The Situation of Infrastructure in Vietnam from the perspective of Universally Accessible Design

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Vietnam Scaling Up Urban Upgrading Project (SUUP)

- Objective: Improve access to infrastructure in priority city areas and improve urban planning in the participating cities.

- Pipeline project for 2018〜2023

- Operational mission conducted in November 2016 and January 2017

Target Cities

- 7 cities in the Mekong Delta: Vinh Long, Vi Thanh, Soc Trang, Long Xuyen, Ben Tre, Tan An, Bac Lieu
Current Status

- Request for Bank Task Team from Leaders of 7 Cities
  - Set up accessible environment
  - Achieve social participation of people
  - Activate their cities following Hanoi, Ho Chi Minh City

- Status
  - People with disabilities do not own welfare equipment because it cannot be used if the right infrastructure is not in place.
  - The local consultant needs capacity building support for universally accessible design because they are not familiar with the institutional frameworks, technical requirements, etc.
Overall Flow

- **Sidewalk**
  - Ramp
  - Root-rising
  - On-street shop

- **Public Facility (Park)**
  - Gateway
  - Braille for the feet

- **Others**
  - Bridge, Sign

There are people need Universally Accessible Design. It will continue to increase.

For preparing an Accessible environment, We propose and prioritize improvement plan.
What is Barrier Free?

**Barrier Free**
For specific groups

**Barrier free**
Originally confined to physically handicapped people only. (Removing Barriers)
Universally Accessible Design?

**Universal Design**
For everyone

**Barrier free**
For specific groups

**Universal Accessible Design (UD)**
Any facilities, products, or service that are comfortable for people. Regardless of nationality, age, gender or degree of disability.
Basic Information

- **Can Tho city**
  - Regional development project (Completed)
  - Vietnam Upgrading Project (VUUP, 2004~2014)
  - Field survey conducted
  - The fourth-largest city in Vietnam
  - The largest in the Mekong
  - Population: 1,237,300
  - Area: 1,408.9 km²
Field Survey

Sidewalk

Ramp

Issue

- Ramp is attached after installation of the ROW.
  (Blue: ROW, Red: Ramp)

- Ramp is steep because it matches the height of the ROW.
  (Yellow: 10~12cm of the height)

- Wheelchair user cannot access 10° gradient (ramp) by himself.

No entry to Sidewalk causes On-road-walking and traffic accidents.
Sidewalk

Example in Japan

Proposal

- Extend sidewalk after installation of Ramp and make it one-lane.
- By putting ramp into the width of Sidewalk, keep an area on the whole street.
- Preventing steep gradient by installing ramp from the beginning.

For Wheelchair, elderly, strollers...
Anyone can access to sidewalk safely and easily.
Sidewalk

Root-rising

Issues

- Prevents destination
- Trees that grow 10–20 years break pavement.

On-street Shop

- Prevents destination
- Sidewalk is not functioned as “Passage for pedestrians.”

People cannot walk on sidewalk because of non-traffic line.
Sidewalk

Effective soil

- Secure an effective soil at least of 1~1.5m in the underground.
- Plant trees and bushes which down deep roots.

Proposal

Traffic Regulation

- Regulate traffic rules of the road in country (or in 7 cities).

Securing traffic lanes on the sidewalk supports smooth and safe passage.
Field Survey

Public Facility (Park)

Gateway

Issues

• No connection with the pedestrian crossing or sidewalk.

• Steep gradient

• Metallic obstacle (Parking ban sign)

Braille for the feet

• Misuse of Braille for the feet
  : It does not work as a guide-line.
  : It connect with Road directly.

• Non-installation of Warning braille.

Cannot reach destination. Causes traffic accidents because of incorrect guidance.
Field Survey

Public Facility (Park)

Gateway

Proposal

- Connection with pedestrian crossing
- Gentle gradient
- Putting visible poles

Braille for the feet

- Install correct braille for the feet by using guide/warning braille blocks.
- Guide to correct destination

Design public facilities that are easy to use for various people.
Field Survey

Others

Misalignment (Bridge)

Proposal

- Paving up to the end of the bridge with concrete material.
  (Need improvement of construction skill)

Establish various access routes and promote people’s social involvement.

Known-level of Signs

- Under the cooperation of the city/province, promote awareness and recognition of the Signs.
  (ex: Educational events, signboard etc.)

Bring changes to recognition and improve symbiotic environment.
Toward the introduction of UD in 7 cities:

**7cities**
- Prioritize development target
- Improvement of construction skill
- Correct understanding of laws and regulation

**Mirairo**
- Understanding the life culture of Vietnam
- Comparison with Japanese case
- Mixing with the natural disaster aspect

From improvement of accessible environment, realize regional activation and economic growth through social participation of diverse people.
Thank you for your listening!

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