Introduction to Tools for Climate Adaptation & Risk Management for the Water Sector in a Transboundary Context

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Outline

- What is a ‘tool’ for climate adaptation and water?
- Major types of tools & marketplace examples
- Issues to consider when choosing, using or developing tools
What is a climate/water ‘tool’?

Are broad frameworks tools??

(CapNet et al., 2009 {for IWRM})
Tools for Adaptation in Transboundary Contexts: Major Types

We can classify tools based on their function and/or audience (sector).

One useful typology is the functional typology of Hammill & Tanner (2011) (though some overlap between types).

<table>
<thead>
<tr>
<th>Type 1</th>
<th>Type 2</th>
<th>Type 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process Guidance Tools</td>
<td>Data &amp; Information Tools</td>
<td>Knowledge Sharing Tools</td>
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<tr>
<td>Communication Tools</td>
<td>Climate information primers</td>
<td>Web-based platforms, offering access to:</td>
</tr>
<tr>
<td>Screening Tools</td>
<td>Primary climate info:</td>
<td>- Relevant news (e.g. media stories, recent meetings)</td>
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<tr>
<td>Assessment Tools</td>
<td>- Current temp and rainfall data, maps</td>
<td>- Scientific, policy, project documents (e.g. journal articles, case studies, reports)</td>
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<tr>
<td>Implementation Tools</td>
<td>- Projections (GCMs, downscaling tools)</td>
<td>- Personal observations and experiences (e.g. blogs, forums)</td>
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<tr>
<td>Comprehensive process guidance tools</td>
<td>- Secondary impact models, maps</td>
<td>- Professional networks</td>
</tr>
<tr>
<td>Monitoring &amp; Evaluation Tools</td>
<td>Vulnerability info</td>
<td>- Type 1 process guidance tools</td>
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<tr>
<td></td>
<td>- Poverty, livelihood, socio-econ data</td>
<td>- Type 2 Data &amp; information tools</td>
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Major Tool Types cont.

• An audience / sectoral typology:
  
  - PLUS: what part of the ‘water sector’?
    - Local / national / transboundary

Tools for ‘general’ climate adaptation

Tools for water sector best management

Tools specifically for water sector climate adaptation

Most ‘marketplace’ tools
Major Tool Types cont.

- Communication in AMICE project
- Flood communication in Dniester
- WEAP/LEAP
- Deltares Tipping Point Approach
- IIED Stakeholder-focused CBA for the water sector
- Economics of CCA - SwissRe
### Major Tool Types cont.

#### Type 2: Data & Information Tools

- **Climate information primers**
- **Primary climate info:**
  - Current temp and rainfall data, maps
  - Projections (GCMs, downscaling tools)
- **Secondary impact models, maps**
- **Vulnerability info**
  - Poverty, livelihood, socio-econ data

- **Climate vulnerability index modelling applied to Mongolia**
  (Could also include hydrological modelling tools at basin scale)
- **WEAP/LEAP**
- **Geo information / flood risk modelling for Dniester**
### Major Tool Types cont.

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(Themed websites / information ‘toolkits’)
- **WMO Global Framework for Climate Services**
- **GWP ‘IWRM Toolbox’**
- **SEI weADAPT**
- **UNFCCC NWP KM on CCA**

(Including games!)
- **Flood-Wise Cross-Border Flood Risk Management Game**
- **Communication in AMICE project**

- **GWP, IWA, Cap-Net, UNECE, etc.!**

PLUS: ‘Meta tools’?
- **AGWA DSS**
Issues for Tool Users to Consider

- Think carefully about (and defend!) your specific needs
  - In the ‘tool industry’, each developed wants to ‘sell’ you their tool, like any other product
- Do your research, and don’t rush to select the first tool you discover – it might not be best-suited for your needs
  - Risk of maladaptation!
- When choosing, consider:
  - Relevance for your context, language, audience, etc.
  - What type of tool(s) do you need?
  - Complexity (will you need training?)
  - Price?
  - User support available? (is it kept updated?)
  - Do you need a tool at all?
- No tool is perfect – you might need to use several
Issues for Tool Developers to Consider

• The ‘market’ is flooded with tools already (possibly >300 relevant to adaptation/water!) (ODI research)

• **Before** you develop another tool, ask:
  – How specifically does it add **new value**?
  – Is it **necessary**?
    • Maybe better to strengthen/combine existing tools, or create ‘meta tools’?
  – What is the specific **audience**?
    • How will this tool effectively reach & engage them?
    • Will they need training (difficult to scale-up), or can they learn it themselves?

• **Translation** is especially important! Need more multi-lingual tools: e.g. WEAP (22 languages)
Thank you!

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