



# Country Report for THA2019

*by Royal Irrigation Department (RID)  
towards  
Asia's Water-Food-Energy Nexus and SDGs*



**THA 2019** International Conference on  
Water Management and Climate Change towards Asia's  
Water-Energy-Food Nexus and SDGs  
23-25 January 2019, Swissôtel Bangkok Ratchada, Thailand

## Outline

- 1 • SDG's Supporting Plans UN → Thailand → RID
- 2 • Thailand's SDG 6, NEXUS, and AQUASTAT
- 3 • RID No.1 → SDGs & Water-energy-food NEXUS
- 4 • RID's Best Practices



## SDG's Supporting Plans UN → Thailand → RID



**HIGH-LEVEL POLITICAL FORUM ON SUSTAINABLE DEVELOPMENT**

THAILAND WAS PART OF THE 2017 VOLUNTARY NATIONAL REVIEW OF THE HIGH-LEVEL POLITICAL FORUM ON SUSTAINABLE DEVELOPMENT

Sufficiency Economy Philosophy (SEP) for Sustainable Development Goals (SDGs)

**Legal aspect**

**National-level organization on water resource management**

**National Water Resource**

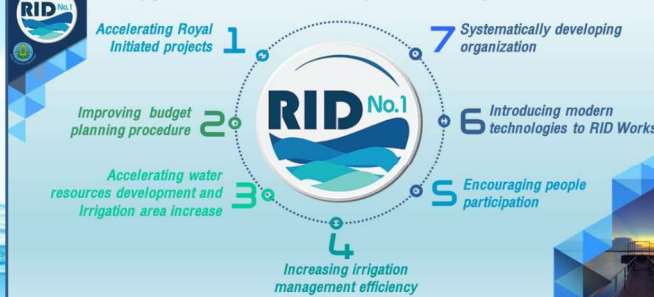
**Water resource management strategic plan**

**3 pillars** of water management in Thailand

**RID No.1**

Approaches for Achieving RID Strategic Plan

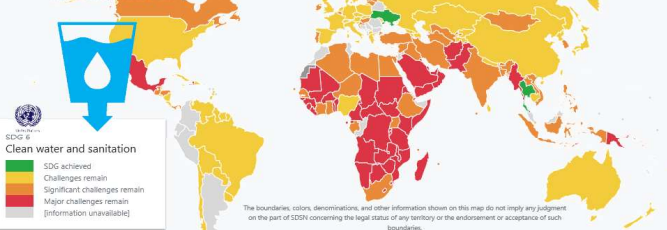
### Approaches for Achieving RID Strategic Plan



SDG Index and Dashboards Report 2018

Global Responsibilities: Implementing the goals

### 6 CLEAN WATER AND SANITATION



### Current Assessment – SDG Dashboard



## Thailand's Water Security

### Strengths

- High clean water accessibility (98%) compared with the rest of the world
- Population has access to improved sanitation facilities (96%)
- 25% of agricultural areas irrigated, compared with global average of 19%**
- Fresh water aquacultural area of 3,750 km<sup>2</sup>

### Weaknesses

- Low runoff (6,382 cu m per capita/ yearly)
- High portion of agricultural water use
- High water footprint in agricultural sector (ranked 3rd globally)

### Development Potential

- Still low industrial water use (34 cu m/year) compared with 37 cu m globally)
- Low water use for energy (4%) compared with the global average (31%)

Source: Water Security Index Concept: Thailand's Water Security Situation in the context of world and ASEAN

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## Update on supporting SDG 6 Indicators under FAO Custodianship (AQUASTAT)

### GOAL 6. ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL



6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity

- 6.4.1 Change in water-use efficiency over time (Tier II)
- 6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources (Tier I) **Thailand 17.49 year 2014**

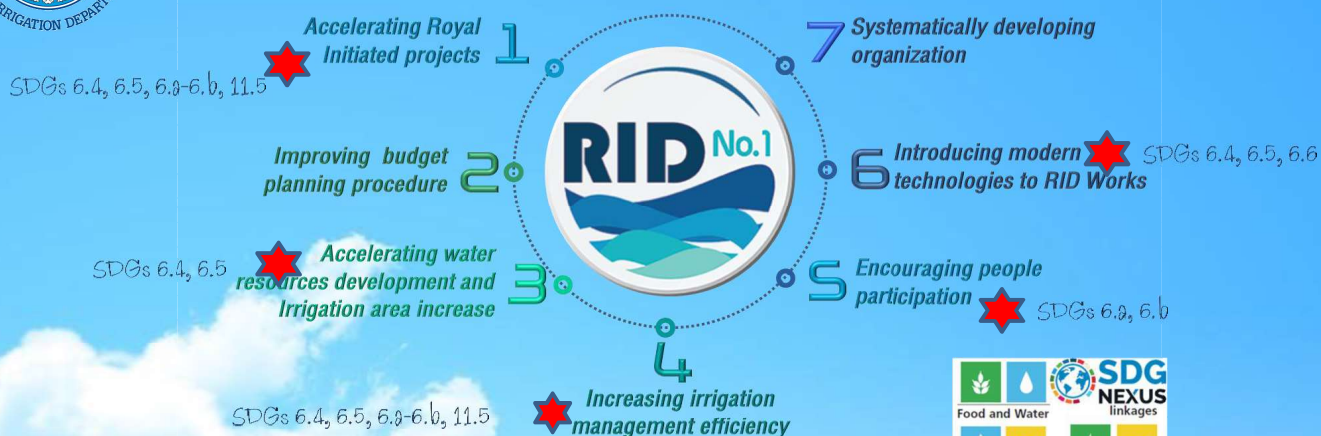
### DATA COLLECTION (NEW)

- On 4 May 2018, FAO sent a letter to all countries requesting the appointment of a National Focal Point who will be responsible for completing FAO's "Water and Agriculture" Questionnaire.
- At the same time, request for:
  - Updated data on 2015-17
  - Validation of data 2000-2014
- Data collected through this questionnaire aim to provide a comprehensive picture of water resources and uses at the national and sub-national level
- These data will be critical in calculating SDG indicators 6.4.1 and 6.4.2

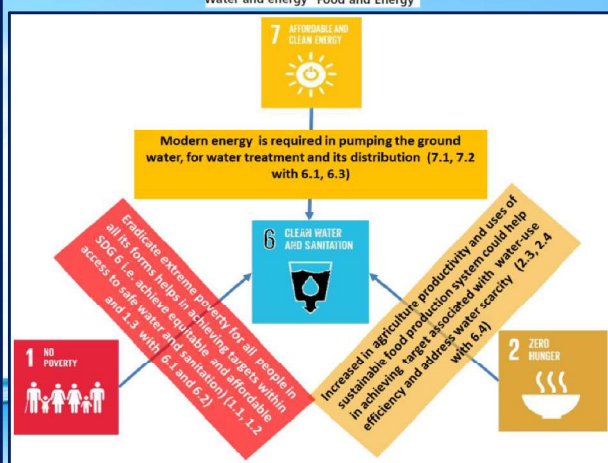
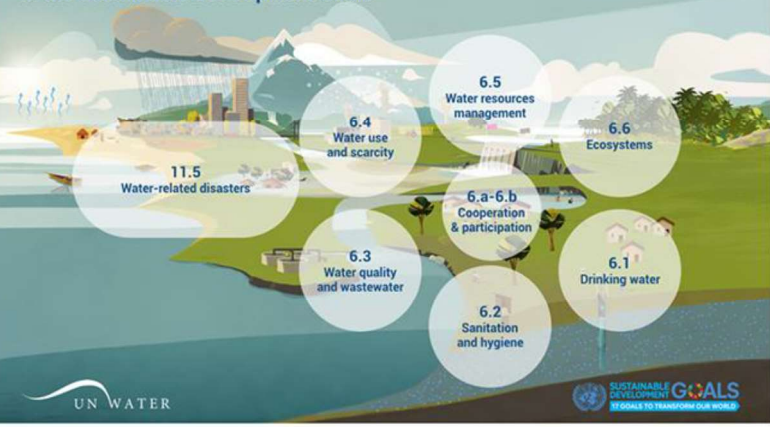
Country	Nominated focal point?	Returned questionnaire?
Afghanistan	Yes	NO
Bhutan	NO	NO
India	NO	NO
Iran	NO	NO
Japan	NO	NO
Lao PDR	Yes	Yes
Malaysia	Yes	Yes
Maldives	Yes	NO
Mongolia	Yes	NO
Pakistan	Yes	Yes
Papua New Guinea	NO	NO
Republic of Korea	NO	NO
Samoa	NO	NO
Thailand	Yes	Yes
Turkmenistan	NO	NO
Uzbekistan	Yes	Yes

Country	National Focal point for 6.4.1/6.4.2
Mongolia	Oyunjargal MANGALSUREN, Senior Statistician of Economic Statistics Department, National Statistics Office of Mongolia
Pakistan	<ul style="list-style-type: none"> <li>Mr. Fazil Mahmood Baig, Director (National Account), Pakistan Bureau of Statistics</li> <li>Mr. Waqar Aslam, Chief Statistical Officer (agriculture), PBS</li> </ul>
Papua New Guinea	
Republic of Korea	
Samoa	
Thailand	<ul style="list-style-type: none"> <li>Chalermkiat Khongwichianwat, Deputy Director General for Engineering, Royal Irrigation Department</li> <li>Mr. Sanya Saengpumpung, Director of Water Management and Hydrology Bureau, Royal Irrigation Department</li> </ul>

## RID No.1 & SDGs + Water-energy-food NEXUS



### The Water Cycle in the Sustainable Development Goals





# RID No.1 : Strategic Approaches 1, 4, and 5



SDGs 6.4, 6.5, 6.9-6.10, 11.5

★ Accelerating Royal Initiated projects



SDGs 6.4, 6.5, 6.9-6.10, 11.5

★ Increasing irrigation management efficiency



The Huai Hong Khrai Royal Development Study Centre,



The Phu Phan Royal Development Study Centre, Sakon Nakhon



The SWOC command center for water resource management

## RID No.1 : Approach 6



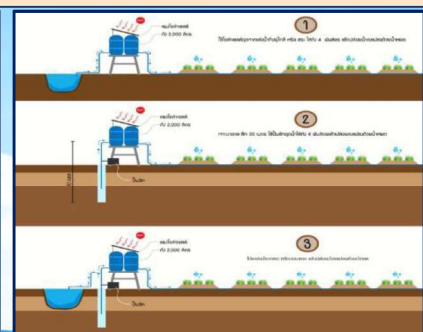
6 Introducing modern technologies to RID Works ★ SDGs 6.4, 6.5, 6.6



Underground and Dripping Solar Irrigation Projects



The South Bungmalang, Ubon Ratchatani Solar Irrigation Project



More than 10 RID solar water powered irrigation projects are being implemented throughout Thailand



## RID's Best Practices for SDGs and NEXUS



The Mae Taeng- Mae Ngat  
-Mae Kuang Diversion Tunnels, and  
Naruebodindrachinta irrigation Projects

The Smart Water  
Operation Center (SWOC)



The WATSAVE awarded  
Alternating Wet and Dry  
Technique (AWDI)



The 'Kok Nong Na' self-sufficiency  
water and land management  
Learning Hub by The Irrigation  
Development Institute (IDI)



## End of Country Report for THA2019

by **Royal Irrigation Department (RID)**  
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# THANK YOU



THA  
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