



INVENTORY OF WATER GOVERNANCE INDICATORS AND MEASUREMENT FRAMEWORKS

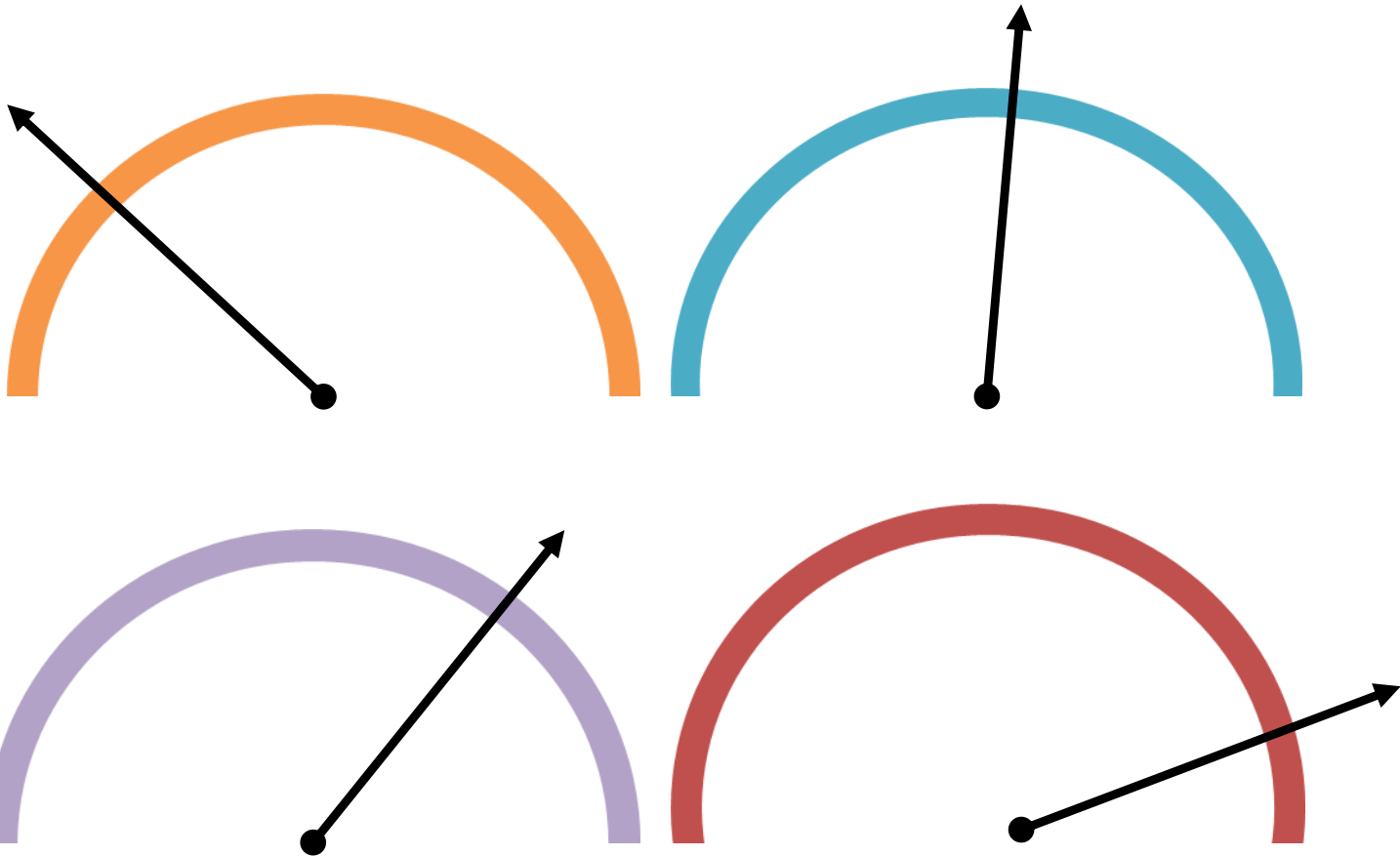


TABLE OF CONTENTS

INDICATORS	4
A) WATER GOVERNANCE INDICATORS	4
UN-HABITAT Urban water and sanitation governance index	4
Composite index for regulatory governance in the Water and Wastewater Sector	5
Transparency International, Water Management Transparency Index	6
Equity index in water and sanitation	6
Sustainable Water Governance Index	7
Asia Water Governance Index	7
Canadian Water Sustainability Index	8
Key Performance Indicators of River Basin Organizations	9
NARBO Performance indicators of River Basin Organisations	9
B) WATER INDICATORS WITH GOVERNANCE VARIABLES	9
IBNET Water Utility Apgar Score and Water Utility Vulnerability Index	9
Turin Index	10
ADB Water Security Index	10
Index to assess the sustainability of water and sanitation management systems	11
IWA performance indicators projects	11
Index of drinking water adequacy (IDWA)	11
INBO Performance Indicators for African Basin Organizations	12
IWRM implementation indicators in South Africa	12
UN-Water, Monitoring progress in the water sector: A selected set of indicators	14
Cap-Net, UNDP, Indicators: Implementing integrated water resources management at river basin level	14
Watershed Sustainability Index	16
WWF Water and Wetland Index	16
C) ENVIRONMENTAL/GOVERNANCE INDICATORS WITH WATER VARIABLES	17
Environmental performance index	17
UNSD, First list of proposed priority indicators and detailed inputs to be discussed by the IAEG-SDGs	17
The World Bank Institutional Profiles Database	17
DATABASES	18
FAO Water Lex	18
OECD Database on instruments used for environmental policy	18
WaterLex Legal Database	18
National Open data	19
FAO, AQUASTAT	19
World Bank, Private Participation in Infrastructure Project Database	20
GUIDELINES	20
UNDP, Water Governance Facility, SIWI, WIN, User’ s Guide on Assessing Water Governance	20
OECD Multi-level Water Governance Framework	20
WHO, Guidelines for drinking-water quality (4th ed.)	21
WIN, WSP, Promoting Transparency, Integrity and Accountability in the Water and Sanitation Sector in Uganda	22
Transparency International, Global Corruption Report: climate change	22

MAPS	22
WRI, Environmental Democracy Index	23
Yale EPI, Wastewater Treatment Performance Map	23
WWF, Water Risk Filter	23
WRI, Aqueduct Water Risk Framework	24
ASSESSMENT TOOLS	24
WB, IAWD, Water and Wastewater Services in the Danube Region. A state of the sector	24
DROP Governance Assessment Tool (GAT).....	25
UN WWAP UNESCO, Project for Gender Sensitive Water Monitoring Assessment and Reporting ...	25
WWF Basin Report Cards	26
UNDP Global water solidarity, Certificate for Decentralized Water Solidarity	26
UN- CEPAL, Best practices in regulating State-owned and municipal water utilities	26
UNEP-DHI, SIWI, The Transboundary Water Assessment programme	27
IDB, IWA, AquaRating.....	27
Ten building blocks for sustainable water governance	28
Assessing Stability and Dynamics in Flood Risk Governance	28
The AWS International Water Stewardship Standard.....	28
UN-Water Country Briefs Project.....	29
TASU, Analysis of the Auditor General's Annual Report 2011/12 Uganda	29
UNEP, The UN-Water Status Report on the Application of Integrated Approaches to Water Resources Management	30
European Water Stewardship Standards	31
USAID Regional Water Governance Benchmarking Project	32
UN-Water, WHO, GLAAS Global Analysis and Assessment of Sanitation and Drinking-Water	32
GEF, The Pacific IWRM Project	33
UN-Water, Status of IWRM and Water Efficiency Plans at CSD16	33
UN DESA, Status of implementation of CSD-13 Policy Actions on Water and Sanitation.....	34
Japan Water Forum, Survey of progress towards IWRM	34
WB, Saleth, Dinar, The institutional Economics of Water. A cross-country analysis of institutions and performance.....	35
UN World Water Development Report. Water: A Shared Responsibility	35
UNECE Protocol on Water and Health.....	36
WRI, Access Initiative	37

INDICATORS

A) WATER GOVERNANCE INDICATORS

Description

Variables

Geographical scope

UN-HABITAT Urban water and sanitation governance index



Author: UN-HABITAT

Year: Indicator under development and not yet tested

Source: http://webworld.unesco.org/water/wwap/wwdr/indicators/pdf/C2_Urban_Water_and_Sanitation_Governance_Index.pdf

It aims at accounting for the actions taken and processes enabled at the local level, within existing authorities' mandates that positively engage poor communities in their pursuit of adequate water and sanitation, and the impact that these actions should have on the provision and sustainability of adequate water and sanitation delivery.

Underlying definitions and concepts:

Process indicators

- Percentage of departments establishing programme monitoring
- Percentage of local governments using Citizen Score Cards
- Percentage of councils that have formed committees; the percentage of those committees that have held public hearings
- Percentage of departments that have citizen oversight committees established, percentage of committees that have held meetings with senior management
- Percentage of councils holding public hearings on pro-poor water and sanitation
- Percentage of local governments that publish and make available the annual budget, percentage of councils holding participatory public hearings on the budget
- Percentage of councils conducting public awareness campaigns on WDM, water quality, costs and revenues
- Percentage of councils that provide for external audit of the departments.

Impact indicators

- Percentage of departments meeting water quality standards.
- Percentage of departments meeting sewage treatment standards
- Percentage of departments meeting solid waste collection standards.

- Percentage of departments with % of unaccounted for water less than target.
- Percentage of departments where the number of technical and administrative workers per cubic meter of accounted for water is higher than the standard.
- Cost per cubic meter of accounted for water (national distribution of departments)
- Revenue per cubic meter of accounted for water (national distribution of departments)
- Percentage of households with metered water connections
- Number of regulated versus unregulated small scale water vendors
- Percentage of departments with improved Citizen Score Card results

Composite index for regulatory governance in the Water and Wastewater Sector



Author: Instituto Superior Técnico – University of Lisbon, Portuguese Water Partnership

Year: 2015

Source: presentation at the 7th World Water Forum, 12- 17 April 2015, Daegu & Gyeongbuk.


The index allows to operationalize the concept of regulatory governance and to measure it quantitatively through multi-criteria modelling.


Inner factors:

- Transparency: Publication of suitable information in accordance with where and when it is published
- Predictability: Provision of reasonable certainty/predictability regarding regulatory procedures and ease of changing them.
- Consistency: Regulatory activity should be developed uniformly both regarding the targets of its application and the period undertaken.
- Proportionality: Intervene only when required. Remedies should be appropriate to the risk posed, and costs identified and minimized. Exceptions apply in case of obligation due to water and wastewater services general interest nature.

Outer factors:

- Clarity of Rules: Clarity of rules that hold the

		<p>regulatory process related to, e.g., principles, objectives, guidelines, responsibilities and consequences of misbehaviour.</p> <ul style="list-style-type: none"> ▪ Regulatory Coordination: Clarity in the role of the regulator in order to avoid duplication of functions, conflicts between regulators and sending misleading signs to the stakeholders. ▪ Requisite Powers: Powers required to perform its mission. <p>Relational factors:</p> <ul style="list-style-type: none"> ▪ Financial Independence ▪ Managerial Independence ▪ Operational Independence ▪ Public Participation ▪ Accountability
<p>Transparency International, Water Management Transparency Index</p>  <p>Author: Transparency International</p> <p>Year: 2013</p> <p>Source: http://www.transparencia.org.es/INTRAG/INTRAG_2013/METODOLOGIA_UTLIZADA_EN_EL_INTRAG_2013.pdf</p>	<p><i>The Index assesses the extent to which a water agency makes relevant information available on the website.</i></p>	<ul style="list-style-type: none"> ▪ Information about the River Basin Authority ▪ Relationships with the public and stakeholders ▪ Transparency in the planning process ▪ Transparency on water use and management ▪ Economic and financial transparency ▪ Transparency in contracts and tenders <p>14 River Basin Authorities, Spain</p>
<p>Equity index in water and sanitation</p> <p>Author: Jeanne Luh, Rachel Baum, Jamie Bartram</p> <p>Year: 2013</p> <p>Source: Equity in water and sanitation: Developing an index to measure progressive realization of the human right, <i>International Journal of Hygiene and Environmental Health</i>, Volume 216, Issue 6, November 2013, Pages 662–671</p>	<p><i>The Equity Index (EI) provides a single value between -1 and 1 which evaluates a State's progress in realizing substantive equality for the right to water. The index itself is the uniformly-weighted average of three components: Structural Index, Process Index, and Outcome Index.</i></p>	<ul style="list-style-type: none"> ▪ Existing laws that recognize the need for disadvantaged groups to be treated differently ▪ Estimated percentage of the drinking water budget dedicated for the poor ▪ Progress made towards achieving equitable access to improved water between rural and urban regions ▪ Rate of decrease of the proportion of the population <p>56 states</p>

<p>Sustainable Water Governance Index</p> <p>Author: Iribarnegaray M.A., Seghezzi L.</p> <p>Year: 2012</p> <p>Source: Governance, Sustainability and Decision Making in Water and Sanitation Management Systems, Sustainability 2012, 4, 2922-2945</p>	<p><i>The index provides with connections between the concept of governance and sustainability and their roles in water and sanitation management systems.</i></p>	<p>using an unimproved water source compared to the rate of decrease of the proportion of the population using a non-piped improved source</p> <ul style="list-style-type: none"> ▪ Access: Economic accessibility to water and sanitation services Quantity and quality of freely accessible information concerning the water and sanitation system Indicates whether everybody has access to the minimum amount of water needed to cover basic needs ▪ Planning: Funds availability, assessment of the regulation process, and degree of public participation in the formulation of specific water projects Assessment of the number, type and potential impact of the projects under execution in institutions related to water management in the city ▪ Personnel: Degree of training of water managers, satisfaction in water-related institutions, and transparency in contracting processes. ▪ Participation: Degree of involvement of institutional and individual actors in interaction spaces for public engagement with water authorities 	<p>City of Salta, Argentina</p>
<p>Asia Water Governance Index</p>  <p>Author: Araral E. and Yu D.</p> <p>Year: 2010</p> <p>Source: http://issuu.com/rsulkyschool/docs/awgi_brochure-iwp-lkyspp_9-10_</p>	<p><i>The index compares water governance in Asia using 20 governance indicators representing "best practices" in water governance, in terms of water laws, policies and administration.</i></p>	<ul style="list-style-type: none"> ▪ Legal dimension <ul style="list-style-type: none"> ○ Legal distinction of different water sources ○ Format of surface water rights ○ Legal accountability of water sector officials ○ Centralization/decentralization tendency within water law ○ Legal scope for private and user participation ○ Legal framework for integrated treatment of 	<p>20 countries/ states in Asia Pacific</p>

water sources

- Policy dimension
 - Project selection criteria
 - Finance available for water investments
 - Pricing policy
 - Linkage between water law and water policy
 - Linkages with other policies
 - Attention to poverty and water
 - Private sector participation
 - User participation

- Administrative dimension
 - Existence of independent water pricing policy
 - Organizational basis
 - Functional capacity and balance
 - Accountability and regulatory mechanisms
 - Validity of water data for planning
 - Science and technology application

Canadian Water Sustainability Index



The index provides a holistic profile of a community's key water issues, allowing for intra-community and inter-community comparison and analysis.

Capacity:

- Financial:
 - The financial capacity of the community to manage water resources and respond to local challenges.
- Education
 - The human capacity of the community to manage water resources and address local water issues
- Training
 - The level of training that water and waste water operators have received.

District of Chetwynd, British Columbia

Town of Three Hills, Alberta

Tsuu T'ina First Nation, Alberta

Pelican Lake First Nation, Saskatchewan

Rural Municipality of Gimli, Manitoba

Moose Cree Nation, Ontario

Author: Policy Research Initiative

Year: 2007

Source: <http://publications.gc.ca/collections/Collection/PH2-1-14-2007E.pdf>

Key Performance Indicators of River Basin Organizations



Author: Hooper B.

Year: 2006

Source: "Key Performance Indicators of River Basin Organizations." To appear as a technical note. US Army Corps of Engineers.

115 Indicators assessing the performance of river basin organisations grouped in 10 categories.

- Coordinated decision-making
- Responsive decision-making
- Goals, goal shift and goal completion
- Financial sustainability
- Organizational design
- Role of law
- Training and capacity building
- Information and research
- Accountability and monitoring
- Governments & citizens

Selected US river basins

NARBO Performance indicators of River Basin Organisations



Author: NARBO

Year: since 2005

Source: http://www.narbo.jp/event/ev_annc_Performance_Benchmarking.html

The benchmarking system includes 14 performance indicators that reflect common processes in core business areas considered essential for effective basin management within the IWRM framework.

Five critical performance areas:

- Mission
- Stakeholders
- Learning and growth
- Internal business processes
- Financing

South East Asia

B) WATER INDICATORS WITH GOVERNANCE VARIABLES

Description

Variables

Geographical scope

IBNET Water Utility Apgar Score and Water Utility Vulnerability Index



The IBNET Apgar represents utilities' health, stage of development, and performance status, while WUVI estimates probability that a water utility will experience a performance problem.

Five variables included in the WUVI:

- "Water Coverage," as the percentage of households in the utility's service area receiving water service from the utility;
- "Sewer Coverage," as the percentage of households in the utility's service area receiving sewer service from the utility;
- "Nonrevenue Water," as cubic meters per kilometer

Utilities

Author: IBINET, The World Bank

Year: 2014 (latest edition)

Source: The IBINET Water Supply and Sanitation Blue Book 2014: The International Benchmarking Network for Water and Sanitation Utilities Databook, http://elibrary.worldbank.org/doi/abs/10.1596/978-1-4648-0276-8_ch2

per day of water in the utility's service area for which the utility does not receive compensation;

- "Affordability," as the utility's revenue as percentage of per capita gross national income
- "Collection Period," as the number of days required for the utility to collect payment for water and/or sewer services provided.

Turin Index



The Index is an application of the Longitudinal Poverty Index to the case of arrearage. It is a synthetic measure, a range between 0 and 1, which can be used by local operators to identify groups of users who face a higher risk of delaying payments.

- Percentages of bills paid with a delay of more than 30 days
- City of Turin

Author: Turin School of Local Regulation

Year: 2013

Source: <http://turinschool.eu/turin-index>

ADB Water Security Index



Author: ADB and Asia-Pacific water forum

Year: 2013

Source: Asian water development outlook 2013. Securing water in Asia and the Pacific.

It is composed by five dimension indexes of water security. The national security water index scores from 1 to 5, to which a certain level of 'National water security stage' correspond. This indicates how the legislative and regulatory framework is more or less effective in favouring water security.

Five dimensions:

- Household Water Security
- Economic Water Security
- Urban Water Security
- Environmental Water Security
- Resilience to Water-Related Disasters

Asia

Index to assess the sustainability of water and sanitation management systems

Author: Iribarnegaray, M.A.et al.

Year: 2012

Source: A comprehensive index to assess the sustainability of water and sanitation management systems. J. Water Sanitat. Hyg. Dev. 2012, 2, 205–222.

The index assesses the sustainability of water and sanitation through the management systems, accounting for indicators such as planning and participations.

- Place: water availability, water quality, changes in aquifer levels, water wastage, and water pollution, among others.
- Permanence: local capacity to solve problems, improve the management system, and ensure the coverage of basic human needs. Planning ability and institutional aspects.
- Persons: scarcity and unequal access to water and sanitation services.

City of Salta, Argentina

IWA performance indicators projects



Author: IWA

Year: 2011

Source: IWA Manual of Best Practice, Benchmarking Water Services, guiding water utilities to excellence

They allow for performance assessment and benchmarking of water services.

- Performance indicators for water supply services: Water resources indicators
- Performance indicators for sanitation services: Environmental quality indicators
- For both: Staff indicators, Equipment indicators, Operation indicators, Service quality indicators, Financial indicators

Utilities

Index of drinking water adequacy (IDWA)



Author: Lee Kuan Yew School Of Public Policy

National University of Singapore

Year: 2010

Source: Index of Drinking Water Adequacy (IWDA): International and Intra-national Exploration by Seetharam and Rao (Eds), National University of Singapore Press 2010 ,

IDWA allows cross-country comparisons and helps in ascertaining which of the 5 components of access to drinking water is weak and requires priority attention.

5 components of access:

- Resources
- Access
- Use
- Capacity
- Quality

114 countries

http://lkyspp.nus.edu.sg/iwp/wp-content/uploads/sites/3/2013/04/IDWA_Mega_Flyer.pdf

INBO Performance Indicators for African Basin Organizations



Author: INBO

Year: 2010

Source: <http://www.oieau.fr/iowater/our-projects-news-and-update/article/performance-indicators-for-african?lang=en>

Self-evaluation of organizations on basin organisation's operation and achievement of their missions.

- 20 indicators on the governance and operation of organizations in charge of the implementation of integrated management in transboundary basins:
- 15 indicators on the river basin, describing its condition, pressures and responses.

10 pilot basins: Congo (CICOS), Gambia (OMVG), Lake Chad (CBLT), Lake Victoria (LVBC), Niger (NBA), Nile (NBI), Okavango (OKACOM), Orange-Senqu (ORASECOM), Senegal (OMVS), Volta (VBA)

IWRM implementation indicators in South Africa



Author: Water Research Commission

Year: 2010

Source: <http://www.wrc.org.za/Pages/DisplayItem.aspx?ItemID=9027&FromURL=%2FPages%2FDefault.aspx%3F>

Indicators for assessing how IWRM will impact on the lives of women and the poor.

Good governance criteria and sub-criteria:

- Transparency:
 - 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)
 - information accessible (Reports and documents available in applicable languages, non-technical, etc.)
- Voice :
 - opportunities for the public to express their views (Existence of civil society organisations (WUA, CF, Farmers Unions, etc.), meetings being held and attended)
 - accessibility of opportunities (Specific efforts made such as transport to/from meetings, location of meetings, timing of meetings etc.)
 - opportunities for women to express their views (Meaningful opportunities and contributions by women at civil society

Case study: the town of Clanwilliam and the compulsory licensing project of the Jan Dissels River Catchment

- opportunities for the poor to express their views (Meaningful opportunities and contributions by poor at civil society organisations (WUA, CF, Farmers Unions, etc.), meetings.)
- opportunities for the poor to express their views (Meaningful opportunities and contributions by poor at civil society organisations (WUA, CF, Farmers Unions, etc.), meetings.)
- Authority
 - equal distribution of knowledge, insights and confidence amongst all stakeholders (Stakeholders adequately capacitated to express their views and opinions)
 - equal distribution of knowledge, insights and confidence amongst women (Women stakeholders adequately capacitated to express their views and opinions.)
 - equal distribution of knowledge, insights and confidence amongst the poor (Poor adequately capacitated to express their views and opinions.)
- Accountability :
 - promotion and awareness of rules and regulations (Rules and regulations promoted, interpreted and highlighted)
 - enforcement of rules and regulations (Active and visible enforcement of rules and regulations.)
- Agency :
 - power to influence decision (Examples of where stakeholders have managed to get a decision changed.)
- Commitment :
 - on-going engagement (Opportunity after formal public participation process to provide input, comment, raise concerns and

awareness raising)

UN-Water, Monitoring progress in the water sector: A selected set of indicators



Author: UN-Water

Year: 2009

Source:

<http://webworld.unesco.org/water/wwap/wwdr/indicators/taskforce.shtml>

The Task Force report proposed a set of 15 quantitative 'key indicators' to provide a snapshot of the water sector.

Four categories of indicators can be used to better understand the water sector: Global

- Context
- Functioning
- Governance
- Performance.

Cap-Net, UNDP, Indicators: Implementing integrated water resources management at river basin level



Author: Cap-Net, UNDP

Year: 2008


Source: www.cap-net.org/documents/2008/09/indicators-implementing-integrated-water-resources-management-at-river-basin-level.pdf.



Indicators are based on the implementation of the integrated approach to the sustainable management of water resources. Cap-Net assists river basin organisations (RBOs) at national and sub-national levels to assist in their development as effective managers of water.

Minimum Indicator Set for Water Resources RBOs Management:

- Water allocation
 - Number of surface and groundwater users licensed according to the regulations.
 - Water allocation criteria include use efficiency, economic benefit and social goals.
 - % of time environmental and social reserve is maintained in major water courses.
- Pollution control
 - % of surface water quality samples complying with water quality objectives.
 - % of ground water quality samples complying with water quality objectives.
 - Number of polluters licensed according to the regulations.

- Monitoring
 - Proportion of water allocation permit holders complying with permit conditions.
 - Proportion of water pollution permit holders complying with permit conditions.
 - Number of water resource monitoring stations producing reliable data.
 - Total water storage capacity.
 - % groundwater monitoring stations with declining water levels
- Basin planning
 - Water management activities driven by Basin plan.
 - Stakeholder priorities reflected in the basin plan.
 - Economic and financial management
 - Charges and fees for water allocation favour the poor and efficient water use.
 - Pollution charges give incentive to reduce pollution.
- Information management
 - Data base is established in formats compatible with other river basin organisations.
 - Water management information is available to managers and other stakeholders as required.
- Stakeholder participation
 - Number of meetings of Government agencies with water interests to consult and collaborate on water management.
 - Formal stakeholder structures established with clear roles and responsibilities in water

		<ul style="list-style-type: none"> resources management. ○ Basin stakeholders (male and female) represented in decision making bodies at all levels. 	
<p>Watershed Sustainability Index</p> <p><u>Author:</u> Chaves, Henrique M. L., Susana ALIPAZ.</p> <p><u>Year:</u> 2007</p> <p><u>Source:</u> “An Integrated Indicator based on Basin Hydrology, Environment, Life, and Policy: The Watershed Sustainability Index.” <i>Water Resources Management</i>, Volume 21, Number 5, Mai 2007. Springer, pp. 883-895(13)</p>	<p><i>The index helpsevaluating the sustainability in water resource management within a river basin.</i></p>	<p>There are 4 indicators: Hydrology, Life, Environment and Policy.</p> <ul style="list-style-type: none"> ▪ Policy: Basin institutional capacity in IWRM <p>Evolution in the basin’s IWRM expenditures in the period analysed.</p>	<p>SF Verdadeiro, Southern Brazil</p>
<p>WWF Water and Wetland Index</p>  <p><u>Author:</u> World Wide Fund for Nature</p> <p><u>Year:</u> 2003</p> <p><u>Source:</u> http://assets.panda.org/downloads/wwireport.pdf.</p>	<p><i>WWF’s Water and Wetland Index (WWI) is a two-phase pan-European initiative aiming at stimulating debate on how to preserve and improve the state of freshwater ecosystems across Europe through the sustainable and integrated management of water.</i></p>	<p>The index it is based on three WFD/IWRM principles:</p> <ul style="list-style-type: none"> ▪ Public participation ▪ Integration of water policies ▪ Wetlands management <p>It is also based on the application of measures tackling the most significant freshwater problems in each country (water quantity problems, water quality problems and river fragmentation).</p>	<p>20 European countries</p>

C) ENVIRONMENTAL/GOVERNANCE INDICATORS WITH WATER VARIABLES	Description	Variables	Geographical scope
<p>Environmental performance index</p>  <p>Author: Yale Center for Environmental Law & Policy Year: 2000-2014 Source: http://epi.yale.edu/our-methods</p>	<p><i>The Environmental Performance Index (EPI) is constructed through the calculation and aggregation of 20 indicators reflecting national-level environmental data.</i></p>	<ul style="list-style-type: none"> ▪ Access to drinking water ▪ Access to sanitation ▪ Wastewater management 	149 countries
<p>UNSD, First list of proposed priority indicators and detailed inputs to be discussed by the IAEG-SDGs</p>  <p>Author: UN Statistics Division Year: May 2015 Source: http://unstats.un.org/sdgs/2015/05/29/first-proposed-priority-indicator-list/</p>	<p><i>The UN Statistics Division consolidated inputs on indicators provided by agencies in a list of priority indicators for the effective monitoring of the SDG. The list will be revised during the next consultations.</i></p>	<p>Proposed priority indicators for the Targets of Goal 6. Ensure availability and sustainable management of water and sanitation for all:</p> <ul style="list-style-type: none"> ▪ Target 6.1.: Percentage of population using safely managed drinking water services ▪ Target 6.2.: Percentage of population using safely managed sanitation services ▪ Target 6.3.: Percentage of wastewater safely treated , disaggregated by economic activity ▪ Target 6.4.:Percentage change in water use efficiency over time ▪ Target 6.5.: Degree of integrated water resources management (IWRM) implementation (0-100) ▪ Target 6.6.: Percentage of change in wetlands extent over time ▪ Target 6.a.: ODA for water and sanitation related activities and programmes 	
<p>The World Bank Institutional Profiles</p>	<p><i>The nine institutional functions assessed are: 1.</i></p>	<ul style="list-style-type: none"> ▪ Territorial coverage: drinking water and sanitation 	123 countries

Database



Author: World Bank

Year: 2012

Source:

<https://www.agidata.org/site/SourceProfile.aspx?id=21>

Political institutions; 2. Safety, Law and Order, Control of violence; 3. Functioning of Public administrations; 4. Free Operation of Markets; 5. Coordination of actors, Strategic vision, Innovation; 6. Security of transactions and contracts; 7. Market regulations, Social dialogue; 8. Openness to the outside world; 9. Social cohesion and mobility

networks

- Proportion of public sector: water and sanitation

DATABASES

Description

Variables

Geographical scope

FAO Water Lex



Author: Fao

Year: latest access May 2015

Source: <http://faolex.fao.org/waterlex/index.htm>

WATERLEX carries the analyses of the legal framework governing water resources in selected countries.

Features of a country's legal framework on water resources by reference to four major subjects:

- Legal basis
- Administration
- Water management
- Pollution control.

Worldwide

OECD Database on instruments used for environmental policy



Author: OECD

Year: latest updates March 2014

Source: <http://www2.oecd.org/ecoinst/queries>

The database includes economic instruments for water pollution.

The database does not include tariffs, but it compiles abstraction and pollution charges reported by member countries.

OECD countries

WaterLex Legal Database

The WaterLex Legal Database Project (WLDP) provides direct access to legal and political sources on the human right to water and

- Legal Document Types (International Law Convention, National Law, National Policy, National Strategy, Political Declaration)

Worldwide



sanitation.

Author: WaterLex

Year: last update July 2014

Source: <http://www.waterlex.org/waterlex-legal-database/>

- Human Rights Standards & Principles
 - Acceptability
 - Access to information
 - Accessibility
 - Accountability
 - Affordability
 - Availability
 - Coordination
 - International Cooperation
 - Non-discrimination & Positive measures for vulnerable and marginalized groups
 - Participation
 - Quality
 - Recognition of the Human Right to water and sanitation & General Obligations
 - Sustainability

National Open data

Open data on different aspects of water management and water governance.

Institutions, legal framework, governance instruments, National level service providers, etc.

- The Netherlands: <http://www.waterschapsspiegel.nl/open-data/>
- Australia: <https://publications.qld.gov.au/storage/fi/2013-05-07T035344/DEWS-Open-Data-Strategy.pdf>
- United Kingdom: <http://www.iatiregistry.org/publisher/aauk>
- United States: <http://acwi.gov/>
- France: <http://www.data.eaufrance.fr/>
- Italy: <http://www.acqua.gov.it/>
- Canada: www.open.canada.ca

FAO, AQUASTAT



It is a global water information system providing data, metadata, reports, country profiles, river basin profiles, regional analyses, maps, tables, spatial data, guidelines, and other tool.

- Water resources: internal, transboundary, total
 - Water uses: by sector, by source, wastewater
 - Irrigation: location, area, typology, technology, crops
 - Dams: location, height, capacity, surface area
 - Water-related institutions, policies and legislation
- Global

Author: Food and Agriculture Organization of the United Nation

Year: 1994- on-going

Source: <http://www.fao.org/nr/water/aquastat/main/index.stm>

World Bank, Private Participation in Infrastructure Project Database



Author: World Bank

Year: from 1985 to 2014 (depending on the availability of data)

Source: <http://data.worldbank.org/indicator/IE.PPI.WATR.CD>

Data on Investment in water and sanitation with private participation.

- Infrastructure projects in water and sanitation that have reached financial closure and directly or indirectly serve the public
 - Operations and management contracts, operations and management contracts with major capital expenditure, greenfield projects and divestitures.
 - Investment commitments
 - Investments in facilities
 - Investments in government assets
- Data available for selected countries

GUIDELINES

Description

Variables

Geographical scope

UNDP, Water Governance Facility, SIWI, WIN, User's Guide on Assessing Water Governance



Author: UNDP, Water Governance Facility, SIWI, WIN

Year: 2013

Source: http://www.undp.org/content/undp/en/home/librarypage/democratic-governance/oslo_governance_centre/user-s-guide-on-assessing-water-governance/

A guide structured around three overarching questions: why, what and how to assess water governance.

The guide uses the TAP approach to analyse institutions and stakeholders relations within a governance assessment:

- Transparency
- Accountability
- Participation

OECD Multi-level Water Governance

The OECD Multi-level Governance Framework is a strategic tool in diagnosis multi-level

- Seven Governance gaps:
- Administrative gap

Several OECD countries

Framework



Author: Organisation for Economic co-operation and Development

Year: 2011

Source: OECD (2011), Water Governance in OECD countries, OECD publishing, Paris

governance challenges. It is organised around seven “gaps”, which are interrelated and can exacerbate each other.

- Policy gap
- Objective gap
- Capacity gap
- Information gap
- Funding gap
- Accountability gap

WHO, Guidelines for drinking-water quality (4th ed.)



Author: World Health Organization

Year: 2011

Source: http://www.who.int/water_sanitation_health/publications/2011/dwq_guidelines/en/

The Guidelines provide the recommendations for managing the risk from hazards that may compromise the safety of drinking-water.

The preventive risk management approach for ensuring drinking-water quality includes the roles of stakeholders in ensuring drinking-water safety. Worldwide

WIN, WSP, Promoting Transparency, Integrity and Accountability in the Water and Sanitation Sector in Uganda



Author: Jacobson, Maria, Sam Mutono, Erik Nielsen, Donal O'Leary and Rosemary Rop

Year: 2010

Source:
https://www.wsp.org/sites/wsp.org/files/publications/WIN_WSP_Uganda_report.pdf

The note describes the key ingredients to putting in place a nationwide good governance action plan in Uganda's water sector, the challenges to be overcome and lessons learned to date.

- Institutional overview
- Risk/Opportunity Mapping Study

Uganda

Transparency International, Global Corruption Report: climate change

Measuring Transparency Policies and Mechanisms in Public Utilities



Author: Alma Rocio Balcazar, Marta Elena Badel and Lorena Roa Barrera

Year: 2010

Source: Transparency international

It reports on measuring transparency in multiple sectors, including water supply and sanitation.

- Additional or self-imposed control
- Corporate ethics
- Corporate governance
- Information disclosure

Colombia

MAPS

Description

Variables

Geographical scope

WRI, Environmental Democracy Index



Author: WRI

Year: to be launched in May 2015

Source: http://www.wri.org/sites/default/files/Environmental_Democracy_Index_0.pdf

The Environmental Democracy Index (EDI) is an online platform for tracking progress on national laws promoting transparency, access to justice, and citizen engagement in environmental decision making. It is based on 75 legal indicators and 24 limited practice indicators

Environmental information on drinking water quality

70 countries

Yale EPI, Wastewater Treatment Performance Map



Author: Yale Center for Environmental Law & Policy

Year: 2015

Source: http://epi.yale.edu/waste_map

The interactive map visualises the 2014 indicator on national-level wastewater treatment of the Environmental Performance Index; the percentage of population connected and the percentage of wastewater treated.

The map also provides with a visualisation of countries' data concern, in order to improve the availability and updating of data at national level.

Worldwide

WWF, Water Risk Filter



Author: WWF

Year: latest access May 2015

Source: <http://waterriskfilter.panda.org/>

The Water Risk Filter aims to cover all relevant aspects of water risks. s.

- Regulatory risk:
 - Sophistication and clarity of water related legal framework
 - Enforcement of water related legal framework
 - Official forum or platform in which stakeholders come together to discuss water-related issues of the basin

Global

ANA, Water Management Map

The Brazilian National Water Agency has developed a methodology to determine the degree of complexity of water management. The

- Indicators for the institutional framework are:
- Presence/mission of River Basin Organisations
 - Presence of Water Agencies

Brazil



Ministry of Environment



4 typologies of complexity (from A to D- the most complex one) correspond to 4 institutional frameworks for managing water (from basic to advanced).

- Presence of State Councils of water
- Typology of water management bodies
- Technical staff
- Minimum requirements for staff
- Legal basis

Author: ANA

Year: 2013

Source: <http://www2.ana.gov.br/Paginas/pactonacional.aspx>

WRI, Aqueduct Water Risk Framework



It provides a set of indicators that capture a wide range of variables, and aggregates them into comprehensive scores using the Water Risk Framework, which includes 12 indicators grouped into three categories of water risk.

Reputational and Regulatory Risks: Global

- Media coverage (used as a proxy of public awareness about water issues) :
 - It measures the percentage of all media articles in an area on water-related issues. Higher values indicate areas with higher public awareness about water issues, and consequently higher reputational risks to those not sustainably managing water.

Author: WRI

Year: 2013

Source: Reig, P., T. Shiao and F. Gassert. 2013. "Aqueduct Water Risk Framework." Working Paper. Washington, DC: World Resources Institute.

ASSESSMENT TOOLS

Description

Variables

Geographical scope

WB, IAWD, Water and Wastewater Services in the Danube Region. A state of the sector



Based on public data sources, the report assesses the progress made in delivering sustainable water and wastewater services.

The report is based on 6 sections for evaluation:

- Context for services (including administrative organisation)
- Organisation of services (including regulation and sector monitoring and benchmarking)
- Access to services
- Performance to services
- Financing of services

16 countries in the Danube watershed

Author: Michaud, David; Hommann, Kirsten; Shegay, Anastasia; Gabric, Stjepan; Heider, Angelika Maria

Year: 2015

Source: Michaud, David; Hommann, Kirsten; Shegay, Anastasia; Gabric, Stjepan; Heider, Angelika Maria. 2015. Water and wastewater services in the Danube region : a state of the sector. Washington, D.C. World Bank Group.

<http://documents.worldbank.org/curated/en/2015/05/24608302/water-wastewater-services-danube-region-state-sector>

DROP Governance Assessment Tool (GAT)



Author: Hans Bressers (editor), Nanny Bressers (editor), Alison Browne, Carina Furusho, Isabelle Lajeunesse, Corinne Larrue, Gül Özerol, Maria-Helena Ramos, Ulf Stein, Jenny Tröltzsch, and Rodrigo Vidaurre.

Year: 2015

Source: *Benefit of Governance in Drought Adaptation – Governance Assessment Guide*, INTERREG IVb North West Europe Programme, Waterschap Vechtstromen, www.dropproject.eu.

It assesses the governance context in a specific domain concerning a specific issue, like drought.

5 dimensions of governance are taken into account:

- Levels and scales
- Actors and Networks
- Perceptions and goals
- Strategies and instruments
- Responsibilities and resources

Dimensions are described by 4 criteria: extent, coherence, flexibility and intensity. For each dimensions and criteria, key descriptive questions are formulated to help the diagnosis.

Six regions: Twente and Salland in the Netherlands, Eifel-Rur in Germany, Brittany in France, Somerset in the United Kingdom and Flanders in Belgium

UN WWAP UNESCO, Project for Gender Sensitive Water Monitoring Assessment and Reporting



Author: UN WWAP UNESCO

Year: 2014-2016

Source: <http://www.unesco.org/new/en/natural-sciences/environment/water/wwap/water-and-gender/>

This project will produce a comprehensive methodology for gender-disaggregated data gathering and will yield the first-ever set of gender-disaggregated data on topics such as women's water empowerment and participation in water-decision making.

WWAP is developing a priority set of gender-sensitive indicators and a gender-disaggregated data methodology that will then be tested in the field by Member States in different regions.

WWF Basin Report Cards



In partnership with the University of Maryland's Integration and Application Network and WWF-Colombia, the pilot test in the Colombian headwaters of the Orinoco River Basin will aim at revealing the status and trends of basin health, but also catalysing improvements in policy, management and behaviour.

- Economic variables
- Social variables
- Governance variables

Basins

Author: WWF

Year: 2015 -ongoing

Source: <https://www.worldwildlife.org/projects/developing-a-scalable-river-basin-report-card>

UNDP Global water solidarity, Certificate for Decentralized Water Solidarity



GWS has developed a certification tool for the recognition, promotion and motivation of existing and future decentralized water solidarities. The Certificate is issued to national platforms for decentralized solidarity in water and sanitation sector or specific international initiatives based on the fulfilment of the principles of decentralized cooperation and of the territorial approach to development.

Principles are:

- Universality
- Subsidiarity
- Harmonization
- Mutual Accountability
- Leverage
- Environmental Sustainability
- Financial Sustainability
- Technical Sustainability

Author: UNDP

Year: latest access May 2015

Source: globalwatersolidarity.org

UN- CEPAL, Best practices in regulating State-owned and municipal water utilities

This study identifies best practice in regulatory governance and corporate governance of state-owned and municipal utilities.

5 principles of a sound regulatory system design determine sustainable sector outcome:

- Coherence
- Creativity
- Communication
- Collaboration
- Consultation

Case studies:
Uganda, Cambodia,
Scotland



NACIONES UNIDAS



Author: Sanford V. Berg. Corporate author: France, Ministère des Affaires Etrangères, UN an CEPAL.

Year: 2013

Source: <http://www.cepal.org/en/publications/4079-best-practices-regulating-state-owned-and-municipal-water-utilities>

- Credibility

UNEP-DHI, SIWI, The Transboundary Water Assessment programme



Author: UNEP-DHI, SIWI

Year: 2013-2014

Source: <http://www.geftwap.org/water-systems/river-basins>

The Programme aims to provide a baseline assessment to identify and evaluate changes in these water systems caused by human activities and natural processes, and the consequences such have on dependent human populations.

The TWAP consists of five independent indicator-based assessment and the linkages between them, including their socioeconomic and governance-related features.

IDB, IWA, AquaRating



Author: IDB, in cooperation with IWA


Year: 2014-2015


Source: www.aquarating.org

Rating system that assesses the performance of water and sanitation (WS) service providers.

- Access to Service
- Quality of Service
- Operating Efficiency
- Planning and Investment
- Execution Efficiency
- Business Management
- Efficiency
- Financial Sustainability
- Environmental Sustainability

13 utilities in nine European and Latin American and Caribbean countries. A worldwide market introduction of AquaRating is planned for 2015.

<p>Ten building blocks for sustainable water governance</p> <p>Author: Marleen van Rijswick, Jurian Edelenbos, Petra Hellegers, Matthijs Kok & Stefan Kuks</p> <p>Year: 2014</p> <p>Source: Marleen van Rijswick, Jurian Edelenbos, Petra Hellegers, Matthijs Kok & Stefan Kuks (2014) Ten building blocks for sustainable water governance: an integrated method to assess the governance of water, <i>Water International</i>, 39:5, 725-742.</p>	<p><i>This is a three-step interdisciplinary method to assess approaches to water shortage, water quality and flood risks. It is based on water system analysis, economics, law and public administration.</i></p>	<ul style="list-style-type: none"> ▪ Corporate Governance <p>The proposed interdisciplinary method consists of 10 building blocks:</p> <ol style="list-style-type: none"> 1. Water system knowledge 2. Values, principles, policy discourses 3. Stakeholders involvement 4. Trade-offs between social objectives 5. Responsibility, authority and means 6. Regulation and agreements 7. Financial arrangements 8. Engineering and monitoring 9. Enforcement 10. Conflict prevention and resolution
<p>Assessing Stability and Dynamics in Flood Risk Governance</p> <p>Author: Dries L. T. Hegger & Peter P. J. Driessen & Carel Dieperink & Mark Wiering & G. T. Tom Raadgever & Helena F. M. W. van Rijswick</p> <p>Year: 2014</p> <p>Source: <i>Water Resources Management</i> (2014) 28:4127–4142</p>	<p><i>The paper analyses stability and dynamics in Flood Risk Governance Arrangements, by using the Policy Arrangements Approach.</i></p>	<ul style="list-style-type: none"> ▪ Actors (e.g. private, public, coalitions and oppositions) ▪ Discourses (e.g. relevant scientific paradigms and uncertainties; Policy programmes, policy objectives and policy concepts; historical metaphors/narratives; policy and legal values and principles) ▪ Rules (e.g. Legislation, constitutional, procedural norms, legal instruments, legal traditions, informal rules) ▪ Power & Resources (Legal authority; Financial power; Knowledge; Interaction skills) <p>Dordrecht in the Rijnmond Drechtsteden Area</p>
<p>The AWS International Water Stewardship Standard</p>  <p>Author: Alliance for Water Stewardship</p> <p>Year: 2014</p> <p>Source: http://allianceforwaterstewardship.org/become-a-</p>	<p><i>It provides a framework regarding how water should be stewarded at a site and catchment level in a way that is environmentally, socially, and economically beneficial.</i></p>	<p>AWS standards are based on 6 steps: commit; gather & understand; plan; implement; evaluate, communicate & disclosure water stewardship actions. Each step is described by criteria and indicators. Examples of governance indicators are:</p> <ul style="list-style-type: none"> ▪ List of relevant aspects of catchment plan(s), significant publicly led initiatives and/or relevant water related public policy goals for the site ▪ List, and description of relevance, of all applicable water-related legal and regulatory requirements, <p>The AWS Standard can be implemented by any site, in any sector, in any catchment around the world</p>

<p>water-steward.html#aws-standard</p>		<p>including legally defined and customary water rights and water-use rights</p> <ul style="list-style-type: none"> ▪ Copies of existing water stewardship and incident response plans ▪ Documented description of system, including the processes to evaluate compliance and the names of those responsible and accountable for legal compliance ▪ Consult stakeholders on water-related performance: Commentary by the identified stakeholders 	
<p>UN-Water Country Briefs Project</p>  <p>Author: UN Water Year: 2013 Source: http://www.unwater.org/activities/multi-agency-featured-projects/country-briefs/en/</p>	<p><i>It provides a comprehensive data-rich water national snapshot.</i></p>	<p>Among the data provided in the profiles, investment (established by the OECD Creditor Reporting System), include:</p> <ul style="list-style-type: none"> ▪ water resources policy and administrative management ▪ water resources protection ▪ water supply and sanitation in large systems <p>Status, trends and assessment: tracking water governance (source data UN water 2012 and WHO, 2012)</p>	<p>Chile, The Gambia, Bangladesh, Guyana, Ghana, Kyrgyzstan, Mexico, United Republic of Tanzania, Mongolia, Zambia, Oman, Philippines, Viet Nam</p>
<p>TASU, Analysis of the Auditor General's Annual Report 2011/12 Uganda</p> <p>Author: Joint Budget Support Framework, Technical and Administrative Support Unit (TASU) Year: 2013</p>	<p><i>TASU assesses the level and quality of accountability for public funds and the performance of public financial management systems in sectors of interest to JBSF development partners, including the water sector.</i></p>	<ul style="list-style-type: none"> ▪ Evidence of corruption and misuse of public funds; ▪ Mischarging expenditure against budget; ▪ Quality of IT management / policies; ▪ Internal audit and internal controls; ▪ Human resource management (Watch out for nepotism); ▪ Dormant accounts; ▪ Impact of late releases on accountability; ▪ Domestic arrears; ▪ Management and monitoring of Non-Tax Revenue (NTR); ▪ Weaknesses in contract management; ▪ Financial management systems – data security and 	<p>Uganda</p>

UNEP, The UN-Water Status Report on the Application of Integrated Approaches to Water Resources Management



Author: UNEP

Year: 2012

Source: <http://www.unwater.org/publications/status-report-on-integrated-water-resources-management/en/>

The report includes lessons learned and recommendations, as well as focus areas for action for integrated water resources management

- internal controls;
- Tax payments to the Uganda Revenue Authority;
- Provision of tax Incentives to the private sector;
- Government of Uganda investment in the private sector

- Policy, Strategic Planning and Legal Framework
 - Enabling environment for the development, management and use of water resources (national, federal instruments, agreements)
- Governance and Institutional Frameworks
 - Governance systems for the development, management and use of water resources (institutional framework, Stakeholder Participation, Capacity building)
- Management instruments
 - Management instruments for the development, management and use of water resources (Programmes, Monitoring and information, Knowledge sharing, Financing of water resource management)
- Infrastructure Development and Financing
 - Infrastructure development for the development, management and use of water resources (Investment plans and programmes, mobilizing financing for water resources infrastructure)
- Sources of financing
- Outcomes and impacts: improved water resource management
- Priority challenges
- Indicator water resources governance:
- Progress towards planning and implementing integrated water resources management – national scale and sub-national scale
(Respondent are asked to choose among: not used, used irregularly, used regularly)

UN member states

European Water Stewardship Standards



Author: European Water Stewardship (EWS)

Year: 2012



Source: <http://www.ebp.eu/wp-content/uploads/2012/04/EWS+European-Water-Stewardship-Standard-v4.8-Dec-2012-Doc.pdf>

The EWS Standard aims to map, grade and evaluate water management based on redesign, reuse, recycle and re-allocate measures. 49 Indicators are classified as major indicator (III), minor indicator (II) or as recommendation.

Examples of water governance indicators are:

- All sources used for water abstraction are documented (documentation regularly updated).
- The water volume abstracted from each source is quantified, monitored and reported
- The impact* of abstraction and discharge is described (by source).
- Action is taken to mitigate actual and potential impacts* caused by water abstraction and discharge
- There is a complete and up-to-date inventory of all applied substances, indicating the frequency and amount/volume applied.
- The (quantitative) relation of water and energy use is identified and optimized.
- The (quantitative) relation of water and other resources than energy is identified and optimized.
- A strategy is in place and described to achieve optimized water efficiency
- A person or department is identified who participates and reports on River Basin Committee activities.
- Internal transparency: Sustainable water management is disseminated within the operation.
- External transparency: The water management is publically available for customers, the public and authorities, e.g. by a water report.
- Campaigns or partnerships to inform stakeholders on water topics are described and implemented.
- Management of incidents:
 - 1) Procedures are established, implemented and monitored to respond to accidents, security incidents, emergency situations, disasters and the like.
 - 2) The impacts of such an occurrence to the environments, employees, the regional population

Water users and industries

		<ul style="list-style-type: none"> and communities are described or estimated. ▪ Best Management Practices* (BMPs*) are in place and integrated in a water resource management strategy. ▪ The implementation procedures and the evaluation of BMPs (or alike) are described 	
<p>USAID Regional Water Governance Benchmarking Project</p>  <p>Author: USAID, Kallidaikurichi, S. & Rao, B. Year: 2010 Source: http://www.watergovernance.org/ReWab</p>	<p><i>The purpose of the project is to provide a strategic framework and a set of yardsticks to guide and monitor national progress on water governance in the MENA region. The project identifies a simple and robust set of indicators for benchmarking water governance practices and performance.</i></p>	<ul style="list-style-type: none"> ▪ Framework Development (national policies, laws and implementing rules, and implementing organizations) ▪ Policy, Legal, and Organizational Assessments 	<p>23 member countries of the Asian Development Bank (ADB)</p>
<p>UN-Water, WHO, GLAAS Global Analysis and Assessment of Sanitation and Drinking-Water</p>  <p>Author: WHO, UN Water Year: 2008; 2009/2010; 2011/2012; 2013/2014 Source: http://www.who.int/water_sanitation_health/glaas/en/</p>	<p><i>It offers a comprehensive analysis of strengths and challenges in water, sanitation and hygiene (WASH) within and across countries.</i></p>	<p>Examples of indicators in the drinking-water and sanitation sections, include:</p> <ul style="list-style-type: none"> ▪ Current access ▪ Policies and institutions <ul style="list-style-type: none"> ○ Are targets included in Poverty Reduction Strategy Paper ○ National Development Plan? ○ Is there a policy agreed by stakeholders and approved and gazetted? ○ Is there a government agency lead (sanitation) or are institutional roles clearly defined (drinking-water)? ○ To what degree has decentralization of service been carried out? ▪ Planning, monitoring and evaluation <ul style="list-style-type: none"> ○ Is there a national information system used? 	<p>94 countries (GLASS 2014)</p>

- Is there an investment programme agreed and published?
- Is there an annual or biennial review to monitor sector?
- Year last national assessment done?
- Budgeting and expenditure
- Participation and Equity
 - Procedures for informing, consulting and supporting participation by individuals/community?
 - Are there agreed criteria used to distribute funding equitably to communities, and are they applied?
 - Do national strategies include specific provision for slum and informal settlements?
 - Has the impact of equity policies been measured?
- Outputs
- Sustainability
- Human resources

GEF, The Pacific IWRM Project



Author: Global Environment Facility (GEF), Pacific Islands Applied Geoscience Commission (SOPAC)

Year: 2008-2013

Source: <http://www.pacific-iwrm.org/>

Regional indicator framework for monitoring progress towards Integrated Water Resources Management (IWRM) wastewater management and Water Use Efficiency (WUE).

The indicator system are specific to country needs to drive the changes needed to facilitate mainstreaming of IWRM and Water Use Efficiency in Pacific Island Countries.

14 Pacific Island Countries

UN-Water, Status of IWRM and Water Efficiency Plans at CSD16

It provides an overview of the status of water resources management. Complementary to the survey, is a Road mapping initiative for providing countries with a set of indicators able to identify needs to advance in the implementation of the IWRM.

The survey gathers information such as the implementation of National IWRM plans. 104 countries



Author: UN-Water

Year: 2008

Source: http://www.unwater.org/downloads/UNW_Status_Report_IWRM.pdf

UN DESA, Status of implementation of CSD-13 Policy Actions on Water and Sanitation



Author: UN DESA

Year: 2007, 2008

Source: http://sustainabledevelopment.un.org/content/documents/UN_DESA_CSD13_Monitoring_report_on_Water_and_Sanitation.pdf

The report is an attempt to further the implementation agenda in the domain of water and sanitation. The survey covers a large spectrum of sectors (Water Supply, IWRM, and Sanitation) and policy areas.

The level of implementation of each policy action was assessed according to the analysis of 5 attributes:

- Existence of policy measures
- Quality of the measure in place (clear objectives)
- Range of target area
- Scale of implementation
- Sustainability

35 countries in
4 geographical sub-regions of the world

Japan Water Forum, Survey of progress towards IWRM



Author: Japan Water Forum

Year: 2006

Source: http://www.waterforum.jp/eng/4th_output/doc/IWRM-Report-E.pdf

The aim of the survey is to evaluate progress towards IWRM implementation, based on a questionnaire at the government level.

The Overall IWRM Evaluation considers:

- 1) Quantitative evaluation based on the results of clarifying the state of water resources management:
 - Water resources management organizations
 - Water resources management measures
 - Basic data
- 2) Quantitative evaluation based on indicator evaluation survey:
 - Population with sustainable access to improved sanitation
 - Population with sustainable access to an improved water
 - State of provision of legal frameworks

82 countries

- Plan prepared/not prepared
- State of government investment
- Basin level efforts undertaken/not undertaken
- System to implement environmental conservation efforts established/not established
- System for participation of stakeholders established/not established
- Systems to support citizens' groups established/not established
- Systems for personnel development, training/education established/not established
- State of provision of data related to each category of water use (Topographical map, geological map, vegetation map, land-use map, precipitation data, river level data, river discharge, water table data, water intake volume, drainage volume, meteorological and hydrological predictions)

WB, Saleth, Dinar, The institutional Economics of Water. A cross-country analysis of institutions and performance



The study aims at evaluating water sector features, institutional arrangements, and institutional initiatives of sample countries within a comparative context. It draws from the results of a perception-based international survey of water experts.

The sections of the survey are:

- Water law
- Water Policy
- Water Administration
- Water sector & water institution: overall performance

Worldwide: 127 water experts responded to the survey from a sample countries and regions

Author: Saleth R.M., Dinar A.,

Year: 2004

Source: Saleth R.M., Dinar A., (2004), The institutional Economics of Water. A cross-country analysis of institutions and performance, Edward Elgar, Cheltenham, UK , Northampton, MA, USA. Co-publication with the World Bank

UN World Water Development Report. Water:

The triennial UN World Water Development Report is a joint undertaking of 24 UN agencies

Examples of indicators:

1. Access to information, participation and justice:

Africa, Asia and the Pacific, Latin

A Shared Responsibility



Author: UN

Year: 2003-2015

Source: http://webworld.unesco.org/water/wwap/wwdr/indicators/wwdr_indicators.shtml

comprising UN-Water in partnership with governments and other stakeholders, and coordinated by WWAP.

- Public participation rights in constitutional legal framework:
 - Constitutional guarantees to public participation
 - Comprehensiveness of notice and comment in different types of decision-making processes
 - Public notice and comment requirements for environmental impact assessment

America and the Caribbean, Europe

(Each indicator is described according to criteria correspondent to strong, intermediate or weak access to information, participation and justice).

- Quality and accessibility of water data
(Systems score weak when only a few parameters on quality of water are collected)

2. Assessing progress towards achieving IWRM target

(Categorization of countries into three groups, those that have made good progress and are on the roadmap towards meeting the target; those that have made only some progress; and those that have hardly made any progress, based on ten specific criteria)

UNECE Protocol on Water and Health



Author: UNECE

Year: 1999- reporting mechanisms available for 2013

Source: <http://www.unece.org/?id=2975>

The Protocol on Water and Health, obliges each Party to establish and publish its national targets, target dates and indicators to measure the progress.

Examples of governance indicators are:

39 parties

- Adoption of management plans for River Basins
- Publication of National Report on drinking water quality
- Availability of a summary report on progress implementing the Protocol
- Meetings, conferences, seminars to raise awareness on issues related to the Protocol

WRI, Access Initiative



Author: WRI

Year: since 1999 (revised in 2005)

Source:http://www.accessinitiative.org/sites/default/files/NEW12-12_revised_indicators_ne_1.pdf

The Access initiative is the world's largest civil society network promoting transparency, citizen engagement and accountability on environmental issues. Each TAI assessment is based on 148 research questions, or indicators, which NGO coalitions use to assess their governments' performance in ensuring adequate access.

Indicators are divided in four categories:

- Access to Information
- Public Participation
- Access to Justice
- Capacity Building

55 countries