The National Climate Change Adaptation Plan of Korea

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## Impacts of climate change in Korea

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>Impact</th>
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<tbody>
<tr>
<td><strong>RAINFALL</strong></td>
<td>Annual precipitation of 6 major cities increased by 19% in 100yr</td>
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<td></td>
<td>Rainfall intensity is doubled compared with that of the 1970s</td>
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<td><strong>PUBLIC HEALTH</strong></td>
<td>Increase of infectious diseases spreading wide</td>
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<td>Heat wave victims increase</td>
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<td><strong>NATURAL DIASTER</strong></td>
<td>Increase of the cost of extreme weather events</td>
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<tr>
<td><strong>INFRASTRUCTURE</strong></td>
<td>Highway and bridge damages by heavy rainfalls</td>
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<td><strong>ECOSYSTEM</strong></td>
<td>Especially vulnerable in the subtropical zone and mountain areas</td>
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<tr>
<td><strong>AGRICULTURE</strong></td>
<td>Cultivation areas shifting/moving.</td>
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Impacts of climate change in Korea

Observed climate change impact on the Korean Peninsula

Temperature Rise in 6 Major Cities:
+1.7°C/100 years

Sea Level Rise at Yong-Mu-Ri, Jeju:
22cm over past 43 years
Impacts of climate change in Korea
Impacts of climate change in Korea
History of the National Climate Change Policy

Comprehensive Plan on Countermeasures to Climate Change

1st Comprehensive Plan on Countermeasures to Climate Change (1999-2001)


3rd Comprehensive Plan on Countermeasures to Climate Change (2005 - 2007)


In 2010, Korea established the “Framework Act on Low Carbon, Green Growth” and the National Adaptation Strategy
“Framework Act on Low Carbon, Green Growth” and enforcement ordinance went into effect in April, 2010

Plans related to Climate Change Adaptation (CCA): Green Growth 5-year Implementation Plan, National Climate Change Adaptation Master Plan, Action Plans for Each Sector and Local Governments
National Climate Change Adaptation Master Plan

National Strategic Plan for Climate Change Adaptation (2011-15)

Characteristics of the Plan

- Legal plan by the Framework Act on Low Carbon, Green Growth (April, 2010)
- Made the Adaptation Master Plan with 13 related ministries
- 86 Major Projects for 10 Sectors
- Set up action plans for each sector and also for local governments

Ministerial Level Committee

Chair: MOE
National Climate Change Adaptation Master Plan

10 Sectors for Climate Change Adaptation

Public Health
- Protect the people, especially the vulnerable class, from extreme hot weather and infectious diseases

Disaster/Infrastructure
- Minimize damages from natural disasters
  - Early warning system and insurance

Agriculture
- Transform the current agricultural system into a climate smart agriculture system for food security of the country
National Climate Change Adaptation Master Plan

10 Sectors for Climate Change Adaptation

**Forest**
- Improve the forest productivity and protect forests by preventing landslides

**Marine/Fishery**
- Secure marine/fishery food resources and minimize damage from the impacts of climate change such as SLR

**Water**
- Establish a stable water supply system; minimize water related disasters

**Ecosystem**
- Enhance biodiversity by protecting habitats of vulnerable species from climate change
National Climate Change Adaptation Master Plan

10 Sectors for Climate Change Adaptation

- **Climate Change Monitoring and Projection**
  - Monitor climate change over time and provide scientific knowledge of climate change projections

- **Adaptation Industry/Energy**
  - Create new business for adaptation and minimize damages in industry and provide energy stably

- **Publication Education International Cooperation**
  - Raise public awareness and expand international partnerships for climate change adaptation
Climate Change Adaptation Framework of Korea

- **Introduced a Top-down Approach** to cope with Climate Change
  - Korea set up the National Government Adaptation Committee (NGAC) composed of the representatives of 13 ministries to implement the National Adaptation Strategy.
  - Ministry of Environment (MOE) is in charge of the NGAC and also supporting local governments.

- **Established the National Climate Change Adaption Center.**
  - Launched a national task force for climate change adaptation, the Korea Adaptation Center for Climate Change (KACCC) in July 2009 at the Korea Environment Institute. MOE and KACCC are working closely to support for both central ministries and local governments to set up adaptation plans.

- **Provided a Ground for Adaptation**
  - In August, 2010, Korea established the “National Climate Change Adaptation Master Plan (NCCAMP)” based on the “Framework Act on Low Carbon, Green Growth” and set up the committee to implement the NCCAMP successfully.
Climate Change Adaptation Framework of Korea

Multi-level Efforts for Climate Change Adaptation

National Level

- Framework Act on Low Carbon and Green Growth
- National CCA Master Plan
- Adaptation Action Plan for Each Sector

MOE, Related Ministries, and KACCC

KMA: National Climate Change Scenario

Local Level

- Local Adaptation Plan (LAP)
- Local Government: Develop & Implement LAP
National Climate Change Adaptation Master Plan

Revision of National CCA Master Plan with Recent CC Scenario

Recent Climate Change Scenario

- Recent Climate Change Scenario – RCP scenario
- Customized scenario for the whole country km*1km resolution, RCP 8.5

Vulnerability Assessment

- Sectoral climate change vulnerability assessment
- Various research centers and institutions for each sector working together

Revision of the Master Plan

- Provide guidelines for NCCAMP revision by Ministry of Environment
- Final draft of NCCAMP in 2012
Way Forwards

The results of the vulnerability assessment for each sector, based on the recent climate change scenario, will be provided.

The results of the analysis of the vulnerable class and areas will be provided.

The National Climate Change Adaptation Master Plan will be revised.

The National Adaptation Action Plan will be revised.

The 1st Adaptation Action Plan by local government will be set up in 2012.

Local governments will implement their Adaptation Action Plans.
Thank You for Your Attention!