Presentation on Indicator 6.5.2: Transboundary cooperation in IWRM

Expert Group Meeting on methodologies for meeting water related SDGs at global, regional and national levels

Amman, 22-23 March 2017

Alexandros Makarigakis UNESCO
Indicator 6.5.2 and the rationale

• **Target 6.5:** By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate.

• **Indicator 6.5.2:** Proportion of transboundary basin area with an operational arrangement for water cooperation.

• **Complements indicator 6.5.1** which measures the advancement of Integrated Water Resources Management (IWRM)
Background indicator 6.5.2

- **Justification**: Most of the world’s water resources are shared: transboundary lake and river basins account for 60% of global freshwater. Some 286 transboundary main river basins and 592 transboundary aquifers have been identified.

- Development and management of water resources has impacts across transboundary basins and therefore transboundary cooperation is required. However, cooperation is in most cases not advanced.

- **Rationale**: Specific agreements or other arrangements concluded between co-riparian countries are a key precondition to ensure long-term, sustainable cooperation.
Methodology for 6.5.2

Proportion of transboundary basin area with an operational arrangement for water cooperation

• Main steps for calculation:
  1- calculate the surface area of each transboundary basin and the total sum within a country.
  2- verify which transboundary basins are covered by a cooperation arrangement.
  3- check which of the existing arrangements are operational and calculate the share of transboundary basins covered by these of the total sum of transboundary basin area.

• Aggregation/disaggregation can be done also at levels different from national (basin, regional and global)
Methodology for 6.5.2

\[
\frac{a_1 + a_2 + a_5}{a_1 + a_2 + a_3 + a_4 + a_5} = \frac{10 + 10 + 1}{10 + 10 + 12 + 1 + 1} = \frac{21}{34} \times 100\% = 61.8\%
\]
Criteria for operationality of cooperation arrangements

The criteria:

• 1 Existence of a joint body, joint mechanism, commission (e.g. a river basin organization) for transboundary cooperation

• 2 Regular formal communications between riparian countries (e.g. regular meetings)

• 3 Existence of joint or coordinated water management plan(s), or of joint objectives

• 4 Regular exchange of data and information between riparians.

Basis: the main principles of customary international law (reflected in global freshwater conventions, UN ILC Draft Articles on n The Law of Transboundary Aquifers)
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<tr>
<th>Key feedback received</th>
<th>Response &amp; Rationale</th>
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<td><strong>Inclusion of sub-basins or portions of transboundary basins to be covered by operational agreements in the calculation.</strong></td>
<td>Methodology revised accordingly; this will allow monitoring the change in areas covered especially in the case where there is no operational arrangement at the level of the assessed basin in its entirety.</td>
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<td><strong>The regularity of meetings and of exchange of information should be specified</strong></td>
<td>A minimum frequency of meetings, “at least once per year”, was included in the text of the methodology</td>
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<td><strong>Inclusion of additional factors to assess the quality of transboundary cooperation</strong></td>
<td>Not included in the methodology; methodology based on the four criteria of arrangements’ operationality of customary international water law; will be discussed in the roll-out</td>
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## Revised Methodology for 6.5.2

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<td>Have only <strong>part of the four criteria to assess operationality</strong> of arrangements applied, to track the process of transboundary cooperation</td>
<td>Not included. To partially use the 4 criteria would require the indicator to be expressed as an index and not a proportion of area. IAEG-SDGs has expressed its reluctance towards indicator expressed as index.</td>
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<td><strong>Alternative metrics</strong> to basin area (volumetric)</td>
<td>Not included; Volumetric assessment will require more data</td>
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<td>Effective cooperation without an agreement in place; section to explain the implications of the values of the indicator; when no activities in the shared basin is cooperation essential?</td>
<td>Not included</td>
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## Revised Methodology for 6.5.2

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<td>Details on technical steps to be taken, institutional arrangements and resources and capacity mobilization in testing the monitoring methodology of the indicator</td>
<td>Not included but <strong>will be used for roll-out</strong> with aspects and challenges to strengthen the step-by-step approach to be presented in the technical webinar and tutorial.</td>
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Data sources - overview

- Data would be most reliably collected and validated at the national level.
- Reporting by countries under the Convention on the Protection and Use of Transboundary Watercourses and International Lakes will contribute information for tracking progress.
- International sources of information can support and complement the information by the countries and allows to have a first baseline / overview.
  - Transboundary river basin delineations and areas as well as presence of an agreement and of a basin organisation: Global Environment Facility supported Transboundary Waters Assessment Programme (TWAP)
  - International Freshwater Treaties Database, Oregon State University
  - Information about transboundary aquifers: regional inventories of the UNESCO-led Internationally Shared Aquifer Resources Management, database of the UNESCO International Groundwater Resources Assessment Centre (IGRAC); Etc.
- GEMI will support testing the methodology and acquiring practical experience of its application in countries.
Key data flow: Reporting

- An adopted version of questionnaire related to UNECE’s Water Convention, was prepared and sent to Parties and Non-Parties.
- It will gather information needed for the calculation of indicator 6.5.2, especially on the cooperation arrangements, transboundary waters covered by them as well as operationality of cooperation arrangements.
- Covers transboundary rivers, lakes and groundwater.
Example on Jordan
National sources, self-assessment, validation etc?

Jordan River Basin

AS126 Al-Disi/Al-Sag Aquifer

AS129 Tawil Quaternary Aquifer System: Wadi Sirhan Basin

AS142 Basalt Aquifer System (West): Yarmouk Basin

AS143 Basalt Aquifer System (South): Azraq-Dhuleil Basin

Agreements: operationality?
Integrated Monitoring Initiative for SDG 6

Thank U 4 UR @10Ti