Outlook on Water Governance in Thailand

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Objectives

- Institutional Arrangement on Water Governance
- Drawbacks
- Imminent Problems
- Attempts for Reform and Future
• Area: 51.31 mil ha
• Rainfall: 1,634 mm
• 25 River Basins
• Arable Land: 20.85 mil ha
  • 40.64% of total area
• Irrigated Area: 4.54 mil ha
  • 8.85% of total area
  • 21.77% of arable land

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Dominance of Agriculture in Water Usage

- 94 per cent of water is used by agricultural sector
- 4 per cent by household sector
- 2 per cent by industrial and service sectors
Institutional Arrangement on Water Management

National Water Resource Committee

Ministry of Agriculture and Co-operatives
  Royal Irrigation Department
  Land Development Department

Ministry of Natural Resources and Environment
  Department of Water Resource
  Department of Underground Water Resource
  Pollution Control Department

Other Related Government Organisations
  Ministry of Interior
    - Department of Public Works and City Planning
    - Natural Disaster Prevention and Relief Centre
  Ministry of Energy
    - EGAT
  Ministry of Science and Technology
  Ministry of Industry
  Bureau of Budget/ NESDB
  Local Community Administrations

River Basin Committees
  (for local vicinities)
Main Actors

• **Surface Water**
  – Royal Irrigation Department
    • Under Ministry of Agriculture and Co-operatives
    • Irrigated Areas
  – Department of Water Resources
    • Under Ministry of Natural Resources and Environment
    • Remaining Areas

• **Underground Water**
  – Department of Underground Water Resources
    • Under Ministry of Natural Resources and Environment
Royal Irrigation Department (RID)

• OPERATOR
• 3 Acts governing RID’s authority
• Mainstay in water allocation: 105 years
• Main/Original Objective: *water for agriculture*
• Current Objective: ensure sufficient water supply for usages by stakeholders
• Legal priority is destined for ‘agricultural’ purpose (under Acts)
• Water Distribution Plan, however, prioritise household use (very small proportion)
• Remaining areas are under DWR
• POLICY MAKER (designed)
• Has limited authority given by the Cabinet; not Act
  ➢ Relatively weaker in term of legal authority than RID
  ➢ OPERATOR for non-irrigated areas
  ➢ SECRETARIAT for National Water Resources Committee
• In process of drafting ‘Water Act’ since 1992
  • Water Act supposes to be the main governing legislation of water in Thailand + water pricing
  • DWR would be the main policy-maker of water as a part of other natural resource policies
National Water Resources Committee

- **FOCAL POINT**: exchange of various needs/requirement on water
- Delegates from existing organisations = protecting own interests in Committee
- No power/authority to determine the direction of national water policy
Functional/Purposive Approach to Water

- Each institution has its own agenda on how the water shall be used
- Overlapping authorities: policy making vs operator
- Most of them have legal authorities to do depending on their purposes but legislations are outdated and not suitable for current situation
- Lack of unity and comprehensive water management = no ‘resource-based’ central authority to oversee the matter of water
- Space for integration and coordination
Water Pricing

- **FREE**
- **RID**
  - Raw Water Fee: discretionary and no proper monitoring
    - Charging Waterworks Facilities for use of water to produce piped/tap water
    - Charging large-scale users – farms and industries
  - Free for agricultural purpose
    - Excessive use of water
    - Controversy on whether to levy fees for farmers to realise the real cost of water
- **Waterworks including MWA/PWA/Private Works**
  - Water Charges: direct to the end users (Household and Industry)
    - Treatment of water and piping
    - Channeling water for industrial estates (private waterworks)
Prone to Water Crisis

• Situation of water inadequacy and imbalance water supply are looming and escalating

• Competition and conflicts on water
  – Agriculture vs Others
  – Rural vs Urban
  – Usage vs Preservation
  – Saving cities vs saving farm land (during flood)

• No predictable solution – largely solved by politics which would intensify future conflicts
Missing Perspectives

• Sustainability of natural water sources
  – Forest, re-forestation, and preservation of water source

• Management of Sewage and Wastewater
  – No treatment for household sector yet
  – Non-point sources of pollutants (mostly from agricultural sector whereby almost 100% fertilizer and 90% pesticides)

• Demand-side Management

• Regenerating water after consumption

• Roles of Privates, Locals, and NGOs
Recent Attempts (i)

- Unify and co-operate: set up ‘National Water Resource Committee’ to be the centre for water solution or the focal point (since 1989)

- Legislation
  - Drafting of ‘Water Act’ (since 1992):
    - Gradually including Water Fees for Agriculture (2000)
    - Authorise DWR as a central organisation for water governance
  - Drafting of ‘Waterworks Act’
    - Separating operational and regulatory tasks
Recent Attempts (ii)

- Encourage more participation from users/locals
  - Self-determination

- Introducing ‘Integrated Water Resources Management (IWRM)’ targeted at 25 river basins mostly under RID
  - Require a lot of cooperation and coordination: tremendous transaction cost = good institutional framework is needed
  - Require many academic fields working together to provide knowledge base

Remaining ‘unsettled’
Conclusion

- Legislation/Central Organisation which is ‘resource-based’ and ‘multi-dimensional + multi-functional’ is called for but not yet materialised
- Priority in agriculture has been shifted toward more balanced distribution
- Water Pricing remains debatable
  - Especially agricultural users
  - Pricing to incorporate environment impact from water use
- Crisis in water may put these institutional setup in disarray and cause havoc
- Co-operation with users/stakeholders and local communities
THANK YOU FOR YOUR ATTENTION

Comments and Questions are welcomed

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Domestic water supply sources (1990-1996)

Thailand
North
Center
North-East
Bangkok metropolis
South

Typology according to main water supply sources
