

Increasing Water Security

GWP TEC Background Paper

Template for contributions from the GWP knowledge chain

The preparation of the Background Paper¹ (BP) will draw on the [Perspectives Paper](#) (PP) and on generous inputs from regions and countries through the GWP Knowledge Chain, including case studies and examples. What follows below is a template for the BP (including a tentative outline - with working titles) to guide the regions and countries in providing their inputs to the team.²

Increasing water security has become the central objective of GWP's work, and in preparing this paper it is therefore important for all contributors to create synergy by building on other TEC products (past and under preparation), such as on economics, social equity, urban water management, climate change adaptation etc.

Content and approach

The team's present thinking on the BP is that it will consist of 3 parts:

- Part 1 – IWRM: our journey and mental models
- Part 2 – Water Security: what it is and what it takes
- Part 3 – Good Practice: making a difference

The BP is expected to be 60 pages maximum with about 10, 25 and 25 pages for the respective 3 parts. This includes figures, text boxes and cases. The core (scientific) content of the BP will be in Part 2 with Part 3 illustrating the concepts described in the previous parts. The set-up of these parts is described below.

The aim of the BP is that it can be used by professionals in policy making, planning, monitoring and project design and implementation in country, region, cities and basins, as well as by academia to explain the concepts of water security to students. This requires that the BP will be concise, include clear figures that illustrate the concepts and give good examples of good practices. This will also require that water security can be quantified. We need to give examples on indicators that can be used and how the values of these indicators

¹ Background Papers are prepared for the GWP Network, water professionals, and the wider development community. They provide a common understanding by the Network of a particular concept/topic through the GWP Knowledge Chain. The focus is on bridging science and policy. Regional input to a Background Paper will be sought in response to the Perspectives Paper provided to the regions. Background Papers have a maximum of 64 pages. (Source: GWPO Publications Guidelines, 2012)

² The team includes Wouter Lincklaen Arriens, Eelco van Beek, Oscar Cordeiro, and Zaki Shubber (writer/editor), with comments expected from the other TEC members, and many inputs welcomed from the GWP Knowledge Chain.

can be determined. At the same time we should make clear that the content of water security will be different, depending on the local conditions.

A BP is meant to focus on bridging science, policy and implementation. That is also what this BP is aiming for. At the other hand the BP should have a practical value, i.e. it should appeal to the professional community, practitioners, and the public. This might mean that we should use the actual water resources problems and issues (such as “too little, too much, too dirty”) as starting points and possibly pay somewhat less attention to generic concepts such as sustainability and avoid an over-exposure of governance issues. Working with operational contexts like river basins and cities can help to bring in this practical context.

Boxes will be used in the BP to highlight our messages and definitions. The cases with good practices will also be put in boxes. A box should cover no more than 1 page and preferably less.

Starting point of the BP will be the Perspective Paper (PP) on Water Security (February 2012) which represents the present thinking of GWP on water security. The relation between the text of the PP and the BP is indicated in the description of the various parts.

Process and time schedule

The BP is scheduled for substantial completion by the end of 2012. This will enable a possible launch of the BP at the International Water Summit in Abu Dhabi on 15-17 January 2013. This leads to the following process steps and time schedule, the delivery of which will depend on inputs from the GWP Knowledge Chain:

- July –August 2012: input from GWP regions and countries based on this template and the underlying Perspectives Paper.
- 22 – 23 August 2012: draft BP for review and discussion in the GWP TEC meeting.
- 24 August 2012: discussion of draft BP with the Regions during the TEC/Regions joint meeting.
- September 2012: inter-regional expert workshop on methods for water security measurement and a tool kit for reviewing water security policies, tentatively in Stockholm.
- End October 2013: final draft BP for peer-review by experts and GWP regions and countries.

Input from GWP regions and countries

The GWP regions and countries are warmly requested to provide inputs to this BP. This might include comments on the general set-up and topics to be covered in the BP but in particular the team like to receive examples and cases related to water security. These examples and cases will be included in the BP as text boxes. Please note that a box will not exceed 1 page. In the following description more specific information is given on the requested input of the regions and countries.

Part 1 – IWRM: our journey and mental models

In this introductory part, readers will recognize how IWRM thinking and application has evolved over the years, why it is important for today's challenges, and how IWRM as an adaptive management process leads to increased water security. They are reminded by cases how IWRM has made a difference at country, basin and city levels.

- The IWRM journey since the launch of GWP in 1996
- IWRM principles, framework, and adaptive management process
- The evolution of the challenges for which the IWRM process provides solutions
- How IWRM is connected with institutional and other reforms
- IWRM implementation in countries, basins and cities
- Expressed criticism on IWRM and how water security addresses this criticism
- Water security depends on the country resources endowment and coping capacity
- Increasing water security through the IWRM process (incl. spiral of progress).

Relation with Perspective Paper (PP):

- Will cover the PP sections on 'Seeing our journey', 'Part I: Where are we now', first part of 'Part II: Where are we going?' (not the matrix) and the spiral-part of 'Part III: How do we get there?'.

Specific requests to GWP regions and countries:

- Successful IWRM implementation cases in countries, river basins, and cities
- Cases showing the 'spiral of progress' (e.g. update of basin plan, showing realisation and increased ambition level)

Part 2 – Water Security: what it is and what it takes

Readers will discover what water security means in different dimensions and contexts, and realize the importance of measuring it. They are introduced to a workable definition, a framework for action in the form of 3 keys for success, and suggested methodologies for quantification. By seeing examples of measurement, they are inspired and motivated to measure it themselves in their own country/basin/city.

- Various perspectives on, and dimensions of water security (e.g. household, economic, urban, and environmental water security, and risks and resilience)
- Working in the context of the water-food-energy-climate nexus
- A clear and actionable GWP definition of water security (with graphic illustration)
- The notion that water security can be increased, not achieved
- How to increase water security, depending on the conditions (incl. the matrix of the PP on Water Stress versus Coping Capacity)
- (Socio-economic) Benefits and Costs of increased water security
- No universal prescription as local conditions vary greatly
- At which level water security should be applied?
- How to deal with water security in a dynamic environment (growing demands, spatial developments, etc.)
- Quantifying water security, which indicators to use for which conditions
- Keys for success, including measuring performance, convening the players, and growing our knowledge
- A recommended framework to apply the concepts of water security.

Relation with Perspective Paper:

- Will cover the matrix of ‘Part II: Where are we going?’, sections from the remainder of ‘Part III: How do we get there?’ and from ‘Part IV: Outlining an Agenda’.

Specific requests to GWP regions and countries:

- Suggestions for figures that illustrate the various dimension and/or concepts of water security and its relation to IWRM (comparable with the figures from TEC 4: the comb and 3 pillars of IWRM) – a figure tells more than 1000 words!
- Examples of assessing and measuring water security (for countries, river basins, and cities), illustrating methodology (science) as well as practical guidelines (the art).
- A nice IWRM example illustrating the water-food-energy-climate nexus

Part 3 – Good Practice: making a difference

Readers will understand how innovative actions are already demonstrating the power of the IWRM process in specific ways (e.g. in climate change adaptation, environmental flow management), to make a difference in increasing water security in locations around the world, and feel encouraged that they can adapt these to their own practice and take a leading role in implementation, building on GWP's strengths.

- Building capacity and inclusive partnerships
- Leveraging knowledge, institutions, and technology
- Practical tools and approaches to quantify the various dimensions of water security (in particular the less-known concepts of environmental flow, equity, etc.)
- Cutting through complexity with leadership
- The role of the private sector
- Choosing smart investments and financing
- Reducing uncertainty and managing risks.

Relation with Perspective Paper:

- Will cover sections from the 'Part III: How do we get there?' and 'Part IV: Outlining an Agenda'.

Specific requests to GWP regions and countries:

- Successful leadership in IWRM implementation through multi-stakeholder platforms and partnerships, policies and targets, leveraging knowledge, tools for inter-disciplinary and inter-sectoral planning, mainstreaming water into development plans, water productivity gains, innovative capacity development, and others.
- Examples of specific tools and approaches to quantify the various dimensions of water security.