Making cities resilient in Viet Nam

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Context

Encouraging progress..

- Viet Nam has made **significant progress** towards achieving the Millennium Development Goals:
  - **reducing its poverty rate** from 58% in 1992 to 14.5% in 2008
  - reporting **GDP growth** of approximately 6.5% in 2010
  - ***per capita* income** has increased five-fold in the past four decades, helping lift millions of people out of poverty
- Significant economic growth as it shifted to a **market-style economy**

Context

However..

- Due to its **location, geography and topography** Viet Nam is one of the **most disaster-prone** countries in the world
- Susceptible to almost every type of hazard, among which **hydro-meteorological hazards** are most frequent and devastating
- From 1990-2009 the country suffered an estimated **annual economic loss equivalent to 1.3% of GDP**
- More than **70% of the population is exposed to risks** from multiple natural hazards
- Severe **droughts, sea water intrusion, landslides** and **forest fires** also impact the country

Context

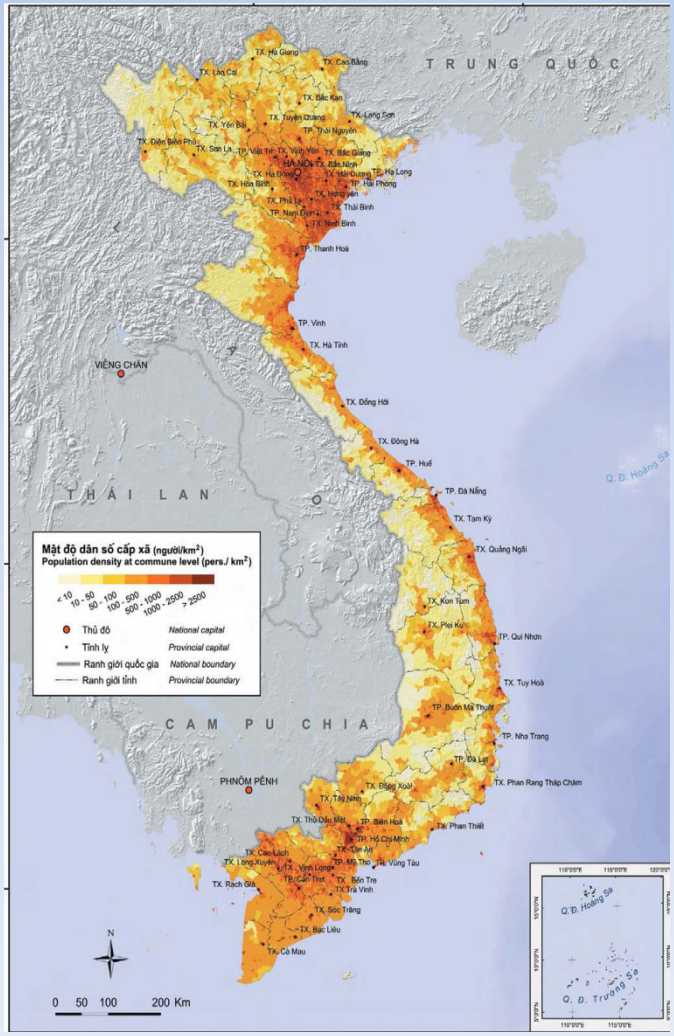
The impact of climate change..

- Viet Nam is predicted to be one of the countries seriously affected by **climate change**, as a large proportion of the population, infrastructure and economic production - including irrigated agriculture - is located in coastal lowlands and deltas
- In the future, it is foreseen that there will be **increased unpredictability and intensity** of typhoons, floods and droughts which may lead to increased threats to people's livelihoods and affect the country's development process
- Rising **seawater levels** pose a significant problem, with a one-meter mean sea level rise by 2100 increasingly likely and threatening inundation of 5.3% of Viet Nam's total land area*

* *unless major action, such as dyke reinforcements and improved drainage, takes place*

Urban population of Viet Nam is growing fast..

- In 2009, the **total population** of Viet Nam was ~86million, at the end of 2009, the urban population was ~30%*
- The **urban population is growing** at an average rate of 3.4% per year – annually one million people are added to the urban areas
- An additional 7.3 million live in urban areas compared to the prior decade, representing **77% of the country's population growth** during this period
- Forecasts are that the urban population will reach 40 million — equivalent to **45% of the population by 2020**



National Population and Housing Census, April 2009

Development and urbanization

- Country's **rapid development process goes hand in hand with an increased urbanization** and consequent pressures on social services, economic production, infrastructure and other facilities
- Urban population increase is due to the **expansion of the labour market in the urban areas and movement from the rural areas** due to a complex of reasons – including recurrent disasters and likely impact of climate change

Cities are at risk

- Over **47% of the urban population now lives in ten of the largest cities along the coastline** - particularly prone to sea-surge, floods, landslides and other natural disasters - that will be exacerbated further by climate change
- **Urban poverty** is a challenge as towns and cities swell with the influx of people from rural areas who are drawn by economic opportunities; urban slum incidence is about 34% most people reside in at-risk areas
- Around **80% of homes were built by the owners**, usually on an informal basis outside planning and building regulations and often without adequate supporting infrastructure
- The government's classification reckons that about a **quarter of the country's housing is substandard or temporary**

Cities are at risk

- Annually, cities in Viet Nam suffer from disasters with **total losses** amounting to millions of USD

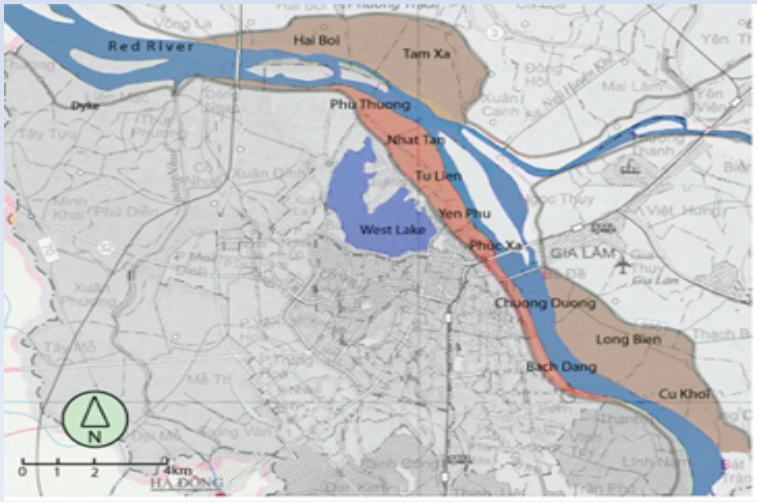
  - *Ho Chi Minh City*: annual flood losses are estimated nearly USD780 million
  - In October 2008, *Hanoi* was affected by severe flooding from 0.3 to 1.2 meter causing serious disruptions, massive economic loss and a large amount of infrastructure damage
  - Other cities like *Hue* and *Da Nang* are also annually affected by floods, typhoons and a complex of other hazards

Disaster risk reduction, climate change adaptation policy, strategy and plans

- **Poverty Reduction Strategy,** the **Socio-Economic Development Plan 2006-2010** and **Country Partnership Strategy (2007-2011),** all refer to DRR
- **National Strategy for Natural Disaster Prevention, Response and Mitigation** (2007), which stipulates tasks, solutions and plans for different sectors and localities
- **Community Based Disaster Risk Management program** (2009) targeted at 6,000 communes, includes ensuring that Provincial Governments incorporate risk reduction into planning and zoning regulations and building codes especially for communities at highest risk
- **National Target Program to Respond to Climate Change** (2008) provinces/municipalities produce climate change action plans

Making cities more resilient

- The government is interested in supporting **plans for the cities**, which can provide an overall **framework for risk reduction and adaptation measures** within relevant sectors
- Steps have been made to **integrate DRR and CCA** into urban development, land use, water resources and physical planning
- **Land use planning** is an effective instrument that city authorities employ to reduce disaster risk by regulating the expansion of human settlements and infrastructure



Making cities more resilient

- **Action Plans** (of the Ministry of Construction, MoNRE, Ministry of Planning and Investment, as well as provinces and cities) should have specific tasks that address risks for urban development and respond to climate change, e.g. building codes and climate proofing
- Investments in **early warning system in the urban areas**
- **Infrastructure-based approaches** to improve drainage systems and strengthen dyke system can be combined with **ecosystems-based approaches**, such as management of **mangroves**, **protection of natural resources** and biodiversity and rehabilitation of urban wetlands
- Various **on-going initiatives** in the country are aiming to make cities more resilient to disasters and the impact of climate change, examples are:

Making cities more resilient

- **Asian Cities Climate Change Resilience Network** (since 2008) in Da Nang, Can Tho and Quy Nhon
- **Coastal cities environmental sanitation project, World Bank** (since 2008) in coastal cities of Dong Hoi, Quy Nhon and Nha Trang
- **UNISDR Safer Cities initiative** (since March 2011) in Ho Chi Minh, Ha Noi, Hai Phong, Can Tho and Da Nang

Some recommendations for making cities resilient*

- **Reduce the vulnerability of the urban poor**
  - Have **policies** to address urban poverty
  - Support affordable **land and housing**
  - Enhance the **capacity building of local governments** for risk assessment, in the context of a changing climate
- **Consider disaster and climate-related risks as an integral part of city and regional planning**
- **Manage the urban environment and infrastructure** to reduce the risk of disaster and potential climate-related impacts
- **Develop innovative, city-specific solutions** that combine infrastructure investments, zoning, and ecosystem-based strategies for urban risk reduction and adaptation

** Modified from the World Bank*