



๗๐ ปี ครองราชย์ ประชาชนร่วมใจกตัญญู
รักษาน้ำตามรอยพ่อ

70th Accession Anniversary
Civil State Loyally & in Unity
Conserve Water Resources Following
Guidance of His Majesty the King



"...The importance is we must have water to drink, use and cultivate because life is there. If there is water, we can survive. If there is no electricity, we also can survive. But if there is electricity but no water, we cannot survive..."

*King Bhumibol Adulyadej's speech
Given at Chitralada Villa on 17 March 1986*



Department of Water Resources
Ministry of Natural Resources and Environment



“ ... If His Majesty the King is water, I would be the forest... The forest that is faithful to the water. If His Majesty the King builds a reservoir, I would plant a forest ...”

*Her Majesty Queen Sirikit's speech
Given at Baan Tamtiw, Amphoe Song Dao, Sakon Nakorn province on 20
December 1982*

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Ministry of Natural Resources and Environment*

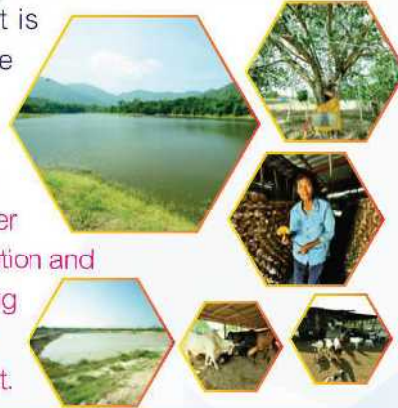




"Hubkapong"

The First Project under His Majesty The King's Initiative

"Hubkapong" or the cooperative village project of Hubkapong under royal patronage in Phetchaburi Province covers the area of approximately 12,500 rai. It is the first project following His Majesty the King's initiative to allocate degraded forest areas around Khaoyai subdistrict, Cha-am district, Phetchaburi Province for those who face land problems and have low income by not giving them land ownership. It is considered as one of the current model of the agricultural cooperative project implementation. Even though there are some reservoirs, it is inadequate for agriculture and many areas still face drought problem. **Department of Water Resources** has carried out many conservation and rehabilitation projects to support Hubkapong Royal Initiative Project and entrusted local people with the maintenance of the project.



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Ministry of Natural Resources and Environment*

Department of Water Resources Implemented Nong Suea Reservoir Conservation and Rehabilitation Project under the “Chang Hua Mun Project under the Royal Initiative”



The “Chang Hua Mun Project under the Royal Initiative” is regarded as the center of economic plants in Tha Yang district, Phetchaburi province. His Majesty the King had the best local species cultivated in the area, and asked government agencies and local people to look after the plants grown in the project area.



Department of Water Resources under Ministry of Natural Resources and Environment is an agency implementing the Royal Initiative by continuing the Chang Hua Mun Project under the Royal Initiative of His Majesty the King. The department has supported the Nong Suea reservoir conservation and rehabilitation project, developed two multi-purpose grounds, improved a pedestrian bridge across the reservoir, and built an open terrace at the entrance and an island for bird watching. The project area is so fertile that it is called “the King’s Farmland”.



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“Doi Ompai”

“Doi Ompai” Project under Her Majesty Queen Sirikit’s Royal Initiative



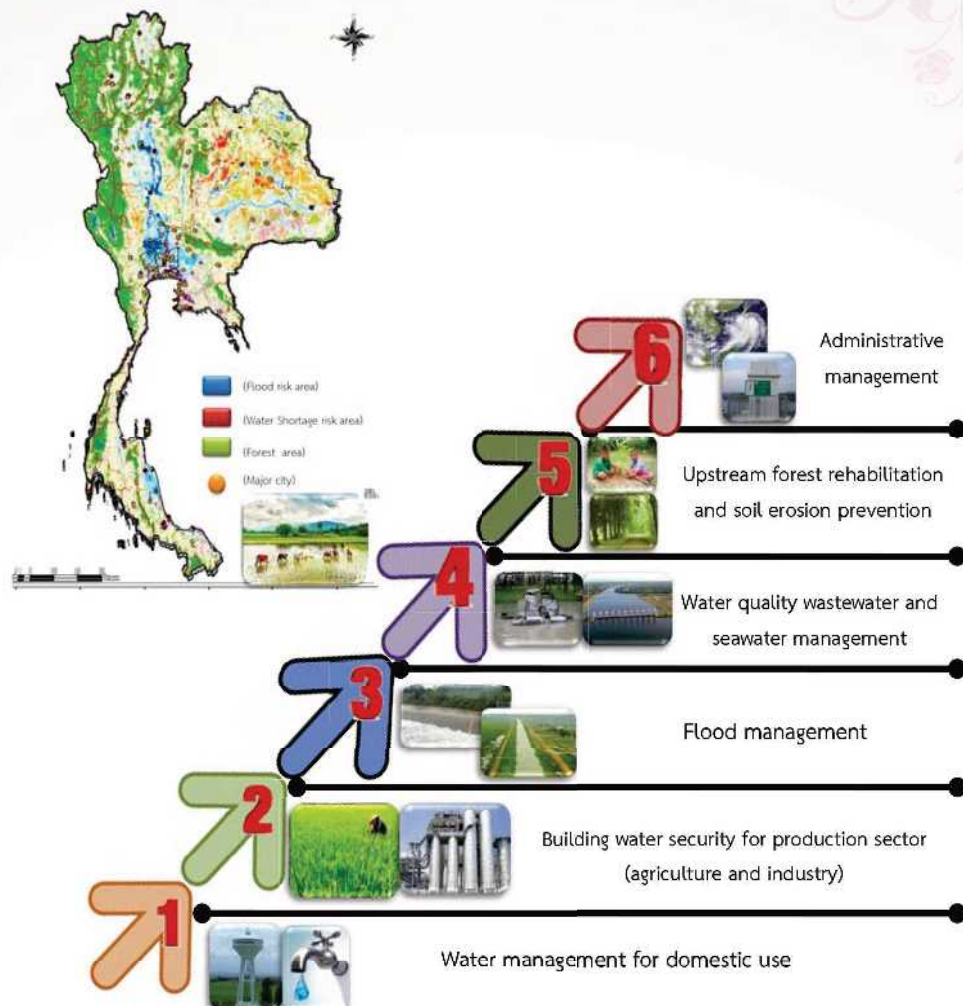
Doi Ompai highland agricultural development station under the Royal Initiative is located in Sam village, Pang Hin Fon sub-district, Mae Chaem district, Chiang Mai province. Department of Water Resources under Ministry of Natural Resources and Environment has followed the Royal Initiative by constructing water sources in the area, namely 6 check dams, 3 reinforced concrete ponds of 1,000 m³ retention capacity and water conveyance system, 8 reinforced concrete water tanks of 150 m³ retention capacity and water conveyance system, 11 water retention ponds and water conveyance system, and a village water supply system. These water sources can be utilized in the 300 rai agricultural development station as well as the 380 rai mixed agricultural land plot. At present, they have ensured the “water” abundance for the project.



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Ministry of Natural Resources and Environment*

Water Resources Management Strategy

The Thai government's policy has followed His Majesty the King's initiatives on water resources management as strategic planning resource management facility of the country.



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Ministry of Natural Resources and Environment



Water Resources Management Strategy

1 Water management for domestic use



2 Building water security for production sector (agriculture and industry)



3 Flood management



4 Water quality management



5 Upstream forest rehabilitation and soil erosion prevention

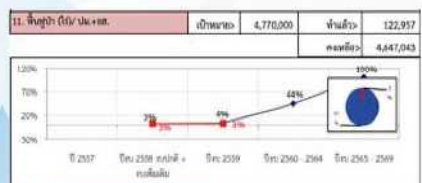
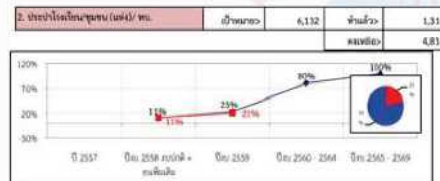


6 Administrative management



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Results of Water Resources Management Strategy (26 May 2016)



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Ministry of Natural Resources and Environment



"...When the flood occurs somewhere... Understanding various situations thoroughly is needed... When knowing all the situations clearly, the timing and situations that may happen in the future could be forecasted. Then, protection measures could be well determined in accordance with the problems and area."

Royal Speech of His Majesty King Bhumibol Adulyadej
In the commencement ceremony of Chulalongkorn University
at Chulalongkorn University on Friday 17th July 1998

The Flash Flood and Landslide warning system

Tool cabinets in the alarm stations for
flash floods and landslides



The warning signs
with light signals and
sirens for people living
in the risk areas



Rain recording gauge



Early Warning

Rain measurement and determination of warning criteria. People in areas of surveillance should give warning signs when the rain level reaches defined criteria and take actions according to rehearsals. The system sends back information to the center (Department of Water Resources) and National Hydro Informatics and Climate Data Center.

Satellite Communication System or Telecommunication System



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“...we should try to pump water up step by step until reach the possible highest level using renewable energy such as solar energy and wind energy which is always available in order to save fuel. When water is stored at the highest level, it can be naturally distributed...”

Royal Speech of His Majesty the King

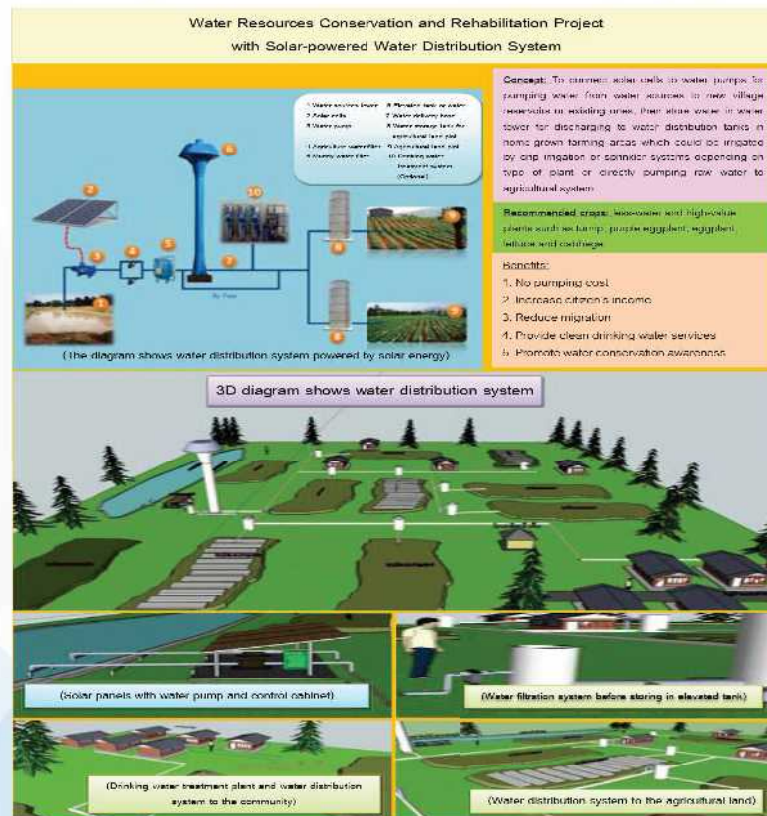
3 June 1987

Huai Sai Royal Development Study Centre

Solar-powered water distribution system

People have access to water

by saving cost of fuel and electricity for water pumping



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"Considering for small reservoirs to support agricultural areas in nearby villages..."

Royal Initiative
10 September 1985
Narathiwat Province

Village Reservoir "OVOWS"

All villages have access to water
The number of reservoirs appropriate for areas and water demands

The concept of water supply improvement in response to basic needs specifically in areas which are difficult to provide water supply by constructing sustainable open and closed system "village reservoir"

One Village One Water Supply : OVOWS

A measure for helping low-income people and stimulating small investments under the mission of Ministry of Natural Resources and Environment

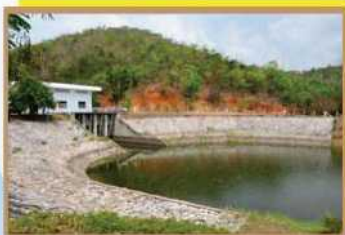
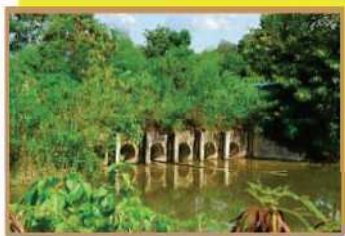


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“...natural water resources should be improved by excavating canals to connect them so that they can store more water, which will relieve flooding and serve as water resources for agriculture in dry season.”

*Royal Initiative
given on 18 November 1992
at Sakon Nakhon Irrigational Project*

“Huai Mai Teng Rehabilitation Project”

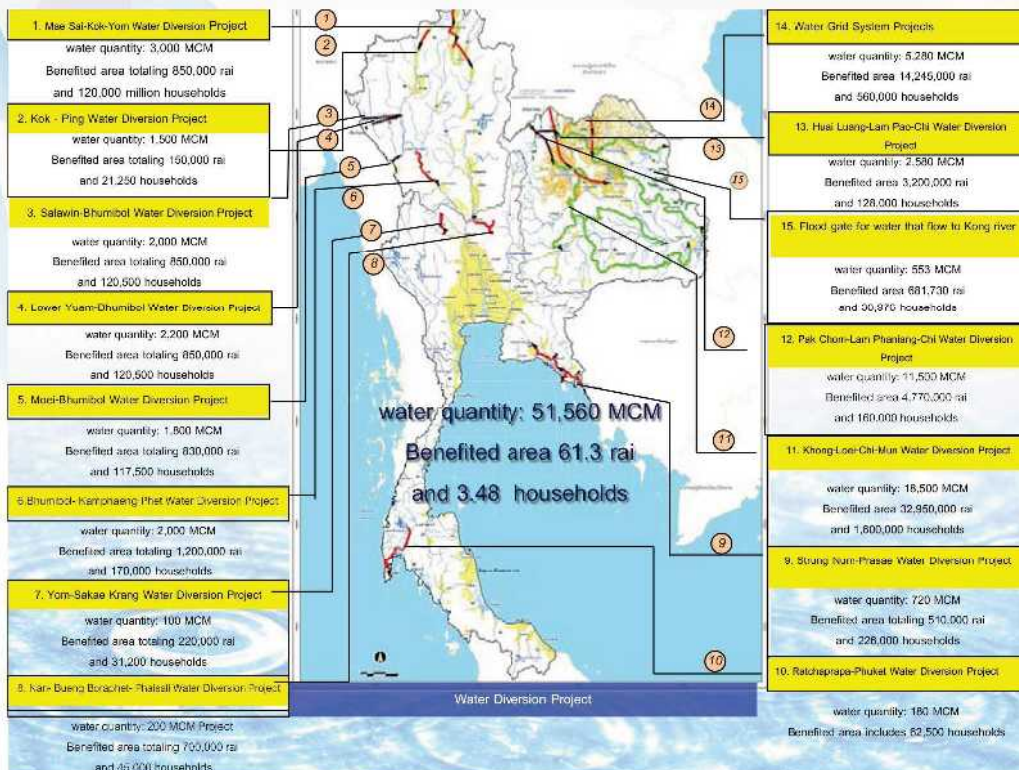


Department of Water Resources under Ministry of Natural Resources and Environment has adopted the royal initiative of His Majesty the King on using the network of reservoir operation for water management in Ratchaburi Province. The project is implemented by distributing water from Tha Khoey reservoir to Huai Ma Hat reservoir and then from Huai Ma Hat reservoir to Sam Nak Mai Teng reservoir. This can alleviate the flood problem in the lower area of Tha Khoey reservoir and Huai Ma Hat reservoir. In addition, water stored in Sam Nak Huai Mai Teng reservoir can help reduce drought problem. (Huai Mai Teng Rehabilitation Project has been completed while Tha Khoey reservoir – Huai Ma Hat Project and water distribution system are under construction).

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Water Diversion Project



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Accomplishment of Department of Water Resources

19,053 water resources conservation and rehabilitation projects,
Capacity **1,623.14 million³ m** , service for **1,082,400** rai of agriculture
and **5,412,400** households.

267 water resources development supporting the royal initiative project
capacity **41.61 million³ m** , service for **29,700** rai of agriculture and **138,600**
households.

153,419 members of the river basin organization and network organization
contributing to water resource management.

1,947 Early Warning System for flash flood and landslide covering **6,420**
villages.

133 Water The telemetry system covering **10** main river basin.

51 CCTV stations for monitoring actual water situation in **16** river basin.



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Water For Life



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