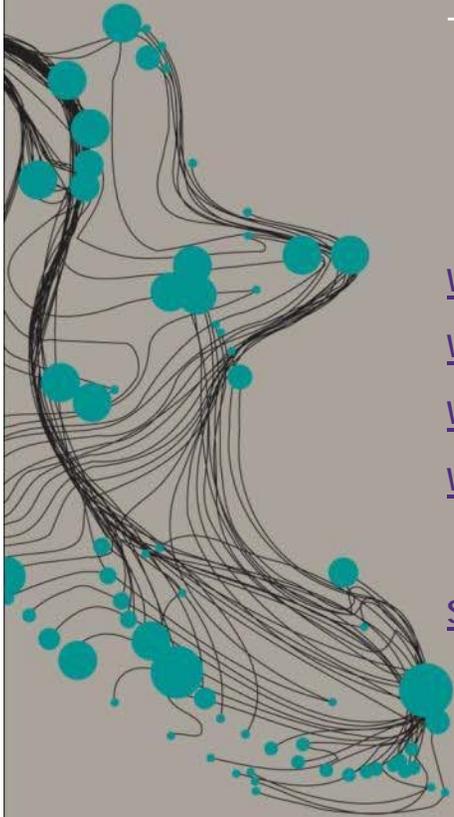
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