Revitalising IWRM for the 2030 Agenda

Background Paper for the High-Level Panel on IWRM, XVI IWRA World Water Congress, Cancun Mexico

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Version: May 26, 2017

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1. Water in the SDGs

Seventeen goals. And thirteen years to deliver. The Sustainable Development Goals aspire to transform pathways for development, fairness and equity in the global economy and how nature and development co-exist. Taken together, the SDGs lay out an agenda that connects sectors, rich countries and poor, governments, communities and business. The goals and their targets are – by design – interdependent. Ultimately, their success will be judged not by aspirations, however, but by results. Delivering the SDGs will require strategies that use the interdependencies among them to achieve progress across multiple goals. Action on the SDGs will hence be most effective where it is able to grasp and leverage synergies among goals to achieve change at scale and – given the short time available to 2030 – with speed.

SDG6, the dedicated goal on water – *to ensure availability and sustainable management of water and sanitation for all* – has brought a spotlight to water policy at global level and in national planning for action on SDG implementation. Connections between the water goal and the other goals are clear. Delivery and management of water and sanitation is a prerequisite for ending poverty and ensuring good health and food security. It enables and strengthens results for securing access to affordable energy, inclusive industrialisation and making cities safe and resilient. Managing water well helps build peace and security for communities and countries and it is vital for conserving coasts and oceans and terrestrial ecosystems, and adapting to the impacts of climate change. Sustainable development that fulfils these multiple ambitions is unimaginable without water. UN-Water analysed the interlinkages of water and sanitation across the 2030 Sustainable Development Agenda. Their analysis showed that of 169 SDG targets, 59 have synergies with the targets on water under SDG6. With effective policies and strategies action on the water targets will reinforce results for other targets and vice versa. There are 13 targets in potential conflict with water targets unless policies and careful planning address constraints in implementation and trade-offs.[1]

Water policies are widely – in principle – well-equipped to meet the challenge of integration needed to achieve synergies across goals and manage trade-offs. Formalisation of a policy framework at global level for Integrated Water Resources Management (IWRM) began with adoption of Mar del Plata Action Plan at the UN Water Conference in 1977. The Dublin Principles of 1992 provided guiding principles for IWRM and in 2002, at the World Summit on Sustainable Development in Johannesburg, governments agreed to develop national IWRM and water efficiency plans. By 2012, more than 80% of countries were assessed to have made good progress towards this target.[2] The importance of IWRM for the SDG agenda was foreseen in Target 6.5, which calls for implementation by 2030 of *integrated water resources management at all levels, including through transboundary cooperation as appropriate*. In their assessment of interlinkages of water across the SDGs, UN-Water concluded that IWRM provides the framework for addressing the synergies and potential conflicts related to water among targets "by balancing the demands from various sectors [and stakeholders] on water resources, as well as the potential impacts of different targets on each other, to form a coordinated planning and management framework."

IWRM should equip countries and communities to use interdependencies to reinforce and deliver progress on SDG6 and across multiple SDGs. But is IWRM up to the job?

2. Demands on IWRM in the 2030 Agenda

The vision for successful IWRM has before now been change that leads to water resources management that is economically efficient, equitable and environmentally sustainable. The Global Water Partnership (GWP) defined IWRM in 2000 as "a process which promotes coordinated development and management of water, land and related resources in order to maximise the resultant economic and social welfare in an equitable manner without compromising the sustainability of ecosystems."[3] IWRM has since then been guided by four practical elements:[4]

- a strong enabling environment – policies, laws and plans that put in place 'rules of the game' for water management that use IWRM
- a clear, robust and comprehensive institutional framework – for managing water using the basin as the basic unit for management while decentralising decision making
- effective use of available management and technical instruments – use of assessments, data and instruments for water allocation and pollution control to help decision makers make better choices
- sound investments in water infrastructure with adequate financing available – to deliver progress in meeting water demand and needs for flood management, drought resilience, irrigation, energy and ecosystem services.

Measures of progress in IWRM against these elements, assessed in 2012,[5] were strongest in relation to governance reforms, institutional improvements, use of water resource assessments and awareness of the need to accommodate multiple uses in water resource planning. Progress was assessed as weaker, especially in the poorest countries, in relation to overcoming constraints on financing for development of water resources, infrastructure development and coordination among sectors, and application of management instruments such as water allocation, pricing and demand management. National progress in implementation appears to many observers, as a consequence, to emphasise reforms to policies, laws and the institutional framework for water resource management. To some, therefore, IWRM has become over-reliant on top-down reforms, excessively technocratic and too heavily focused on an idealised, normative IWRM.[6]

Critics of IWRM perceive that IWRM comes up short in terms of delivering concrete outcomes. IWRM can appear to be entangled in technical and institutional intricacies rather than solving practical problems. With the adoption of the SDGs and recognition of the potential for IWRM to mobilise synergies among goals and to manage trade-offs in targets, the demands on IWRM are now much larger than they were in the past. IWRM in the 2030 Agenda must deliver more tangible progress and do so more quickly and at larger scale than it has achieved before.

3. Revitalising IWRM for the 2030 Agenda

Now is the time for action on water resources management to rapidly accelerate the transformations that were broadly envisaged in Mar del Plata and further elaborated in Dublin, Rio, Johannesburg and now the SDGs. An updated and forward looking agenda for IWRM is needed, building on what has been achieved already, but capable of delivering impacts that are counted in the billions of lives transformed. For IWRM to succeed at this scale, it must make change in water management in complex social and political contexts manageable. It must reconcile IWRM's principles and process with practical action and pragmatic problem solving.

IWRM should be guided by lessons on how to activate change within systems where – as in water resource management – there are multiple scales and multiple stakeholders and, unavoidably, uncertainties and unknowns. Elinor Ostrom demonstrated, in her Nobel-prize winning work, that adaptive governance of natural resources is more effective in achieving beneficial change where decentralised, self-organising institutions are rich in information and empowered to make decisions on collective action through dialogue and deliberation.[7] Aspirations for water resources management are hence better served where IWRM focuses on bringing together stakeholders and sector interests to collaborate and negotiate solutions to tangible, shared problems related to for example reconciling water resources and development options, water allocation, pollution and ecosystem restoration.[8] Such problem solving cannot, however, take place in a vacuum. To inform, influence and catalyse wider-scale change, it should be combined with reforms to water policies, the legal and regulatory framework and development of institutions at various levels. If IWRM is going to drive an effective change agenda on water in the SDGs, therefore, top-down and bottom-up must work in concert.

The four elements that have shaped IWRM since 2000 need to be expanded. They are not sufficient by themselves to lead to operationalisation of IWRM. Fifth and sixth elements are needed in addition to putting in place enabling policies laws and plans, setting up the institutional framework, application of management instruments and investment in infrastructure:
- strategies for catalysing and managing change at all levels – facilitation of social learning, supported by data, communications and empowerment to take action to solve problems and learn-by-doing, which work with and reinforce reform processes and investments
- operating mechanisms to bridge strategy setting and problem solving – platforms that bring sectors and stakeholders together to collaborate, coordinate, jointly innovate and negotiate.

Formalising these expectations reframes IWRM as an adaptive change strategy. The framework of IWRM then better reflects the reality of processes for implementing change in water resources management - as messy, noisy processes in which stakeholders are trialling solutions, negotiating choices and moving upwards and downwards between levels and sectors, carrying and brokering information, lessons, ideas and proposals. Progress emerges from highly dynamic, interactive exchange and (sometimes political) negotiation rather than from the cool and quiet of (usually technocratic) top-down deliberation. In the evocative analogy of Bruce Lankford and Nick Hepworth, IWRM functions then like a bazaar and not a cathedral.[9]

As an over-arching, adaptive strategy for change in water resource management, aligned to delivering results for the SDGs, IWRM needs to combine four basic strategies:
1. High-level policy and strategy setting to put in place, through dialogue and negotiation between key sectors and stakeholders, agreed, high-level priorities. These set the direction and the enabling environment at national or basin levels using reform processes familiar from IWRM.
2. Pragmatic problem solving that complements strategy setting, to meet stakeholder priorities at all levels, related for example to local water services, to water infrastructure or to ecosystem restoration. This delivers early wins, serves to empower stakeholders to take action and energises higher-level reform processes.
3. Operating mechanisms are needed that bridge strategy setting and problem solving. These create the means for sectors and stakeholders to come together to work dynamically on their high priority issues, guided by high-level strategy but focused on action.
4. Monitoring of progress and achievement of goals and targets. Data and information builds transparency, trust and accountability and helps stakeholders at all levels to align to a shared vision.

4. Operationalising IWRM

This 4-point strategy for IWRM shows that the key to operationalising IWRM is that there are effective operating mechanisms available. Fortunately, multiple operating mechanisms in water resources management have been tried and tested. These are usually spoken of and understood to be alternatives to IWRM or even competitors to IWRM. The enormity of the water resources challenge in the SDGs, however, calls for a new outlook. If IWRM is understood simply as the over-arching framework for water resource management in the SDG agenda, then the operating mechanisms sit underneath and are applied to transform policies and principles into pragmatic action for results across multiple SDGs. To those working in the water resources field, these operating mechanisms are familiar, and include:
- the water-energy-food nexus – for example to foster synergies with results for food security, access to energy, sustainable infrastructure and peaceful transboundary cooperation
- corporate water stewardship – integrating inclusive industrialisation, economic growth and decent work
- the ecosystem approach – for reducing poverty and inequalities, ensuring sustainable, climate-resilient communities, and protecting and restoring ecosystems
- integrated flood management – integrating sustainable cities and infrastructure, climate resilience and inclusive institutions
- source-to-sea management – for food and energy secure development, responsible consumption and production and conservation and sustainable use of coasts and the marine environment.

Choices among such operating mechanisms can then be made pragmatically under the over-arching framework of IWRM. What are the priority problems that motivate sectors and stakeholders to come together to manage water? Who are the stakeholders? Which operating mechanism will they be able to manage in terms of geography, sector skills or risks? What are the available entry points for integrating water management across users and sectors? What is the political room for manoeuvre? These are the questions that should guide operationalisation of IWRM in the SDG agenda if IWRM is going to fulfil its potential to integrate and leverage synergies from water management across multiple goals and enable negotiation of trade-offs. … scale

Key Messages: IWRM in the SDGs

The SDGs are a wake-up call for IWRM – The SDGs are not business as usual for IWRM. They are a wake-up call. IWRM must ultimately deliver results on the ground – in terms of water security across scales and sectors, change in water management and benefits for people and nature – at a scale that it has never achieved before and with higher speed. A new IWRM is needed in the 2030 Agenda – one that dynamic, adaptive, demand responsive and strongly impact-oriented but which builds on what has been achieved at local, national and transboundary levels.

Integrating water across the SDGs requires a re-think of IWRM – Implementing IWRM is a specific target in the SDGs, Target 5 under SDG 6. As a vehicle for integration, though, IWRM is also a means of achieving results across all goals and 59 out of all 169 targets. A singular focus on Target 6.5 is self-defeating. Target 6.5 challenges IWRM to integrate water across multiple sectors. To succeed, IWRM must change. It must build a common agenda with other sectors – using language that makes sense to them, addressing their demands and priorities, and using spatial organisation in which they can negotiate and manage.

The 2030 Agenda demands IWRM to be transformational – The SDGs call for a forward looking agenda for IWRM that will deliver large-scale change in the sustainability of water resources

development by 2030. Implementation of IWRM will be judged by results – whether the water security of billions of people improves fast enough, and whether water-related targets across the SDGs are met. IWRM hence needs to move onto a transformational footing in the 2030 Agenda, building on established IWRM policies adopted by many countries, but focused on implementation modalities that drive change.

IWRM in the 2030 Agenda is an over-arching adaptive strategy for change – The principles, pillars and processes that have shaped IWRM should be recast now as an over-arching framework for integrating water management. National IWRM policies will then provide an umbrella for multiple, diverse and adaptive implementation modalities.

Diverse and adaptive models for integrating water management are already in use – There are multiple models at work today for integrating management of water resources. Examples are the water-energy-food nexus, corporate water stewardship, the ecosystem approach, source-to-sea water management, integrated drought management, integrated flood management, conjunctive water management etc. These share with IWRM the aim of integrating across sectors and users, yet are widely held to be competitors of IWRM. Under the umbrella of the IWRM framework, they are applied by and in collaboration among sectors and users according to demand, priorities and the available political room for manoeuvre. Operationalising IWRM is then demand responsive, offers continuous improvement and is monitored based on outcomes delivered.

IWRM will not succeed as a single model applied only at basin scale – IWRM is sometimes mis-perceived to require that integration takes place at basin scale. IWRM, initially an encompassing framework, has come to be viewed by some stakeholders as a single, normative model for integration. Depending on the problems to be resolved, integration may best take place at other scales or using other means of spatial organisation (eg. cities, national) that are better suited to managing and negotiating trade-offs involving water.

IWRM is practical when it responds to demand from other sectors – The drivers for integration of water management emerge because water resources affect competing users in multiple sectors. Integration of water management is hence very practical when it responds to demand to address the priorities of other sectors (eg. energy, agriculture) or other policy priorities (urban development, coastal management). While IWRM is perceived as idealistic, examples of integration of water resource management are paradoxically widespread.

The policy agenda for water must proactively build water-wise policies across sectors – Integration is a much larger agenda than water. It cuts across sectors, environment and levels. A focus on effective water policies is therefore insufficient. National water policies provide a basic IWRM framework that enables dynamic and adaptive action on implementation. In addition, however, ultimately the objective of integrated water management requires that other sectors (e.g. agriculture, energy, cities) adopt water-wise policies.

IWRM must work with political realities – Integration in management of water resources engages water governance. Both cross levels and sectors, and together they combine technical and political decisions. IWRM is therefore inherently a political-technical process. Allocation of water among sectors and uses is hence only one type of decision addressed in IWRM. It also leads to re-allocation of political influence. Modalities for implementation applied to IWRM must be appropriate to – and responsive to – political realities.

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