Metadata Sheet: Enabling Environment
(Indicator No. 12)

Title:	*Enabling Environment*
Indicator Number:	*12*
Thematic Group:	*Governance*
Rationale:	Legal Framework (Indicator number 10) and Hydropolitical Tension (Indicator number 11) indicators focus on governance at the transboundary scale, but it is also important to look at governance at the national scale for countries within each transboundary basin. This indicator considers the development of the 'Enabling Environment' for water resources management in each riparian country. This is based on a broad spectrum of issues including the policy, planning and legal framework, governance and institutional frameworks, and management instruments. The final results of the indicator show the status of development of enabling environment in BCUs and Basins, aggregated based on national level information received from countries.
Interlinkages:	*GW (indication of the likelihood of sustainable abstraction levels from aquifers), Lakes (results likely to be similar for lakes overlapping with transboundary river basins), LMEs (may be overlap of jurisdictions between river basins and LMEs)*
Description:	This indicator considers the level of development and implementation of the 'enabling environment' for water resources management in each riparian country. Enabling environment in this context refers to the national (or subnational/basin) level policies, plans, legal and institutional frameworks and management instruments required for effective water resources management, development and use. Well-designed and implemented enabling environment ensures that the framework is in place to facilitate involvement of stakeholders (at all levels - community, national, private sector) in water management, and considers needs of the different users, including the environment. This indicator builds on monitoring work to measure progress on "the application of integrated approaches to the development, management and use of water resources" as called for in Agenda 21 of the 1992 'Earth Summit' (UNCED 1992). The underlying data for this indicator builds on the survey undertaken for the 2012 UN Water Status Report on the Application of Integrated Approaches to Water Resources Management (UNEP 2012). Results show the development of the enabling environment for each basin country unit (BCU). A weighted 'importance' of each BCU to the basin based on the share of population and area is used to produce weighted BCU scores. The sum of the weighted BCU scores is used to aggregate basin score.
Metrics:	The majority of the data for this indicator come from a survey undertaken during 2011 involving all 192 UN member states at that time. 133 country responses were received to the survey. For the purposes of TWAP RB, additional responses were collected from 15 countries in 2013, using in-country experts (with assistance from GWP and OSU) to fill identical survey questionnaires. Status of development of the 'enabling environment' was assessed based on the following factors (numbers in brackets refer to question numbers in the original questionnaire): 1. Water resources policy, laws, and plans (1.1.1) 2. Institutional frameworks (2.1.1) 3. Stakeholder participation (2.1.2) 4. Capacity building (2.1.3)

	5. Water resources assessment and development guidelines (3.1.1) 6. Water resources management programmes (3.1.2) 7. Monitoring and information management (3.1.3) 8. Knowledge sharing (3.1.4) 9. Financing of water resources management (3.1.5) The status of enabling environment in the country questionnaires take year 2011 as the reference year.
Computation:	Computation of indicator scores was done in following steps: 1. Assigning scores to each BCU based on the average scores of the national response for each of the 9 metrics (calculated from a number of sub-questions under each question from the country surveys). <table><tr><th>Status</th><th>Score</th></tr><tr><td>Not relevant</td><td>1</td></tr><tr><td>Under development</td><td>2</td></tr><tr><td>Developed, but implementation not yet started,</td><td>3</td></tr><tr><td>Implementation started</td><td>4</td></tr><tr><td>Implementation advanced</td><td>5</td></tr><tr><td>Fully implemented</td><td>6</td></tr></table> 2. Calculating the average score considering all 9 metrics for each BCU, but removing any responses given as 'not relevant' (response of 1), to give a single value for each BCU. All 9 metrics were weighted equally. 3. Calculating the 'importance' of each BCU within basin based on the proportion of population and area that the respective BCU represents compared to the basin. The sum of the BCU relative importance values within basin is 1. 4. Multiplying average score ('2') by relative importance ('3') to get a weighted score for each BCU. 5. Add these scores to obtain a total score for the basin*. * Basins with responses for more than 80% coverage of the basin (based area or population represented by the BCU responses), were considered to have sufficient information to generate basin scores and results categories, resulting in indicator score coverage for 230 basins.
Units:	Unitless
Scoring system:	Table below shows distribution of basins and BCUs across risk categories. For the 230 transboundary basins (and corresponding BCUs) assessed, the risk categories were assigned as above resulting in the following number of basins/BCUs in each category: <table><tr><th>Relative risk category</th><th>Range (normalized score)</th><th>No. of Basins</th><th>Proportion of Basins</th><th>No. of BCUs</th><th>Proportion of BCUs</th></tr><tr><td>1 - Very low</td><td>5.01 - 6</td><td>29 (1*)</td><td>13%</td><td>110 (0*)</td><td>16%</td></tr><tr><td>2 - Low</td><td>4.01 - 5</td><td>84 (4*)</td><td>36%</td><td>212 (0*)</td><td>32%</td></tr><tr><td>3 - Moderate</td><td>3.01 - 4</td><td>66 (7*)</td><td>29%</td><td>162 (0*)</td><td>24%</td></tr><tr><td>4 - High</td><td>2.71 - 3</td><td>25 (1*)</td><td>11%</td><td>106 (0*)</td><td>16%</td></tr><tr><td>5 - Very high</td><td><=2.7</td><td>26 (5*)</td><td>11%</td><td>84 (0*)</td><td>12%</td></tr></table> * Number of basins in brackets, indicates number of basins that did not have 100% of area and population coverage based on BCU data, but for which scores were generated based on 80% -

	99% coverage (deemed sufficient for purposes of this assessment).
	The relative risk categories are largely based on the original survey (see original scoring table under 'Computation' section).
	Basins and BCUs in the relative risk categories 4 and 5, represent enabling environments for IWRM that are generally still under development, but implementation has not yet started.
	Category 3 represents enabling environments that have been developed, and some implementation has begun.
	The lowest relative risk categories 1 and 2 represent more advanced enabling environments, where implementation is advanced or fully completed.
Limitations:	- The indicator is based on approximately 60 sub-questions from the original survey questionnaire. This breadth of questions is seen as a strength, making it a more robust assessment (compared to, for example, merely looking at the existence of policies, laws and plans). Averaging of 60 sub-questions dows however make it difficult to know which 'aspects' of the enabling environment are more or less developed in each country (or which are more relevant than others), and therefore which may require further development.
	- For the purposes of TWAP RB assessment, the nine sub-question groups from the survey are averaged and weighted equally to create a single BCU score, as all aspects are deemed equally relevant to achieving full implementation of the 'enabling environment'. Any potential weighting of the question groups would depend on the priorities of the country.
	- The data is based on subjective views in response to a questionnaire.
Spatial Extent:	Global
Spatial Resolution:	BCUs and Basins
Year of Publication:	2012
Time Period:	2011
Additional Notes:	
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Format:	Microsoft Excel Worksheet
File Name:	TWAP_RB_indicator_11_results.xlsx
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