



# Paving the Way for Sustainable Urban Mobility at Kasetsart University



2009



2015

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# 1. Starting point:

Kasetsart University (KU) established in 1938

Area : 135 hectares (1 x 1.7 km)

Students : 54,000

KU was “a bicycle university”.

Traffic congestions

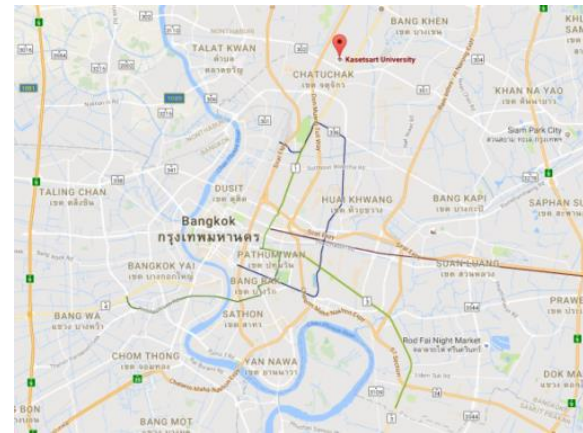
KU roads = shortcut

Bicycle users reduced

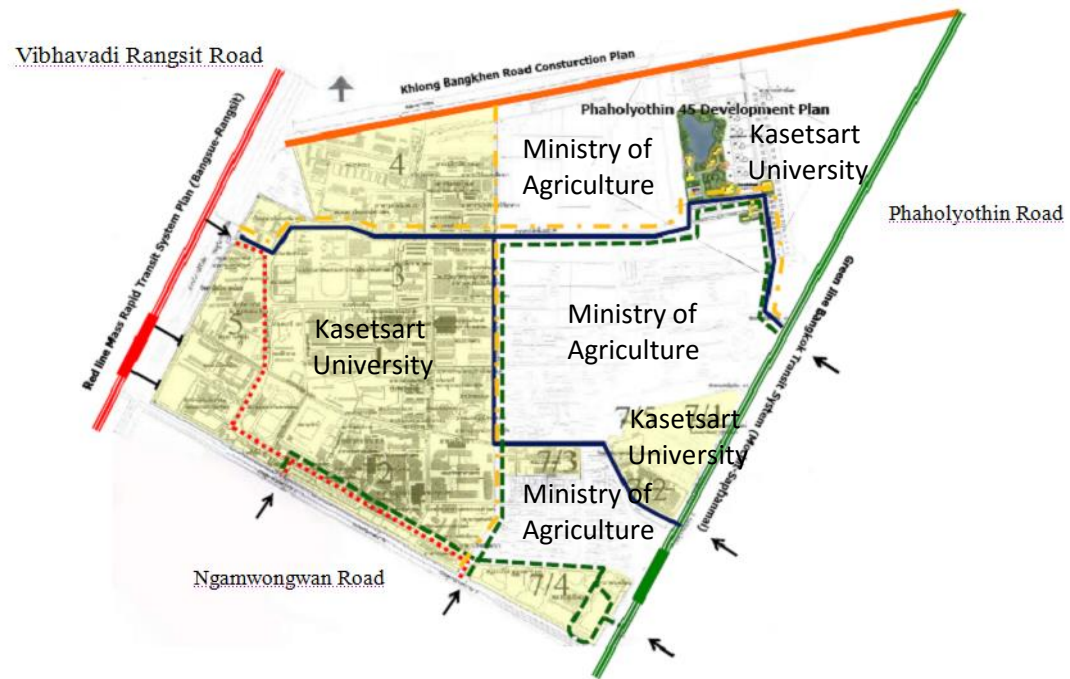
Shuttle buses and motorcycle taxis

Future mass transit systems

An attempt to  
bring bicycles  
back to KU



Location of KU



Legends:



Shortcut from Nangwongwan Road to Vibhavadi Rangsit Road  
Shortcut from Vibhavadi Rangsit Road to Phaholyothin Road  
Shortcut from Nangwongwan Road to Phaholyothin Road



Motorized Entry  
Future Shortcut

Existing and future transportation network





## 2. Institutional setting:

A policy “**KU Green Campus Healthy Community**” in 2008

### Stakeholders :

- KU President and vice presidents (policy maker)
- Vehicle, Building, and Physical Plant Division (practitioners)
- Alumni (bicycle donors)
- Students = KU Bicycle Club

Joined **UI GreenMetric** World University Rank Thailand

# top-down approach



<http://pr.ku.ac.th>



“KU Green Campus Healthy Community” Project in 2008  
Source: KU (2016)



### 3. Approach:

# “build it and they will come”

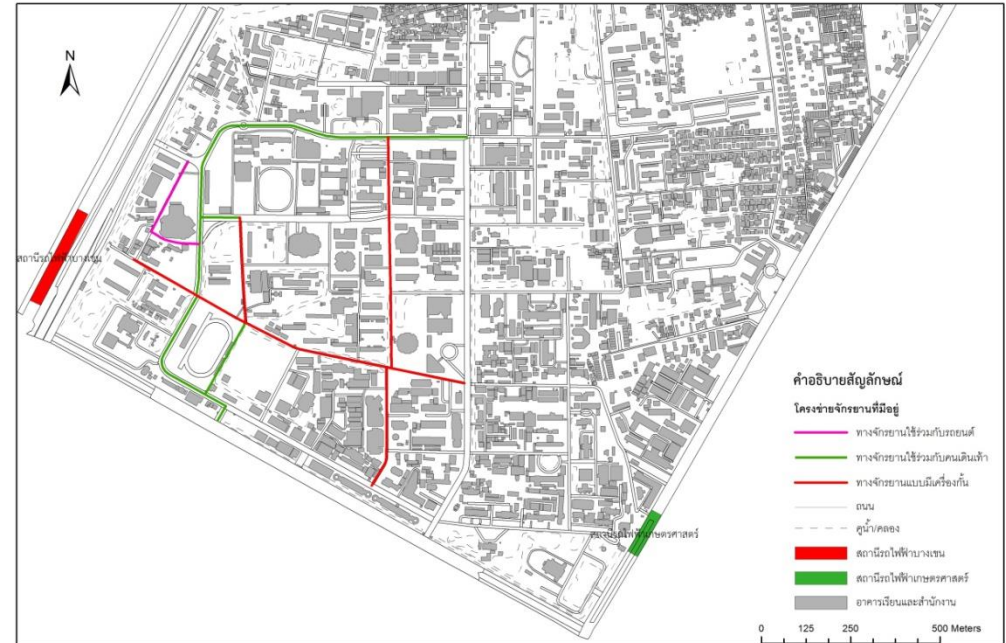
Bicycle lanes were provided

3 types of the bicycle lanes:

- bike lane with barriers (red)
- bike lane on footpath (green)
- bike lane without barriers (pink)

Bicycles were donated by alumni

A master plan for bicycle network is needed



Existing bicycle network

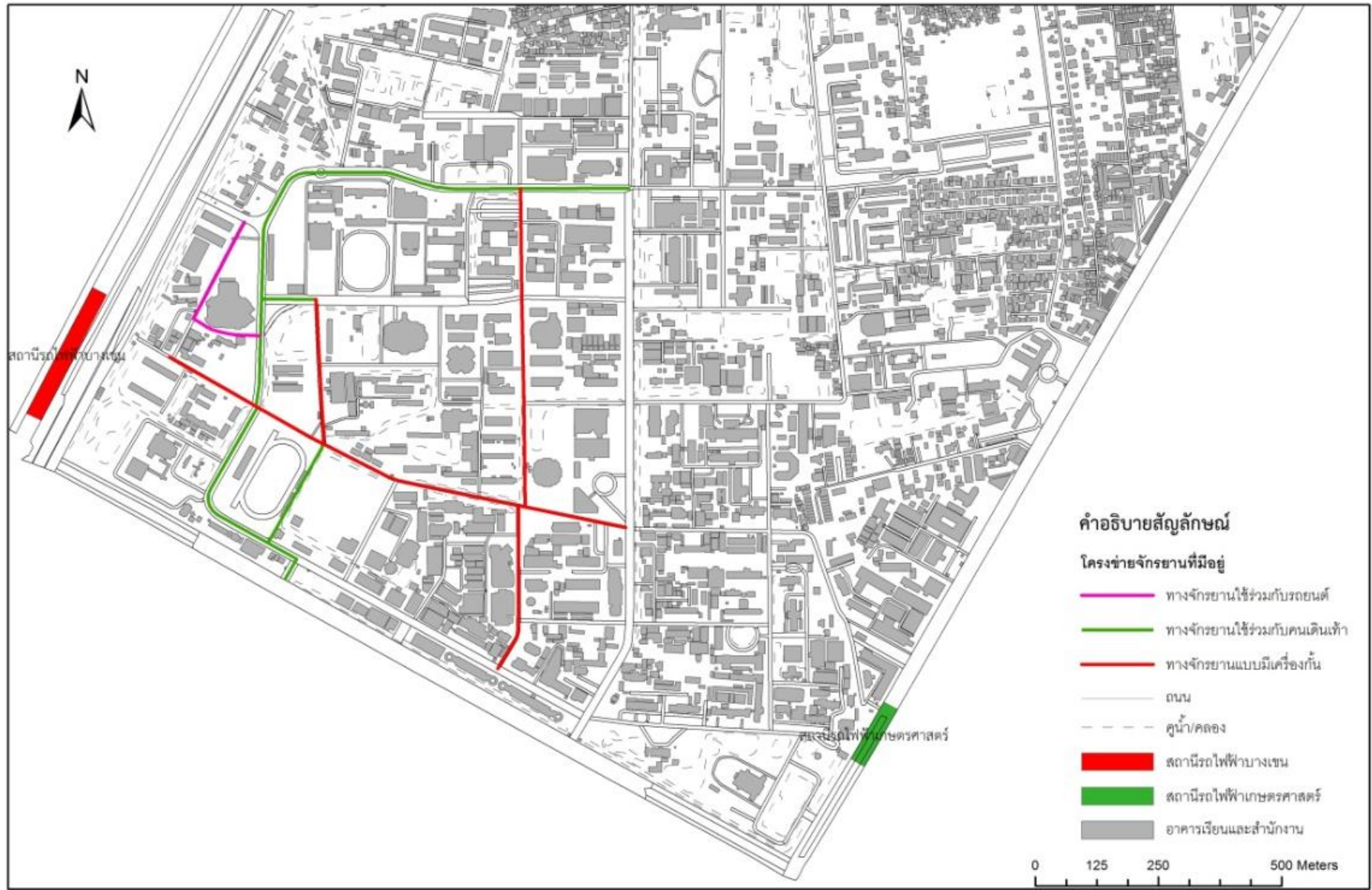


Alumni donated bicycles





# “build it and they will come”





#### 4. Output:

## Bicycle facilities:

Bicycle lanes

Public bicycle system

Private bicycles –  
safe bicycle parking

Shower facilities

## Activities:

Bike for Mom

Bike on Friday

Number of bicycle users is higher

But still long queue for shuttle  
buses and motorcycle taxis



Different types of bicycle lanes



The white PUB bikes with  
ID codes



An advertisement shows that the PUB bikes are free  
of charge at the PUB stand at Ngamwongwan 2 gate



A security guard operates the  
PUB system at Vibhavadi gate



Rules are posted at the stand  
at Ngamwongwan 1 gate



Bike locks at the stand at  
Ngamwongwan 2 gate

Public bicycle system in 2009





## 5. Lessons:

Providing bicycle facilities =

“chicken and egg”

Conflicts among road users

Motorcycles use bicycle lanes

**Enforcement** is lacking

Increase number of bicycle users:

**How to encourage  
them to ride?**



Road users conflicts



## 6. Transfer:

A research with  
community participation

A master plan for “bicycle network”

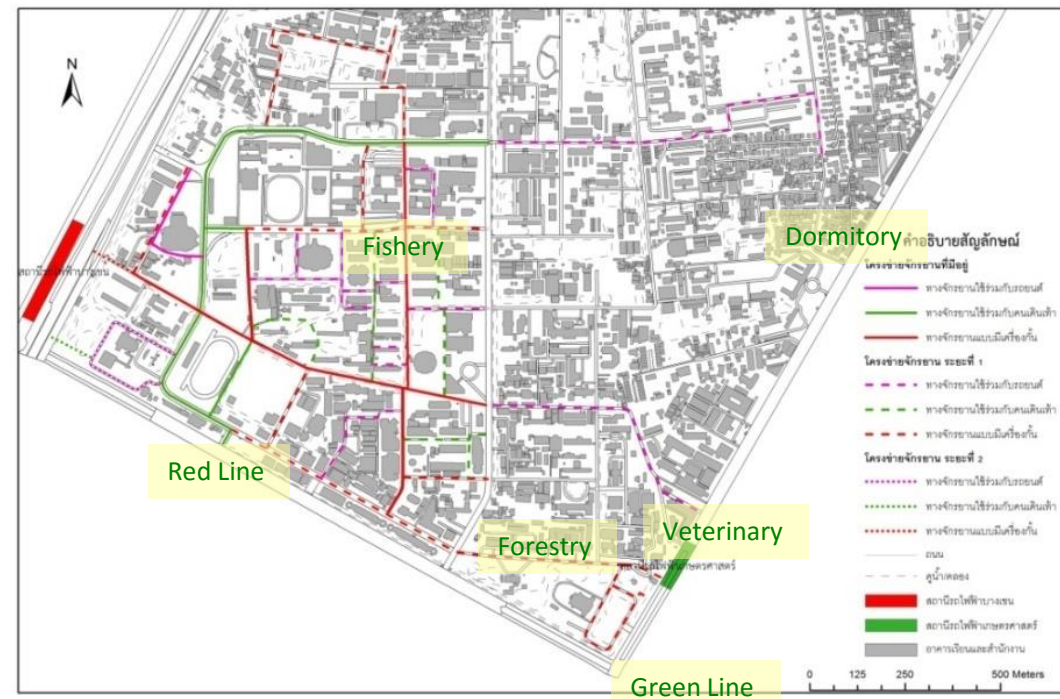
- connectivity
- safety
- comfort

To encourage people to use bicycles -

saving time

saving money

Climate change is perceived as distant



Proposed Bicycle Network



Before



After



Before



After

Proposed improvement of bicycle lanes