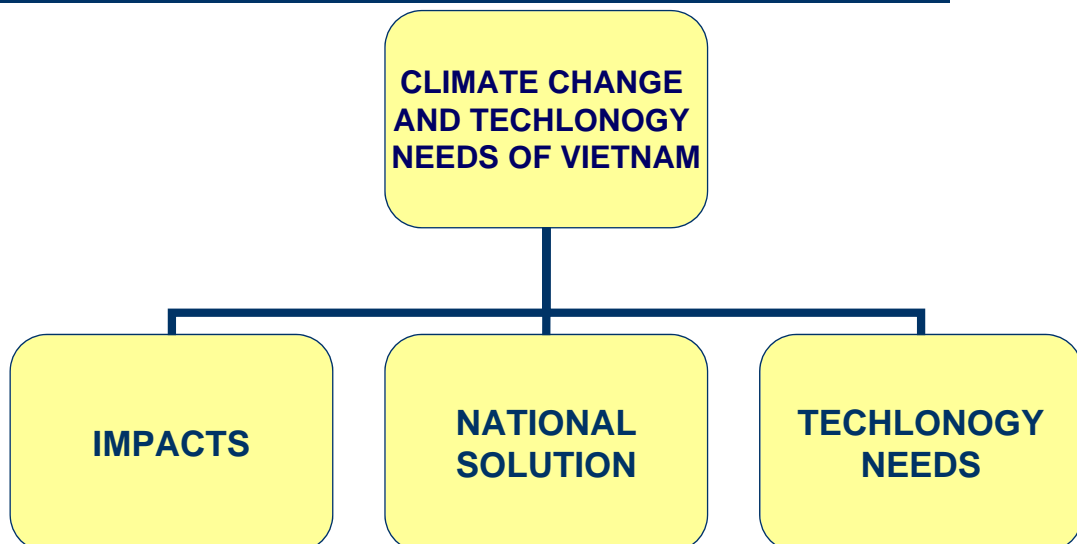


# CLIMATE CHANGE AND TECHLONOLOGY NEEDS OF VIETNAM

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## OUTLINE



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## A. IMPACTS

### I. IMPACTS of CLIMATE CHANGE

#### **Current status** (for duration 1951-2000)

- **Temperature:** annual average temperature risen 0.7 degrees Celsius
- **Sea level:** average sea level risen about 20cm (data taken at Cua Ong and Hon Dau stations, North of Vietnam)

# I. IMPACTS of CLIMATE CHANGE

- **Typhoon:** more intense, move slowly
- **Storm:** season ends later, orbit is more unusual



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# II. IMPACTS of SEA LEVEL RISE

- **Vietnam:**
  - 3.260km long coastline
  - one million km<sup>2</sup> of territorial waters
  - over 3.000 small islands near the shore and two groups off-shore island
  - many coastal lowlands (over 80% and 30% area of Cuu Long River and Red River Deltas under sea level of 2.5 m, respectively)



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## II. IMPACTS of SEA LEVEL RISE

- Increases the number of the flooded areas
  - difficult for water drainage increased → coastal erosion
  - salt water intrusion affecting agricultural production and water
  - great risks to coastal buildings (sea dikes, roads, ports, factories, towns and populated coastal areas)

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## III. IMPACTS of GLOBAL WARMING

- affect natural ecosystems
- influence agriculture:
  - structure of plants and animals and crop is changed
  - increase the likelihood of developing diseases and epidemics
  - reduced productivity and output
  - increase risks in food security



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## **B. NATIONAL SOLUTION**

### **NATIONAL TARGET PROGRAM**

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## **I. BASIS**

Decision 158/2008/QD-TTg approved the National Target Program, issued by the Prime Minister

→ respond to climate change

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## II. SPECIFIC OBJECTIVES

### 1. Assessing:

- extent of climate change in Vietnam by global one
- impact of climate change for the areas, sectors and localities

### 2. Identifying the measures responding to climate change

### 3. Strengthening scientific and technological activities

→ establish the scientific basis for adaptation measures to climate change

## II. SPECIFIC OBJECTIVES

### 4. Consolidating and strengthening institutional capacity, institutional and policy

### 5. Raising awareness, responsibility and community involvement of human resource development

### 6. Enhancing international cooperation in order to enlist the help and support of the international organization

## II. SPECIFIC OBJECTIVES

7. Integrating climate change issues into development strategies, planning and economic development - social, sectoral and local development

8. Developing and implementing action plans of ministries, branches and localities cope with climate change; implementation of the project, first as a pilot project

## III. PROGRAM FUNDING

- For the implementation of the program activity period 2009 - 2015
- Not include funding for implementation of action plans of ministries, branches and localities
- Estimated at 100 million USD, capital allocations, as follows:
  - Foreign capital 50%
  - 50% domestic capital

## C. TECHNOLOGY NEEDS

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### I. Technologies for supporting the modern sea dikes

→ reduces harmful effects of sea level rise



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## II. Technologies alternative environmental-friendly energy sources



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## III. Modern waste treatment technology



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- and so on

**THANK YOU FOR YOUR ATTENTION!**

