

Panjarat Champathong • Puree Sirasoontoon • Supruet Thavornnyutikarn



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Outlook on Water Governance in Thailand





Objectives

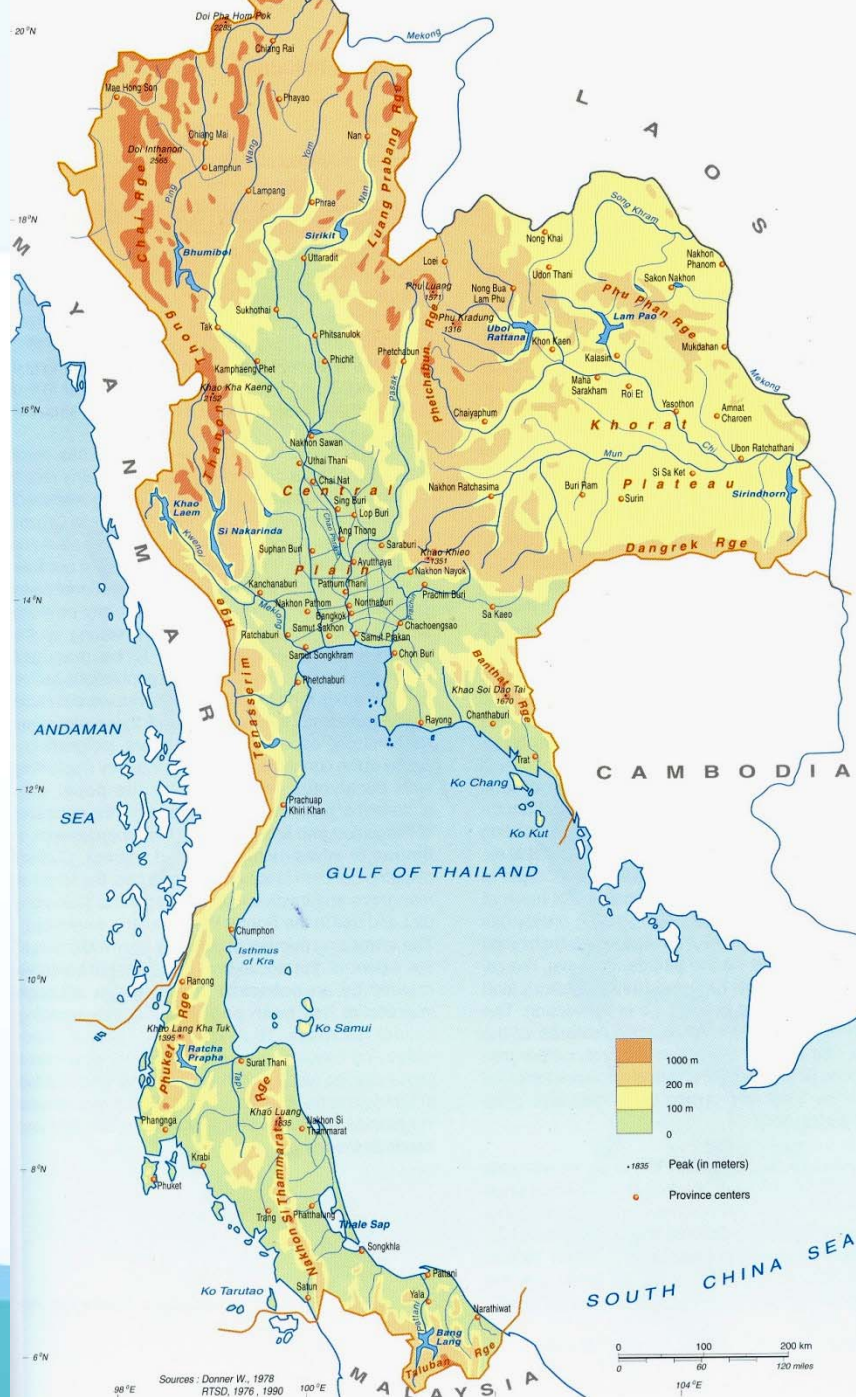
- Institutional Arrangement on Water Governance
- Drawbacks
- Imminent Problems
- Attempts for Reform and Future



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- 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



Source: **Atlas of Thailand: Spatial Structures and Development**. Edited by Doryane Kermel-Torres. Paris: IRD Editions.



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Dominance of Agriculture in Water Usage

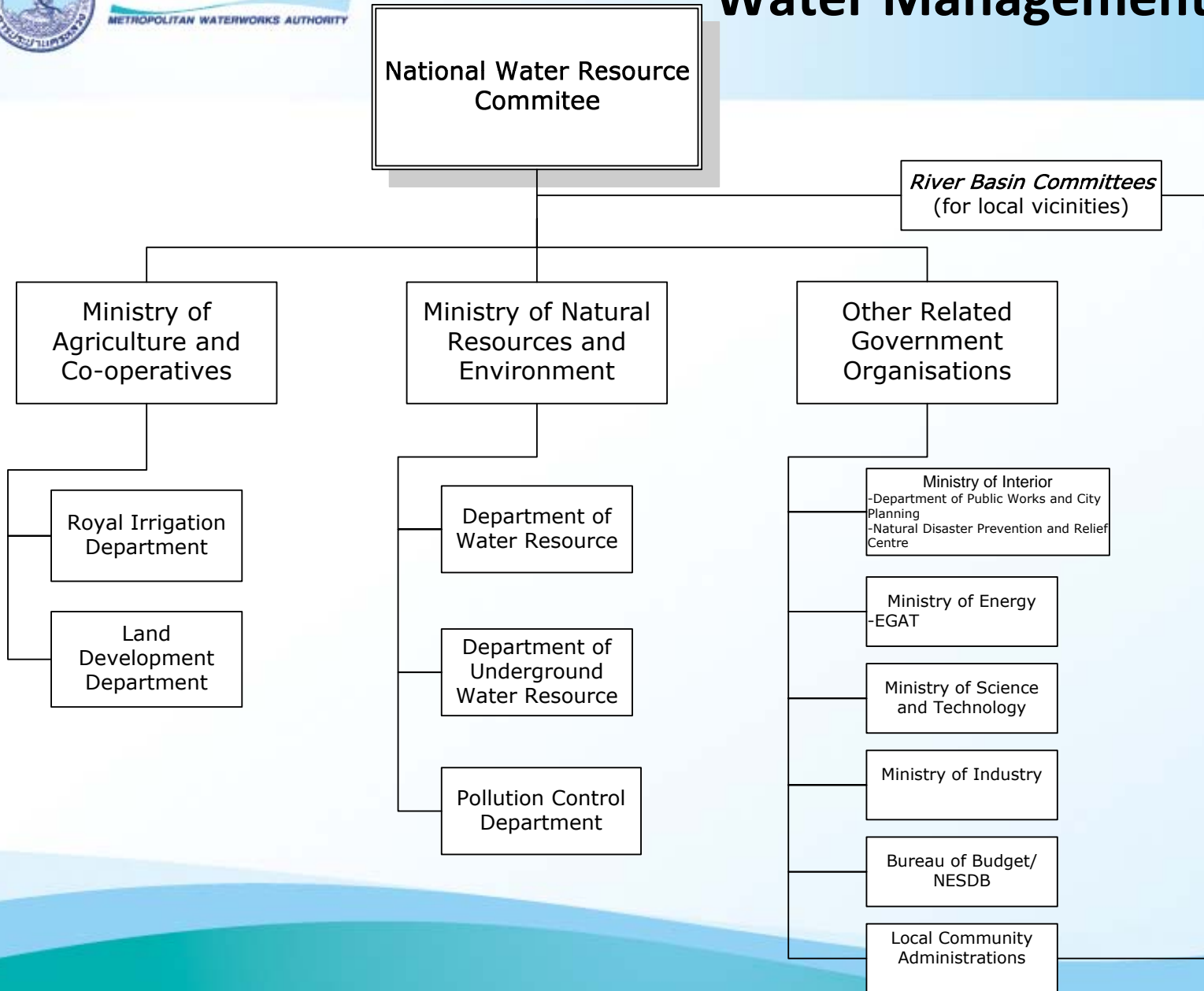


- 94 per cent of water is used by agricultural sector
- 4 per cent by household sector
- 2 per cent by industrial and service sectors



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Institutional Arrangement on Water Management





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



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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



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Department of Water Resource (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



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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



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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



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THANK YOU FOR YOUR ATTENTION

Comments and Questions are welcomed

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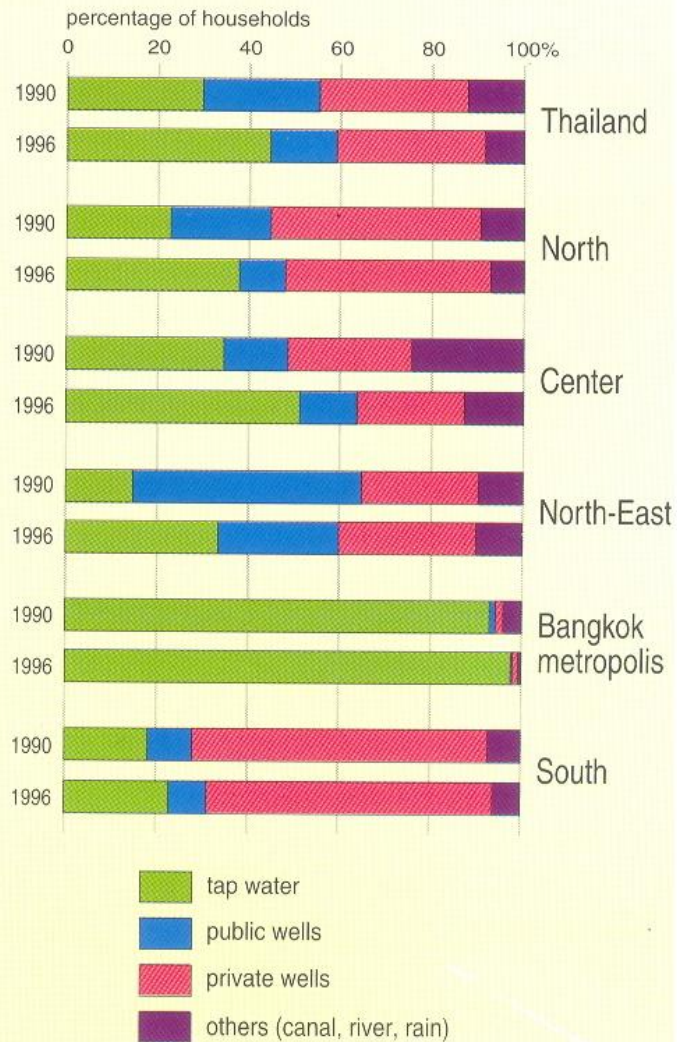
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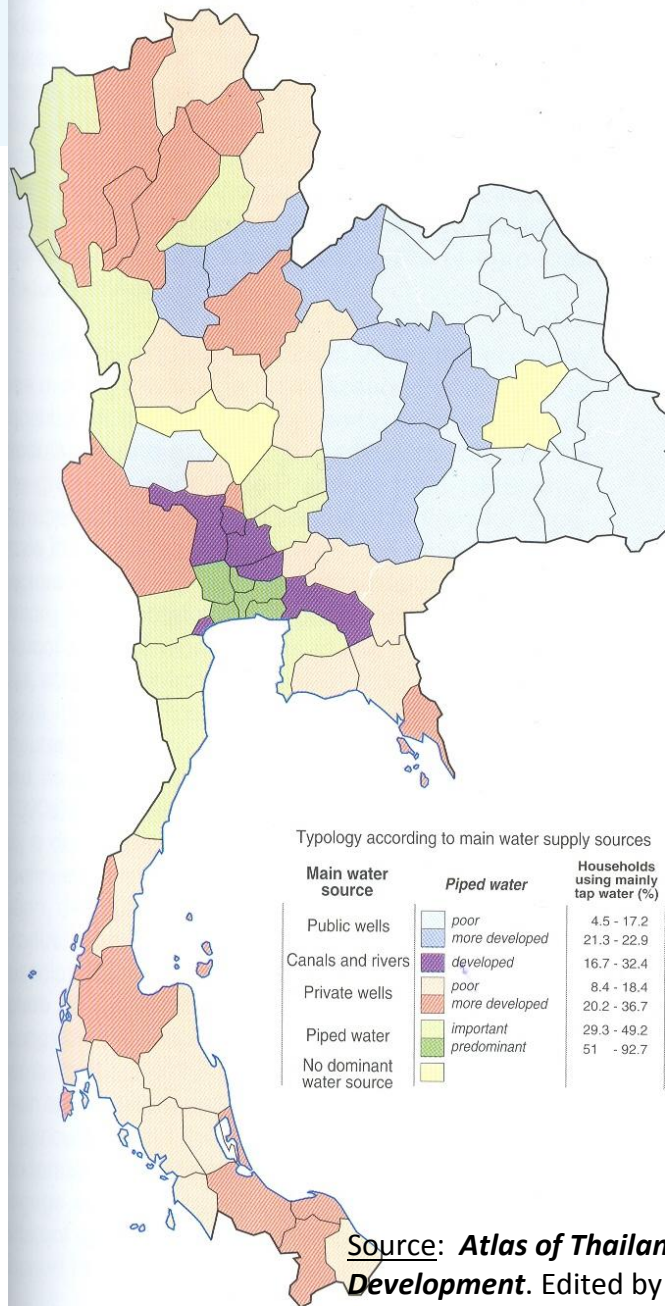




Domestic water supply sources (1990-1996)



Water supply for domestic use (1990)



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