Emergence and application of adaptive delta management in the Netherlands

Delta Programme (2010-2014)

- Strategy for flood risk management and water resources management until 2100

- Adaptive Delta Management (ADM) applied for strategy development in 1 thematic and 6 regional sub-programmes

- Delta Programme is now entering a stage of implementation and monitoring
The context in which ADM emerged

ARK Programme

Delta commission 2008

Delta scenarios 2011

Rational planning
Lack of momentum

Sense of urgency
Major measures

Problems not acute
Time for consideration

ADM in four principles

Delta Programme operationalised ADM through four key principles:

1. Incorporating long term change in short term decisions
2. Flexible measures and keeping multiple options open
3. Adaptation pathways instead of end-goals
4. Linking investment agendas

DP2014
Methods

September 2013 – June 2014
(DP worked towards preferential strategies)

• Desk study: Guidline ADM, yearly policy docs, (scientific) reviews, etc
• Observations at ‘Core team ADM’ of staff Delta Programme
• Electronic questionnaire amongst representatives of sub-programmes
• Interview

Reflection upon selection process

Planned selection process:

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<th>2010</th>
<th>2011</th>
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<th>2013</th>
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<tr>
<td>Preparation</td>
<td>Problem analysis</td>
<td>Possible strategies</td>
<td>Promising strategies</td>
<td>Preferential strategies</td>
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In reality:
• Selection through refining rather than sifting options
• Simultaneous consideration of technical, political and financial feasibility
1. Incorporating long term change in short term decisions

Most subprogrammes identified:
- Uncertainties: climate, socio-economic and sometimes more.
- Area specific water policy objectives and regional ambitions

→ Most valued aspect of ADM amongst sub-programmes was connect LT and ST (4,56 / 5) and increased awareness about uncertainties (4,22 / 5).
→ Deep uncertainties about future conditions, but also ‘fixable’ uncertainty about current state of the system.

2. Flexible measures and keeping multiple options open

- Flexibility through expanding measures and keeping options open.
- Limited number of options kept open in DP2015.
- Keeping options open is logical, but is politically challenging

Source: Pieter Bloemen, 2013
3. Adaptation pathways instead of end goals

- Identifying tipping points was found most difficult aspect of ADM
- Possible explanations:
  - Strategies are often inherently flexible
  - Variability of river discharge
  - Exceedance of norms is not always ‘felt’ as tipping points
  - Tipping points are often subjective

4. Linking investment agendas

**REPLACEMENT OF AGING INFRASTRUCTURE**

**REGIONAL DEVELOPMENT**
Reflection

1. ADM provides better explanations for short term investment decisions
   1. ADM helped to incorporate uncertainty in decision making
   2. ADM helped to take account of the future
   3. ADM helped to look beyond water policy domain

2. Thinking in options seems logical from a planning perspective, but is it also from a political perspective?

3. Adaptation tipping points work nicely in theory, but have brought less than expected.

4. Limited concrete opportunities for linking investment agendas.
   → Is strategy the right venue for linking investment agendas?

Contact details

Thank you for your attention

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