

## A mapping of existing indicators and datasets of Relevance to OECD Principles on Water Governance

13 June 2016

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This document is meant to support the discussion on “water governance indicators” to be held at the 7th meeting of the OECD Water Governance Initiative on 23-24 June 2016, The Hague, Netherlands. It will be used to brainstorm among working group members on i) the value-added of the initiative to produce water governance indicators compared to what exists; ii) the gaps that the initiative should bridge; and iii) the nature and scope of what should be measured; and iv) a realistic timeline for doing so. The document should not be disclosed publicly at this stage of the process. For questions please contact [Oriana.Romano@oecd.org](mailto:Oriana.Romano@oecd.org) or [Aziza.Akhmouch@oecd.org](mailto:Aziza.Akhmouch@oecd.org), from the OECD Water Governance Programme

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Measuring water governance aspects requires first a stock taking of existing indicators before embarking in the development of new ones. The [OECD Inventory Water Governance Indicators and Measurement Frameworks](#), launched on line on October 2015, identified 78 instruments (e.g. indicators, maps, databases and assessment tools) for measuring and evaluating several water governance aspects. The aim of the Inventory is to support the ongoing discussion on the definition of “water governance indicators” to track and measure relevant water governance variables vis-à-vis the [OECD Principles on Water Governance](#).

The Working Group on Indicators of the [OECD Water Governance Initiative \(WGI\)](#) virtually gathered during a dedicated Webinar on [25 April 2016](#) and suggested to reorganise the *OECD Inventory Water Governance Indicators and Measurement Frameworks* around the 12 Principles for better capturing what exists and/or needs further development. Further discussions will take place during the 7<sup>th</sup> meeting of the WGI to be held in The Hague on 23-24 June 2016.

The following table compiles 587 indicators identified through desk research and previous consultations within the OECD Water Governance Initiative. It reports disaggregated variables of composite indexes, as well as questions employed for monitoring and evaluation frameworks, and information contained in databases. Indicators are distinguished according to the 3 clusters, which the 12 Principles belong to (effectiveness, efficiency, trust & engagement); the 12 principles; the water functions (as specified by the studies under review); the scale (national, basin, local); the phase of measurement (status, progress and impact), the type of indicator (input, process, output, outcome and impact).

It has to be noted that: 1) while trying to be as compelling as possible, the list is certainly not exhaustive and can be further updated in the future; 2) some indicators have been listed under one Principle, but could potentially be used for more than one Principle; 3) the distinction across the type of indicator (input, process, output, outcome and impact) is often merely indicative. In fact being only “governance indicators” this distinction is not always straightforward.

Please refer to the reported sources for further information regarding the geographical scope and the available years of indicators.

## EFFECTIVENESS CLUSTER

**Principle 1.** Clearly allocate and distinguish roles and responsibilities for water policymaking, policy implementation, operational management and regulation, and foster co-ordination across these responsible authorities.

Indicator	Function	Scale	Phase	Type	Source
<b>Government Agency as Groundwater Resource Guardian</b>	Groundwater	National/Local	Status	Input	FAO, UNESCO, GEF, World Bank, IAH, Groundwater Governance Indicators "Global Framework for Action" of the Groundwater Governance Project ( proposal)
<b>There is an institution that is dedicated to sanitation policy and has presence at the national level, with clear institutional mandates at all levels and coordination between related ministries</b>	Sanitation	National	Status	Input	USAID WASH Sustainability Index Tool
<b>District/support institutions have clear roles and responsibilities for supporting service providers of school and institutional sanitation</b>	Sanitation	National	Status	Input	USAID WASH Sustainability Index Tool
<b>RBOs status</b>	Water resources	Basin	Status	Input	NARBO
<b>RBOs governance</b>	Water resources	Basin	Status	Input	NARBO
<b>Existence of national and/or international coordination arrangements (dialogues, memoranda of understanding, joint programs of action) between states for river basin management</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Use of multiple agency approach with overarching coordination body</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Evidence of use of consensus methods to broker agreements on commitments within the basin, coupled with evidence of mechanisms to monitor those agreements</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Existence of small-scale local public water management institutions and results are recorded which demonstrate improvements made</b>	Water resources	Basin	Status	Input	Hooper B.
<b>Evidence of links between macro-level institutions and grassroots user organizations</b>	Water resources	Basin	Status	Input	Hooper B.
<b>Evidence of authority given to the RBO to coordinate actions and programs across the basin</b>	Water resources	Basin	Status	Input	Hooper B.
<b>Existence of a business plan for the RBO which specifies coordination mechanisms between entities</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Existence of laws which specify authority of river basin organization to coordinate entities</b>	Water resources	Basin	Status	Input	Hooper B.
<b>Existence of national government guidelines for the establishment of basin organizations within national goals and priorities for natural resources management</b>	Water resources	Basin/National	Status	Input	Hooper B.
<b>Existence of national government guidelines for priority action areas in natural resources management which can be implemented by basin organizations and are supported by national funding mechanisms</b>	Water resources	Basin/National	Status	Input	Hooper B.
<b>Evidence of methods to integrate decision-making vertically through organizations: linking local management to Cabinet-levels of government</b>	Water resources	Basin/National	Status	Process	Hooper B.
<b>Evidence of measures to link RBO to high levels of government decision-making</b>	Water resources	Basin/National	Status	Process	Hooper B.
<b>Evidence of clear specification of the roles, responsibilities and functions of river basin organization and roles are distinguished from those of other entities</b>	Water resources	Basin/National	Status	Input	Hooper B.
<b>Evidence of institutional arrangements for basin management which specify roles and responsibilities of different entities and stakeholders</b>	Water resources	Basin/National	Status	Process	Hooper B.
<b>Degree to which RBO roles, responsibilities and functions reflect realities of existing conditions</b>	Water resources	Basin/National	Status	Outcome	Hooper B.
<b>The specification of organizational responsibilities is clear and determined by policy and law</b>	Water resources	Basin/National	Status	Outcome	Hooper B.
<b>Evidence that the RBO has the mandate to ensure they take the 'big picture' in river basin management</b>	Water resources	Basin	Status	Input	Hooper B.
<b>Evidence of strategic planning and implementation process based on communications, coordination and cooperation within a river basin organization</b>	Water resources	Basin	Status	Process	Hooper B.
<b>National/federal water resources policy</b>	Water resources	National/federal	Status	Input	UNCSD 2012
<b>Sub-national/provincial/state water resources policy</b>	Water resources	Subnational	Status	Input	UNCSD 2012
<b>Decentralized structures for water resources management</b>	Water resources	National	Status	Input	UNCSD 2012
<b>Improved governance and institutional frameworks had an impact in the past 20 years on economic development objectives</b>	Water resources	National	Impact	Impact	UNCSD 2012
<b>Improved governance and institutional frameworks had an impact in the past 20 years on social objectives</b>	Water resources	National	Impact	Impact	UNCSD 2012
<b>Improved governance and institutional frameworks had an impact in the past 20 years on environmental objectives</b>	Water resources	National	Impact	Impact	UNCSD 2012
<b>Improved governance and institutional frameworks had an impact in the past 20 years on the overall national development</b>	Water resources	National	Impact	Impact	UNCSD 2012
<b>Priority water management challenge areas : institutional capacity at subnational level</b>	Water resources	National	Status	Outcome	UNCSD 2012
<b>Priority water management challenge areas : coordination between levels and types of management</b>	Water resources	Local	Status	Outcome	UNCSD 2012
<b>Priority water management challenge areas : institutional capacity at national level</b>	Water resources	National	Status	Outcome	UNCSD 2012
<b>Water-related Institutions: type of actors, activities and sectors</b>	Water resources	National	Status	Input	Aquastat
<b>Institutional roles and responsibilities and lead agencies: Please list ministries/ national institutions with responsibilities in WASH and indicate the level of responsibility in each sector</b>	WASH	National	Status	Input	GLASS 2013
<b>Coordination between actors: Does a formal mechanism exist to coordinate the work of different organisations with responsibilities for WASH (health, education, environment, public works, etc.) to coordinate activities?</b>	WASH	National	Status	Process	GLASS 2013
<b>Coordinating with non-government organizations: To what extent do NGOs coordinate with government institutions?</b>	WASH	National	Status	Process	GLASS 2013
<b>Extent: Are all responsibilities clearly assigned and</b>	Water resources	Subnational	Status	Input	DROP project

facilitated with resources?						
<b>Coherence: To what extent do the assigned responsibilities create competence struggles or cooperation within or across institutions? Are they considered legitimate by the main stakeholders?</b>	Water resources	Subnational	Status	Outcome	DROP project	
<b>Flexibility: To what extent is it possible to pool the assigned responsibilities and resources as long as accountability and transparency are not compromised?</b>	Water resources	Subnational	Status	Process	DROP project	
<b>Flexibility: Is it possible to move up and down levels (up scaling and downscaling) given the issue at stake?</b>	Water resources (Drought)	Subnational	Status	input	DROP project	
<b>Intensity: Is there a strong impact from a certain level towards behavioural change or management reform?</b>	Water resources (Drought)	Subnational	Status	Outcome	DROP project	
<b>Extent: How many levels are involved and dealing with an issue? Are there any important gaps or missing levels?</b>	Water resources (Drought)	Subnational	Status	input	DROP project	
<b>Coherence: Do these levels work together and do they trust each other between levels? To what degree is the mutual dependence among levels recognised?</b>	Water resources (Drought)	Subnational	Status	Outcome	DROP project	
<b>A person or department is identified who participates and reports on River Basin Committee activities.</b>	Water resources	Basin	Status	Input	EWS	
<b>Management organisation established/not established</b>	Water resources	Basin	Status	Input	Japan Water Forum	
<b>Current intragovernmental responsibility in water law</b>	Surface water	National/Local	Status	Input	Saleth, Dinar	
<b>Current intragovernmental responsibility in water law</b>	Groundwater	National/Local	Status	Input	Saleth, Dinar	
<b>Current intragovernmental responsibility in water law</b>	Recycled water	National/Local	Status	Input	Saleth, Dinar	
<b>Current intragovernmental responsibility in water law</b>	Water quality	National/Local	Status	Input	Saleth, Dinar	
<b>Co-ordinated decision making</b>	Water resources	Basin	Status	Process	WWF Water and Wetland Index	

**Principle 2.** Manage water at the appropriate scale(s) within integrated basin governance systems to reflect local conditions, and foster co-ordination between the different scales

Indicator	Function	Scale	Phase	Type	Source
<b>Natural resources are managed to support sustainable WASH service delivery</b>	Water & sanitation	Local	Status	Process	USAID WASH Sustainability Index Tool
<b>Integrated water resources management concepts</b>	Water resources	National	Status	Process	UN-Water Task Force on Indicators, Monitoring and Reporting
<b>Existence of IWRM Plans</b>	Water resources	National	Status	Process	UN-Water Task Force on Indicators, Monitoring and Reporting
<b>Water management activities driven by Basin plan.</b>	Water resources	Basin	Status	Process	Cap-Net
<b>Integrated management implementation in transboundary basins</b>	Water resources	Basin	Status	Process	INBO
<b>Internal business process</b>	Water resources	Basin	Status	Process	NARBO
<b>Evidence of an IWRM approach used as the basis for land and water resources management</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Existence and use of water and natural resources planning: well-defined objectives, mutually beneficial and desirable goals, and resource development priorities in a long-term integrated basin management plan</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Evidence of an awareness of resource availability constraints on and options for development in river basin management plans</b>	Water resources	Basin	Status	Outcome	Hooper B.
<b>Evidence of completion of river basin management plans</b>	Water resources	Basin	Status	Outcome	Hooper B.
<b>Demonstrated use of national land and water policies in water planning documents and practices</b>	Water resources	Basin	Status	Outcome	Hooper B.
<b>National land and water policies stipulate use of river basin as a management unit for natural resources management</b>	Water resources	Basin	Status	Input	Hooper B.
<b>Use of a stepped approach to decision-making is used - do what is achievable first</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Evidence that organization type reflects prevailing needs for river basin management</b>	Water resources	Basin	Status	Outcome	Hooper B.
<b>Use of flatter organizational structures to improve coordination rather than steeply hierarchical structures</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Evidence that the RBO provides the leading voice on basin wide land and water issues</b>	Water resources	Basin	Status	Outcome	Hooper B.
<b>Existence of a well-designed research program which identifies and tests with stakeholders best management options for land types in sub-basin catchments</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Evidence of institutional reform through high level ownership of water management &amp; using 'water champions' in government</b>	Water resources	Basin	Status	Process	Hooper B.
<b>National or federal integrated water resources management plan/s or equivalent strategic plan document/s</b>	Water resources	National	Status	Input	UNCSD 2012
<b>Separate national or federal water efficiency plan/s</b>	Water resources	National	Status	Input	UNCSD 2012
<b>International agreements on water resources management to which your country is party</b>	Water resources	National	Status	Input	UNCSD 2012
<b>Mechanisms (e.g. commissions, councils) for river basin management</b>	Water resources	National	Status	Process	UNCSD 2012
<b>Mechanisms for management of groundwater</b>	Groundwater	National	Status	Process	UNCSD 2012
<b>Mechanisms for management of lakes</b>	Surface water	National	Status	Process	UNCSD 2012
<b>Mechanisms for cross-sector management of water resources</b>	Water resources	National	Status	Process	UNCSD 2012
<b>Mechanisms for transboundary water resources management</b>	Water resources	National	Status	Process	UNCSD 2012
<b>Basin studies for long-term development and management of water resources</b>	Water resources	National	Status	Process	UNCSD 2012
<b>Programs to value water-related or dependent ecosystem services</b>	Ecosystem services	National	Status	Process	UNCSD 2012
<b>Groundwater management program</b>	Groundwater	National	Status	Input	UNCSD 2012
<b>Surface water management program</b>	Surface water	National	Status	Input	UNCSD 2012
<b>Linked ground and surface water management program</b>	Surface water	National	Status	Input	UNCSD 2012
<b>Programs to address water-related disasters (e.g. floods and</b>	Water risks	National	Status	Input	UNCSD 2012



droughts)						
Cooperative programs managing transboundary water resources	Transboundary	National	Status	Input	UNCSD 2012	
Improved management instruments had an impact in the past 20 years on economic development objectives	Water resources	National	Impact	Impact	UNCSD 2012	
Improved management instruments had an impact in the past 20 years on social objectives	Water resources	National	Impact	Impact	UNCSD 2012	
Improved management instruments had an impact in the past 20 years on environmental objectives	Water resources	National	Impact	Impact	UNCSD 2012	
Improved management instruments had an impact in the past 20 years on the overall national development	Water resources	National	Impact	Impact	UNCSD 2012	
Improved infrastructure development had an impact in the past 20 years on economic development objectives	Water resources	National	Impact	Impact	UNCSD 2012	
Improved infrastructure development had an impact in the past 20 years on social objectives	Water resources	National	Impact	Impact	UNCSD 2012	
Improved infrastructure development had an impact in the past 20 years on environmental objectives	Water resources	National	Impact	Impact	UNCSD 2012	
Improved infrastructure development had an impact in the past 20 years on the overall national development	Water resources	National	Impact	Impact	UNCSD 2012	
Priority water management challenge areas: disaster management	Water resources	National	Status	Outcome	UNCSD 2012	
Priority water management challenge areas: Climate change adaptation management	Water resources	National	Status	Outcome	UNCSD 2012	
Priority water management challenge areas: Water use efficiency management	Water resources	National	Status	Outcome	UNCSD 2012	
Water strategy of local, national and upstream governments, including drought and flood management plans where appropriate	Water risks	National/basin	Status	Input	WWF risk assessment	
6.5.1 Degree of integrated water resources management implementation (0-100)	Water resources	National	Progress	Outcome	IAEG: UNEP	
Action is taken to mitigate actual and potential impacts* caused by water abstraction and discharge	Water resources	Basin	Status	Process	EWS	
A strategy is in place and described to achieve optimized water efficiency	Water resources	Basin	Status	Process	EWS	
Best Management Practices* (BMPs*) are in place and integrated in a water resource management strategy	Water resources	Basin	Status	Process	EWS	
Level of implementation of policy categories in the sanitation, water supply and IWRM sectors	Water resources/ Sanitation	National	Status	Outcome	UN DESA	
Management plans established/ not established	Water resources	Basin	Status	Process	Japan Water Forum	
Basin level management performed/ not performed	Water resources	Basin	Status	Outcome	Japan Water Forum	
Improved policy, strategic planning and legal frameworks had an impact in the past 20 years on economic development objectives	Water resources	National	Impact	Impact	UNCSD 2012	
Improved policy, strategic planning and legal frameworks had an impact in the past 20 years on social objectives	Water resources	National	Impact	Impact	UNCSD 2012	
Improved policy, strategic planning and legal frameworks had an impact in the past 20 years on environmental objectives	Water resources	National	Impact	Impact	UNCSD 2012	
Improved policy, strategic planning and legal frameworks had an impact in the past 20 years on the overall national development	Water resources	National	Impact	Impact	UNCSD 2012	
Organisational basis	Water resources	National	Status	Input	Asia Water Governance Index (Araral E. and Yu D., 2010)	
Use of consensus-based decision-making in basin-wide planning and management to balance all user needs for water resources and to provide protection from water related hazards	Water resources	Basin	Status	Process	Hooper B.	
Water efficiency in integrated water resources management plan or equivalent	Water resources	National	Status	Input	UNCSD 2012	
National integrated water resources management plan is in place, updated regularly, and applied to WASH services planning	Water resources	National	Status	Input	USAID WASH Sustainability Index Tool	
Water strategy of local, national and upstream governments, including drought and flood management plans where appropriate	Water resources/ water risks	National/Local	Status	Process	WWF, Water Risk Filter	

**Principle 3.** Encourage policy coherence through effective cross-sectoral co-ordination, especially between policies for water and the environment, health, energy, agriculture, industry, spatial planning and land use

Indicator	Function	Scale	Phase	Type	Source
Coordination with Urban/ Industrial Development	Groundwater	National/Local	Status	Process	FAO, UNESCO, GEF, World Bank, IAH, Groundwater Governance Indicators "Global Framework for Action" of the Groundwater Governance Project (proposal)
Coordination with Agricultural Development	Groundwater	National/Local	Status	Process	FAO, UNESCO, GEF, World Bank, IAH, Groundwater Governance Indicators "Global Framework for Action" of the Groundwater Governance Project (proposal)
Linkage between water law and water policy	Water resources	National	Status	Outcome	Asia Water Governance Index
Linkage with other policies	Water resources	National	Status	Outcome	Asia Water Governance Index
Integrated approach in water policy	Water	National	Status	Input	WWF Water and Wetland

	resources				Index
<b>Integrated co-operation</b>	Water resources	National	Status	Input	WWF Water and Wetland Index
<b>Existence of high level, cross-sectoral policy links between natural resources management, health, population and economic development portfolios of government</b>	Water resources	Basin	Status	Input	Hooper B.
<b>Existence of natural resources management policies which provide solutions by across the spectrum of natural resources, and the development of regional (basin scale) natural resources management policies</b>	Water resources	Basin	Status	Input	Hooper B.
<b>Evidence of international, cross-portfolio arrangements between agencies with similar roles in neighbouring countries which address natural resources management, health, population and economic development</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Evidence that the basin organization promotes local best management options to industry, urban planning, forestry, agriculture and other resource use organizations &amp; individuals</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Existence of international agreements /partnerships for other sectors (trade, health for example) between basin member nations pre-exist, which facilitate development of international (transboundary) water sharing agreements</b>	Water resources	Basin	Status	Input	Hooper B.
<b>Poverty Reduction Strategy (PRS) with water resources management component</b>	Water resources	National	Status	Input	UNCSD 2012
<b>National Strategy for Sustainable Development</b>	Water resources	National	Status	Input	UNCSD 2012
<b>National Development Plan with water resources management component</b>	Water resources	National	Status	Input	UNCSD 2012
<b>National Environmental Action Plan water resources management component</b>	Water resources	National	Status	Input	UNCSD 2012
<b>National climate change adaptation policy/strategy/plan with water resources management component</b>	Water resources	National	Status	Input	UNCSD 2012
<b>National Agricultural Plan with water resources management component</b>	Water resources	National	Status	Input	UNCSD 2012
<b>National energy policy/strategy/plan with water resources management component</b>	Water resources	National	Status	Input	UNCSD 2012
<b>National desertification policy/strategy/plan with water resources management component</b>	Water resources	National	Status	Input	UNCSD 2012
<b>National wetland policy/strategy/plan with water resources management component</b>	Water resources	National	Status	Input	UNCSD 2012
<b>National biodiversity policy/strategy/plan with water resources management component</b>	Water resources	National	Status	Input	UNCSD 2012
<b>Land/natural resources management programs that include water resources management components</b>	Water resources	National	Status	Input	UNCSD 2012
<b>Programs for allocating water resources that include environmental considerations</b>	Water resources	National	Status	Input	UNCSD 2012
<b>Programs to address climate change adaptation through water resources management</b>	Water resources	National	Status	Input	UNCSD 2012
<b>Programs to reverse environmental/ecosystem degradation</b>	Water resources	National	Status	Input	UNCSD 2012
<b>Priority water management challenge areas: Coordination between sectors at subnational level</b>	Water resources	National	Status	Process	UNCSD 2012
<b>Priority water management challenge areas: Coordination between sectors at national level</b>	Water resources	National	Status	Process	UNCSD 2012
<b>Water management, policies and legislation related to water use in agriculture</b>	Water resources	National	Status	Input	Aquastat
<b>Do national policies and plans exist, and to what extent are these implemented to ensure the provision of water and sanitation?</b>	WASH	National	Status	Outcome	GLASS 2013
<b>Policy and plan coverage targets: the coverage target (including the year targets are expected to be attained) as documented in the policy or plan</b>	WASH	National	Impact	Outcome	GLASS 2013
<b>Extent: To what extent are the various problem perspectives taken into account?</b>	Drought	Subnational	Status	Outcome	DROP project
<b>Coherence: To what extent do the various perspectives and goals support each other, or are they in competition or conflict?</b>	Drought	Subnational	Status	Outcome	DROP project
<b>Flexibility: Are there opportunities to re-assess goals? Can multiple goals be optimized in package deals?</b>	Drought	Subnational	Status	Process	DROP project
<b>Intensity: How different are the goal ambitions from the status quo or business as usual?</b>	Drought	Subnational	Status	Outcome	DROP project
<b>The (quantitative) relation of water and energy use is identified and optimized.</b>	Water resources	Basin	Status	Outcome	EWS
<b>The (quantitative) relation of water and other resources than energy is identified and optimized.</b>	Water resources	Basin	Status	Outcome	EWS
<b>Level of integration of water laws with other laws related to land, forest and environment</b>	Water resources	National	Status	Outcome	Saleth, Dinar
<b>Existence of water policy implications in agricultural policy, fiscal policy, investment policies, environmental policies</b>	Water resources	National	Status	Input	Saleth, Dinar
<b>Integrated national policy/strategy/plan for land and water resources management</b>	Water resources	National	Status	Input	UNCSD 2012
<b>Land-Use Controls to Reduce Diffuse Source Pollution</b>	Groundwater	National/Local	Status	Input	FAO, UNESCO, GEF, World Bank, IAH, Groundwater Governance Indicators "Global Framework for Action" of the Groundwater Governance Project ( proposal)

**Principle 4.** Adapt the level of capacity of responsible authorities to the complexity of water challenges to be met, and to the set of competencies required to carry out their duties.

Indicator	Function	Scale	Phase	Type	Source
<b>Functional capacity and balance</b>	Water resources	National	Status	Outcome	Asia Water Governance Index
<b>The human capacity of the community to manage water resources and address local water issues</b>	Water resources	National	Status	Outcome	Canadian Water Sustainability Index
<b>The level of training that water and waste water operators have received.</b>	Water & wastewater	National	Status	Outcome	Canadian Water Sustainability Index
<b>National support to local government / other support institutions is provided and appropriate</b>	Sanitation	National	Status	Outcome	USAID WASH Sustainability Index Tool
<b>Support to schools/institutions in upkeep of sanitation facilities is available as needed</b>	Sanitation	National	Status	Outcome	USAID WASH Sustainability Index Tool
<b>Resilience to water-related disasters</b>	Floods/droughts	National	Status	Outcome	ADB Water Security Index
<b>Basin Institutional capacity in IWRM</b>	Water resources	Basin	Status	Input	Watershed Sustainability Index
<b>Learning and growth</b>	Water resources	Basin	Status	Process/Outcome	NARBO
<b>Use of a “learn by doing” approach by the basin organization</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Existence of legally trained staff in the RBO</b>	Water resources	Basin	Status	Input	Hooper B.
<b>Evidence of training programs to improve the skill levels of river basin managers and stakeholders, specific to their situation</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Evidence that the RBO leadership is well-trained, articulate, responsible and has ‘listening skills’</b>	Water resources	Basin	Status	Input	Hooper B.
<b>Existence of well-trained staff with capacity to work in teams and plan across sectors and disciplines</b>	Water resources	Basin	Status	Outcome	Hooper B.
<b>Evidence of training programs in the concept of IWRM and the tools of coordinated management</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Evidence of the capacity of local agencies, NGOs and water user organizations to implement resource management activities [labor supply, funding, assessment techniques to ensure best management options are relevant to the setting]</b>	Water resources	Basin	Status	Outcome	Hooper B.
<b>Assessment of capacity needs in water resources management at national level</b>	Water resources	National	Status	Process	UNCSD 2012
<b>Assessment of capacity needs in water resources management at subnational level</b>	Water resources	National	Status	Process	UNCSD 2012
<b>Programs for capacity development in water resources management institutions/organizations at national level</b>	Water resources	National	Status	Input	UNCSD 2012
<b>Programs for capacity development in water resources management institutions/organizations at sub-national levels</b>	Water resources	National	Status	Input	UNCSD 2012
<b>Programs for in-service training of staff/professionals in water resources management</b>	Water resources	National	Status	Input	UNCSD 2012
<b>Water resources management in the technical/higher education curriculum</b>	Water resources	National	Status	Input	UNCSD 2012
<b>Programs for providing advisory (extension) services on water management issues to end users</b>	Water resources	National	Status	Input	UNCSD 2012
<b>Does an overall HR strategy exist to develop and manage human resources in sanitation and drinking-water?</b>	Water resources	National	Status	Input	GLASS 2013
<b>If an HR strategy exists or is under development, has an HR gap been identified?</b>	WASH	National	Status	Outcome	GLASS 2013
<b>If an HR strategy exists or is under development, does it outline actions to fill identified gaps in HR?</b>	WASH	National	Status	Outcome	GLASS 2013
<b>How often is/ (will) the human resources strategy (be) reviewed?</b>	WASH	National	Status	Process	GLASS 2013
<b>Constraints to WASH human resources: To what extent do the following factors constrain WASH human resources capacity? Is HR limiting achievement of WASH services?: What are the three (3) tasks that would most benefit from increased human resource capacity?</b>	WASH	National	Status	Outcome	GLASS 2013
<b>Intensity: Is the amount of allocated resources sufficient to implement the measures needed for the intended change?</b>	Drought	Subnational	Status	Outcome	DROP project
<b>#/% of water management committees trained in management and maintenance of water and sanitation infrastructure/CBNRM</b>	WASH	Regional	Status	Output	ABCG
<b>% of community members understanding and acknowledging co-management roles, responsibilities and obligations for riparian catchment</b>	WASH	Regional	Status	Output	ABCG
<b>#/% of communities able to renew, replace and rehabilitate their water infrastructure</b>	WASH	Regional	Status	Output	ABCG
<b>Measurable sustained increase in training and awareness campaigns, including appropriate national level financial allocations for capacity development</b>	Water resources	Basin	Impact	Impact	SOPAC
<b>Increase in national staff (both men and women) across institutions with IWRM knowledge and experience by end of project</b>	Water resources	Basin	Impact	Impact	SOPAC
<b>Education and training provided/not provided</b>	Water resources	Basin	Status	Outcome	Japan Water Forum
<b>Percentage of departments where the number of technical and administrative workers per cubic meter of accounted for water is higher than the standard.</b>	Water & sanitation	National	Status	Output	UN-HABITAT Urban water and sanitation governance index



## EFFICIENCY CLUSTER

**Principle 5.** Produce, update, and share timely, consistent, comparable and policy-relevant water and water-related data and information, and use it to guide, assess and improve water policy

Indicator	Function	Scale	Phase	Type	Source
<b>Institutional information on the River Basin Authority</b>	Water resources	Basin	Status	Input	Transparency International, Water Management transparency index (2013)
<b>Technical information obtained directly from the websites under assessment</b>	Drinking water & Sanitation	National/Local	Status	Input	Iribarnegaray, M.A. and Seghezzo, L. Governance, Sustainability, and Decision Making in Water and Sanitation Management Systems. Sustainability 2012
<b>Validity of water data for planning</b>	Water resources	National	Status	Outcome	Asia Water Governance Index
<b>Data base is established in formats compatible with other river basin organisations</b>	Water resources	Basin	Status	Outcome	Cap-Net
<b>Environmental information on drinking water quality</b>	Drinking water	National	Status	Input	WRI, Environmental Democracy Index
<b>Media coverage</b>	Water resources	National	Status	Output	WRI, Aqueduct
<b>Data sharing</b>	Water resources	Basin	Status	Process	Narbo
<b>Evidence of a method to specify type of information, how it is presented and timing of information exchange in the RBO's information systems</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Evidence that information is appropriate to relevant stakeholders</b>	Water resources	Basin	Status	Outcome	Hooper B.
<b>Evidence that information system is affordable for relevant stakeholders</b>	Water resources	Basin	Status	Outcome	Hooper B.
<b>Evidence of integration of the information on a spatial scale: provides a resource management atlas in GIS at the sub-basin scale specifying environmental conditions and best management options</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Evidence of 'wisdom' [best understandings derived from research and practice over decades] being incorporated into local, regional and basin-wide information and mapped in a basin IMS</b>	Water resources	Basin	Status	Outcome	Hooper B.
<b>Evidence that two-way vertical information exchange mechanisms are made a priority</b>	Water resources	Basin	Status	Outcome	Hooper B.
<b>Evidence that data and information are quality controlled; including strong systems of field measurements and of data collection</b>	Water resources	Basin	Status	Outcome	Hooper B.
<b>Evidence of high reliability of information system – evidence of lack of breakdowns</b>	Water resources	Basin	Status	Output	Hooper B.
<b>Evidence of uniformity of information system for entire basin</b>	Water resources	Basin	Status	Outcome	Hooper B.
<b>Evidence that information management systems and models are used for analysis and prioritizing resource management options</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Existence of data providers who understand the basin's structure, management functions and resource use activities.</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Existence of a GIS which describes research programs (and outputs) for specific sub-basin locations</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Water resources information system</b>	Water resources	National	Status	Input	UNCSD 2012
<b>Mechanisms for exchanging information between countries</b>	Water resources	National	Status	Process	UNCSD 2012
<b>Priority water management challenge areas: Managing resource information</b>	Water resources	National	Progress	Process	UNCSD 2012
<b>Data availability for decision-making: Are data collected and used to inform decision making?</b>	Water & sanitation	National	Status	Outcome	GLASS 2013
<b>All sources used for water abstraction are documented (documentation regularly updated).</b>	Water resources	Basin	Status	Outcome	EWS
<b>There is a complete and up-to-date inventory of all applied substances, indicating the frequency and amount/volume applied</b>	Water resources	Basin	Status	Input	EWS
<b>State of clarification of land use information</b>	Water resources	Basin	Status	Outcome	Japan Water Forum
<b>State of hydrological observation systems</b>	Water resources	Basin	Status	Outcome	Japan Water Forum
<b>State of clarification of water use</b>	Water resources	Basin	Status	Outcome	Japan Water Forum
<b>State of hydrological prediction system</b>	Water resources	Basin	Status	Outcome	Japan Water Forum
<b>Percent of households with metered water connections</b>	Water & sanitation	Local	Status	Output	UN-HABITAT Urban water and sanitation governance index
<b>Research programs in water resources management</b>	Water resources	National	Status	Process	UNCSD 2012

**Principle 6.** Ensure that governance arrangements help mobilise water finance and allocate *financial resources* in an efficient, transparent and timely manner

Indicator	Function	Scale	Phase	Type	Source
<b>Groundwater Abstraction &amp; Use Charging</b>	Groundwater	National/Local	Status	Process	FAO, UNESCO, GEF, World Bank, IAH, Groundwater Governance Indicators "Global Framework for Action" of the Groundwater Governance Project (proposal) Iribarnegaray, M.A. and Seghezzi, L. Governance, Sustainability, and Decision Making in Water and Sanitation Management Systems. Sustainability 2012
<b>Percentage of the minimum wage required to pay water and sanitation services</b>	Drinking water	National	Status	Input	Asia Water Governance Index
<b>Finance available for water investments</b>	Water resources	National	Status	Input	Asia Water Governance Index
<b>Pricing policy</b>	Water resources	National	Status	Input	Asia Water Governance Index
<b>Existence of independent water pricing policy</b>	Water resources	National	Status	Input	Asia Water Governance Index
<b>The financial capacity of the community to manage water resources and respond to local challenges</b>	Water resources	Local	Status	Input	Canadian Water Sustainability Index
<b>There are national/district mechanisms to meet full life-cycle costs, beyond the school/institution's budget</b>	Sanitation	National	Status	Process	USAID WASH Sustainability Index Tool
<b>School/Institution has the ability to meet long-term operational, minor maintenance and capital maintenance expenditures</b>	Sanitation	National	Status	Outcome	USAID WASH Sustainability Index Tool
<b>National/local mechanisms exist to meet the full cost of supporting households in household water treatment and safe storage</b>	Sanitation	National	Status	Process	USAID WASH Sustainability Index Tool
<b>Percentages of bills paid with a delay of more than 30 days</b>	Drinking water	Local	Status	Outcome	Turin Index
<b>Productive Economy Indicators</b>	Water resources	National	Impact	Outcome	ADB Water Security Index
<b>Importance of national expenditure for water supply and sanitation</b>	Water resources	National	Status	Input	UN-Water Task Force on Indicators, Monitoring and Reporting
<b>Economic and financial management of river basins</b>	Water resources	Basin	Status	Process	Cap-Net
<b>Charges and fees for water allocation favour the poor and efficient water use.</b>	Water resources	Basin	Status	Outcome	Cap-Net
<b>Pollution charges give incentive to reduce pollution.</b>	Water resources	Basin	Status	Process	Cap-Net
<b>Evolution in the basin's IWRM expenditure in the period analysed</b>	Water resources	Basin	Progress	Outcome	Watershed Sustainability Index
<b>6.a.1 Amount of water- and sanitation-related official development assistance that is part of a government-coordinated spending plan</b>	Water & sanitation	National	Status	Output	IAEG: OECD, WHO and UNEP
<b>Economic instruments for water pollution</b>	Water pollution	National	Status	Input	OECD
<b>RBOs Finance</b>	Water resources	Basin	Status	Process	NARBO
<b>Evidence of services delivered by national government to specific basins using State budget mechanisms</b>	Water resources	Basin/ national	Status	Process	Hooper B.
<b>Evidence of cost-sharing arrangements</b>	Water resources	Basin/ national	Status	Process	Hooper B.
<b>Evidence of joint ventures</b>	Water resources	Basin/ national	Status	Process	Hooper B.
<b>Existence of ongoing funding for river basin management</b>	Water resources	Basin/ national	Status	Process	Hooper B.
<b>Funding exists and is adequate to address at least priority natural resources management issues</b>	Water resources	Basin	Status	Input/Outcome	Hooper B.
<b>Funding appropriations established and operating within National and State resources management investment</b>	Water resources	Basin	Status	Outcome	Hooper B.
<b>Funding exists for staff training in coordination practices</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Availability of adequate financial resources</b>	Water resources	Basin	Status	Input	Hooper B.
<b>Evidence of water pricing used to recover some or all of development costs</b>	Water resources	Basin	Status	Output	Hooper B.
<b>Evidence of cost-recovery mechanisms used in water management plans</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Methods in place to deal with multilateral donor agencies and/or funding sources</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Evidence that donor agencies are sensitive to these approaches in water planning</b>	Water resources	Basin	Status	Outcome	Hooper B.
<b>Evidence of clear specification of private sector involvement and links to basin decision systems</b>	Water resources	Basin	Status	Input/Process	Hooper B.
<b>Evidence of joint ventures, funding and exploiting resources</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Programs for transferring improved and cost effective water saving technologies</b>	Water resources	National	Status	Process	UNCSD 2012
<b>Cost recovery mechanisms/progressive tariff structures for all water uses</b>	Water resources	National	Status	Process	UNCSD 2012
<b>Subsidies for promoting water efficiency</b>	Water resources	National	Status	Process	UNCSD 2012



<b>Charges for water resource management (e.g. pollution charges)</b>	Water resources	National	Status	Process	UNCSD 2012
<b>Water resources included in national infrastructure investment plans</b>	Water resources	National	Status	Process	UNCSD 2012
<b>Investment plans and programs: irrigation</b>	Irrigation	National	Status	Input	UNCSD 2012
<b>Investment plans and programs: energy/hydropower</b>	Energy	National	Status	Input	UNCSD 2012
<b>Investment plans and programs: groundwater</b>	Groundwater	National	Status	Input	UNCSD 2012
<b>Investment plans and programs: flood management</b>	Flood	National	Status	Input	UNCSD 2012
<b>Investment plans and programs: water supply ( domestic and industrial)</b>	Water supply	National	Status	Input	UNCSD 2012
<b>Investment plans and programs: desalination</b>	Desalination	National	Status	Input	UNCSD 2012
<b>Investment plans and programs: wastewater treatment</b>	Wastewater treatment	National	Status	Input	UNCSD 2012
<b>Investment plans and programs: rainwater harvesting</b>	Rainwater	National	Status	Input	UNCSD 2012
<b>Investment plans and programs: natural system ( wetlands, floodplains and catchment restoration)</b>	Natural system	National	Status	Input	UNCSD 2012
<b>Financing for water resources included in national investment plans</b>	Water resources	National	Status	Input	UNCSD 2012
<b>Financing for irrigation</b>	irrigation	National	Status	Input	UNCSD 2012
<b>Financing for energy/hydropower</b>	Energy	National	Status	Input	UNCSD 2012
<b>Financing for groundwater (e.g. boreholes, pumps and treatment)</b>	Groundwater	National	Status	Input	UNCSD 2012
<b>Financing for flood management</b>	Flood	National	Status	Input	UNCSD 2012
<b>Financing for water supply (domestic and industrial)</b>	Water supply	National	Status	Input	UNCSD 2012
<b>Financing for wastewater treatment</b>	Desalination	National	Status	Input	UNCSD 2012
<b>Financing for desalination of seawater</b>	Wastewater treatment	National	Status	Input	UNCSD 2012
<b>Financing for rainwater harvesting</b>	Rainwater	National	Status	Input	UNCSD 2012
<b>Financing for natural systems (e.g. wetlands, floodplains and catchment restoration)</b>	Natural system	National	Status	Input	UNCSD 2012
<b>Government budget allocation (as % of GDP) for water resources development</b>	Water Resources	National	Status	Output	UNCSD 2012
<b>Grants and loans from aid agencies for water resources development</b>	Water Resources	National	Status	Output	UNCSD 2012
<b>Investments from International Financing Institutions (e.g. World Bank) for water resources development</b>	Water Resources	National	Status	Output	UNCSD 2012
<b>Investments from private sources (e.g. banks and private operators, non-profit) for water resources development</b>	Water Resources	National	Status	Output	UNCSD 2012
<b>Revenues (e.g. from water use charges/tariffs) used for water resources development</b>	Water Resources	National	Status	Output	UNCSD 2012
<b>Payments for ecosystem services and related benefit/cost transfer schemes</b>	Water Resources	National	Status	Output	UNCSD 2012
<b>Priority water management challenge areas: financing of water resources management</b>	Water Resources	National	Status	Outcome	UNCSD 2012
<b>Priority water management challenge areas: financing of infrastructure</b>	Water Resources	National	Status	Outcome	UNCSD 2012
<b>Investment in water and sanitation with private participation</b>	Water & sanitation	National	Status	Input	WB
<b>Existence of financing plan/budget: Has the government defined a financing plan/budget for the WASH sector, clearly assessing the available sources of finance and strategies for financing future needs (i.e. who should pay for what), that is published and agreed?</b>	WASH	National	Status	Process	GLASS 2013
<b>Government budget specific to WASH</b>	WASH	National	Status	Input	GLASS 2013
<b>Financial reporting: Are expenditures reports available that allow actual spending on WASH to be compared with committed funding</b>	WASH	National	Status	Process	GLASS 2013
<b>Cost recovery strategies: If a financing plan/budget is in place, does it define if operating and basic maintenance is to be covered by tariffs or household contributions? (please check one response in each row)</b>	WASH	National	Status	Process	GLASS 2013
<b>Equity: Are there specific measures in the financing plan to target resources to reduce inequities in access and levels of service and are they being applied for the following?</b>	WASH	National	Status	Process	GLASS 2013
<b>Affordability: Are there financial schemes to make access to WASH more affordable for disadvantaged groups?</b>	WASH	National	Status	Process	GLASS 2013
<b>Absorption of external funds: What is the percentage of official donor capital commitments for WASH utilized (three-year average)?</b>	WASH	National	Status	Output	GLASS 2013
<b>Domestic absorption: What is the estimated percentage of domestic commitments utilized (three year average)?</b>	WASH	National	Status	Output	GLASS 2013
<b>Donor funding: Is there a coordination mechanism between bi-lateral/multi-lateral donors and government and how are the donor funds channelled to the sector?</b>	WASH	National	Status	Process	GLASS 2013
<b>Sufficient finance to meet targets: Going forward, do you estimate that financing allocated to water/sanitation/hygiene improvements are sufficient to meet MDG targets?</b>	WASH	National	Status	Impact	GLASS 2013
<b>Sources of financing</b>	WASH	National	Status	Input	GLASS 2013
<b>Cost recovery policy</b>	Water Resources	National	Status	Process	WB, IAWD
<b>Investment targeting mechanism</b>	Water Resources	National	Status	Process	WB, IAWD
<b>Main national funding source</b>	Water Resources	National	Status	Input	WB, IAWD
<b>Main international funding sources</b>	Water Resources	National	Status	Input	WB, IAWD
<b>Coherence: Are trade-offs in cost benefits and</b>	Drought	Subnational	Status	Process	DROP Project

distributional effects considered?						
Decentralised solidarity mechanisms	Water & sanitation	National	Status	Process	UNDP global water solidarity	
# and type of financial incentives designed to facilitate better (improved) access to WASH services and products	WASH	Regional	Status	Input	ABCG	
Access to credit, diversity of income (varied units of measure applicable)	WASH	Regional	Status	Output	ABCG	
Investments made for maintenance and improvement of the water management are fully reported.	WASH	Basin	Status	Outcome	EWS	
Government spending made/not made	Water resources	Basin	Status	Output	Japan Water Forum	
Frequency of revision of water prices and charges	Water resources	National	Status	Process	Saleth, Dinar	
Efficiency and extensiveness of water transfers	Water resources	National	Impact	Outcome	Saleth, Dinar	
Cost per cubic meter of accounted for water (national distribution of departments)	Water & sanitation	Local	Status	Output	UN-HABITAT Urban water and sanitation governance index	
Revenue per cubic meter of accounted for water (national distribution of departments)	Water & sanitation	Local	Status	Output	UN-HABITAT Urban water and sanitation governance index	

**Principle 7.** Ensure that sound water management *regulatory frameworks* are effectively implemented and enforced in pursuit of the public interest

Indicator	Function	Scale	Phase	Type	Source
Number of regulated versus unregulated small scale water vendors	Water & sanitation	Local	Status	Output	UN-HABITAT Urban water and sanitation governance index
Waterwell Drilling Permits & Groundwater Use Rights	Groundwater	National/Local	Status	Input	FAO, UNESCO, GEF, World Bank, IAH, Groundwater Governance Indicators "Global Framework for Action" of the Groundwater Governance Project (draft)
Instrument to Constrain Waterwell Construction/ Use	Groundwater	National/Local	Status	Process	FAO, UNESCO, GEF, World Bank, IAH, Groundwater Governance Indicators "Global Framework for Action" of the Groundwater Governance Project (draft)
Sanctions for Illegal Waterwell Operation	Groundwater	National/Local	Status	Input	FAO, UNESCO, GEF, World Bank, IAH, Groundwater Governance Indicators "Global Framework for Action" of the Groundwater Governance Project (draft)
Constraints on Ground Discharge of Waste (water)s	Groundwater	National/Local	Status	Input	FAO, UNESCO, GEF, World Bank, IAH, Groundwater Governance Indicators "Global Framework for Action" of the Groundwater Governance Project (draft)
Users of Sub-Surface Space Registered & Regulated	Groundwater	National/Local	Status	Input	FAO, UNESCO, GEF, World Bank, IAH, Groundwater Governance Indicators "Global Framework for Action" of the Groundwater Governance Project (draft)
Composite index for regulatory governance in the Water and Wastewater Sector	Water & wastewater	National	Status		Rui Marquez, Instituto Superior Técnico – University of Lisbon, Portuguese Water Partnership
Legal distinction of different water sources	Surface water & groundwater	National	Status	Input	Asia Water Governance Index
Format of surface water rights	Surface water	National	Status	Input	Asia Water Governance Index
Legal accountability of water sector officials	Water resources	National	Status	Input	Asia Water Governance Index
Centralisation/decentralisation tendency in water law	Water resources	National	Status	Input	Asia Water Governance Index
Legal scope for private and user participation	Water resources	National	Status	Input	Asia Water Governance Index
Legal framework for integrated treatment of water sources	Water resources	National	Status	Input	Asia Water Governance Index
Accountability and regulatory mechanisms	Water resources	National	Status	Process	Asia Water Governance Index
There are licensed and regulated septage haulers/desludgers	Sanitation	National	Status	Input	USAID WASH Sustainability Index Tool
Environmental health risk guidelines exist and are followed	Sanitation	National	Status	Input	USAID WASH Sustainability Index Tool
National environmental protection standards are established and applied to WASH services	Sanitation	National	Status	Input	USAID WASH Sustainability Index Tool
National environmental protection standards are established and applied to WASH services	Sanitation	National	Status	Input	USAID WASH Sustainability Index Tool
National policy, norms and guidelines for community-managed water supply and enabling legislation is in place	Sanitation	National	Status	Input	USAID WASH Sustainability Index Tool
Promotion and awareness of rules and regulations (Rules and regulations promoted, interpreted and highlighted)	Water resources	National	Status	Output	IWRM implementation indicators in South Africa (Braid S; Görgens A, 2010)

<b>Enforcement of rules and regulations (Active and visible enforcement of rules and regulations.)</b>	Water resources	National	Status	Output	IWRM implementation indicators in South Africa (Braid S; Görgens A, 2010)
<b>Number of surface and groundwater users licensed according to the regulations</b>	Water resources	Basin	Status	Input	Cap-Net
<b>Water allocation criteria include use efficiency, economic benefit and social goals</b>	Water resources	Basin	Impact	Process	Cap-Net
<b>% of time environmental and social reserve is maintained in major water courses</b>	Water resources	Basin	Impact	Output	Cap-Net
<b>% of surface water quality samples complying with water quality objectives</b>	Water resources	Basin	Impact	Output	Cap-Net
<b>% of ground water quality samples complying with water quality objectives</b>	Water resources	Basin	Impact	Output	Cap-Net
<b>Number of polluters licensed according to the regulations</b>	Water resources	Basin	Status	Output	Cap-Net
<b>Proportion of water allocation permit holders complying with permit conditions.</b>	Water resources	Basin	Status	Output	Cap-Net
<b>Proportion of water pollution permit holders complying with permit conditions.</b>	Water resources	Basin	Status	Output	Cap-Net
<b>Sophistication and clarity of water related legal framework</b>	Water resources	National	Status	Input	WWF, Water Risk Filter
<b>Enforcement of water related legal framework</b>	Water resources	National	Status	Process	WWF, Water Risk Filter
<b>Existence of guidelines produced by the RBO to enact natural resources management by local governments</b>	Water resources	Basin	Status	Input	Hooper B.
<b>Evidence that local government zoning mechanisms are congruent with river basin management goals and strategies</b>	Water resources	Basin	Status	Input	Hooper B.
<b>Evidence that local government and state agency pollution laws and regulations are congruent with river basin management plans and goals</b>	Water resources	Basin	Status	Input	Hooper B.
<b>Use of environmental management systems and eco-audits, voluntary regulation of practices and international standards</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Mechanisms exist in government to reduce jurisdictional overlap and reduce duplication (such as regulatory tribunals)</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Existence of legislation to enact natural resources management</b>	Water resources	Basin	Status	Input	Hooper B.
<b>Legislation specifies functions, structure, financial base &amp; accountability mechanisms for river basin management</b>	Water resources	Basin	Status	Input	Hooper B.
<b>Existence of an appropriate and enforceable legal and jurisdictional system in land and water management</b>	Water resources	Basin	Status	Input	Hooper B.
<b>Regulatory norms and guidelines for sustainable development of water resources</b>	Water resources	National	Status	Input	UNCSD 2012
<b>Enforcement of water related legal framework</b>	Water resources	Basin	Status	Input	WWF risk assessment
<b>Does the constitution or other legislation recognize water and sanitation as a human right?</b>	WASH	National	Status	Input	GLASS 2013
<b>Public reporting/complaints: Do members of the public served by formal service providers have an effective mechanism to file complaints concerning the lack of, or unsatisfactory sanitation and drinking-water services?</b>	WASH	National	Status	Process	GLASS 2013
<b>Independent monitoring and audits: Is independent surveillance of drinking water quality carried out and does it inform remedial action?</b>	WASH	National	Status	Process	GLASS 2013
<b>Practices of economic regulation in the Danube region</b>	Water & sanitation	National	Status	Process	WB, IAWD
<b>Main characteristics of regulatory agencies in the Danube region</b>	Water & sanitation	National	Status	Input	WB, IAWD
<b>Institutionalized utility performance information systems and benchmarking schemes in the Danube region</b>	Water & sanitation	National	Status	Process	WB, IAWD
<b>Compliance with Drinking water quality standards ( Danube Region)</b>	Water & sanitation	National	Status	Output	WB, IAWD
<b>Compliance with Wastewater treatment quality standards ( Danube Region)</b>	Water & sanitation	National	Status	Output	WB, IAWD
<b># of community-based enforcement mechanisms or authorities established with the mandate to ensure water access rights and use in target regions (across a hierarchy of effectiveness)</b>	Water & sanitation	Regional	Status	Output	ABCG
<b># of available mechanisms to resolve disputes</b>	Water & sanitation	Regional	Status	Output	ABCG
<b>Procedures are established, implemented and monitored to respond to accidents, security incidents, emergency situations, disasters and the like.</b>	Water resources	Basin	Status	Process/Outcome	EWS
<b>Legal framework established/ not established</b>	Water resources	Basin	Status	Input	Japan Water Forum
<b>Legal Treatment of Different Water Sources</b>	Water resources	National	Status	Input	Saleth, Dinar
<b>Legal Linkages between Water and Water-Related Resources</b>	Water resources	National	Status	Input	Saleth, Dinar
<b>Property-Rights Status</b>	Water resources	National	Status	Input	Saleth, Dinar
<b>Is there legalized intersectoral prioritization?</b>	Water resources	National	Status	Input	Saleth, Dinar
<b>Are the conflict-resolution mechanisms explicitly specified in law?</b>	Water resources	National	Status	Input	Saleth, Dinar
<b>Kind of conflict-resolution mechanisms</b>	Water resources	National	Status	Process	Saleth, Dinar
<b>Explicit legal provisions for ensuring the accountability of officials, water suppliers, and users</b>	Water resources	National	Status	Input	Saleth, Dinar



<b>Law and regulation of the River Basin Authority</b>	Water resources	Basin	Status	Input	Transparency International, Water Management transparency index (2013)
<b>National/federal water laws</b>	Water resources	National/federal	Status	Input	UNCSD 2012
<b>Sub-national/provincial/state water law</b>	Water resources	Subnational	Status	Input	UNCSD 2012
<b>Priority water management challenge areas: legislation</b>	Water resources	National	Status	Outcome	UNCSD 2013
<b>Legal documents</b>	Water resources	National	Status	Input	Waterlex database
<b>Sophistication and clarity of water related legal framework</b>	Water resources	National/basin	Status	Input	WWF risk assessment
<b>Percentage of departments meeting water quality standards</b>	Water resources	Local	Status	Output	UN-HABITAT Urban water and sanitation governance index
<b>Percentage of departments meeting sewage treatment standards</b>	Sewage	Local	Status	Output	UN-HABITAT Urban water and sanitation governance index
<b>Percentage of departments with % of unaccounted for water less than target.</b>	Water resources	Local	Status	Output	UN-HABITAT Urban water and sanitation governance index
<b>Existence of national land and water policies</b>	Water resources	Basin	Status	Input	Hooper B.
<b>Framework Law applied to water resources management</b>	Water resources	National	Status	Input	FAO water lex

**Principle 8.** Promote the adoption and implementation of innovative water governance practices across responsible authorities, levels of government and relevant stakeholders

Indicator	Function	Scale	Phase	Type	Source
<b>Science and technology application</b>	Water resources	National	Status	Process	Asia Water Governance Index
<b>Evidence of programs which promote more efficient water management techniques in agriculture to achieve more crop, cash and jobs for each drop</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Evidence of programs which capture water more effectively in the soil profile (capture water where it falls) rather than increased river diversions</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Evidence of programs to raise local productivity through village-led/local government initiatives in water harvesting</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Evidence of alternative demand management technologies to manage water use</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Demand management measures to improve water use efficiency in all sectors</b>	Water resources	National	Status	Process	UNCSD 2012
<b>Program for re-use or recycling of water</b>	Water resources	National	Status	Process	UNCSD 2012
<b>The water steward implements and documents innovative measures to improve the sustainability of the internal and the river basin water management.</b>	Water resources	Basin	Status	process	EWS

### TRUST & ENGAGEMENT CLUSTER

**Principle 9.** Mainstream *integrity and transparency* practices across water policies, water institutions and water governance frameworks for greater accountability and trust in decision-making

Indicator	Function	Scale	Phase	Type	Source
<b>Percentage of councils that provide for external audit of the departments</b>	Water & sanitation	Local	Status	Output	UN-HABITAT Urban water and sanitation governance index
<b>Transparency in the planning phase</b>	Water resources	Basin	Status	Input	Transparency International, Water Management transparency index (2013)
<b>Transparency in water management and use</b>	Water resources	Basin	Status	Process	Transparency International, Water Management transparency index (2013)
<b>Economic transparency</b>	Water resources	Basin	Status	Process	Transparency International, Water Management transparency index (2013)
<b>Transparency in contracting</b>	Water resources	Basin	Status	Process	Transparency International, Water Management transparency index (2013)
<b>Information freely accessible (Reports and documents available in local libraries, internet, and/or easily obtainable from the Directorate for Water Affairs DWA, institutions, organisations or consultants)</b>	Water resources	Basin	Status	Input	IWRM implementation indicators in South Africa
<b>Information accessible (Reports and documents available in applicable languages, non-technical, etc.)</b>	Water resources	Basin	Status	Input	IWRM implementation indicators in South Africa
<b>Water management information is available to managers and other stakeholders as required.</b>	Water resources	Basin	Status	Input	Cap-Net
<b>Evidence of dialogue being used as a tool to make decisions on preferred management options – as in open meetings, tribunals, forums</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Evidence of transparency mechanisms to declare all revenue streams are transparent, to stakeholders</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Existence of democratically elected governments</b>	Water resources	Basin	Status	Input	Hooper B.
<b>Evidence that government officials appointed between</b>	Water	Basin	Status	Input	Hooper B.

administrations without civil unrest	resources					
Evidence that national water policy functions through successive administrations	Water resources	Basin	Status	Output	Hooper B.	
Evidence that a system of water laws remains through successive administrations	Water resources	Basin	Status	Output	Hooper B.	
Evidence of the RBO informing its constituencies and decision-makers of basin issues and management solutions	Water resources	Basin	Status	Process	Hooper B.	
Evidence that information is accessible to relevant stakeholders	Water resources	Basin	Status	Input	Hooper B.	
Evidence of sharing of data in the information system by stakeholders	Water resources	Basin	Status	Process	Hooper B.	
Existence of an accountability mechanism for the RBO to higher authorities and citizens	Water resources	Basin	Status	Process	Hooper B.	
Existence of a "policing" entity on RBO activities: e.g. an independent body (or bodies) with enough authority to insist on improvements	Water resources	Basin	Status	Input	Hooper B.	
Reporting mechanisms in place between RBO and high levels of government	Water resources	Basin	Status	Process	Hooper B.	
Exposure of this country to local/national media coverage reporting on criticizing on possible water issues	Water resources	National	Status	Outcome	WWF risks assessment	
Exposure of this country to global media coverage reporting on criticizing on possible water issues	Water resources	National	Status	Outcome	WWF risks assessment	
Institutionalized utility performance information systems and benchmarking schemes in the Danube region	Water service	National	Status	Input	WB, IAWD	
Internal transparency: Sustainable water management is disseminated within the operation.	Water resources	Basin	Status	Input	EWS	
External transparency: The water management is publically available for customers, the public and authorities, e.g. by a water report	Water resources	Basin	Status	Input	EWS	
Publication of national reports on drinking water quality	Water resources	National	Status	Process	UNECE	

## Principle 10. Promote stakeholder engagement for informed and outcome-oriented contributions to water policy design and implementation

Percentage of local governments using Citizen Score Cards	Water & sanitation	Local	Status	Output	UN-HABITAT Urban water and sanitation governance index
Percentage of councils that have formed committees; the percentage of those committees that have held public hearings	Water & sanitation	Local	Status	Process/ Outcome	UN-HABITAT Urban water and sanitation governance index
Percentage of departments that have citizen oversight committees established, percentage of committees that have held meetings with senior management	Water & sanitation	Local	Status	Output	UN-HABITAT Urban water and sanitation governance index
Percentage of councils holding public hearings on pro-poor water and sanitation	Water & sanitation	Local	Status	Output	UN-HABITAT Urban water and sanitation governance index
Percentage of local governments that publish and make available the annual budget, percentage of councils holding participatory public hearings on the budget	Water & sanitation	Local	Status	Output	UN-HABITAT Urban water and sanitation governance index
Percentage of councils conducting public awareness campaigns on WDM, water quality, costs and revenues	Water & sanitation	Local	Status	Output	UN-HABITAT Urban water and sanitation governance index
Percentage of departments with improved Citizen Score Card results	Water & sanitation	Local	Impact	Impact	UN-HABITAT Urban water and sanitation governance index
Permanent stakeholder engagement mechanisms for balanced participation and active support	Groundwater	National/Local	Status	Process	FAO, UNESCO, GEF, World Bank, IAH, Groundwater Governance Indicators "Global Framework for Action" of the Groundwater Governance Project (proposal)
Relationships with the public and stakeholders: information	Water resources	River Basin	Status	Process	Transparency International, Water Management transparency index (2013)
Relationships with the public and stakeholders: public participation	Water resources	River Basin	Status	Process	Transparency International, Water Management transparency index (2013)
Participation: Degree of involvement of institutional and individual actors in interaction spaces where public engagement with water authorities becomes possible	Water resources	City	Status	Process	Sustainable Water Governance Index Author: Iribarnegaray M.A., Seghezzo L. (2012)
Legal scope for private and user participation	Water resources	National	Status	Input	Asia Water Governance Index (Araral E. and Yu D., 2010)
User participation	Water resources	National	Status	Outcome	Asia Water Governance Index (Araral E. and Yu D., 2010)
Number of significant participation events per year (Events/year)	Water resources	Local	Progress	Output	WASSI
Opportunities for the public to express their views (Existence of civil society organisations (WUA, CF, Farmers Unions, etc.), meetings being held and attended)	Water resources	National	Status	Process	IWRM implementation indicators in South Africa (Braid S; Görgens A, 2010)
Accessibility of opportunities (Specific efforts made such as transport to/from meetings, location of meetings, timing of meetings etc.)	Water resources	National	Status	Process	IWRM implementation indicators in South Africa (Braid S; Görgens A, 2010)
Opportunities for women to express their views (Meaningful opportunities and contributions by women at civil society organisations (WUA, CF, Farmers Unions, etc.), meetings.)	Water resources	City/ basin	Status	Process	IWRM implementation indicators in South Africa (Braid S; Görgens A, 2010)
Opportunities for the poor to express their views (Meaningful opportunities and contributions by poor at civil society organisations (WUA, CF, Farmers Unions, etc.), meetings)	Water resources	City/ basin	Status	Process	IWRM implementation indicators in South Africa (Braid S; Görgens A, 2010)

<b>Equal distribution of knowledge, insights and confidence amongst all stakeholders (Stakeholders adequately capacitated to express their views and opinions)</b>	Water resources	City/ basin	Impact	Outcome	IWRM implementation indicators in South Africa (Braid S; Görgens A, 2010)
<b>Equal distribution of knowledge, insights and confidence amongst women (Women stakeholders adequately capacitated to express their views and opinions.)</b>	Water resources	City/ basin	Impact	Outcome	IWRM implementation indicators in South Africa (Braid S; Görgens A, 2010)
<b>Equal distribution of knowledge, insights and confidence amongst the poor (Poor adequately capacitated to express their views and opinions.)</b>	Water resources	City/ basin	Impact	Outcome	IWRM implementation indicators in South Africa (Braid S; Görgens A, 2010)
<b>Power to influence decision (Examples of where stakeholders have managed to get a decision changed.)</b>	Water resources	City/ basin	Impact	Impact	IWRM implementation indicators in South Africa (Braid S; Görgens A, 2010)
<b>On-going engagement (Opportunity after formal public participation process to provide input, comment, raise concerns and awareness raising)</b>	Water resources	City/ basin	Status	Process	IWRM implementation indicators in South Africa (Braid S; Görgens A, 2010)
<b>Stakeholder priorities reflected in the basin plan</b>	Water resources	Basin	Status	Output	Cap-Net, UNDP, Integrated Water Resources Management for River Basin Organizations: Training Manual (Cap-Net, UNDP, 2008)
<b>Water management information is available to managers and other stakeholders as required.</b>	Water resources	Basin	Status	Input	Cap-Net, UNDP, Integrated Water Resources Management for River Basin Organizations: Training Manual (Cap-Net, UNDP, 2008)
<b>Number of meetings of Government agencies with water interests to consult and collaborate on water management</b>	Water resources	Basin	Status	Output	Cap-Net, UNDP, Integrated Water Resources Management for River Basin Organizations: Training Manual (Cap-Net, UNDP, 2008)
<b>Formal stakeholder structures established with clear roles and responsibilities in water resources management</b>	Water resources	Basin	Status	Process	Cap-Net, UNDP, Integrated Water Resources Management for River Basin Organizations: Training Manual (Cap-Net, UNDP, 2008)
<b>Basin stakeholders (male and female) represented in decision making bodies at all levels.</b>	Water resources	Basin	Status	Process	Cap-Net, UNDP, Integrated Water Resources Management for River Basin Organizations: Training Manual (Cap-Net, UNDP, 2008)
<b>Public participation in water management: information provision</b>	Water resources	National level/ Regional level	Status	Process	WWF Water and Wetland Index ( 2003)
<b>Public participation in water management: public consultation</b>	Water resources	National level/ Regional level	Status	Process	WWF Water and Wetland Index ( 2003)
<b>Public participation in water management: active involvement</b>	Water resources	National level/ Regional level	Status	Process	WWF Water and Wetland Index ( 2003)
<b>Strong community awareness and participation processes exist to enhance greater ownership of basin scale plans of action</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Existence of workable methods in the RBO to manage public involvement and avoid stalemates</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Existence of actions to empower local organizations and individuals, if participation is a high priority</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Evidence of local awareness of river basin management issues in basin community and high levels of government</b>	Water resources	Basin	Status	Outcome	Hooper B.
<b>Evidence of stakeholders' access to governments through RBO about natural resources management issues</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Evidence that 'rules' of participation specify membership representation and exiting decision settings</b>	Water resources	Basin	Status	Outcome	Hooper B.
<b>Evidence that RBO structures avoid dominance of one sectoral interest group that river basin management plan is driven by bottom up water sector initiatives with strong NGO and village level management</b>	Water resources	Basin	Status	Outcome	Hooper B.
<b>Stakeholders engagement in river basin organisations</b>	Water resources	Basin	Status	Input	NARBO Performance indicators of River Basin Organisations
<b>Stakeholders have access to information on national water resources management and development</b>	Water resources	National	Status	Process	UNCSD 2012
<b>Public awareness campaigns on water resources management and development</b>	Water resources	National	Status	Process	UNCSD 2012
<b>Involvement of general public, civil society organizations and nongovernment organizations in water resources management and development at the national level</b>	Water resources	National	Status	Process	UNCSD 2012
<b>Involvement of the private sector in water resources management and development at the national level</b>	Water resources	National	Status	Process	UNCSD 2012
<b>Involvement of general public, civil society organizations and nongovernment organizations in water resources management and development at the basin level</b>	Water resources	National	Status	Process	UNCSD 2012
<b>Involvement of the private sector in water resources management and development at the basin level</b>	Water resources	National	Status	Process	UNCSD 2012
<b>Gender mainstreaming in water resources management and development</b>	Water resources	National	Status	Input	UNCSD 2012
<b>Priority water management challenge areas: stakeholder</b>	Water	National	Status	Process	UNCSD 2012



<b>participation</b>	resources					
<b>Official forum or platform in which stakeholders come together to discuss water-related issues of the basin</b>	Water resources	Basin	Status	Process	WWF risk assessment	
<b>Progress on stakeholder participation (including access to information, involvement of different stakeholder groups including the private sector, and gender mainstreaming):</b>	Water resources	National	Progress	Output	UN-Water Status Report on the Application of Integrated Approaches to Water Resources Management for Rio+20 ( 2011)	
<b>Stakeholder participation (including access to information, involvement of different stakeholder groups including the private sector, and gender mainstreaming) by region: The current status in responding countries by region</b>	Water resources	National	Status	Process	UN-Water Status Report on the Application of Integrated Approaches to Water Resources Management for Rio+20 ( 2011)	
<b>The extent to which gender outcomes and gender-sensitive accountability indicators are included in M&amp;E/impact statements/benefits analyses of national-level WASH-sector projects (project proposals and/or outcomes assessments). Sample projects.</b>	Water resources	National	Status	Outcome	UN WWAP UNESCO, Project for Gender Sensitive Water Monitoring Assessment and Reporting ( 2016)	
<b># of forums carried out to engage the community to debate and influence WASH and FC policies</b>	WASH	National	Status	Output	ABCG, Freshwater Conservation and WASH: Monitoring and Evaluation Framework and Indicators ( 2013)	
<b># of community managed institutions focusing on integrated WASH-FC</b>	WASH	National	Status	Output	ABCG, Freshwater Conservation and WASH: Monitoring and Evaluation Framework and Indicators ( 2013)	
<b># of community level decision making bodies with progressive and transparent policy and budget processes</b>	WASH	National	Status	Output	ABCG, Freshwater Conservation and WASH: Monitoring and Evaluation Framework and Indicators ( 2013)	
<b>% of representation by marginalized groups in community level decision making bodies related to WASH or FC</b>	WASH	National	Status	Output	ABCG, Freshwater Conservation and WASH: Monitoring and Evaluation Framework and Indicators ( 2013)	
<b># of people participating in accountability mechanism (define as level and quality) for integrated WASH-FC</b>	WASH	National	Status	Output	ABCG, Freshwater Conservation and WASH: Monitoring and Evaluation Framework and Indicators ( 2013)	
<b># of changes or successful negotiations due to citizen participation</b>	WASH	National	Status	Output	ABCG, Freshwater Conservation and WASH: Monitoring and Evaluation Framework and Indicators ( 2013)	
<b># of marginalized communities articulating and voicing demands for WASH and FC</b>	WASH	National	Status	Output	ABCG, Freshwater Conservation and WASH: Monitoring and Evaluation Framework and Indicators ( 2013)	
<b># of spaces and mechanisms for institutionalized participation in policy formulation, planning and implementation</b>	WASH	National	Status	Output	ABCG, Freshwater Conservation and WASH: Monitoring and Evaluation Framework and Indicators ( 2013)	
<b># of community-based enforcement mechanisms or authorities established with the mandate to ensure water access rights and use in target regions (across a hierarchy of effectiveness)</b>	WASH	National	Status	Output	ABCG, Freshwater Conservation and WASH: Monitoring and Evaluation Framework and Indicators ( 2013)	
<b>% of community member groups involved in the management of freshwater resources</b>	WASH	National	Status	Output	ABCG, Freshwater Conservation and WASH: Monitoring and Evaluation Framework and Indicators ( 2013)	
<b>Official forum or platform in which stakeholders come together to discuss water -related issues of the basin</b>	Water resources	National	Status	Process	WWF, Water Risk Filter( 2015)	
<b>System for participation of stakeholders established/not established</b>	Water resources	Basin	Status	Process	Japan Water Forum, Survey of progress towards IWRM ( 2006)	
<b>Systems to support citizens' groups established/not established</b>	Water resources	Basin	Status	Process	Japan Water Forum, Survey of progress towards IWRM ( 2006)	
<b>Public participation rights in constitutional legal framework: § Constitutional guarantees to public participation § §</b>	Water resources	National	Status	Input	UN World Water Development Report. Water: A Shared Responsibility ( 2003-2015)	
<b>Comprehensiveness of notice and comment in different types of decision-making processes</b>	Water resources	National	Status	Process	UN World Water Development Report. Water: A Shared Responsibility ( 2003-2015)	
<b>Public notice and comment requirements for environmental impact assessment</b>	Water resources	National	Status	Process	UN World Water Development Report. Water: A Shared Responsibility ( 2003-2015)	
<b>6.b Support and strengthen the participation of local communities in improving water and sanitation management: 6.b.1 Proportion of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management</b>	Water resources	National	Progress	Outcome	IAEG: WHO and UNEP, in collaboration with OECD	

<b>Inclusiveness and equity</b>	Water resources	tbd	Impact	Outcome	OECD Indicators/ Principles for stakeholder engagement in water
<b>Clarity of goals, transparency and accountability</b>	Water resources		Status	Input	OECD Indicators/ Principles for stakeholder engagement in water
<b>Capacity and information</b>	Water resources		Status	Process	OECD Indicators/ Principles for stakeholder engagement in water
<b>Efficiency and effectiveness</b>	Water resources		Impact	Impact	OECD Indicators/ Principles for stakeholder engagement in water
<b>Institutionalisation, structuring and integration</b>	Water resources		Status	Process	OECD Indicators/ Principles for stakeholder engagement in water
<b>Adaptiveness</b>	Water resources		Impact	Impact	OECD Indicators/ Principles for stakeholder engagement in water
<b>Participation procedures: Are there clearly defined procedures in laws or policies for participation by service users (e.g. households) and communities in planning programs and what is the level of participation?</b>	Water resources	National	Status	Process	GLASS 2013
<b>Is the performance (e.g. quality of service) of the formal service providers made public and are the results of customer satisfaction information made public?</b>	Water resources	National	Status	Outcome	GLASS 2013
<b>Extent: Are all relevant stakeholders involved? Are there any stakeholders not involved or even excluded?</b>	Drought	Subnational	Status	Process	DROP project
<b>Coherence: What is the strength of interactions between stakeholders? In what ways are these interactions institutionalised in stable structures? Do the stakeholders have experience in working together? Do they trust and respect each other?</b>	Drought	Subnational	Status	Outcome	DROP project
<b>Flexibility: Is it possible that new actors are included or even that the lead shifts from one actor to another when there are pragmatic reasons for this? Do the actors share in 'social capital' allowing them to support each other's tasks?</b>	Drought	Subnational	Status	Process	DROP project
<b>Intensity: Is there a strong pressure from an actor or actor coalition towards behavioural change or management reform?</b>	Drought	Subnational	Status	Outcome	DROP project
<b>%/# of institutions with accessible sanitation facilities for both sexes (including disabled)</b>	Wash	Regional	Status	Output	ABCG
<b># of laws, policies or procedures drafted, proposed or adopted by community to promote gender equality in integrated FW-WASH project participation and benefits</b>	Wash	Regional	Status	Output	ABCG
<b>% of women in decision-making positions in community-based WASH and freshwater conservation</b>	Wash	Regional	Status	Output	ABCG
<b># of HH reached with WASH and conservation program intervention (sex disaggregated)</b>	Wash	Regional	Status	Output	ABCG
<b>%/# of women involved in the planning, design or implementation of integrated WASH-freshwater conservation interventions</b>	Wash	Regional	Status	Output	ABCG
<b># of people aware of WASH or freshwater conservation(FC) related-policies</b>	Wash	Regional	Status	Output	ABCG
<b># of forums carried out to engage the community to debate and influence WASH and FC policies</b>	Wash	Regional	Status	Output	ABCG
<b># of people satisfied with WASH/FC interventions being implemented</b>	Wash	Regional	Status	Output	ABCG
<b># of community managed institutions focusing on integrated WASH-FC</b>	Wash	Regional	Status	Output	ABCG
<b># of community level decision making bodies with progressive and transparent policy and budget processes</b>	Wash	Regional	Status	Output	ABCG
<b>% of representation by marginalized groups in community level decision making bodies related to WASH or FC</b>	Wash	Regional	Status	Output	ABCG
<b>% of people participating in accountability mechanism (define as level and quality) for integrated WASH-FC</b>	Wash	Regional	Status	Output	ABCG
<b># of changes or successful negotiations due to citizen participation</b>	Wash	Regional	Status	Output	ABCG
<b># of marginalized communities articulating and voicing demands for WASH and FC</b>	Wash	Regional	Status	Output	ABCG
<b># of spaces and mechanisms for institutionalized participation in policy formulation, planning and implementation</b>	Wash	Regional	Status	Output	ABCG
<b>% of community member groups involved in the management of freshwater resources</b>	Wash	Regional	Status	Output	ABCG
<b>% of youth in decision-making positions in community-based WASH and FC structures</b>	Wash	Regional	Status	Output	ABCG
<b>% of leadership positions held by youth in CBNRM and WASH committees</b>	Wash	Regional	Status	Output	ABCG
<b>Accountability for public funds</b>	Wash	Regional	Status	Outcome	ABCG
<b>Campaigns or partnerships to inform stakeholders on water topics are described and implemented.</b>	Water resources	Basin	Status	Process	EWS
<b>Stakeholders participation system established/ not established</b>	Water resources	Basin	Status	Outcome	Japan Water Forum
<b>Citizen's support provided/not provided</b>	Water resources	Basin	Status	Outcome	Japan Water Forum
<b>How favourable are the legal provisions for private sector, nongovernmental organization (NGO)/community participation in water development/management</b>	Water resources	National	Status	Outcome	Saleth, Dinar
<b>Extensive user participation in irrigation</b>	Irrigation	National	Status	Outcome	Saleth, Dinar

<b>Extensive user participation in urban domestic use</b>	Urban use	National	Status	Outcome	Saleth, Dinar
<b>Extensive user participation in rural domestic use</b>	Rural use	National	Status	Outcome	Saleth, Dinar
<b>Extensive user participation in industrial and commercial use</b>	Industrial use	National	Status	Outcome	Saleth, Dinar
<b>Effectiveness of participation of NGOs in the water sector</b>	Water resources	National	Status	Outcome	Saleth, Dinar
<b>Increase in gender balanced community and wider stakeholder engagement in water related issues by month</b>	Water resources	Basin	Impact	Impact	SOPAC
<b>Private sector participation</b>	Water resources	National	Status	Input	Asia Water Governance Index

## Principle 11. Encourage water governance frameworks that help manage *trade-offs* across water users, rural and urban areas, and generations

Indicator	Function	Scale	Phase	Type	Source
<b>Do national drinking water policies or strategies include specific provisions for vulnerable and marginalized groups?</b>	Drinking water	National	Status	Input	GLAAS report(WHO, 2012)
<b>What is the rate at which the proportions of rural and urban populations with access to improved water converge?</b>	Drinking water	National	Impact	Outcome	GLAAS report(WHO, 2012)
<b>What is the rate of decrease of the proportion of the population using an unimproved water source compared to the rate of decrease of the proportion of the population using a non-piped improved source?</b>	Drinking water	National	Impact	Outcome	GLAAS report(WHO, 2012)
<b>Equity index in water and sanitation</b>	Drinking water	National			Jeanne Luh, Rachel Baum, Jamie Bartram ( 201)
<b>Attention to poverty and water</b>	Water resources	National	Status	Process	Asia Water Governance Index
<b>The amount of potable water accessible per person</b>	Drinking water	Local	Status	Output	Canadian Water Sustainability Index
<b>The number of service disruption days per person</b>	Drinking water	Local	Status	Output	Canadian Water Sustainability Index
<b>Goods and services for maintenance, repair and the emptying of pits for school/institutional sanitation facilities are available and accessible at the district level</b>	Sanitation	Local	Status	Output	USAID WASH Sustainability Index Tool
<b>Sanitation facilities are constructed in-line with design criteria needed for long-term and safe use.</b>	Sanitation	Local	Status	Output	USAID WASH Sustainability Index Tool
<b>Sanitation facilities are well-maintained and are being used</b>	Sanitation	Local	Status	Output	USAID WASH Sustainability Index Tool
<b>Change in water productivity in agriculture</b>	Water resources	National	Progress	Outcome	UN-Water Task Force on Indicators, Monitoring and Reporting
<b>Change in water productivity in industrial sector</b>	Water resources	National	Progress	Outcome	UN-Water Task Force on Indicators, Monitoring and Reporting
<b>Change in hydropower productivity</b>	Water resources	National	Progress	Outcome	UN-Water Task Force on Indicators, Monitoring and Reporting
<b>Territorial coverage: drinking water and sanitation networks</b>	Water & sanitation	National	Status	Output	WB institutional Profile Database
<b>Evidence of lack of conflict over resources use between basin member nations</b>	Water resources	Basin	Status	Outcome	Hooper B.
<b>Evidence of protocols in place to ensure information is equitable in addressing gender, race and poverty issues related to natural resources management</b>	Water resources	Basin	Status	Outcome	Hooper B.
<b>Use of a common language despite ethnic differences</b>	Water resources	Basin	Status	Process	Hooper B.
<b>Programs for efficient allocation of water resources among competing uses</b>	Water resources	National	Status	Input	UNCSD 2012
<b>Improving and sustaining services: Do plans include specific measures in any of the following areas, and how well are these measures implemented?</b>	WASH	National	Status	Outcome	GLASS 2013
<b>Universal access for disadvantaged groups</b>	WASH	National	Status	Outcome	GLASS 2013

## Principle 12. Promote regular *monitoring and evaluation* of water policy and governance where appropriate, share the results with the public and make adjustments when needed

Indicator	Function	Scale	Phase	Type	Source
<b>Percentage of departments establishing programme monitoring</b>	Water & sanitation	Local	Status	Output	UN-HABITAT Urban water and sanitation governance index
<b>Groundwater Piezometric Monitoring Network</b>	Groundwater	National/Local	Status	Process	FAO, UNESCO, GEF, World Bank, IAH, Groundwater Governance Indicators "Global Framework for Action" of the Groundwater Governance Project (draft)
<b>Availability of Aquifer Numerical 'Management Models' for assessment of management measures</b>	Groundwater	National/Local	Status	Output	FAO, UNESCO, GEF, World Bank, IAH, Groundwater Governance Indicators "Global Framework for Action" of the Groundwater Governance Project (draft)
<b>Groundwater Pollution Hazard Assessment</b>	Groundwater	National/Local	Status	Process	FAO, UNESCO, GEF, World Bank, IAH, Groundwater Governance Indicators "Global Framework for



						Action" of the Groundwater Governance Project (draft) FAO, UNESCO, GEF, World Bank, IAH, Groundwater Governance Indicators "Global Framework for Action" of the Groundwater Governance Project (draft)
<b>Groundwater Quality Monitoring Network</b>	Groundwater	National/Local	Status	Process		
<b>Monitoring of sanitation facility use and maintenance and follow-up support provided by district/other support institution</b>	Water & sanitation	Local	Status	Process		USAID WASH Sustainability Index Tool
<b>Number of technical service related complaints (No./1000 p)</b>	Drinking water	Local	Status	Output		WASSI
<b>Number of water resource monitoring stations producing reliable data</b>	Water resources	Basin	Status	Output		Cap-Net
<b>Existence of quality control mechanisms to avoid bias in monitoring, planning and management through coordination of a range of state, federal, commercial and private NGO bodies</b>	Water resources	Basin	Status	Process		Hooper B.
<b>Evidence that the basin management decision processes address critical problems first: e.g. water scarcity, flooding, droughts for very large and rapidly growing populations through risk assessment;</b>	Water resources	Basin	Status	Outcome		Hooper B.
<b>Use of impact assessment procedures – including Strategic Environmental Assessment</b>	Water resources	Basin	Status	Process		Hooper B.
<b>Evidence of economic assessment of water management options</b>	Water resources	Basin	Status	Process		Hooper B.
<b>Evidence of cost-recovery mechanisms used in water management plans</b>	Water resources	Basin	Status	Process		Hooper B.
<b>Evidence of water pricing used to recover some or all of development costs</b>	Water resources	Basin	Status	Process		Hooper B.
<b>Use of joint assessment tools like multi-objectives decision support systems, Policy Delphi techniques and others, to manage research output and use it to inform the basin's strategic natural resources management decisions</b>	Water resources	Basin	Status	Process		Hooper B.
<b>Evidence of research collaboration between RBO, research community, government agencies and NGOs</b>	Water resources	Basin	Status	Process		Hooper B.
<b>Existence of a monitoring and information system including a permanent, reliable and optimized system of meteorological, water resources, water use measurements linked to basin decision-making</b>	Water resources	Basin	Status	Process		Hooper B.
<b>Use of a monitoring system that derives from an accurate, uniform and comprehensive data network, systems and models for analysis</b>	Water resources	Basin	Status	Process		Hooper B.
<b>Use of a monitoring system and that facilitates the use of "knowledgeable" natural resources/water management policies and strategies and is linked to the basin decision systems</b>	Water resources	Basin	Status	Process		Hooper B.
<b>Use of impact assessment to ensure that local ownership of resource management processes occur when BOOT (Build, Own, Operate, Transfer) resource development methods are in place</b>	Water resources	Basin	Status	Process		Hooper B.
<b>Programs to evaluate environmental impacts of water projects</b>	Water resources	National	Status	Input		UNCSD 2012
<b>Government responsibility for hydro-meteorological monitoring adequately addressed in national legislation</b>	Water resources	National	Status	Input		UNCSD 2012
<b>Monitoring of surface water quantity</b>	Surface water	National	Status	Process		UNCSD 2012
<b>Monitoring of ground water quantity</b>	Groundwater	National	Status	Process		UNCSD 2012
<b>Monitoring of water quality</b>	Water quality	National	Status	Process		UNCSD 2012
<b>Monitoring of aquatic ecosystems</b>	Aquatic ecosystems	National	Status	Process		UNCSD 2012
<b>Monitoring of water use</b>	Water resources	National	Status	Process		UNCSD 2012
<b>Monitoring of water use efficiency</b>	Water resources	National	Status	Process		UNCSD 2012
<b>Forecasting and early warning systems</b>	Water resources	National	Status	Process		UNCSD 2012
<b>Programs for information exchange and knowledge sharing of good practices</b>	Water resources	National	Status	Process		UNCSD 2012
<b>Latest National assessment (e.g. Joint Sector Review): When was the last national sanitation and drinking-water supply review or assessment conducted (month/year)?</b>	WASH	National	Status	Input		GLASS 2013
<b>Impacts of sector review: Please give an example of a time when regular performance review or Joint Sector Review resulted in a substantial change to policy, strategy or programming.</b>	WASH	National	Impact	Outcome		GLASS 2013
<b>Tracking progress among disadvantaged groups: Do monitoring systems track and report progress in extending the service provision specifically among the following population groups?</b>	WASH	National	Status	Process		GLASS 2013
<b>Use of selected performance indicators to track progress: Are there clearly defined national standards or agreed upon performance indicators that are used in the following categories?</b>	WASH	National	Status	Process		GLASS 2013
<b>Do service providers report the results of their internal monitoring against required service standards to the regulatory authority and does internal monitoring trigger timely corrective action?</b>	WASH	National	Status	Outcome		GLASS 2013
<b>The water volume abstracted from each source is quantified, monitored and reported.</b>	Water resources	Basin	Status	Output		EWS

<b>The impact* of abstraction and discharge is described (by source)</b>	Water resources	Basin	Impact	Output	EWS
<b>The impact of the discharge is assessed and described by destination</b>	Water resources	Basin	Impact	Output	EWS
<b>An environmental cost analysis is in place.</b>	Water resources	Basin	Status	Process	EWS
<b>Monitoring of sanitation facility use and maintenance and follow-up support provided by district/other support institution</b>	Sanitation	National	Status	Outcome	USAID WASH Sustainability Index Tool
<b>Periodical assessment of water resources</b>	Water resources	National	Status	Process	UNCSD 2012

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