

APEC Workshop on Scientific Decision Supports for Emergency
Preparedness of Natural Hazards

Apply ICT for support warning at
inundation area of HCM city,
Vietnam

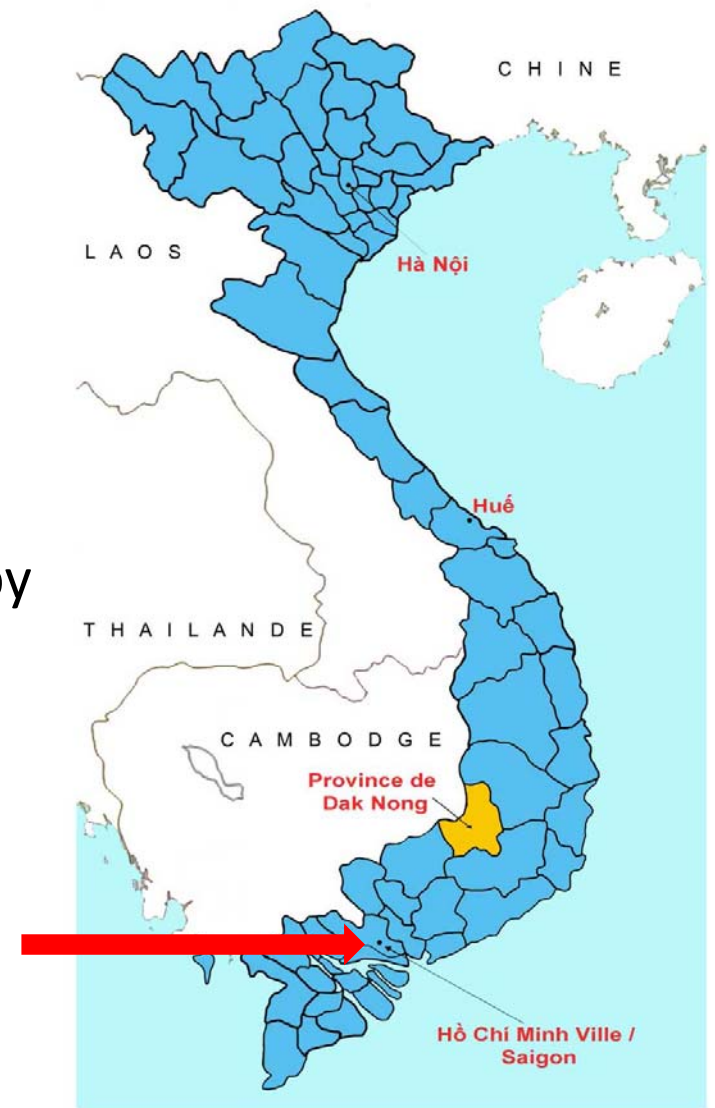
China Taipei, July 31st 2015

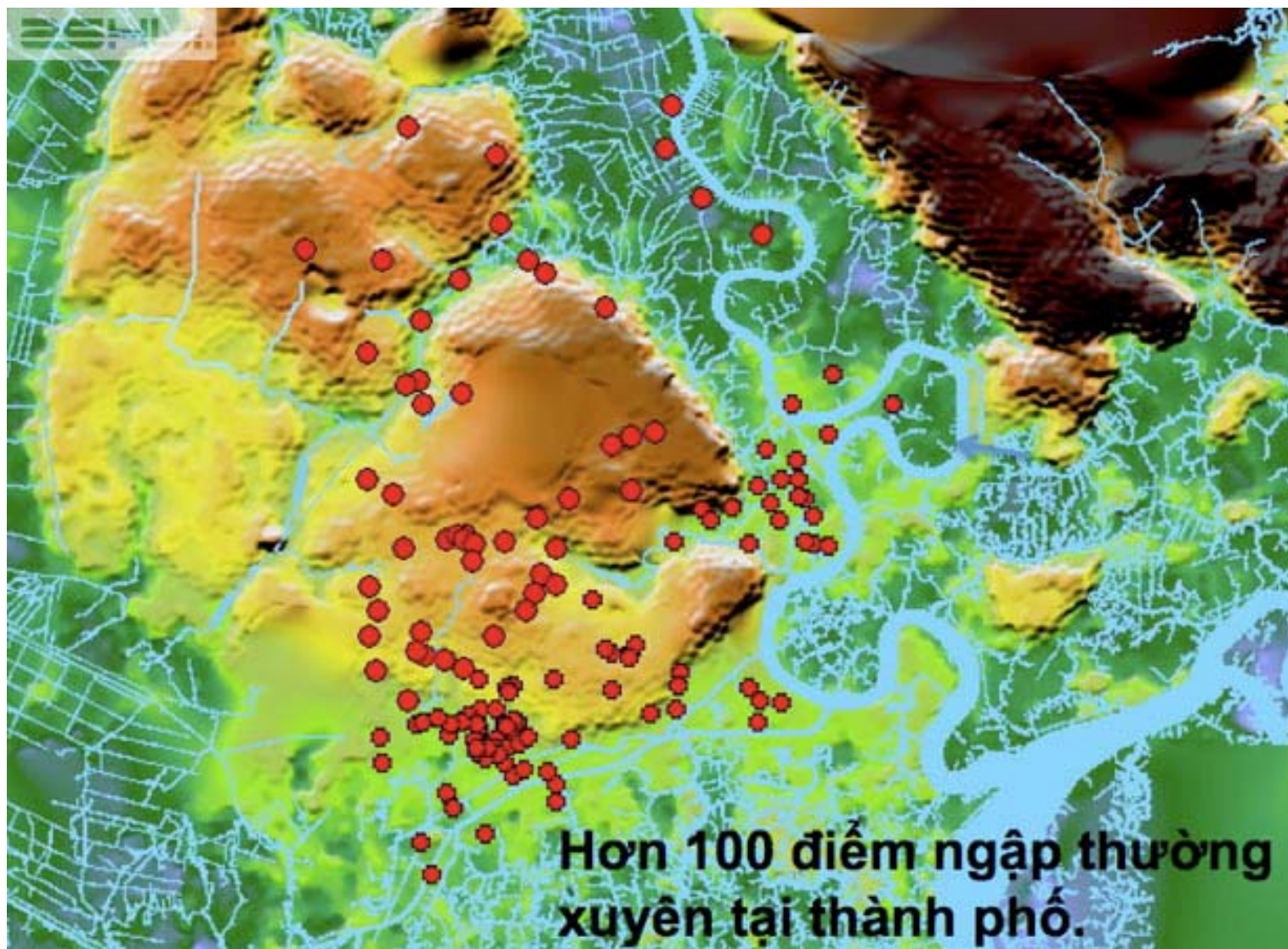
Content

- Overview
- Causes of inundation
- Solutions
- Conclusion

Overview

- According to Prevention Web site, the floods are affecting the lives of 4% of the population and damage of 3% of GDP in Vietnam
- Ho Chi Minh city is the 2nd largest city in Vietnam. However, lies on a ground low and easily flooded by heavy rains, floods or storm surges upstream.
- HCM city has begun face again flooding from almost 10 years. However, after all these time invested money and effort, flooding in HCM City is not generally have significant changes. HCM city is still have about 100 points flooded.

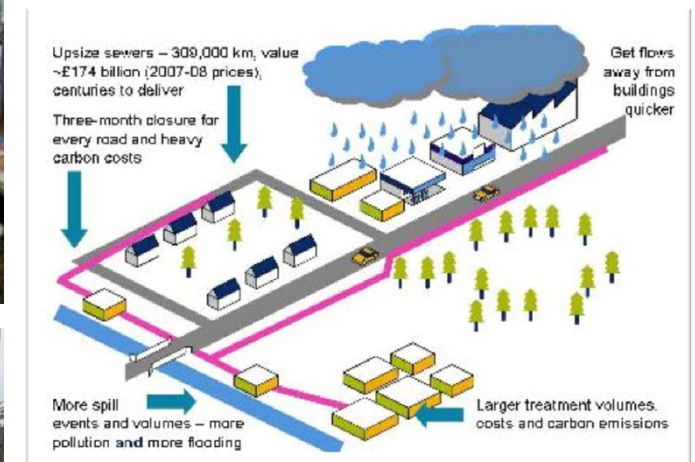




Pic 1: Flooding point maps at HCM city
(source: Ho Long Phi, 2010)

Causes of inundation

- Heavy rainfall
- Drainage system
- Flooding
- Tide
- Combine above factors

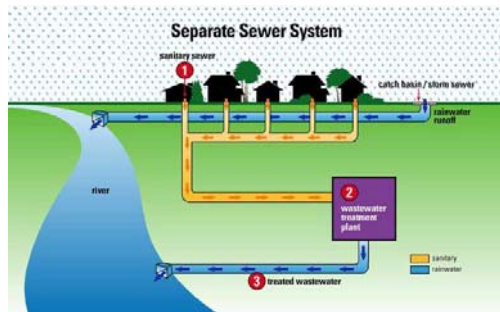


Source: from internet

Solutions



Source: from internet



❖ Structure

- Building code
- Improve infrastructure
- Improve drainage systems

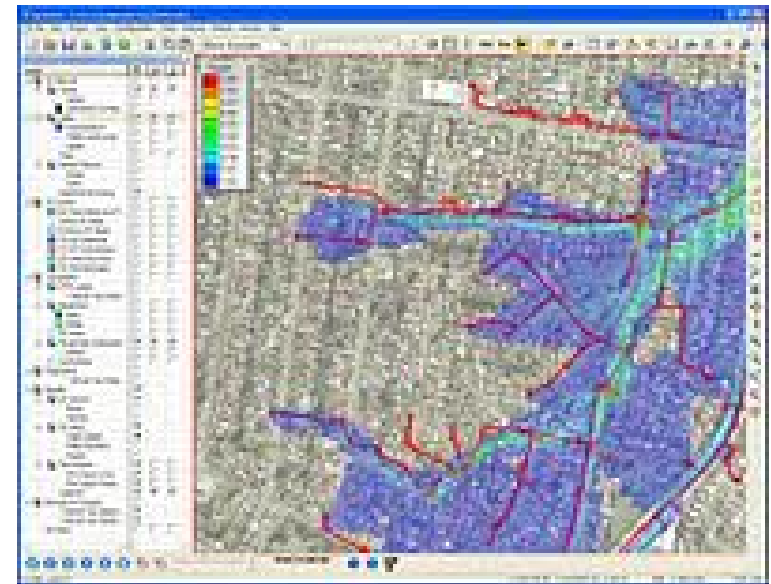
❖ Non Structure

- Planning
- Building database
- Improvement Warning information

How to improvement Warning information?

Challenges:

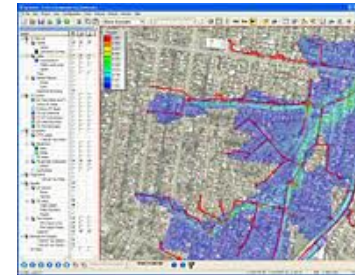
- Old infrastructure: speaker,
- Lag of planning and policy
- Diffusion database
- Capacity of officer in information processing is low
- Lag of information when transition between other levels



Source: from internet

How to improvement Warning information?

- Base line map, topography map, socio – economic data, land use maps
- History meteorology database
- Rainfall observation and forecast
- Modelling for inundation area
- Warning tools: Mobile, Internet, social media, speaker, radio, information board...
- Strengthen capacity for office.



Source: from internet

Conclusion

- Technology and Scientifics will help reduce risk and damage due to disaster.
- There are needs the development in both ICT infrastructure and management level.
- Building an better policy and plan base on the current situation.
- Improve awareness of people in the inundation area.

Thank you for your attention!