



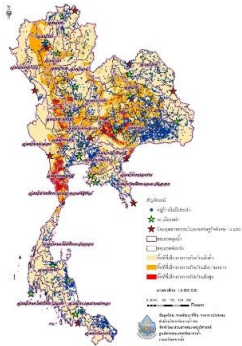
Update on national capacity on water resources management

**The National Water Command Center
Office of the National Water Resources**

**Mr. Atthapong Chantanumate
Expert on Water Analysis**



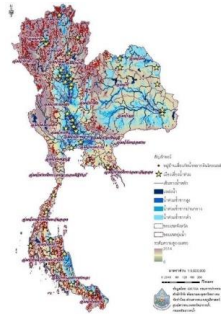
Problems of the National Water Management



Water Shortage

Lack of ater supply system 7,490 villages

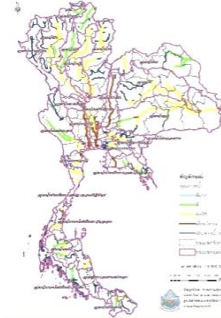
Non-irrigated area 190,400 Sq.Km



Flood

Losses in 2011: 1.44 million million baht
People affected 12.8 million/ Died 813 persons

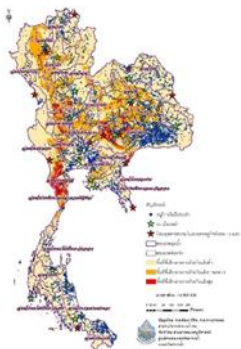
Flood Risk Area 42,800 Sq.Km



Water quality

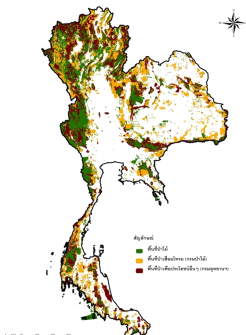
Require monitoring on salt water intrusion: 8 basins

Water quality degradation from moderate - maximum level: 9 basins



Lack of Domestic use

Lack of Domestic use in 59 Cities



Denuded forest

Forest area only 31% of country's area



No coordination
among water-related agencies



Policies of the National Water Management

Cabinet Resolution
on 7 May 2015
assigned the National Water
Resources Committee to implement
the *Strategic Plan on Water
Resources Management*
(2015 - 2026)

National Council for Peace and Order (NCPO)
establish
Office of the National Water Resources
On 25 October 2017



Roles and responsibilities

1. To study and analyze water situation for making policy recommendations, providing water resources management master plan, and coordinating to implement policy into practice.
2. To collect national budget on integrated water resources management and make recommendations on water resources management planning to the National Water Resources Committee (NWRC).
3. To monitor water resources management based on designated policy, master plan, and measures.
4. To integrate both national and international water information and evaluate water needs and water supply for different sectors including present and future impact.
5. To serve as secretary to the NWRC
6. To establish and operate the Special National Command Center for Water Crisis.

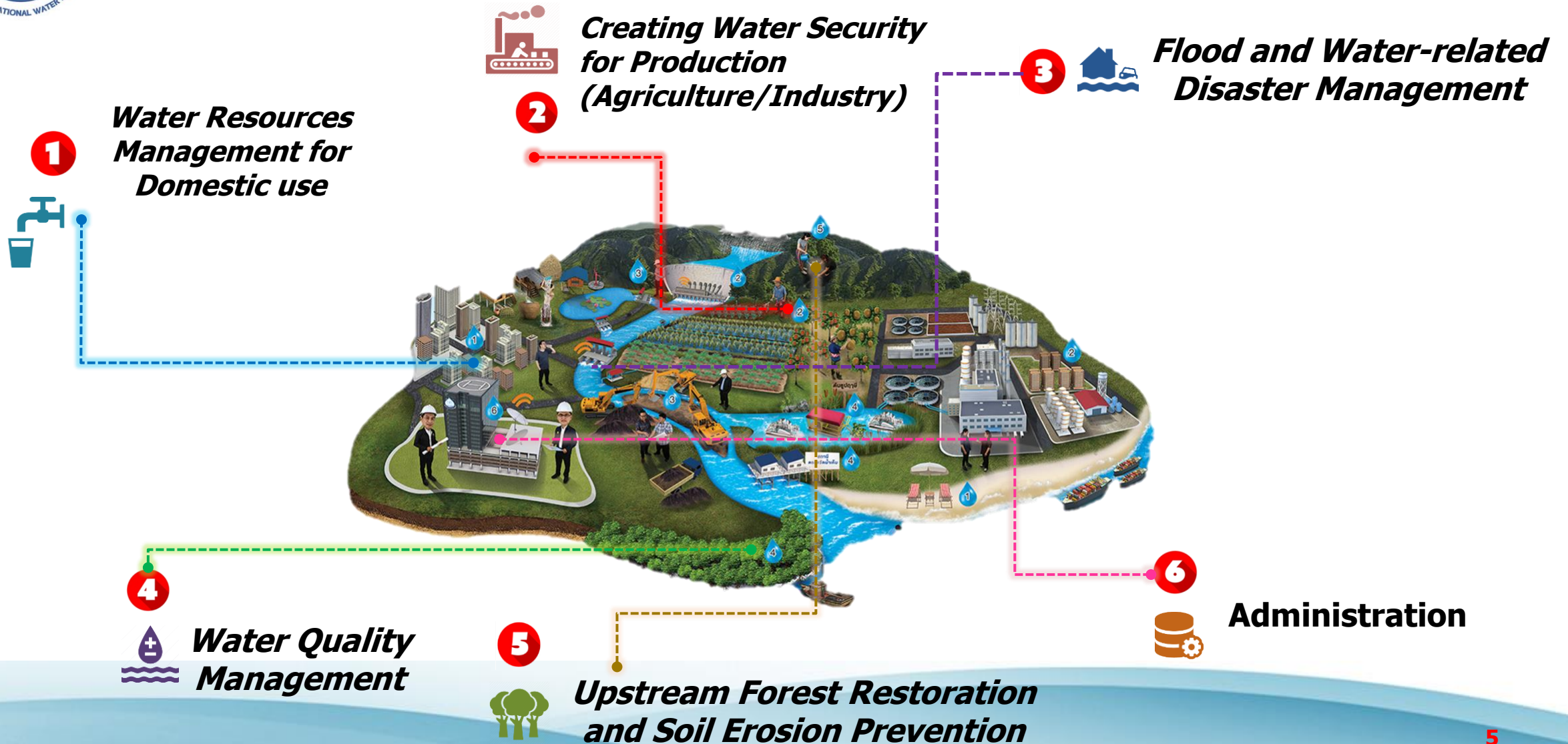


Mechanism to Manage Water of the Nation



4 - Pillar Mechanism to Manage Water

20-Year Water Resources Management Master Plan

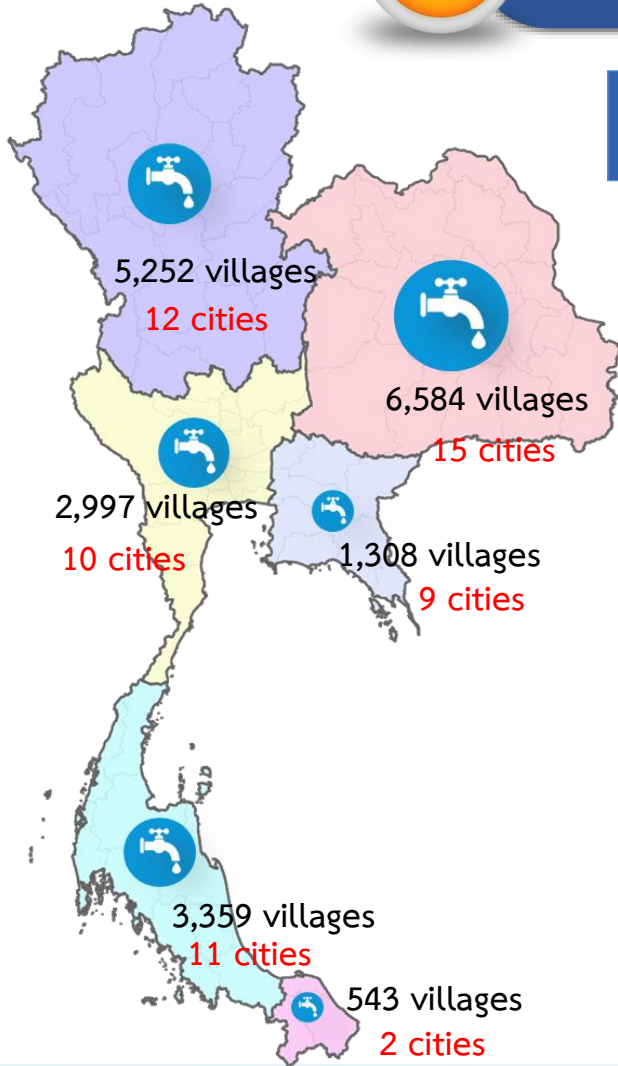




1

Water Resources Management for Domestic Use

Targets



Standard of water supply at villages is equal to standard of drinking water within 2030 (SDGs)



Support the expansion of major cities, tourist attraction cities, and economic area in duration of 20 years



Water saving / Maintain rate of water use per capita and reduce it in the future (2027)

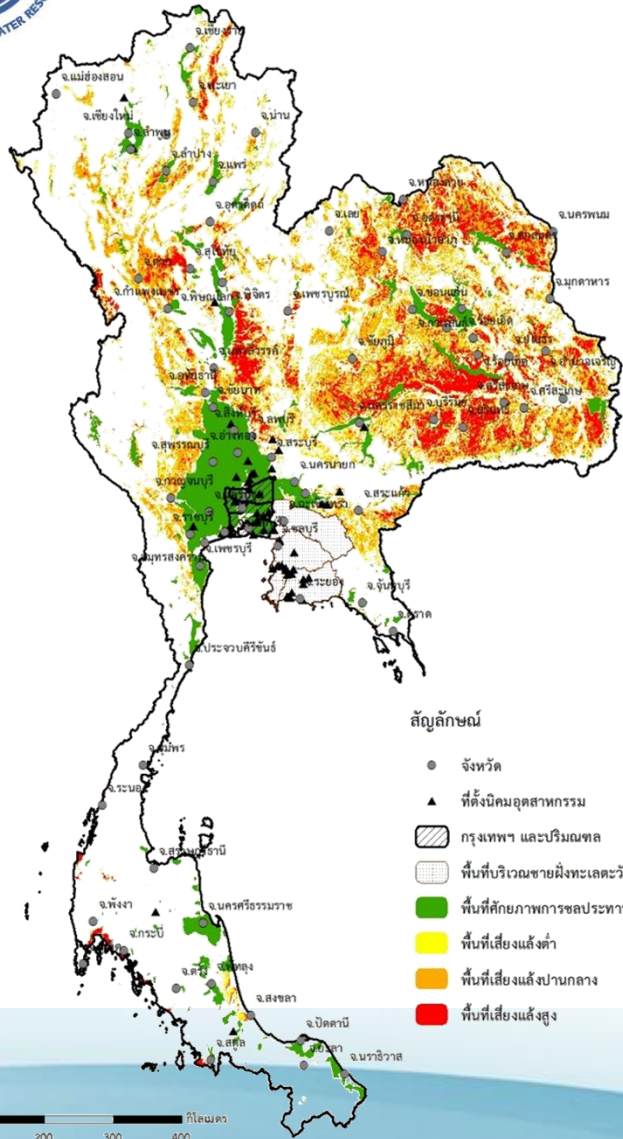
Program on Efficiency Improvement of 20,034 water supplies
Program on Urban Water Supply Development of 59 cities (2022)





2 Creating Water Security for Production (Agriculture/Industry)

Targets



Develop new water resources and delivery system to the highest potential



Water provision for rainfed agriculture to enhance potential of small projects and to reduce risk of crop damage at 50%



Increase productivity and improve water use structure in collaboration with the National Strategy No.2 (Competitiveness Enhancement) and No.4 (Opportunity and Social Equity Creation)

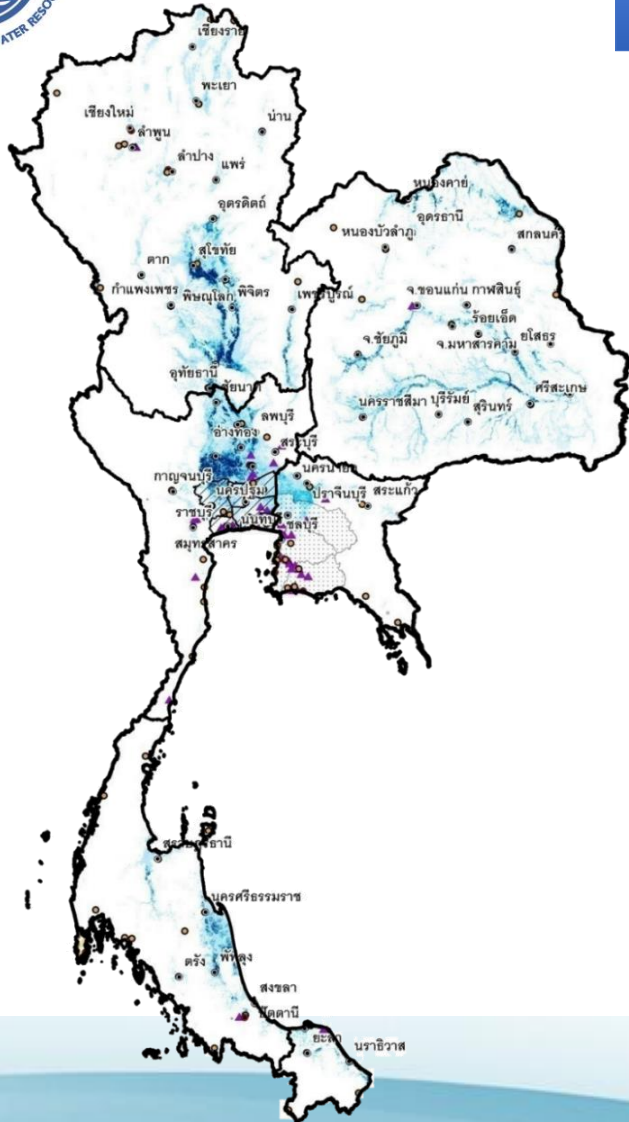




3

Flood and Water-related Disaster Management

Targets



Drainage / Water Channel Obstruction Improvement

- 565 main rivers
 - 154 Tributaries
 - 562 Water Channel Obstruction
- 5,500 Km.**



Provide river basin layout and enforce it in city/province planning



Flood protection of 764 cities by sequence of damage or economic and social impact



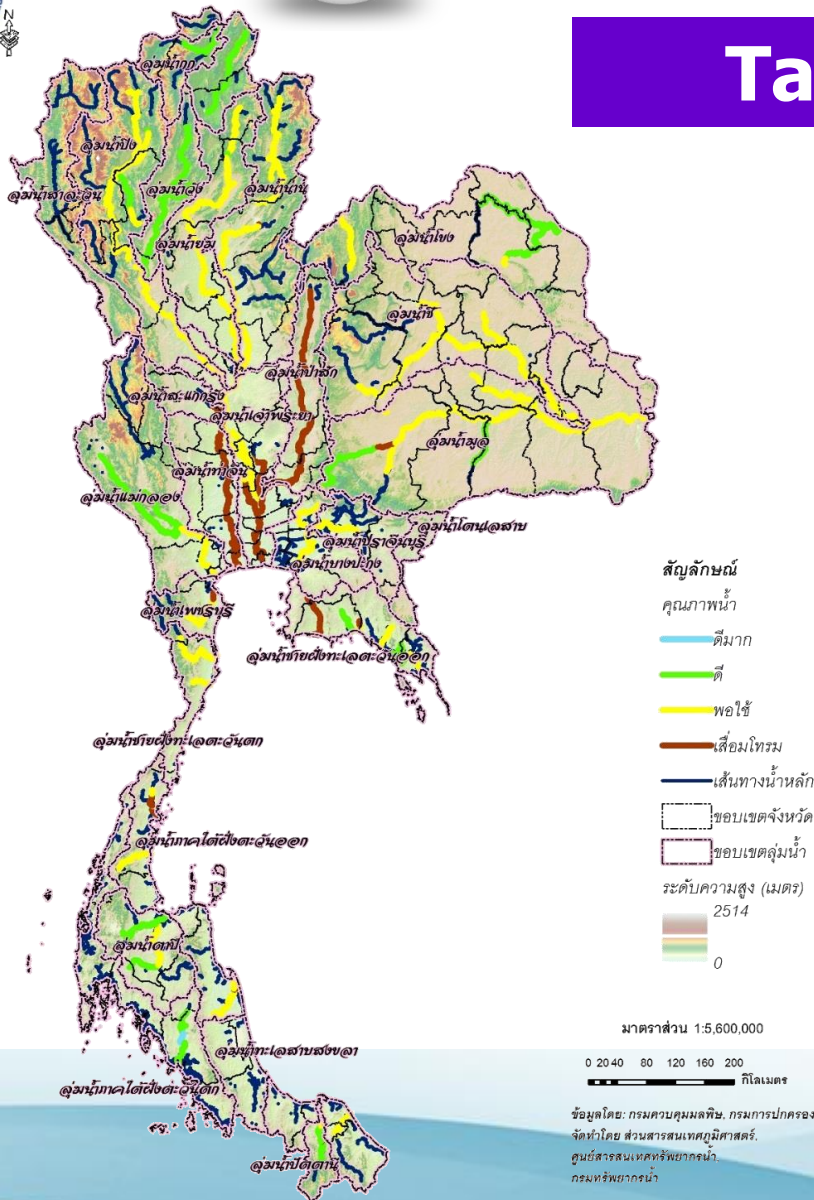
Flood mitigation of crisis area, big watershed, sub-basin / minimize risk and severity at least 60%



Increase adaptation and evacuation efficiency during flood period



Targets



Develop and enhance efficiency of collecting system and central wastewater treatment plant to control wastewater drainage to the environment



Control and reduce wastewater, both quantity and dirtiness, at source



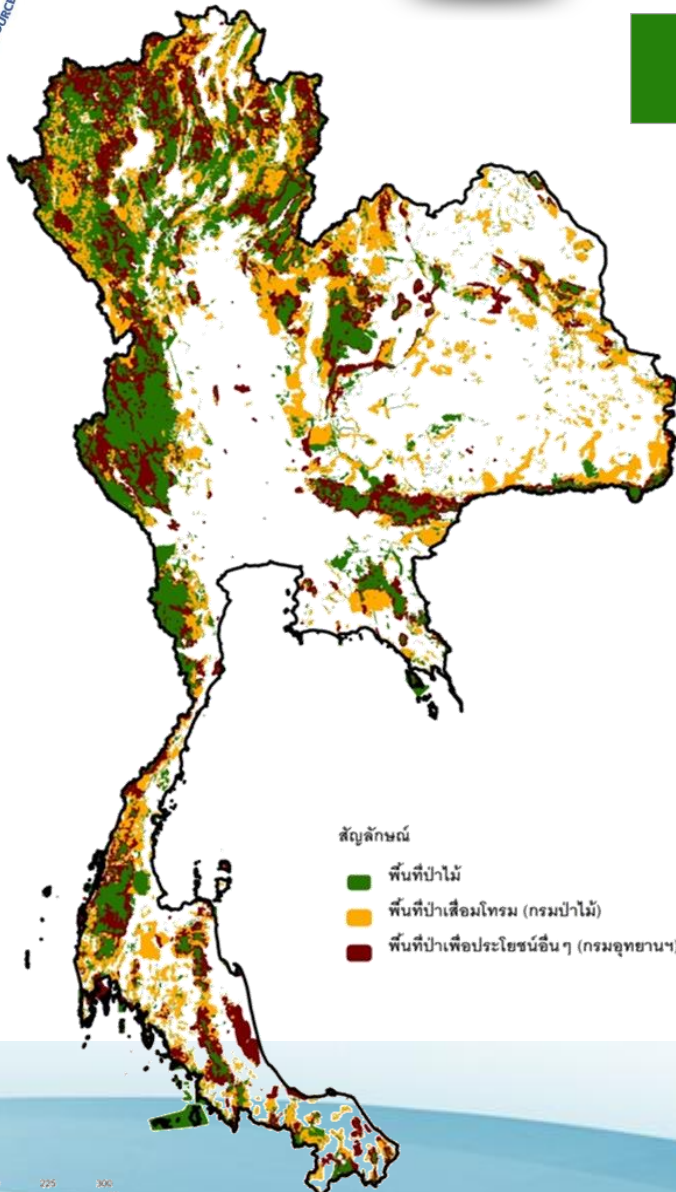
Restore rivers, canals, and natural water bodies throughout the country



5

Upstream Forest Restoration and Soil Erosion Prevention

Targets >>40%



Upstream forest *was restored* and *slow down flash flood at upstream area*



Prevent soil erosion of steep farming to retard water and decrease sediment in water resources





6

Administration

strategy

1



Provide improve law, institution in relation to water management



- 28 water-related laws
- Establish the National Water Resources Committee / River Basin Committee in conform to the Water Resources Act 2018

2



Make water management plan



Strategic plan / Master plan / Action plan / Crisis plan

3



Monitoring and evaluation



Impact evaluation

4



Develop database and Decision Supporting System



- System that links to Big Data
- Provide additional database
- Efficiency enhancement and water administration

5



R&D and initiate water management approaches



Research that is used in water management

6



Public relations, participatory water management, and capacity development



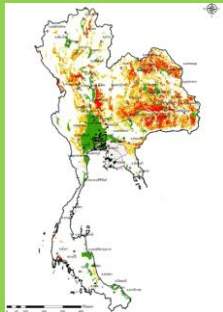
- Capacity development of target groups
- Target groups that receive PR media about water management



20-Year National Strategy & Sustainable Development

20-Year National Strategy & Sustainable Development

SEA
(Strategic Environmental Assessment)



Development within carrying capacity of the environment

- **Apply SEA for basin development plan**
- **Balance use of national natural resources**
- **Mitigate impact to transboundary water**



Challenges and way forward in next 10 years



POLICIES

- MRC Regulation
- Transboundary coordination

Climate Change

- R&D on water management and adaptation
- Data sharing network with MRC member countries

Human Resources

- Capacity building
- Access to updated water information

Environmental Impact & Economy

- Secure environment & economy among MRC member countries



Thank
you!!