

Institutions in the water sector

Conceptual issues and approaches

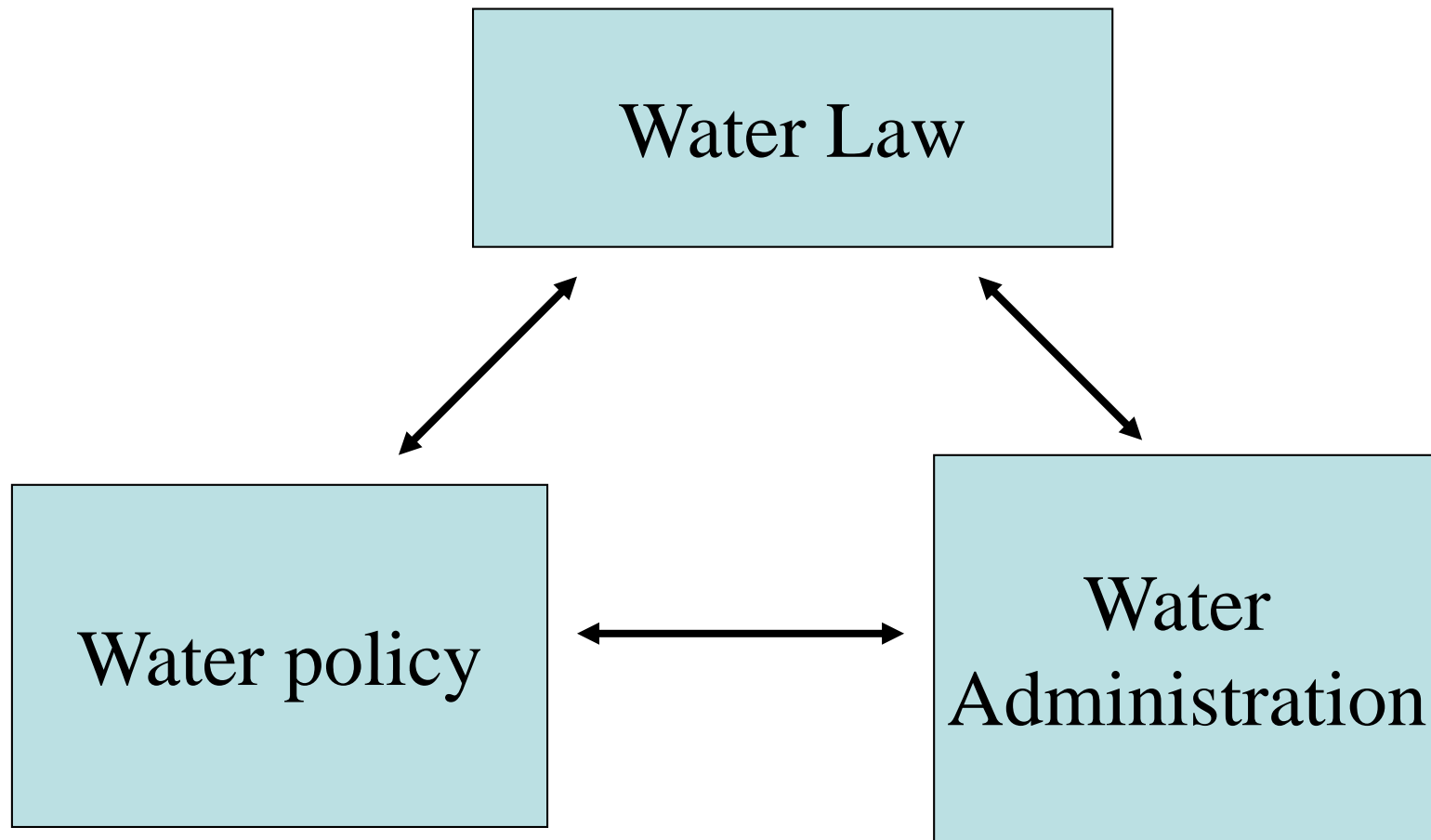
Concept 'Institution'

- **Narrow sense:**
organizations that perform specific function in society
- **Broad sense:**
laws, norms, values and structures that constrain the behaviour of individuals and groups

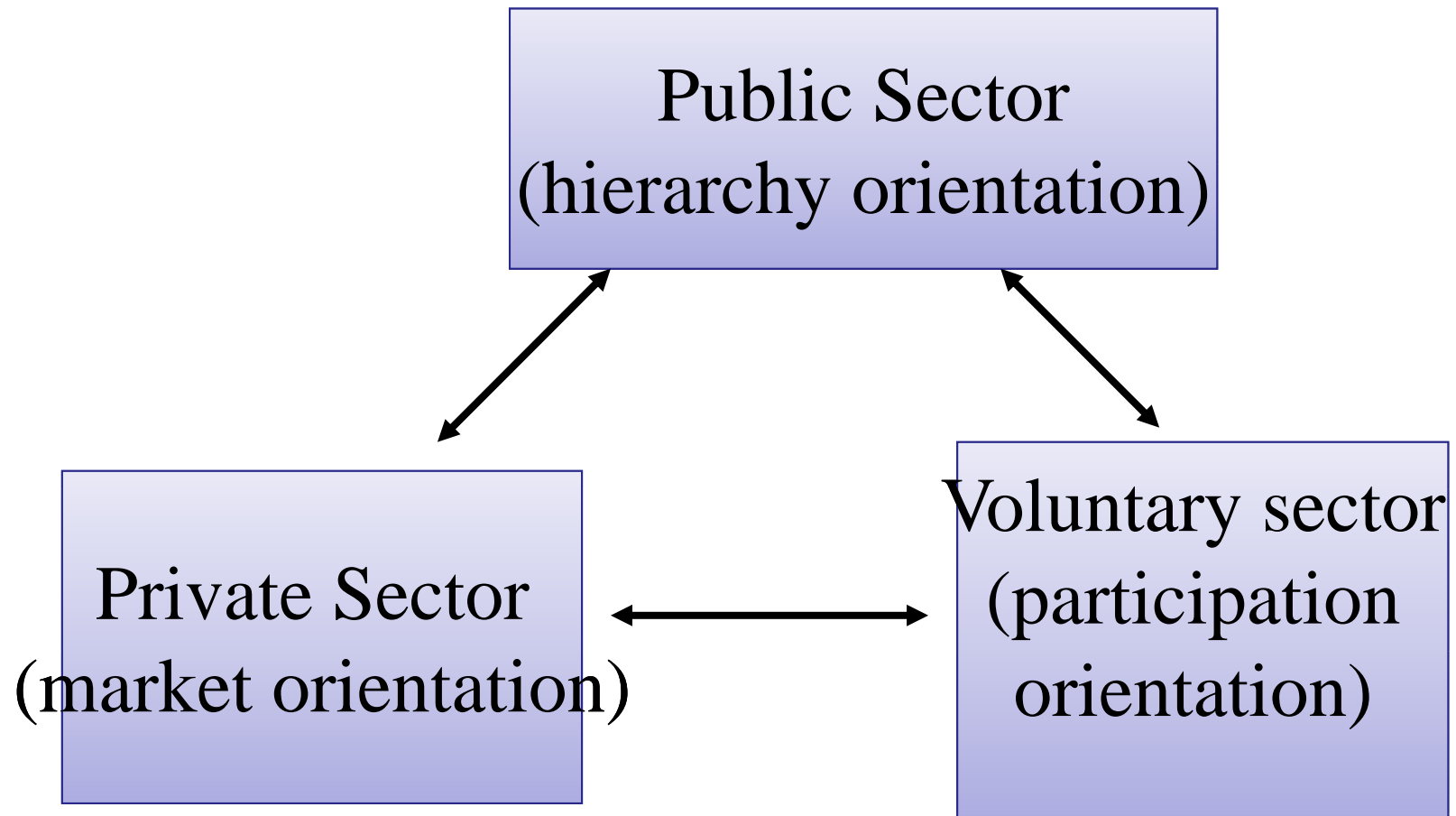
Definitions for water sector:

Organizations,
working rules or
establishments
founded for the public
interest in water based
on an accepted
custom, law or
relationship

Water sector institutions

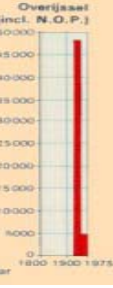
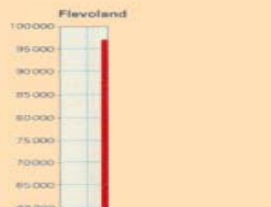
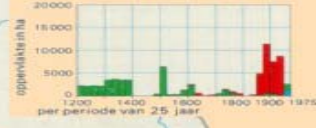
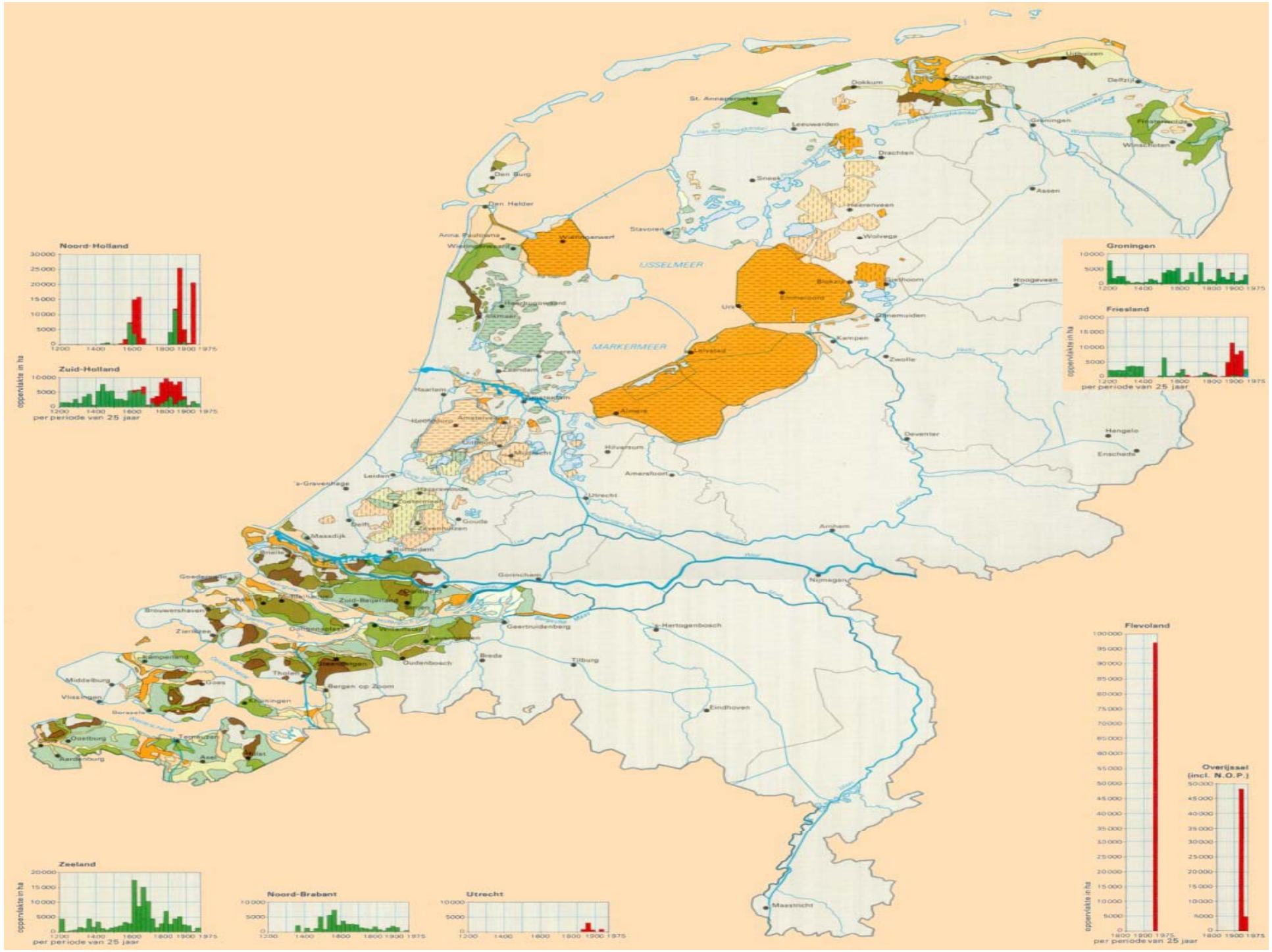


Institutions for water administration



Institutional change in the water sector

- Water institution sets the rules and thereby defines the action sets for both individual and collective decision making in the realm of water resources development, allocation and utilization
- Organizations (public, semi-public, community, private)
- Policies
- Strategies
- Legal frameworks
- Guidelines and principles
- Procedures
- Standards, norms and traditions
- Partnerships



Evolution of Dutch Water Governance System (1)

Period: 9th-12th century

Locations: Coastal zone: inundated land flooded during winter months

Origin: Local governments (guilds) were building dykes and digging drainage canals to protect land of communities from flooding,

12th – 17th Century

Regional Water Boards: Scales of flood protection too large for one community (12th century)

Local Water Boards: reclaiming land in inland lakes/inundated land that needed needed embankments, drainage systems and water mills (15th century)

**Cities, entrepreneurs and monastic orders formed new
Evolution of Dutch Water Governance System (2)**
Water boards to own and manage Land reclamation from
sea

18th Century

State Water Administration established after French occupation at national and provincial level that worked on national and regional works but failed to control Local Water Boards as municipality for water affairs

State land reclamation projects because risks of larger land reclamations too big for private sector (19th-20th century)

20th Century

IWRM State established the policies, regulatory framework, and quality norms; the rural Water Boards and urban Water Companies implemented the policies and regulations

Up-scaling of water management organizations from local water catchment (polder) to river basin level

Factors leading to changes in water law, policy and administration

Endogenous factors

- Changing political alliances
- Water scarcity/excess
- Water quality control
- Ceiling O&M expenses
- Performance deterioration

Exogenous factors

- International regulations
- International collaboration
- Macro-economic crises
- Technical progress
- Natural calamities

Conclusions

- Water institutions are organizations, and also working rules founded for public interest in water resources management and based on an accepted custom, law or relationship in a society or community.
- Historical perspective shows how technologies, governance and management systems water institutions have evolving over time.
- There are endogenous and exogenous factors affecting institutional changes in the national water sectors.