



## AUDIT OF WATER RESOURCES CONSERVATION AND REHABILITATION PROJECTS IN RURAL AREAS AND ITS IMPACTS

17TH ASSEMBLY MEETING OF INTOSAI WGEA  
24 TO 27 OCTOBER 2016 JAKARTA, REPUBLIC OF INDONESIA

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## Introduction

- ◉ *In 2015, Government planned to promote economic recovery and sustaining economic by launching several measures*
- ◉ *including additional measures to boost the economy in Phase 2 to support economic recovery*

## Introduction (cont.)

*second phase of economic stimulus measures, budgeted at 77,096 million THB (Approx. 2,200 Million USD)*

*urgent water management projects Approx. 1,074 Million USD*

*urgent ground transportation development projects Approx. 1,126 Million USD*

## Introduction (cont.)

- ◉ *Department of Water Resources (DWR) play a vital role in developing measures to protect against water sources deterioration and pollution, measures for rehabilitation of water resources and aquifers to ensure the reasonability, safety and sustainability in exploitation, utilization of water resources.*

## Introduction (cont.)

- ◉ *In FY 2015, Bureau of Water Resources Conservation and Rehabilitation along with several Bureaus under DWR initiated Water Resources Conservation and Rehabilitation Projects located in provincial areas nationwide*
- ◉ *to improve natural water resource*
- ◉ *increase competence to store water supply during drought period.*

## Introduction (cont.)

- ◉ *to protect flood disaster during monsoon period.*
- ◉ *To provide water for consumption and agriculture purpose*
- ◉ *to create prosperity to ecological system*
- ◉ *The construction of projects aims to dredging canals, flood protection dams and other engineering work.*

## Introduction (cont.)

- ◉ *Office of the Auditor General of Thailand (OAG) has monitored projects closely especially its impacts to environment.*

## Objective, scope and criteria

- ◉ *to mitigate the risk of corruption so called preventive audit with proactive audit approach. Subject to the Organic Act on State Audit B.E.2542 (1999)*
- ◉ *to ensure that procurement process will be conducted properly and complying with law and regulation concerned*
- ◉ *to ensure that construction work is complying with blueprint, detail designed and related construction documents specified in contract*
- ◉ *its impact to environment is one of the most important issues to be considered.*

## Audit Methodology

- ◉ *risk assessment*
- ◉ *contracts sampling*
- ◉ *auditing of preparation of procurement plan, tendering and awarding processes*
- ◉ *audit of contract management.*

## Audit Methodology (cont.)

- ◉ *monitoring inspections and reviewed documentation*
- ◉ *worksite visiting. Global Positioning System (GPS) is also being used to determine locations of projects.*
- ◉ *Responsible DWR staff and relevant stakeholders were interviewed.*
- ◉ *Our audit team consists of lawyers, accountants and engineers*

## Field Work



## Field Work (cont.)



## Key Findings

- projects were set up without adequate data of environmental impact assessment and information pertaining peoples' need.
- In term of type and scale of project, no compulsory regulation governs the EIA. Thus, the efficiency Environmental Impact Assessment was not complied.
- DWR focused more on how to settle the dispute and make compensations to peoples who illegally lived in worksites.
- Calculation of Estimated Standard Price of the projects (unit-cost) was mistakenly calculated by Estimated Standard Price Committee.

## Key Findings (cont.)

- lack of tools and office device that required contractor to provide for DWR's employee at worksites was found.
- partial of construction work was not comply with blueprint and detail designed specified in contract.
- level of dredging soil that aim to create biodiversity of aquatic animals and aquatic plants will not reach objective.
- improper of record-keeping of projects documents at worksite office was also found by audit team.

## Key Findings (cont.)

- ◉ absence of DWR supervisor at worksite was found
- ◉ Supervisors and Work Acceptance Committee (WAC) are appointed from DWR officers who work at Headquarter where located in Bangkok.
- ◉ Meanwhile all projects were located in provincial area. Hence, WAC and supervisor couldn't perform their duties properly and efficiently.

## Key Findings (cont.)

- ◉ huge volume of dredged soil was dump in area around worksite without adequate information about impacts to environment, wildlife and endangered species.
- ◉ DWR did not adequately communicate possible environmental impacts issues to concerned agencies and other stakeholders.
- ◉ As part of measures to boost the economic growth, Government urged DWR to disburse expenditure on time. So that projects were urgently implemented without preparedness and adequate manpower and information regarding impact to environment.

## Recommendations & Impacts

- ◉ *Adequate data of environmental impacts must clearly define during project formulation.*
- ◉ *DWR shall correct all mistakes regarding construction work conducted by contractor.*
- ◉ *Director General of DWR recently transferred mandates and duties of WAC and supervisor to DWR officer who work at Regional Water Resources Office.*

## Recommendations & Impacts (Cont.)

- ◉ *Good practice guide and capacity building for relevant DWR employees regarding projects has been introduced.*
- ◉ *The audit report also received considerable attention from the key stakeholders.*

## Difficulties & Barriers

- ◉ *improper of record-keeping of projects documents at worksite office*
- ◉ *some documents and records were kept at the Headquarter*
- ◉ *Inadequate knowledge regarding environment impacts of compliance audit team. (Unlike performance audit team)*

## Lessons learned & Way Forward

- ◉ **Under Government's measures to boost the economy, more urgent water management projects have been conducting by DWR nationwide.**
- ◉ **OAG shall monitor closely and work with all stakeholders**
- ◉ **For sustainable development, OAG play a proactive role to ensure that such works will be implemented properly, meet objectives without negative impact to environment.**

*Thank you*

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