### MINISTRY OF NATURAL RESOURCES AND ENVIRONMENT DEPARTMENT OF METEOROLOGY, HYDROLOGY AND CLIMATE CHANGE



# Viet Nam's Adaptation to Climate Change

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- General Information
- Climate Change in Viet Nam
- Policies on Adaptation
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#### **General Information**



- Located on Indochina peninsula in Southeast Asia
- Climate: tropical moonson
- Population: about 87 million people (2011)
- GDP growth: 5.89% (2011)



#### Climate change in Viet Nam



#### **Overview**

- Key resources and economic sectors highly vulnerable;
- Deltas and coastal areas worst affected;
- Red River and Mekong Deltas are particularly vulnerable areas.



#### Climate change in Viet Nam

- Mean temperature increased by 0.5°C;
- Increased rainfall in rainy season; reduced rainfall in dry season
- Increasednatural disasters, especially storms, floods, and droughts.





#### Climate change in Viet Nam

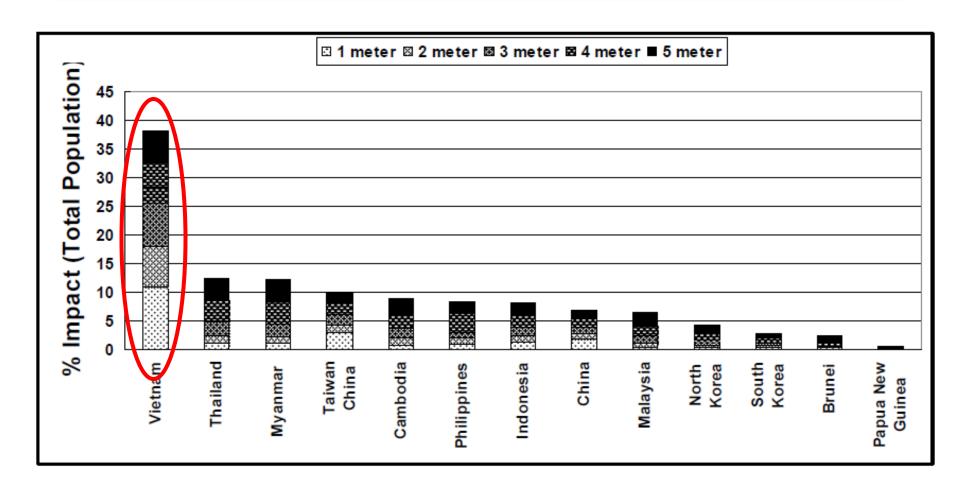
#### Scenarios (updated in 2012)

- Temp. may increase by between 2 and 3° C;
- Winter temp. may increase higher than summer;
- Total rainfall increase in rainy season, decrease in dry season;
- Precipitation may increase about 5%; and
- Sea level rise of about 30cm (2050) and 100cm (2100).





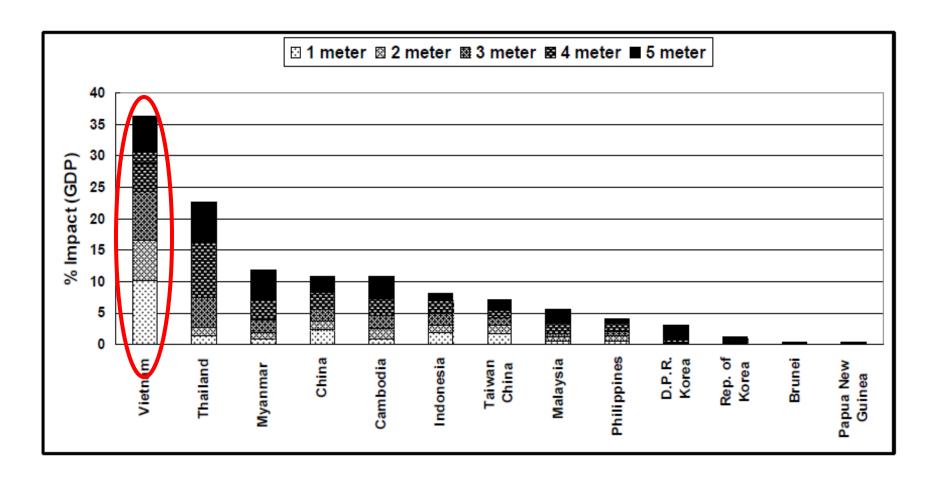
#### **Projected impacts**



Impacts population according to sea level rise scenarios (WB, 2007)

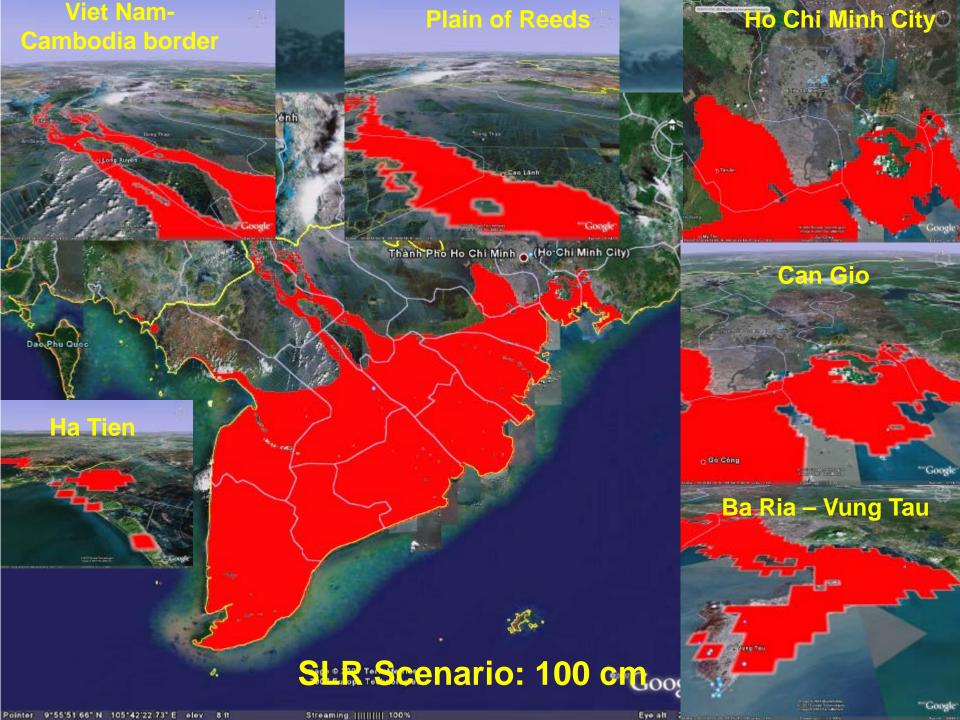


#### **Projected impacts**



Impacts on Viet Nam's GDP according to sea level rise scenarios (WB, 2007)





#### Policies on Adaptation to Climate Change

- Policies on adaptation to climate change mentioned in specific laws; and
- Policies on adaptation to climate change mentioned in national strategies and target programs





#### **NTPRCC**

#### Adaptation-related tasks approved in 2008

- Assess impacts and develop CC and SLR scenarios;
- Develop framework to mainstream CC into socioeconomic plans and projects; and
- > Develop and implement action plans to respond to CC.
- Adaptation-related tasks updated in 2012
- Update scenarios; complete impact assessments; identify response measures;
- Implement action plans to respond to CC;
- Develop policies to adapt to CC; and
- > Raise communities awareness on CC.



#### **National Climate Change Strategy**

### Strategic adaptation tasks

- Proactive disaster preparedness and climate monitoring;
- >Ensure food and water security;
- Respond to rising sea levels in vulnerable areas; and
- Develop community's capacity to respond to climate change.





#### **National Strategy on Climate Change**

#### **Priority programs**

- Hydromet modernisation;
- Water resources management, CC adaptation for major deltas;
- CC response in megacities;
- Sea dyke and river embankment reinforcement;
- Public healthcare improvement;
- Socio-economic development in inhabited islands; and
- > Community pilot programs.





#### **Challenges**

#### International and regional levels

- > Difficulties in international negotiation process on CC mitigation;
- Developed countries prefer CC mitigation to adaptation; and
- Global economic crisis;

#### **National level**

- CC and SLR scenarios' uncertainties;
- CC adaptation programs need huge investments; and
- People's awareness about CC and SLR impacts remains limited;



#### Recommendations

- Cooperation in development and update of CC and SLR scenarios;
- Cooperation in CC impact assessment; and
- Conduct joint research on assessment of CC adaptation measures; and
- Exchange of experience and information about climate and water-related disasters.





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### Thank you!

