



# BINGO

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CLIMATE CHANGE

## Governance strengths and weaknesses for resilient water management: A comparison across six European research sites

E. Bergsma (KWR), H. van Alphen (KWR), A. Bruggeman (CYI), J. Engelenburg (Vitens), E. Giannakis (CYI), A. Hein (IWW), J. Hogendoorn (Vitens), J. Koti (IWW), E. Kristvik (NTNU), P. Lorza (Wupperverband), P. Malgrat (Aquatec), M. Martinez (Aquatec), T.M. Muthanna (NTNU), Fernanda Rocha (LNEC), M. Scheibel (Wupperverband), T. Spek (Provincie Gelderland), E. Suárez (AMB), B. Verboom (Provincie Gelderland), C. Zoumides (CYI).

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**BINGO**  
a better future under  
CLIMATE CHANGE

Bringing **IN**novation to on**GO**ing Water Management

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Providing practical knowledge and tools to end users, water managers and decision-makers to better cope with all climate projections, including droughts and floods.

- WP2**  Climate predictions and downscaling 
- WP3**  Analysis of the water cycle
- WP4**  Impacts of extreme weather events 
- WP5**  Adaptation strategies 
- WP6**  Actionable research



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# BINGO PARTNERS



# Assessment of the governance contexts of the 6 BINGO research sites

## Aims

- Map out regional policy and governance contexts in which adaptation measures should be implemented.
- Identify strong and weak governance aspects for adaptation to climate hazards in each region.
- Comparatively analyze governance strengths and weaknesses for adaptation to climate change to identify common opportunities and challenges.

# Data collection and analytical framework

## Data collection

- Questionnaires filled in by 5-11 stakeholders at each research site.
- Two expert interviews per research site: one national-level policy expert and one key scientist working on national-level adaptation.

## Analytical framework: Three Layer Framework for Water Governance:



# RESULTS (I)

## CYPRUS / TROODOS MOUNTAINS



### Key strengths

- Knowledge of groundwater resources
- Organization of public water supply
- End-user participation in irrigation

### Key weaknesses

- Focus on current situation
- Focus on existing risks (droughts / water availability)
- Unclear responsibilities for adaptation

## PORTUGAL / TAGUS RIVER BASIN



### Key strengths

- National-level planning and institutions
- Sectoral adaptation activity
- Pollution control / technical solutions

### Key weaknesses

- Focus on emergency management
- Lack of policies supporting the implementation of national plans
- No policy on water use (allocation)

# RESULTS (II)

## GERMANY/ WUPPER RIVER BASIN



### Key strengths

- One public administrative body (WA)
- Cooperation and trust between sectors
- Technical knowledge and skills

### Key weaknesses

- Little knowledge about future impacts
- No long-term planning for adaptation
- Undefined responsibilities for adaptation (especially floods)

## THE NETHERLANDS/ THE VELUWE



### Key strengths

- Water management national priority
- Water knowledge and skills
- Clear division of responsibilities over different public agencies

### Key weaknesses

- Focus on water management
- No integral policy on adaptation
- Low public awareness of cc

# RESULTS (III)

## NORWAY/ BERGEN CITY



### Key strengths

- Information dissemination
- National guidelines, local flexibility
- Strong links water and spatial planning

### Key weaknesses

- Historical data
- Adaptation only strategic policy goal
- Lack of enforcement of regional adaptation: stormwater

## SPAIN/ BADALONA CITY



### Key strengths

- Policy framework covers all aspects of water management
- Clear responsibilities
- Knowledge and skills in subsectors

### Key weaknesses

- Fragmented governance structure
- Lack of resources at regional level
- Focus on current situation

# COMPARATIVE ANALYSIS

## Common governance strengths for adaptation

- Existing policies address most important contemporary risks in water management.
- The enforcement of these policies is supported sufficient knowledge and strong institutional capacities.
- Generally, a high degree of awareness of and self-organization for adaptation in subsectors (e.g., irrigation, sewage management).

## Common governance challenges for adaptation

- Insufficient account of new and future risks in adaptation planning.
- Governance structure for water management is fragmented, which is an obstacle for integral adaptation planning.
- Integral adaptation remains largely strategic, actual responsibilities for adaptation are generally not well defined.

# CONTACTS

Emmy Bergsma

([Emmy.Bergsma@kwrwater.nl](mailto:Emmy.Bergsma@kwrwater.nl))

Henk-Jan van Alphen

([Henk-Jan.van.Alphen@kwrwater.nl](mailto:Henk-Jan.van.Alphen@kwrwater.nl))



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