# Thailand:



#### ASIA REGIONAL TECHNICAL WORKSHOP ON MAINSTREAMING CLIMATE CHANGE ADAPTATION IN WATER RESOURCE SECTOR

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# Thailand's context



## Thailand's 20 years Strategy

**Vision:** Developed country using sufficiency economy to be Stability, Wealthy and Sustainability

**Goals:** Developed by Sufficiency Economy

**Approach:** Sufficiency Economy Philosophy (SEP) towards the Sustainable Development Goals (SDGs)

**Strategy 4:** Green Growth for Sustainability (4.2) Effective Integrated Water Resources Management 25 Watershed, consider flood management

## Water Resources Management Strategic Plan (2015-2026)

### **Objectives :**

To solve the water resource problems that cause severe socio-economic impacts

To integrate water management in an appropriate way

To balance the economic development and sustainably environmental conservations.

To extend to the Basin Strategic Plan Study and Action Plan

## Water Resources Management Strategic Plan (2015-2026)

- 1. Strategy on water management for domestic use
- 2. Strategy on building water security for production sector (agriculture and industry)
- 3. Strategy on flood management \*
- 4. Strategy on water quality management
- 5. Strategy on upstream forest rehabilitation and soil erosion prevention
- 6. Strategy on administrative management \*

Source: http://division.dwr.go.th/bwrpp/index.php/th/



## **Water Information**



Map of Water level and quality of groundwater

## Water Status

## Flood

Thailand has encountered 13 times of severe floods in almost every provinces in 2005, 2006, 2010 and 2011

The most severe flood in the Chao Phraya River Basin occurred in 2011.

Causes great damages to lives, property as well as the country economics.

Area 1.6 million hectares.

Economic lost 1.44 Billions bath

## Water Status

### Disaster

The landslide risk area is found in 6,042 villages throughout the country.

The major reasons of landslide are

- heavy rainfall
- deforestation in watershed area

- physical condition of the river basin with steep mountains.

## Tackle Climate Change in Water Sector

Agenda: Water Resources Management Strategic Plan

Goal:

- 1. Water security
  - Water accessibility
  - Water sufficiency
  - Water quality
- 2. Disaster management
  - Flood
  - Land slide



## Water Resources Management Strategic Plan (2017-2036)

National Water Board (NWB) assigned DWR as the secretariat of NWB to study and expand the 12 years plan to be 20 years plan in order to achieve the country's vision.

#### Strategies:

- 1. Household water security
- 2. Agriculture and industry water security
- 3. Flood and risk management
- 4. Water quality management
- 5. Rehabilitation and prevention of forest, land and sea
- 6. Administrative management and Information

### Water Resources Management Strategic Plan (2017-2036)

#### Input to Policy Process

- information of current status, problems, goals, indicators, existing master plans, strategies, work plans, flagship projects, the National agendas, and the SDGs

### Roadmap to implement

- Area-Agenda-Function based projects
- Budget integration in proposes area
- Good Governance mechanisms



#### Water Management Strategy Review: To Tackle Climate Change in Thailand

Further Research Topics 2015

Study on water usage in the water quantity risk

Study of the guideline to evaluate risk assessment for water management

Capacity building on information, research and technology

Study for appropriate organization at basin, sub-basin level

> Study and review the policy process in pilot area

Study of water allocation criteria by cost and social cost

### Study and develop the water

Study the water usage behavior and conjunctive use management in specific

Prepare for the water management to tackle the climate change

Study of conserving and wise use to maintain the ecosystem

Study the success story of pilot project to develop the adaptation plan and guideline Study and prioritize the flood and drought protection investment

Develop the water management mechanism at basin level Study the rainfall pattern

Study the capacity of demand and supply of water usage and the Study configuration mechanism for water allocation and price

Develop the water's policy process

Study of basin settlement as the culture

### Mainstreaming Climate Resilience Policy into Development Plan

Big Data / Information support

Early Warning System for land slide

Sendai Framework for Disaster Risk Reduction 2015-2030

Adaptation Co-benefit

Water Security

People Wellness



# Lesson learned

- Evidence base to downscaling into proposed area
- Insufficient climate
  proof



- CCBA