

# Developing Finance Plans to Accelerate Progress on Water Resources Management

**A Country Guideline**

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# Developing Finance Plans to Accelerate Progress on Water Resources Management: A Country Guideline

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## How to Use This Document

**What is this document?** The main purpose of this document is to provide a clear methodology and illustrative examples on how to develop a finance plan for connected activities whose objective is to remove specific bottlenecks impeding national progress on Water Resources Management (WRM). It has been developed under the Global Water Leadership (GWL) programme. This document is to be used as a guide by the consultant leading the development of a finance plan. It has been developed specifically for the GWL programme but can be utilized by other actors.

**Why use this document?** Given the multiple challenges to improving WRM in GWL countries, it is important to bring focus and commitment to some of the underlying but resolvable constraints. A good understanding of the issue does nothing if the resources are not planned and available to implement the activities that will resolve the bottleneck. Hence, it is important to follow the step-by-step methodology outlined in this document for the GWL programme to meet its aims.

**When to use this document?** Within the GWL Programme, there has been an ongoing process of first identifying the bottlenecks to WRM implementation, followed by the creation of 2-4 working groups to address the major, resolvable bottlenecks. These working groups need to first understand the issue by conducting a root cause analysis which forms the basis of an action plan to remove the bottlenecks. It is important that at the root cause analysis stage, the members of the working group know the type of information the finance plan is expected to contain. To remove bottlenecks, the activities must be planned, the approximate costs of these activities must be known, and the finance must be available to implement the activities. Therefore, the cost considerations of this document should be incorporated into the working groups' reflections from an early stage of solution development so that they are financially realistic.

**Who will use this document?** Given the level of detail contained in this document on the methodology to be followed, it is important that it is read in its entirety by the Financing Consultant, the GWP team and anyone else involved in facilitating the working groups. The proposed approach will need to be adapted where necessary and its key points extracted to be communicated to the working group members and any other relevant stakeholders.

### How to use this Guideline:

1. Read the entire document.
  - a. Part 1 details the objectives and methods of the GWL programme.
  - b. Part 2 of the document outlines a sequential process for the user to follow when building their methodology for guiding working groups through the finance plan development process.
  - c. Part 3 provides further guidance on specific bottlenecks, structured using SWA's five sector building blocks.
  - d. Annex 1 provides additional global context.
  - e. Annex 2 provides additional detail about the bottlenecks identified in each country.
2. Terminology:
  - a. Template: an excerpt from the Tool to help illustrate the process.
  - b. Tables, Figures, Boxes: provide helpful information.
3. Review the **Excel Tool** thoroughly. Propose adaptations to suit your country-specific context.
4. Assess the best method for you to break the finance plan development process into modules that can be taught and worked through with the working groups.
  - a. *Sections 2.3, 2.4, 2.5, 2.6, and 2.7 provide "must-have" categories.*
5. Confirm with GWL Country Coordinators and working group chairs that this process aligns with current planning for working group meetings and reach agreement on any changes.

## Part 1. Context and purpose of this document

**The Global Water Leadership (GWL) programme** is funded by the UK Foreign, Commonwealth and Development Office (FCDO) and has two major components covering water, sanitation, and hygiene (WASH) and water resources management (WRM). The WRM component is being implemented by the Global Water Partnership (GWP) and covers seven countries: Central African Republic (CAR), Malawi, the Occupied Palestinian Territories, Rwanda, Uganda, Nepal, and the United Republic of Tanzania. The WASH component is implemented by UNICEF and covers the first five of these countries plus Madagascar, Bangladesh, and Chad.

**The objective of the GWL programme** is that vulnerable people in low- and middle-income countries use resilient, safely managed WASH services. Under Output 3 on National Systems and Financing, it is expected that GWP will support inclusive and participatory government-led, multi-stakeholder change processes to identify bottlenecks in WRM and develop response strategies to address them. Output 3 aims to drive progress in supporting the strengthening of national systems to deliver improved human development outcomes through quality services by focusing national efforts on identifying and resolving bottlenecks to improve sector performance, and by linking sector institutions with new sources of finance, including climate finance. The FCDO programme intentionally addresses both WASH and WRM to encourage linked-up policy planning to help establish more equitable, sustainable and climate resilient water services, and to build national models of how these - often separate - governance sectors can collaborate.

**One key programme activity to strengthen the enabling environment is multistakeholder identification and agreement upon the most urgent bottlenecks constraining WRM progress,** constitute working groups to identify response strategies to remove the 2-4 priority bottlenecks identified per country. Once the bottlenecks are agreed upon and the working groups formed, the groups undertake a 'root cause analysis' to analyse what solutions will best address the core systemic issues and not merely serve as a short-term band-aid. This means that each country will identify the major bottlenecks that are unique to that country, though there are expected to be some commonalities. Important to the success of this activity is the assessment of how the solutions will be implemented: the actions needed, by whom, the costs, and their financing. *Indeed, many sector initiatives fail or are delayed because the financing is not sufficiently considered from the start – or there is the unmet expectation that donors will cover the majority of the cost.*

**A critical success factor to the plan development and the actual removal of bottlenecks is stakeholder engagement.** It is important for water sector stakeholders to be familiar with the issues that must be considered when crafting a finance plan so that they understand its nuances and support its implementation. This means that the finance plan development process must be defined so that all key stakeholders are on board and are all pushing in the same direction, thus giving the highest chances of success to the identified activities. Meanwhile, engagement of the main stakeholders in the overall response strategy development process is critical for ensuring that governments feel ownership of the strategies, validate them and are ready to invest resources (human, financial, political) in activating them. To this end, the GWP WRM component has been planned to ensure that financing considerations are part-and-parcel of the response strategy development process.

**This guideline is crafted to directly address the bottlenecks identified in the seven GWP-led GWL countries and it proposes finance strategies that are tailored to the issues already identified in the stakeholder consultation process.** It is a tool to be utilized by each country to ensure overarching consistency across countries. The Guideline will be used as a roadmap by local consultants to guide the working groups through the finance plan development process.

**The finance plans to address the WRM sector bottlenecks will be a microcosm of a WRM sector finance strategy.** The root cause analysis will have identified what is causing the bottlenecks and inform the development of proposed solutions; the action plan will be a proposal for concrete actions, timelines, and responsibilities; and the finance plan will assess the costs of those actions and explore finance available from both existing and new sources. Given the bottlenecks already identified and listed in Table 1 in the next section, the majority of costs identified by the GWL programme will be for ‘soft’ items such as meetings, analysis, report writing and advocacy, with fewer costs for ‘hard’ items such as WRM infrastructure. These finance plans could then fit into larger sector finance strategies or national investment plans<sup>1</sup>.

**In addition to developing realistic finance plans, this participatory, consultant-led process has a critical “learning” or “capacity-building” objective.** Participants will gain familiarity with the 3Ts (tariffs, taxes, and transfers) as the ultimate sources of funding, and how repayable finance can help solve liquidity constraints by providing a mechanism to fund upfront costs. A categorisation of costs and finance sources is provided later in this guide.

**In developing this Guideline, the author has incorporated principles from the UNICEF publication on how to develop a WASH finance strategy, which has been developed with partners including the Sanitation and Water for All (SWA) partnership.** Like UNICEF, SWA is a partner in the GWL programme. Committed to establishing WASH strong systems and adequate sector capacity to achieve transformational change, SWA’s Building Blocks have been carefully developed over the past decade. The five key Building Blocks of a well-functioning WASH sector are: Sector Policy/Strategy; Institutional Arrangements; Planning Monitoring and Review; and Capacity Development. Bringing some of the principles of WASH systems thinking to WRM is intended to be a benefit of an integrated WASH-WRM programme.

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<sup>1</sup> Many of the GWL countries in Africa are simultaneously participating in the Continental Africa Water Investment Plan (AIP), which includes a National Investment Plan as one of its primary outputs in the process to addressing the national investment gap for water. These response strategies are expected to serve as small contributing components of the National Investment Plans while also strengthening local stakeholder comfort and familiarity with the finance plan development process.

## Part 2. Building finance plans to remove WRM bottlenecks

### 2.1 Introduction

As explained in Part 1, Output 3 of the GWL programme aims to identify and resolve specific bottlenecks that obstruct climate-resilient water management in each country. This process includes elaborating a finance plan for the activities that will address the bottlenecks. Working groups have been formed in each country around 2-4 of the priority bottlenecks<sup>2</sup>. It is therefore important to understand the bottlenecks themselves. A summary of the bottlenecks is provided below in Table 1, categorized using SWA's five sector building blocks<sup>3</sup>. Grouping the bottlenecks into categories such as the SWA building blocks enables structure which can bring clarity in the development of the finance plan and helps identify interconnections between different areas of the enabling environment.

**Table 1. Working Groups identified by countries to address the major WRM bottlenecks, arranged by SWA Building Block\***

Country	Working group titles
<b>1. Policy or Strategy</b>	
CAR	Weak application of policies and regulations
Malawi	Policy enforcement and regulation
Nepal	Policy execution and implementation
Uganda	Strengthening legal, policy (and institutional) framework towards inclusive and resilient WRM
<b>2. Institutional arrangements</b>	
Malawi	Weak coordination
Malawi	Lack of political will and water leadership
Tanzania	Overlapping legal and regulatory mandates impacting inter Sectoral coordination
Nepal	Institutional coordination
Uganda	Strengthening (legal, policy and) institutional framework towards inclusive and resilient WRM
<b>3. Finance</b>	
CAR	Low adequacy between the national budget allocated and the problems to be solved
Malawi	Low investment in climate resilient water Infrastructure and financing
Tanzania	Knowledge and capacity on project preparation
Uganda	Limited finance towards inclusive and resilient WRM
<b>4. Planning, monitoring &amp; review</b>	
CAR	Lack of an optimal system for monitoring water resources (water information system)
Nepal	Data and capacity
Rwanda	Limited knowledge/awareness by community and private sector on WRM issues & solutions
Palestine	Lack of proper planning at the national level
Palestine	Lack of KPIs and cascaded performance management for climate change impacts on water
Uganda	Limited planning of key mandated Institutions towards inclusive and resilient WRM
<b>5. Capacity</b>	
CAR	Lack and poor distribution of human resources
Rwanda	Limited technical capacity in water demand and supply management
Rwanda	Limited capacity to manage flood risks across different sectors
Uganda	Limited capacity development of key mandated Institutions towards inclusive & resilient WRM
<b>6. Other (bottlenecks that, as currently defined, do not fit within SWA Building Blocks)</b>	
Palestine	Social reluctance towards accepting the reuse of treated wastewater
Rwanda	High siltation of water bodies impacting on water development projects
Tanzania	Inefficient utilization of water resources in agricultural activities

\* These are indicative as the bottlenecks and working group focus areas are in a state of evolution. Annex 2 provides further details.

Key: MSF - Multi-Stakeholder Forum. KPI – key performance indicator.

<sup>2</sup> In some countries, there are separate processes for WASH, while in others, WRM and WASH are combined.

<sup>3</sup> <https://www.sanitationandwaterforall.org/about/our-work/priority-areas/building-blocks>

Part 2 proposes an approach to developing finance plans across all building blocks. It is the most important section to read first and to understand. Part 3 provides further guidance that is more specific to each building block.

## 2.2 General approach to developing finance plans across all building blocks

The development of the finance plan will necessarily be an iterative process, one which will be conducted separately for each working group. Box 1 provides an overview of the process which can be fine-tuned in each country. Complementarities between working groups must be considered, given there is likely to be some overlap in activities and/or finance sources. By working with all working groups, the Consultant will be in a prime position to identify those overlaps and complementary activities. Periodic meetings of all working groups to review the progress of other groups will also serve to highlight these opportunities.

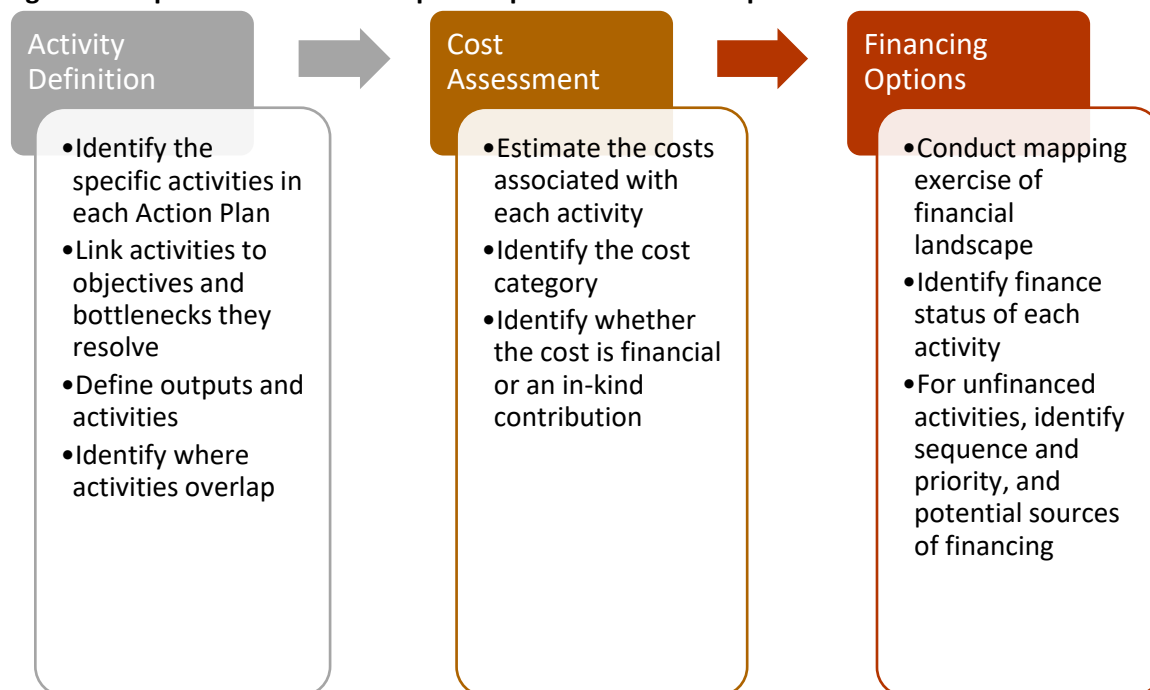
### Box 1. Generic process for developing the finance plan

1. Recruitment of financing consultant and on-boarding to familiarise with context and objectives. GWP will share working group documents and introduce the consultant to core stakeholders. Consultant will coordinate with working group leaders to confirm a timeline/process.
2. Initial engagement of financing consultant with working groups. The consultant should attend meetings where the action plan is being discussed. He/she will introduce the scope and needs of the finance plan, including what contribution is expected from the working group members and clearly setting the expectation that they will actively contribute to the process, not just review work conducted by the consultant between meetings.
3. Fuller development of the Action Plan with the working groups, where the activities are fully detailed and justified. Depending on the progress of the working group, an Action Plan might have already been formulated, in which case this needs to be revisited to assure there is sufficient clarity and level of detail.
4. Based on the Action Plan, the Finance Plan is developed, which consists of estimating the costs, making initial proposals for the financing sources (or options) for each activity and following up on these to make more concrete recommendations. Proposals should be made based on an understanding of the financial landscape in the country and opportunities that may exist. In conducting the work, assignments will be given to members, based on their knowledge, representation, and access to information.
5. A consolidated report is shared back with working group members and other relevant stakeholders for further review and feedback.
6. Discussion of the consultant's report in meetings of each working group, where comments are received, proposals given for changes and plans made for how to fill information gaps. Again, efforts to fill gaps will be assigned and undertaken by group members, not necessarily or exclusively the consultant.
7. Financing sources are further followed up to assess how realistic they are, confirm likelihood and identify the steps that would be needed to access the finance sources.
8. Submission of revised draft based on comments and further research. Virtual consultation and meetings held to obtain agreement of stakeholders.
9. Stakeholder validation of drafts before submission for formal approval.
10. Approval of draft finance plan(s) from relevant authorities. These authorities are likely to be represented in the working groups, but some countries will require a formal process.

The finance plan components, detailed in Figure 1, walk teams through the following points:

1. What specific activities are needed to implement the Action Plans?
2. What are the costs of the specific activities?
3. How will the Action Plans be financed?

**Figure 1. Sequential flow of the inputs required for a finance plan**



**An Excel file is provided which provides the full set of variables to collect.** The following sections (2.3 through 2.7) assist users in collecting the information to complete the Excel file.

### 2.3 Formulating activities within the Action Plan

The Action Plan component of the Response Strategies prepared by the working groups needs to be structured as a series of activities, as this structure provides the underlying information needed for a costing and, ultimately, a finance plan. Template 1 provides a format for how action plans should be specified. Alternative formulations are possible if they meet the information needs for the costing and the finance plan. Steps for completing the table are provided, including an example of a filled-out table.

**Template 1. Specification of action plans to provide the basis for the costing work and finance plan**

Working Group	Root cause being addressed	Sub-objective <sup>1</sup>	Output	Activity	Activity reference number	Responsibilities		If Joint Activity, provide activity reference number
						Lead	Contributor	

- Identify the major components or sub-objectives of each working group:
  - The working group needs to be identified, as the analysis might consolidate the inputs from different working groups in one large spreadsheet.
  - The root cause needs to be clearly stated. This will help groups keep the focus on activities that will address the root cause.



- For the root cause being addressed, there will be one or more sub-objectives. These can be formulated as a positive solution to implement based on the root cause analysis. There may be one or multiple sub-objectives per working group. Having more than one sub-objective enables clearer structuring of the working groups action plan, which might cover several major activities related to finance, policies, capacity-building, etc.
- Depending how broad and ambitious the working group has defined its work, there may be more than 1 sub-objective which needs to be specified. This is important to bring greater structure and clarity when the activities are listed. It also helps link the activity back to what bottleneck is being addressed, thus justifying the activity.
- What are the major outputs and activities per sub-objective? Table 2 identifies different types of outputs and activities.
- What are the responsibilities per activity (proposed lead agency, contributing agency(-ies))?
- Are there common activities across different sub-objectives or working groups? This avoids duplication of activity and double counting of cost. To enable cross-referencing, the template asks for a reference number to be provided for each activity, which can be provided in the 'Joint activity' column.

The level at which the outputs and activities are specified will depend on the nature of the sub-objective. Some sub-objectives and outputs can be switched, as the order in which they are identified depends on the main objective. For example, as in Table 2, there may be a sub-objective to strengthen political support, and to do that, the water policy may need to be revised or updated. However, it could be the other way round – the sub-objective might be to develop a revised policy, and to do that, political will may need to be strengthened.

Table 2 shows an example of sub-objectives for a working group addressing lack of political leadership.

**Table 2. Example list of types of output and activity for two illustrative sub-objectives**

Root Cause	Sub-objective	Outputs	Activities	Activity reference	Responsibilities		Joint activity
					Lead	Contributor	
Water not adequately covered in policies	Strengthen political support to mainstream WRM across all development policies	Revised policy	Consultation workshop	1.1	MoW	DPs	
			Preparation of policy	1.2	MoW	DPs	
			Approval by mandated body	1.3	MoW	-	
			Dissemination and application	1.4	MoW	DPs	1.7
Water not seen as economic driver	Demonstrate economic value of water to increase govt prioritization	Investment case for WRM	Prepare a report	1.5	DPs	MoW	
			Media campaign	1.6	MoC	MoW	1.4
			Advocacy among political leaders	1.7	MoF	SWA	

## 2.4 Estimating costs of the specified activities

Once the action plans have been mapped in Template 1, the first step in developing a finance plan is to clearly outline the costs that must be paid for. This is called 'costing' in economics. To conduct a costing of the identified activities, the following information are needed, shown in Template 2. Table 3 provides several key categories and definitions. Steps for completing the table are provided below.

### Template 2. Information required for estimating cost

Activity	Cost type <sup>1</sup>	Estimated cost	Cost range (if uncertain)		Timing	Frequency
			Lower range	Upper range		

<sup>1</sup> Financial cost or in-kind cost

The following information is needed to complete Template 2:

1. Specify whether the cost is a financial cost or an in-kind cost.
2. Estimate the costs. Costs need to be estimated either in financial terms or, when an in-kind contribution or if the financial values are not known, in physical units. As there may be several cost ingredients for a single activity (see column 1 of Table 3), it will be necessary to keep a clear record of costs considered/calculated and make the calculations in a separate document or, preferably, in another tab of the Excel file. The lump sum cost will then be carried over and recorded in the spreadsheet. When putting the cost ingredients together in the separate file or tab, the unit in which the cost ingredient has been measured must be recorded to ensure transparency in the calculations (see column 2 of Table 3).

**Table 3. Cost ingredients and their units – typical examples**

Type of resource	Units
<b>Human resources</b>	
Salaries	Monthly or annual
Consultant fees	Per deliverable or per contract
Trainer fees	Per training
Other HR fees (e.g. translator, assistant, driver)	
In-kind contribution (specify who and/or type/level of skill)	Hours, days or weeks of time
<b>Other resources</b>	
Conference services (room hire)	Per hour, per day or per event
Per diem (includes accommodation)	Per day or per event
Travel (can include driver)	Per kilometre, per journey, per return journey
Meals (when not included in accommodation or conference services)	Per meal, per day or per event
In-kind contribution: office or meeting space	Number of hours or days of room time for how many people
In-kind contribution: vehicle (specify number of people per vehicle and journey type)	No. of kilometres, number of journeys or number of return journeys
In-kind contribution: other	
<b>Activities which may involve a lump sum cost for HR and non-HR costs</b>	
Study conducted (specify size and type)	Per study
Workshop (specify location, number of days and attendees)	Per workshop

3. Lower and upper ranges on cost – these should be included if the best cost estimate is very uncertain. It helps signal when an activity needs further formulation.
4. Timings – when does the cost need to be paid for, by month and year. Knowing this enables a specific ‘ask’ for potential financiers of the activity. Four response categories are given: short-term (up to one year), medium-term (1-3 years), and long-term (3 years and longer).
5. Frequency – how often is the cost incurred? – Is it a one-time cost or is it recurring? If it is a recurring cost, what is the interval (once a month/year, beginning and end of activity, etc.)?

It is important to capture both financial and in-kind costs. Financial costs need to be paid for, often in addition to current budgets – as a result they need to be explicit and well detailed. In-kind costs, on the other hand, are often overlooked, although some funding proposals require specification of in-kind contributions. Therefore, efforts should be made to try and quantify the time needed of different personnel for implementing some of the activities identified in the working groups. These are important to include because without these inputs, the activity may not be completed successfully<sup>4</sup>.

## 2.5 Identifying financing sources for implementing the Action Plans

For each financial cost, the details outlined in Template 3 are needed as they are core to the eventual finance plan that is prepared. The steps to complete the table are included below it.

**Template 3. Financing sources and mechanisms for identified activities and related costs**

Activity	Estimated cost or input	Potential source(s) of funding	Level of certainty (H/M/U)	Receiving organization	Pass-through organization	Importance level (H/M/L)	Action to secure funds

Initially, it will be important to identify the full range of finance sources likely to be drawn on in the Action Plan. This involves a mapping of different sector stakeholders and financiers and their existing contributions to the sector in addition to available government programmes that may be utilized. The purpose is to identify the main water sector financiers at present, especially for systems strengthening activities, since these have been highlighted as bottlenecks by the working groups but which traditionally attract less funding. The mapping should be led by the financing consultant with some initial preparation, followed by an exercise conducted within the working group to receive broader inputs. Table 5 may help stimulate working groups to think about sources.

**The information compiled from working group members through the mapping exercise above will enable the group to complete Template 3 with a list of potential sources of funding, estimated financial values, and a specified level of certainty (high certainty, medium certainty and uncertain). These then need to be followed up to assess how realistic they are, with unrealistic opportunities moved to the bottom of the Table.**

<sup>4</sup> The true value of in-kind resources can indeed be higher than the going rates of that resource. For example, a major bottleneck in the ministry may be the lack of staff time to develop some terms of reference for a key study, and the lack of budget and contracting modality makes it difficult to sub-contract the work. Hence, the salary cost of the civil servant may be quite low, but the bottleneck created has a high opportunity cost. Therefore, the true full cost of mobilizing a resource is needed in the face of capacity constraints, and this may involve hiring a more expensive resource from outside the organization.

This exercise will almost certainly reveal finance gaps which will need to be filled from other sources. **The consultant will need to guide working group members through a process of thinking about these sources that stretches them and gets them thinking out-of-the-box** to identify new unexplored sources of finance and contemplate what mechanisms must be applied to tap these sources or how the costs of activities can be reduced while still being impactful. This will need some brainstorming and exchange of ideas, leading to conclusions on which are the most likely sources of finance to fill the gaps. These will need to be followed up on by the most appropriate person (working group member or consultant).

In the likely case that there remain finance gaps after exploring all realistic options, these gaps – and the implications of not conducting specific activities – will need to be communicated to the responsible ministry(-ies) and to the Global Water Partnership focal point to elevate it within their organizations.

To fill in Template 3, the following information is needed:

1. Will the activity need one or multiple sources of funding?
  - a. Some activities may be too costly for one mechanism to cover all the costs, while some donors may require co-financing by the government or another party.
  - b. Some activities may be implemented by more than one ministry or department, hence those contributing, whether financial or in-kind, will need to be listed.
  - c. If the activity can be funded from a pooled fund, then the donors to that fund should be listed.
2. What is the current level of certainty of the cost being financed?
  - a. Is it contained within current plans and budgets? (high certainty)
  - b. Will it likely be added to future plans or budgets? Has a financier already indicated that they may be interested to fund the activity? (medium certainty)
  - c. Are new resource mobilization efforts needed? (uncertain<sup>5</sup>)
3. Funding modality:
  - a. The receiving organization needs to be identified here.
  - b. If there is a pass-through organisation, such as for the recipient of global funds, it should also be stated.
4. Importance of funding for the activity to happen – this allows activities to be filtered to organise them according to their importance to resolving the bottleneck.
5. What is needed to secure the funds? This needs a summary of a) who needs to be approached; and b) what document or evidence is needed.

For in-kind contributions, similar information needs to be entered – who will provide the resource, the certainty level, the importance and what is needed to secure the contribution.

Table 4 provides examples of costs and financing sources for preparing or implementing policies better, illustrated using the objective of building political will. It should be emphasized again how important it is to clearly identify the activities to be able to assess costs: who, what, where, when, and how?

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<sup>5</sup> It is not phrased 'low certainty' as there may be a reasonable chance of it being funded and it just needs to be explored.

**Table 4. Examples of costs and financing source for building political will**

Outputs	Activities	Costs	Financing
Analyse the reasons why the water policy has not been implemented	Hold workshop with 30-40 stakeholders from different constituencies	Time of stakeholders	Agencies (allocate staff time)
		Consultant time	Ministry or Development Partner
		Workshop costs	Ministry or Development Partner
	Share workshop minutes and conclusions with relevant senior ministry officials and other decision makers	Consultant time	Ministry or Development Partner
		Time of ministry staff and decision makers	Ministry (allocate staff time)
	Hold meeting between ministry heads of department, director generals and selected experts	Time of ministry staff and decision makers	Ministry (allocate staff time)
Propose solutions based on reasons identified	Roadmap drafted by consultant for implementing policy with support of core group	Staff time	Ministry and Development Partner (allocate staff time)
		Consultant time	Ministry or Development Partner
	Agree actions with relevant stakeholders (meeting, online request)	Time of stakeholders	Agencies (allocate staff time)
		Time of ministry staff and decision makers	Ministry (allocate staff time)
	Assess costs and obtain financing to implement policy	Consultant time	Ministry or Development Partner
		Time of stakeholders	Agencies (allocate staff time)
		Time of ministry staff and decision makers	Ministry (allocate staff time)

Table 5 provides a comprehensive list of financing options, with a clear distinction between different types of public funds and private financing. An assessment is made of whether each finance source typically finances hardware, software or programmatic support, or a combination of activities. *These will need to be assessed locally and adjustments made to the table.*

**Table 5. Categorization of major sources of finance and focus of support**

Category	Agency	Focus of support			Notes
		Hardware	O&M	Software	
<b>Water Funders and Financiers</b>					
Public: National Government	Ministry of Finance	✓			Finances line ministries
	Planning Ministry (if not MOF)	✓			Finances line ministries
	Infrastructure Ministry	✓			Focus on hardware
	Ministry of Rural Development	✓	✓	✓	
	Ministry of Urban Development	✓	✓	✓	
	Ministry of Health	✓	✓	✓	WASH in health facilities
	Ministry of Education	✓	✓	✓	WASH in schools
	Ministry of Local Government	✓	✓	✓	
	Ministry of Tourism	✓		✓	Focus specific locations
	Water Funds (Pooled)	✓		✓	
	Green Bonds	✓		✓	Repayment required
Public: Sub-National Government	State or Regional Government	✓	✓	✓	
	Municipal Grant Funding	✓	✓	✓	
	Municipal Bonds	✓			Repayment required

Category	Agency	Focus of support			Notes
		Hardware	O&M	Software	
	District Funds	✓	✓		
	Community Funds	✓	✓		
Public: ODA	Multilateral development banks	✓		✓	Concessional finance
	United Nations Agencies	✓		✓	
	Bilateral Agencies (development)	✓		✓	
	Bilateral Agencies (foreign/political)	✓		✓	
	Climate Funds: Mitigation	✓		✓	
	Climate Funds: Adaptation	✓	✓	✓	
	Green Funds / Blue Funds	✓		✓	
Philanthropic	International NGOs	✓	✓	✓	
	National NGOs	✓	✓	✓	
	Multi-National Company Foundations	✓		✓	
	National Company Foundations	✓		✓	
Water Resource Service Providers	Water and Wastewater Utilities	✓	✓		
	Agricultural Water Providers	✓	✓		
	Hydropower Providers	✓	✓		
	Small scale Providers	✓	✓		
Private: Investment	National Banks	✓			Repayment required
	Private Banks	✓			Repayment required
	Micro-Finance Institutions	✓			Repayment required
	Private equity funds	✓			Repayment required
	Insurance Companies	✓			Repayment required
	Asset Managers	✓			Repayment required
	Pension Funds	✓			Repayment required
	Sovereign Wealth Funds	✓			Repayment required
	Specialised Water Funds				Repayment required
	Impact Investors	✓		✓	Repayment required
	Venture Capitalists	✓			Repayment required
	Angel Investors	✓		✓	Repayment required
Individual investors				Repayment required	
Crowd sourcing (small-scale)	✓				
Private: Polluter Pays	Property Rights	✓			
	Marketable Permits (e.g. environmental offset markets)	✓			
	Payment for Watershed Services (PWS)	✓			
<b>Water Users</b>					
Households	Water and Wastewater Tariffs	✓	✓		
	Energy Tariffs	✓			
	Property or Other Local Tax	✓	✓		
	Market Goods	✓			
Agricultural Sector	Water and Wastewater Tariffs	✓	✓		
	Land Tax	✓	✓	✓	
Industrial Sector	Water and Wastewater Tariffs	✓	✓		
	Business Tax	✓	✓	✓	
Institutions / Workplaces	Water and Wastewater Tariffs	✓	✓		
	Property Tax	✓	✓	✓	

OECD (2022) provides current values of institutional investment domiciled in OECD and G20 countries (as on February 2020, at US\$ 17 million

Not all types of public funds are fully grant funds, as some may involve loan repayment. Also, these funding streams can be utilized in what has been named ‘blended finance’ which is an approach that strategically uses development finance to attract additional commercial finance. Development finance (e.g., from multilateral or bilateral donors) acts as a risk-reducing mechanism to increase commercial lenders’ confidence. Various instruments are used under blended finance<sup>6,7</sup>.

To mobilize some of the newer or more innovative sources of financing, the perception of the water sector as ‘high risk, low return’ by potential water investors needs to be addressed. This will require dedicated focus on strengthening the enabling environment for water investment covered in the five sector building blocks – many of which are, coincidentally, the priority bottlenecks identified by the working groups!

Through dialogue with financing stakeholders, governments need to identify the required adjustments to policies and institutions that could help to mobilize these types of investment. *These conversations may provide additional support or encouragement for governments to ensure that the response strategies are given priority for activation.*

## 2.6 How will information be gathered? (Using the Excel tool)

When assembled horizontally into the Excel tool, there are a total of 21 columns. Therefore, completing the template table will require a significant amount of information. However, this level of detail and disaggregation is needed for a finance plan to tabulate useful outputs and to enable decisions to be made easily without a lot of further questions being asked. And once the information has been entered, columns can be filtered to give different types of summary outputs for understanding and decision-making purposes. For example, having a column on ‘Financial or in-kind’ will allow the user to filter out certain types of cost.

At the Inception phase of the finance plan (Deliverable 1 for the Consultant), there is an opportunity to review the spreadsheet requirements and determine whether all the information can be collected or whether it would be needed as an output of the working groups. Therefore, proposals can be made for adjusting or simplifying the spreadsheet in consultation and agreement with the Working Group Chairs and the Global Water Partnership GWL focal point.

In addition, having standard information entered for some columns will make it easier to filter or isolate different types of costs, which can be helpful to develop strategies. For example, having three categories for ‘Level of certainty’ will enable simple summaries of level of financing gap. The default lists in the ‘List’ worksheet can be edited to be more relevant for each country.

Much of the costing and financing information will need to be filled in by the financing consultant, informed by various meetings and bilateral conversations with those most closely involved in the activity implementation and financing. Spreadsheets can be shared so that partners can add information – however, the consultant will need to play a gate-keeping role and have an oversight on what changes are being made and by whom. The Consultant is expected to review this guideline and the tool at the very beginning of their consultancy in order to clarify any questions as they craft their Inception Report and develop their schedule.

*In Part 3, further details are given on how to prepare the finance plans for each Sector Building Block.*

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<sup>6</sup> Dominique, K., and Bartz-Zuccala, W. Blended Finance for Water Investment. 2018. OECD. <https://www.oecd.org/water/Background-Paper-3rd-Roundtable-Financing-Water-Blended-Finance-for-water-related-investments.pdf>

<sup>7</sup> See materials at the World Bank Blended Finance Facility site <https://ida.worldbank.org/en/financing/ida-private-sector-window/blended-finance-facility-bff>

### Part 3. Advanced assessments of the building blocks

This section provides further details and examples to help develop the finance plans for different building blocks, which will vary by country. **The building block categorization has been selected because the five building blocks have been carefully, collaboratively identified as representing the primary types of components necessary for delivering sustainable water services.** While the specific bottlenecks may differ across countries, categorizing them into the relevant building block(s) helps identify corresponding types of strategies that have been used for responding to similar types of challenges in the past. The following outline is followed for each building block:

1. The nature and role of the building block: why the building block is needed for finance to work, and why finance is needed to make the building block work.
2. Example of WRM bottlenecks experienced in GWL programme countries.
3. Typical actions, activities and stakeholders engaged to unblock bottlenecks.

#### 3.1 Building Block 1 - Strengthened policies and strategies

***GWL Countries that have identified Building Block 1 bottlenecks: CAR, Malawi, Nepal, Uganda***

##### **FOR FINANCE EXPERTS: Why water policies are needed for finance to work**

As noted by OECD (2022), it is widely recognised that the water sector in many countries lacks robust public policies and institutional frameworks to function effectively. Public ownership of water is important given the common pool nature of water resources and the public good dimensions of water policies and services. Policy frameworks have a profound influence on the water sector's attractiveness to investors, its ability to recover costs and secure sustainable financing, and its ability ensure that individual investments deliver their intended benefits. Furthermore, robust policy frameworks allow governments and investors to situate individual investments within a broader policy context, and to develop new projects and markets not as isolated, standalone investments conducted for their own sake, but instead as part of a holistic approach to achieving water policy aims (OECD, 2020<sup>8</sup>).

Policy frameworks are particularly critical in a sector such as water given the fact that water-related investments have characteristics that do not align with conventional approaches to public and private financing, including long payback periods and complex risk-return profiles and project attributes (OECD, 2022). In addition, the fact that water is a dynamic resource which is managed across jurisdictional boundaries and is essential for life makes it even more complicated for an investor: it requires sustainable management over decades-long timeframes (as opposed to more standard shorter investments), raises questions over ownership and property rights, and leads to strong interdependencies with other policy domains (e.g., agriculture, energy, urban planning) (OECD, 2016<sup>9</sup>). These features contribute to investors' perception of water-related investments as more risky and generally less attractive than those in other sectors (Streeter, 2017<sup>10</sup>).

These require various sources of public funding, but several economic instruments exist to help raise funding for these functions. The following are common policy-related instruments:

- *National Vision document* – it is important that the role and importance of water is well recognized within the National Vision and Development Plan.
- *Mechanisms to facilitate policy coherence across domains/sectors* – these support the policy implementation, strengthen coordination, and enable inter-sectoral collaboration. They may

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<sup>8</sup> OECD (2020), Financing Water Supply, Sanitation and Flood Protection: Challenges in EU Member States and Policy Options, OECD Studies on Water, OECD Publishing, Paris.

<sup>9</sup> OECD (2016), OECD Council Recommendation on Water.

<https://www.oecd.org/environment/resources/Council-Recommendation-on-water.pdf>

<sup>10</sup> Streeter (2017). Financing Water and Sewer Infrastructure in the Developing World. Taylor & Francis.



include climate policy mainstreaming across sectors, coherence of central government processes (e.g., budgeting) or intra- and inter-governmental water policy co-ordination mechanisms (OECD, 2022).

- *Strategies* – these build on the policy and indicate how the policy will be implemented.
- *Regulations* – these ensure the policies have legal basis. For example, laws and regulations are needed for managing water resources allocation.
- *Economic instruments* – these provide efficient ways of implementing the policies. Examples include charges or taxes for water abstraction or pollution (e.g., the Polluter Pays Principle), markets to trade for abstraction entitlements and pollution rights, payments for ecosystem services or insurance for water related risks (drought, flood protection) (OECD, 2022).
- *Information-based policy instruments* – these include data collection, monitoring and early warning systems, service quality and efficiency, asset status, and communication strategies and campaigns (e.g., for households, farmers).

### **FOR WATER EXPERTS: Why finance is needed for water policies to work**

Policies in and of themselves are ineffective if they are not implemented. Indeed, unfortunately many water policies remain largely unimplemented, and inadequate funds are often one of the main reasons that good policies fail to be implemented. Budget allocations, while not the only financial mechanism available, are an important foundation to ensuring a water policy will be effective. If there is no formal budget provision, this indicates that the government is not willing to allocate resources to addressing the issue, which means that there is low likelihood of institutional support. As a first step towards implementation, a water policy needs justification through other policy-related instruments, either as a foundation (e.g., water provisions within the National Vision document) or to build further detail on the policy itself (e.g., Water Strategy).

### **Examples of policy bottlenecks experienced in GWL countries**

Table 6 provides indicative policy-related bottlenecks being recorded in national workshops in each country. Bottlenecks have been expressed in various ways, from one word to a sentence, and many of them link with other building blocks (so they are not purely policy issues). This interconnectedness of the building blocks makes it hard to isolate them and assess them only from the perspective of one building block. For example, weak enforcement of policies may be an institutional, regulatory, monitoring or financing issue.

**Table 6. Bottlenecks related to Policy working groups\***

<b>Country</b>	<b>Working group</b>	<b>Bottlenecks (indicative)</b>
<b>CAR</b>	Weak application of the policies and regulations	<ul style="list-style-type: none"> <li>• Impunity of some officials charged with application of laws</li> <li>• Corruption</li> <li>• Overlapping competencies</li> <li>• Inconsistency of certain laws</li> <li>• Lack of implementing legislation for certain laws</li> <li>• Lack of enforcement mechanism</li> <li>• Fragility of the country following multiple crises</li> </ul>
<b>Malawi</b>	Policy enforcement and regulation	<ul style="list-style-type: none"> <li>• Conflicts arising from weak coordination of programmes and activities</li> <li>• Weak policy enforcement and regulatory mechanisms</li> <li>• Water sector not given prominence in the Malawi Vision 2063 (neither among MW2063 pillars nor MW2063 enablers)</li> </ul>
<b>Nepal</b>	Policy execution and implementation	<ul style="list-style-type: none"> <li>• Frequent changes in the government means policies are not implemented</li> <li>• Practice of reformulating policies and/or amending policies when government changes (political &amp; bureaucratic levels)</li> <li>• Revised policies not implemented.</li> </ul>

Country	Working group	Bottlenecks (indicative)
Uganda	Strengthening legal and policy framework	<ul style="list-style-type: none"> <li>• Weak enforcement</li> <li>• Ownership of the eco-system on individual basis.</li> </ul>

\* These are indicative as the bottlenecks and working group focus areas are in a state of evolution.

Note: In Uganda and CAR these bottlenecks were extracted from a list that related to all the working groups.

### Typical actions and activities to unblock underlying root causes of policy bottlenecks

Policy bottlenecks can be separated into two main issues. The answers to the questions posed below will determine where the problem lies, and what actions are needed:

1. Problems with the policy itself. For example:
  - Is there a policy?
  - Is the policy recent enough to be relevant?
  - Is the policy comprehensive, or does it have major gaps?
  - Does the policy clearly spell out who is accountable for its implementation?
  - Does the policy include provisions for how its enforcement will be paid for?
2. Problems with the policy not being implemented. Identify the reason:
  - Is it related to the way the policy is framed, thus leading to blockages (see bullets 3 and 4 under point 1)?
  - Lack of political will
  - Lack of the correct institutional set-up, weak or no coordination mechanism and lack of accountability (making corruption easier)
  - Weak enabling environment for passing legislation
  - Weak enforcement of existing legislation
  - Weak human resource capacity
  - Lack of financing

Whichever is the case, it is critical to understand the reasons for non-existence, weak content or non-implementation of policies and thereby develop response measures for policy implementation.

***In some cases, it is necessary to refer to other building blocks where the real cause of the bottleneck sits.*** For example, bottlenecks in policies and strategies often occur due to institutional issues (building block 2), lack of financing (building block 3) or lack of human resources capacity (building block 5).

Table 7 provides examples of solutions and actions. Care will be needed in specifying the Outputs and Activities at the right level of detail. In addition, it will be necessary to identify the responsible stakeholders for leading on the sub-objective, and those responsible stakeholders for leading on the Outputs.

When analysing the actions needed (column 3 in Table 10), it will be important to assess how it will be implemented. For example, what evidence is needed? Which individuals will be targeted? How will they be targeted? These are needed to be able to understand the costs involved and potential financing sources. This is where the distinction between Activity and Sub-activity is important.

The [GWP Toolbox](#) provides further resources under 'A. Enabling Environment':

- Policies
- Legal frameworks
- Planning for IWRM implementation

**Table 7. Example solutions, activities and sub-activities related to policy bottlenecks**

Bottleneck / issue	Solution (sub-objective)	Indicative Outputs	Indicative Activities
No policy or Outdated policy or Policy is poorly defined or has gaps	Prepare policy or Update policy	Build political will on need for policy or policy update	Initial meeting of director generals Prepare a written justification Meeting with Minister(s) Release internal memo
		Prepare the groundwork	Draft policy objectives and outline
	or Revise policy with Addendums	Hold consultations and draft new or updated policy	Recruit consultant Hold initial consultative meeting Draft policy and circulate Hold follow-up meeting
		Finalize and approve policy	Revised draft Hold further consultative meetings Final draft Submit to Minister Finalise policy
	Launch policy	Plan release activities Materials for media release Launch event Follow-up events	
Policy is poorly (or not) implemented or enforced	Build political will and re-launch policy	Analyse the reasons why the water policy has not been implemented	Hold workshop with stakeholders Share workshop minutes and conclusions with decision makers Hold meeting with director generals
		Propose solutions based on reasons identified	Draft roadmap for implementing policy Agree actions with relevant stakeholders Assess costs and obtain financing to implement policy

### 3.2 Building Block 2 – Strengthened institutions

***GWL Countries that have identified Building Block 2 bottlenecks: Malawi, Nepal, Palestine, Tanzania, Uganda***

#### **FOR FINANCE EXPERTS: Why strengthened institutions are needed for finance to work**

Institutions are the very basis of national development efforts, hence if institutions are weak, there will be limited ability to define and implement policies. It is only when institutions are functioning well that funders and financiers have confidence that their money will be used effectively for the intended purposes. *This is true both for public funds provided by the Ministry of Finance to line ministries responsible for water as well as for private funds originating from a bank, an investor, or a service provider.* Due to regularly changing ministerial structures and responsibilities, combined with the many overlapping sub-sectors of water (see Box 2 in Annex 1), there is often a lack of clarity on who is responsible for what. In its governance framework, UNICEF includes under the ‘Institutional building block’: institutional mandates, institutional capacity, regulation, accountability, coordination, and service delivery arrangements. These are all critical pillars, and if just one is weak or missing, financiers may not have the confidence to invest in water. As OECD (2022) states, an assessment of the structure and operation of the institutions that design, implement and evaluate policies and activities in the water sector is vital for ensuring an accountable and efficiently functioning investment environment.

## FOR WATER EXPERTS: Why finance is needed for institutions to work

Given the centrality of money to the economy and the functioning of institutions, a lack of resources for fulfilling the functions listed above will mean that institutions remain weak. Indeed, in many low-income countries and even some middle-income countries, the capacity of ministries to deliver on their mandate is weak – posts are not filled, the skills are lacking, incentives are weak (e.g., low salaries) and there is weak inter-sectoral or inter-ministerial coordination. In addition, the regulator – if one exists – often does not have the resources to fulfil its function. This is especially critical with respect to the operation of private providers, who may not have clear laws and legislation giving them confidence about the continuity of their business, hence putting the brakes on further investment opportunities.

## Examples of institutional bottlenecks experienced in GWL countries

Most GWL countries included weaknesses in institutional arrangements in their list of priority bottlenecks (see Table 8). Many of these are linked with political leadership, policy enforcement, capacity, and planning. One issue that is often raised is how WRM is diluted across multiple ministries. If there is no single Water Resources ministry, the water mandate can often be shifted between ministries or split up into different sub-sectors across ministries, leading to fragmentation. In Tanzania, the ministry responsible for the water mandate changed 14 times since 1961<sup>11</sup>, and a similar history can be detailed in Malawi, where the Ministry of Water and Sanitation was formed in 2022 after transferring across different ministries (*see more discussion about this in the Malawi section of Annex 2*). In Nepal, responsibility for WASH was separated from WRM when the Ministry of Water Supply was created in 2014.

**Table 8. Bottlenecks related to Institutional Arrangements working groups\***

Country	Working group	Bottlenecks (indicative)
Malawi	Coordination, policy enforcement and regulation and Political will and water leadership	<ul style="list-style-type: none"><li>• Weak coordination of programmes and activities</li><li>• Weak policy enforcement</li><li>• Weak regulatory mechanisms</li><li>• Unstable Ministry and weak leadership</li><li>• Changing status of water within ministries</li></ul>
Nepal	Institutional coordination	<ul style="list-style-type: none"><li>• Multiple departments, centres and commissions for water resources management and WASH services</li><li>• Duplications in roles and responsibilities for WRM</li></ul>
Palestine	Institutional planning	<ul style="list-style-type: none"><li>• Weak institutionalization of national responses to climate change through IWRM</li><li>• Weak strategic action directions</li><li>• Weak KPIs to measure performance</li></ul>
Tanzania	Water security and resilient growth	<ul style="list-style-type: none"><li>• Low representation of key political and private sector participants in National Sectoral MSF</li></ul>
Uganda	Strengthening legal, policy and institutional framework	<ul style="list-style-type: none"><li>• Poor coordination among NGOs</li><li>• Ownership of the eco-system on individual basis</li><li>• Inadequate expertise to propel IWRM activities</li><li>• Absence of an enterprise on IWRM where they can show case sustainable IWRM</li></ul>

\* These are indicative as the bottlenecks and working group focus areas are in a state of evolution.

<sup>11</sup> [https://www.researchgate.net/figure/Ministries-with-water-mandates-in-Tanzania-since-1961\\_tbl1\\_310769216](https://www.researchgate.net/figure/Ministries-with-water-mandates-in-Tanzania-since-1961_tbl1_310769216)

### Typical actions and activities to unblock institutional bottlenecks

Table 9 gives some illustrative examples of outputs and activities for resolving some of the institutional bottlenecks identified. Many of the bottlenecks require consultations with a range of stakeholders, from national institutions and communities to development partners, to senior ministry leaders. Also, some studies will be needed to assess status and make proposals for improvement.

**Table 9. Example solutions, activities and sub-activities related to institutional bottlenecks**

Bottleneck / issue	Solution (sub-objective)	Indicative Outputs	Indicative Activities
Lack of clarity on water accountability	Clarify institutional mandates	Initial consultation among stakeholders	Hold meetings with senior staff and ministry leaders
		Drafting updated mandates	Drafting
		Consultation of draft	Consultation
Low status of water and regularly changing mandates and responsibilities	Elevate status of water and keep it on the agenda to avoid de-prioritization	Consultation among stakeholders	Hold meetings with senior staff and ministry leaders
		Draft document outlining key role of water in all development policies	Evidence collection and drafting
			Consult draft with senior staff and ministry leaders
Poor coordination	Develop and strengthen coordination mechanisms	Understand coordination needs and results from poor coordination	Conduct analysis of status
		Develop proposal for enhanced coordination mechanism	Consult with stakeholders on the assessment
			Draft proposal with list of stakeholders to be included
		Implement proposal	Consult proposal with agreed preferred option
Weak participation of key stakeholders	Strengthen participation mechanisms for new and existing stakeholders	Conduct stakeholder mapping	Hold coordination meetings
		Invite new stakeholders to platform	Initiate and consult study
		Hold inclusive meetings	Send invitation
		Ensure inputs are followed up	Hold minuted in-person meetings
Weak regulation	Set up independent regulator or better resource already-existing regulator	Examine existing laws and legislation as well as legal issues related to regulation in country, and water regulator in particular	List undertakings from meetings
			Assign responsibility for follow-up

The [GWP Toolbox](#) provides further resources under ‘B. Institutions and Participation’:

- Regulation and compliance
- Water services
- Coordination
- Capacity development (also relevant for Capacity Building in 3.5)
- Addressing gender inclusion (also relevant for Planning in 3.4)

### 3.3 Building Block 3 – Strengthened financing

**GWL Countries that have identified Building Block 3 bottlenecks: CAR, Malawi, Rwanda, Tanzania, Uganda**

#### The role and importance of finance in water sector progress

Lack of finance is unarguably one of the most quoted impediments to achieving SDG 6 globally. Inspired by the vision of the Sustainable Development Agenda, many countries have set targets for universal access to WASH as well as ambitious targets around WRM. In lower-middle income countries, spending on SDG 6 would need to multiply by several times to meet these targets. In addition, many bottlenecks exist in how finance is currently allocated, absorbed, and spent in these countries. *Therefore, it is vital that existing resources are spent more effectively and efficiently, not only to make better use of those resources, but also to give confidence to funders and investors that additional spending will have impact.* Table 16 in the Annex reviews the types of risks that investors weigh when making water investments. Several finance bottlenecks originate in other building blocks (covered above and below) while some are more directly finance issues (see Table 14).

#### Examples of finance bottlenecks experienced in GWL countries

It is important to explore avenues for making existing finance more impactful and in identifying additional sources of finance for both systems strengthening and actual programming – for infrastructure investments as well as for software (such as behaviour change). Table 10 shows that major improvements in the enabling environment can benefit the WRM sector, such as addressing corruption, lack of legislation, inadequate planning, and poor understanding of the benefits of WRM to the broader economy. In several countries, the lack of finance for developing and then operating infrastructure is highlighted. The table also points to the underlying economic context, such as poverty, low tax base and lack of national stability, which affects funds that can be allocated for WRM.

**Table 10. Bottlenecks related to finance working groups\***

Country	Working group	Bottlenecks (indicative)
CAR	Low allocation of national budget for the problems to be solved	<ul style="list-style-type: none"> <li>Corruption</li> <li>Lack of implementing legislation for certain laws</li> <li>Fragility of the country following multiple crises</li> </ul>
Malawi	Low investment in climate resilient water infrastructure and financing	<ul style="list-style-type: none"> <li>Weak investment in climate resilient infrastructure exposed by increased frequency of floods and droughts</li> <li>Lack of dykes or storm drains and multi-purpose dams, and total dependence on hydro-power energy</li> </ul>
Tanzania	Water security and resilient growth	<ul style="list-style-type: none"> <li>Value of water to the country's economy not established to justify massive investment towards the sector</li> <li>Unbalanced budgeting percentage between WASH &amp; WRM while a pre-requisite for sustainable WASH services is the proper management of water resources</li> <li>Skill gaps in WASH &amp; WRM staff leading to ineffective planning and budgeting, low burning rates of budgets</li> </ul>
Uganda	Limited finance towards inclusive and resilient WRM	<ul style="list-style-type: none"> <li>Poverty</li> <li>Inadequate funding</li> </ul>

\* These are indicative as the bottlenecks and working group focus areas are in a state of evolution.

#### Typical actions and activities to unblock finance bottlenecks

Table 11 provides some illustrative examples of outputs and activities to resolve finance bottlenecks. *It is important to remember that many financial bottlenecks will not be resolved simply by acquiring*

*more finance*. Some WRM issues originate in the weaknesses of the public financial management system – weak financial management, delays in disbursement, and corruption. Other issues are due to the lack of a finance strategy to guide the financing of the WRM sector. Some finance bottlenecks require a study to generate evidence or a guided process to develop a strategy or investment plan. All of these require stakeholder consultations, and many will require hiring the right expertise to ensure quality products are developed.

**Table 11. Example solutions, activities and sub-activities related to finance bottlenecks**

Bottleneck / issue	Solution (sub-objective)	Indicative Outputs	Indicative Activities
Poor accountability and transparency in financial management	Strengthen anti-corruption measures	Review accountabilities within the public financial management system	Consultation on the issue Implement study Review study findings/recommendations for anti-corruption measures
		Review auditing procedures	Consultation on the issue Implement study Review study findings/recommendations for anti-corruption measures
		Conduct public expenditure review	Consult TOR Identify finance Implement study
		Strengthen auditing public funds flowing to WRM	Consult audit recommendations Identify finance Implement study
Poor understanding on the benefits of WRM to the broader economy	Generate convincing evidence on WRM contributions	Conduct study to generate evidence	Prepare TORS and recruit consultants Implement study Consult draft findings, revised draft
		Disseminate study	Launch a campaign with media and with relevant stakeholders
		Lobby high level stakeholders	Convene potential financiers to spread messages and demand action
Lack of finance for new infrastructure	Explore finance solutions according to the identified needs	Develop a national finance strategy for WRM and investment plan	Build support for improving strategy/plans Develop WRM finance strategy Develop WRM investment plan Disseminate strategy and plans
		Strengthen link with central ministries	Hold meeting / workshop to engage MOF Build support for setting up regular communications and influencing
		Develop bankable projects	Consult stakeholders on objectives and scope of assessment Outreach to stakeholders of each potential project Conduct analysis, generate project list and make recommendations Seek funding sources for each project
		Develop financing instruments for efficient flow of funds	Study to explore options for finance instruments, pros and cons Consult with stakeholders, including major funders and financiers Develop finance instruments, providing legal basis

### Assessment of activity costs and financing

Activities are diverse, and many are similar to previous building blocks such as holding meetings, convening stakeholders, and conducting and publicizing studies that need to be carried out to have a better evidence base. Some activities are more significant, such as the development of a national finance strategy for WRM, which is a multi-phase endeavour that could take 12-18 months. Other activities need a long-term commitment in implementing the recommendations, such as anti-corruption measures, which require significant systems strengthening as well as political backing.

The [GWP Toolbox](#) provides further resources under ‘D. Financing’:

- Development water investment rationale
- Financing frameworks

### 3.4 Building Block 4 – Strengthened planning, monitoring and review

*GWL Countries that have identified Building Block 4 bottlenecks: CAR, Nepal, Palestine, Rwanda, Tanzania and Uganda.*

#### **FOR FINANCE EXPERTS: Why strengthened planning, monitoring and review are needed for finance to work**

The planning, monitoring and review cycle is a very important building block for finance, because this is how policies and strategies are implemented. A solid planning process is based on evidence of what works and what does not work, engages different stakeholders, and compares the costs of the planned activities against the resources and financing available. Budgeting is therefore central to the planning process, and budget shortfalls are identified early so that resource mobilization can take place. Monitoring and review are key to the planning process: monitoring data enables planners to understand the baseline and to assess what shifts can be made; and the review process enables the presentation of achievements against targets, an explanation of performance and the collection of stakeholder perspectives to then identify what further interventions are needed. These all give confidence to different types of financiers that spending on water resources management is going to achieve the stated objectives.

#### **FOR WATER EXPERTS: Why finance is needed for planning, monitoring and review to work**

While the costs of ensuring solid planning, monitoring and review processes are not significant (compared to infrastructure costs), they are often under-funded, and subsequently do not receive the attention they deserve. In an environment where finance is limited, planning and budgeting might be done along historic lines (i.e., allocations based on previous years) and therefore not properly consider the need or evolving evidence of what works. Monitoring systems are commonly out-of-date, slow, patchy, and riddled with conflicts of interest (to report that targets are being achieved instead of the reality).

#### **Examples of planning, monitoring and review bottlenecks experienced in GWL countries**

Table 12 shows some of the bottlenecks in this building block in five GWL countries, uncovering a mix of issues around weak planning processes, lack of data and monitoring, and raising capacity issues in ministries and communities alike.

**Table 12. Bottlenecks related to planning, monitoring and review working groups\***

Country	Working group	Bottlenecks (indicative)
CAR	Lack of an optimal system for monitoring water resources (water information system)	<ul style="list-style-type: none"><li>• Impunity enjoyed by some officials in charge of the application of the laws</li><li>• Corruption</li><li>• Overlapping of competences</li></ul>



Country	Working group	Bottlenecks (indicative)
		<ul style="list-style-type: none"> <li>• Lack of implementing legislation for certain laws</li> <li>• Fragility of the country following multiple crises</li> </ul>
<b>Nepal</b>	Data and capacity	<ul style="list-style-type: none"> <li>• Poor data generation and use</li> <li>• Data reliability and accessibility is raised frequently.</li> <li>• Available data are not easily shared</li> <li>• Capacity building is repeatedly raised, but which area is lacking in capacity is still unclear</li> </ul>
<b>Rwanda</b>	Limited knowledge/awareness by community and private sector on WRM issues & solutions	<ul style="list-style-type: none"> <li>• Lack of trainings and awareness raising programs and TA in WRM at community level.</li> <li>• Insufficient number of skilled trainers on community level</li> <li>• Poor understanding of women's role in effective water use and management</li> </ul>
<b>Palestine</b>	Institutional planning	<ul style="list-style-type: none"> <li>• Lack of alignments in Water Law for climate change</li> <li>• Institutional gaps</li> <li>• Lack of joint action plans to foster resilience</li> <li>• Poor communication between institutions</li> <li>• Lack of advocacy framework</li> </ul>
<b>Palestine</b>	Monitoring and evaluation - implementation progress of response strategies and workplans	<ul style="list-style-type: none"> <li>• Lack of measurement, reporting and verification (MRC) system</li> <li>• Lack of performance measurement tools, benchmark exercises and impact reporting</li> </ul>
<b>Tanzania</b>	Limited evidence on the value of water for resource mobilization	<ul style="list-style-type: none"> <li>• Low representation of the influential political and private sector players in the National MSF to influence realistic changes for addressing WRM issues</li> <li>• Skill gaps in WASH &amp; WRM staff leading to ineffective planning and budgeting, low burning rates of budgets</li> <li>• Unknown contribution of water in the national economy (value of water) makes it difficult to support or justify massive investment towards the sector</li> <li>• Uncoordinated and incoherent data management protocols (Quality and Quantity) to justify prevalence, magnitude and trend of WRM challenges to attract</li> </ul>

Country	Working group	Bottlenecks (indicative)
		investment towards overcoming the challenges
Uganda	Limited planning of key mandated Institutions towards inclusive and resilient WRM	<ul style="list-style-type: none"> <li>Poor coordination among NGOs</li> <li>Ownership of the eco-system on individual basis.</li> <li>Absence of an enterprise on IWRM where they can showcase sustainable IWRM.</li> </ul>

\* These are indicative as the bottlenecks and working group focus areas are in a state of evolution.

### Typical actions and activities to unblock Planning, Monitoring and Review bottlenecks

Some bottlenecks shown in Table 12 are related to institutional arrangements and coordination, or to poor resource mobilization efforts. This section focuses on the generation and use of evidence for the planning process, and thus the selection and financing of interventions. Table 13 proposes illustrative outputs and activities to resolve selected bottlenecks.

The [GWP Toolbox](#) provides further resources under ‘C. Management Instruments’:

- Assessment instruments
- Decision support systems
- Efficiency in water management
- Economic instruments (also relevant for ‘D. financing’)
- Promoting social change
- Dialogue

**Table 13. Example solutions, activities and sub-activities related to planning, monitoring and review bottlenecks**

Bottleneck / issue	Solution (sub-objective)	Indicative Outputs	Indicative Activities		
Insufficient performance measurement indicators	Use a short-list of indicators that better reflect performance	Review existing monitoring system	Agree TORS and hire consultants Draft report Consult draft report Final report with recommendations		
		Identify key performance indicators that can be used at national sector level	Generate proposed KPIs Consult KPIs Finalise KPIs		
		Implement new indicators	Design data collection system Collect new data		
		Inadequate process for sector review	Institute an annual sector review for WRM	Build political will for a formal annual sector review process	Draft justification for an annual sector review Consult with key stakeholders and funders Agree to proceed
				Share and agree proposals on how the annual sector review will be conducted	Draft a TORS for a sector review, including stakeholder consultation process Collect feedback Finalise proposal
				Hold the first annual sector review	Share agenda and invite participants Prepare background documents (including evidence on KPIs etc) Plan logistics and ensure funding Hold meeting and generate undertakings Follow-up undertakings

### 3.5 Building Block 5 - Strengthened capacity

#### *GWL Countries that have identified Building Block 5 bottlenecks: CAR, Rwanda, Tanzania, Uganda*

##### **FOR FINANCE EXPERTS: Why capacity building is needed for finance to work**

Capacity building is commonly cited as the missing ingredient, but it is very challenging to actually strengthen capacity. In essence, nothing will get done with no or weak capacity, and money will be wasted. Hence some form of capacity is needed for activities to be funded. Capacity means many things, but at its centre is human resource capacity. There is also spending capacity, where other resources are needed to get things done, such as drilling rigs to drill boreholes and vehicles to support programme management and monitoring.

On HR capacity, it is important that job descriptions and skill needs are made explicit so that the staff with the right skills are hired to do jobs that lead to the achievement of programme objectives. In some cases, HR capacity is generally lacking across all skill types; in other cases, there may be a specific lack of skills, such as lack of auditors or behaviour change specialists. In some cases, the skills exist, but the going rates for remuneration are not sufficient to attract them into the WRM sector or government service. And importantly, the capacity to be a leader is often lacking, and good leaders are not necessarily the ones given the positions of influence. Few countries conduct HR capacity assessments, and few update their curricula for the WRM sector based on a constantly evolving context (e.g., new tools and technologies).

##### **FOR WATER EXPERTS: Why finance is needed for capacity building to work**

No capacity can be developed without finance. Capacity development begins early, from primary school, and therefore needs a long lead time to develop a workforce that is fit for the development challenges faced by a country and the tasks at hand. For some advanced skills in the WRM sector, such as IT and engineering, university degrees are needed, requiring countries to incentivize young people to attend the right courses at university and make a career in WRM attractive for them. For shorter term results, diplomas and on-the-job training can be provided to staff that are already in place. But if they do not have the foundational education, or the interest to take on the new skills, it will be a largely wasted effort. Significant finance is required for all of this.

##### **Examples of capacity building bottlenecks experienced in GWL countries**

Lack of capacity has been expressed in different language by five GWL countries (see Table 14). Linkages are also seen with other building blocks – lack of institutional capacity, lack of data or monitoring capacity, and lack of service delivery models that work. In some cases, it is a lack of personnel with the right technical skills or a lack of organizations with the right experience.

**Table 14. Bottlenecks related to Capacity working groups\***

Country	Working group	Bottlenecks (indicative)
<b>CAR</b>	Lack and poor distribution of human resources	<ul style="list-style-type: none"> <li>• Impunity enjoyed by some officials in charge of the application of the laws</li> <li>• Overlapping of competences</li> <li>• Fragility of the country following multiple crises</li> </ul>
<b>Rwanda</b>	Limited technical capacity in water demand and supply management	<ul style="list-style-type: none"> <li>• Insufficient water storage infrastructures to capture runoff water in rainy season</li> <li>• Poor management of existing infrastructures leading to reduced production and conflict</li> <li>• Low institutional capacity in coordination of construction, O&amp;M of infrastructures and awareness creation among water users.</li> <li>• Insufficient financial capacity to build and operate water storage infrastructures</li> </ul>

<b>Rwanda</b>	Limited capacity to manage flood risks across different sectors	<ul style="list-style-type: none"> <li>• Lack of erosion control, catchment restoration, river-bank protection and sand mining in areas close to bridges to maintain their hydraulic capacity.</li> <li>• Lack of quantification of sediments reaching and deposited in floodplains and progressive monitoring</li> <li>• No practical guide for landowners on natural flood management measures, or community flood management plan development</li> </ul>
<b>Tanzania</b>	Awareness raising and capacity development	<ul style="list-style-type: none"> <li>• Poor stakeholder participation</li> <li>• Low representation of the key high influential political and private sector players in MSF</li> <li>• Skill gaps in WASH &amp; WRM staff leading to ineffective planning and budgeting, low burning rates of budgets</li> </ul>
<b>Uganda</b>	Limited capacity of mandated institutions	<ul style="list-style-type: none"> <li>• Inadequate expertise to propel IWRM activities</li> <li>• Absence of an enterprise on IWRM where they can showcase sustainable IWRM.</li> </ul>

\* These are indicative as the bottlenecks and working group focus areas are in a state of evolution.

### Typical actions and activities to unblock Capacity Building bottlenecks

Table 15 presents some illustrative outputs and activities related to capacity bottlenecks. Some of the outputs are major undertakings, such as designing and delivering new courses. Other activities involve compilation of information on courses and expertise available in the sector.

**Table 15. Example solutions, activities and sub-activities related to capacity bottlenecks**

Bottleneck / issue	Solution (sub-objective)	Indicative Outputs	Indicative Activities
<b>Limited technical capacity</b>	Provide targeted capacity building for staff	Identify key skill gaps	Review TA needs not being met by current skills available
		Identify or generate courses	Propose areas for skill development
			Scope which courses are available
			Assess whether existing course (curricula) and modality will meet the sector needs
		Where needs are not met from existing courses, design new courses	
		Provide courses to targeted staff	Identify staff to be trained
			Identify trainers
			Find funding source
			Conduct training event
<b>Poor distribution of human resources</b>	Plans and incentives to move HR to where they are needed	Compare skills available nationally with needs for location of staff with these skills	Review TA needs versus current skills available
		Propose redeployment	Assess how gaps can be closed, and mechanisms/incentives to implement it
		Propose alternatives for meeting need (new hires)	Review the potential to bring new skills into the sector and cost of doing so

The [GWP Toolbox](#) provides further resources – capacity building is cross-cutting across other pillars.

### A note on bottlenecks that are not covered by the Building Blocks

Some bottlenecks have been identified by countries that do not fit neatly within the SWA building blocks, as they touch on social issues or problems in implementation (see Table 1). These issues need to be addressed in the same logic as the issues covered above. The focus, however, should remain on what needs to change in the enabling environment or what part of the system needs to be strengthened to deliver the solution on the ground. For example, the nationwide investments needed in new infrastructure or behaviour change are not the immediate focus of this exercise, although they are relevant for defining a realistic solution.

### Conclusion

This document has attempted to provide a clear, step-by-step methodology with illustrative examples on how to develop a finance plan whose objective is to remove specific bottlenecks impeding national progress on Water Resources Management (WRM). Given the multiple challenges to improving WRM, a finance plan that is based on a robust root cause analysis helps bring attention and commitment to some of these underlying but resolvable constraints. Given the differing country circumstances, some flexibility will be needed in applying the guideline while ensuring the essential elements are captured. Adjustments will be discussed at the Inception phase of the consultants' work and fine-tuned as issues are raised during implementation. Collaboration, consultation and capacity building are key factors that will lead to the engagement of key stakeholders and the success of the programme.

## Annex 1: Review of existing guidance documents and tools

**A considerable number of guidelines, reports and tools exist** which elaborate on the ways in which the water sector can be financed. What follows is a summary of some of the most notable publications of relevance to this specific guideline with a focus on Water Resources Management.

**The Camdessus Report** (“Report of the World Panel on Financing Water Infrastructure”) produced by the World Water Council in 2003 was one of the earlier key global sector documents on financing. Important was its recognition of the importance of water governance and sector reform which the document explores prior to the examination of different financing instruments and facilities.

**Moving into the SDG period, the Addis Ababa Action Agenda (“AAAA”)** was published following the Third International Conference on Financing for Development (FfD) in 2015. This document addressed financing in general, providing a framework for both overall national finance strengthening and sector/SDG-specific actions on finance. The document structure identifies five main finance sources: domestic public resources; domestic and international private business and finance; international development cooperation; international trade; and debt. Notably the document also dedicates significant space to systemic issues (another way of referring to the financing ‘enabling environment’) as well as science, technology, innovation, and capacity-building. These later formed the backbone the SDG Accelerators based on which six accelerators were defined for SDG 6<sup>12</sup>.

**In 2020, the Financing for Sustainable Development Report (FSDR)** issued by the UN Secretary General provides detailed review and analysis of the finance sources and the SDG Accelerators, notably adding data and monitoring to the list of issues covered. Of most interest to the Global Water Leadership programme is the report’s identification of several challenges to financing overall, which has implications for the financing of water resources management (in blue):

- Slowing economic growth, impacted by the Covid-19 pandemic and other factors, with high risk of a global recession => **Constraints on government tax revenue and household spending.**
- Declining official development assistance (ODA) => **with many donors diverting ODA resources to refugee situations closer to home and declining ODA as a percent of GDP, it is likely that ODA to WRM will at best remain stable or is likely to continue declining (as is already happening – refer to the latest GLAAS report).**
- Growing financial risks due to financial market volatility => **reduced movement of international funds to risky countries and thus reduced availability of private loans or higher interest rates.**
- High debt risk, which are rising in the most vulnerable countries => **reduced likelihood of governments seeking concessionary or commercial loans.**
- Increasing trade restrictions, thus impacting trade and critical supply chains => **increasing cost of materials, supplies and equipment for WRM projects.**
- Increasing environmental shocks, with growing weather-related losses reported worldwide => **increased water resources challenges to be faced by all those concerned.**

**Balanced with these challenges are developments which can boost investment and spending in key sectors such as water resources:** continued economic growth in low- and middle-income countries and an increasing tax base to support public investments; global capital seeking favourable

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<sup>12</sup> <https://www.unwater.org/our-work/sdg-6-global-acceleration-framework> These include: (1) Financing - optimized financing is essential to get resources behind country plans. (2) Data and information - Data and information targets resources and measures progress. (3) Capacity development - A better-skilled workforce improves service levels and increases job creation and retention in the water sector. (4) Innovation - New, smart practices and technologies will improve water and sanitation resources management and service delivery. (5) Governance - Collaboration across boundaries and sectors will make SDG 6 everyone’s business.

financial returns, which can be delivered in low- and middle-income countries under the right conditions; and the increasing recognition of the centrality of water resources to the economic development and national stability, thus leading to closing the finance gap.

**The FSDR calls for stakeholders to take every opportunity to accelerate progress**, and the Inter-Agency Task Force identified two key trends that can help accelerate the transition toward sustainable finance: (1) the rapid growth of digital technologies and (2) the growing interest in sustainable investing, with emphasis on disclosing risk and establishing sustainability standards. The FSDR promotes the further development of Integrated National Financing Frameworks (INFF) for adoption by countries<sup>13</sup>. The INFF spells out how the national strategy will be financed and implemented, and includes four building blocks for operationalisation:

1. Assessments and diagnostics.
2. Design of the financing strategy.
3. Mechanisms for monitoring, review, and accountability.
4. Governance and coordination mechanisms.

**The OECD released Financing a Water Secure Future in 2022.** The report distils key messages from the Roundtable on Financing Water, a joint initiative of the OECD, the Government of the Netherlands, the World Water Council and the World Bank. The report outlines challenges in financing water-related investments, distinguishing between ten different sub-sectors, a categorization which might be of interest and use for the GWL Programme (see Box 2).

#### **Box 2. Categorisation of different service areas for water security and sustainable sanitation**

- **Water resources management:** Conservation and rehabilitation of inland surface waters (rivers, lakes etc.), ground water and coastal waters; prevention of water contamination.
- **Bulk water supply:** The production of water to be distributed to various end-users, including drinking water supply. Bulk water supply may be produced from the abstraction of surface or groundwater or through non-conventional sources, such as desalination or wastewater reuse.
- **Storage and conveyance:** The infrastructure required to store and transport bulk water supply to various end-users. This includes reservoirs, pipelines, channels, and other forms of water supply distribution.
- **Water supply services:** The production and distribution of high-quality water at standards required for consumption as drinking.
- **Sanitation services:** Sanitation services consist of the provision of facilities and services for the safe disposal of human urine and faeces.
- **Wastewater collection and treatment:** refers to the safe collection and treatment of sewage and wastewater. The treatment can be executed on several different levels: preliminary, primary, secondary, and tertiary. May include waste to energy activities.
- **Irrigation:** The production, distribution, and application of water to land in support of agriculture.
- **Flood protection (riverine, coastal):** Interventions intended to manage the risk of flooding caused by coastal and river flooding. Flood is defined as the overflowing of the normal confines of a stream or other body of water, or the accumulation of water over areas that are not normally submerged.
- **Urban drainage:** Interventions to manage runoff from storm water.
- **Multipurpose infrastructure:** encompasses all constructed water systems, including dams, dykes, reservoirs, hydropower and associated irrigation canals and water supply networks, which may be used for more than one purpose for economic, social and environmental activities.

Source: Dominique and Bartz-Zuccala (2018)<sup>14</sup> reproduced in OECD “Financing a Water Secure Future” (2022)

<sup>13</sup> <https://sdgintegration.undp.org/INFF>

<sup>14</sup> Dominique, K., and Bartz-Zuccala, W. Blended Finance for Water Investment. 2018. OECD. <https://www.oecd.org/water/Background-Paper-3rd-Roundtable-Financing-Water-Blended-Finance-for-water-related-investments.pdf>

**While the global economic losses related to water insecurity and not achieving SDG 6 amount to several hundreds of billions of dollars annually,** the OECD report recognises that a strong economic case for water-related investments does not translate into financing flows commensurate with needs. This is partly due to the simultaneous public and private nature of the benefits, and the many different beneficiaries under each. Several constraints and risks limit the availability of commercial finance, such as requirements for long-term loans, small lending volumes per borrower, limited creditworthiness, the lack of clearly defined revenue streams and lack of knowledge of the financial institutions on the water sector. Also, some economic benefits (such as saved lives) do not have clear pathways for financial returns. Hence, any future advocacy efforts for water-related investments needs to recognise these constraints. OECD classifies the risks in Table 16.

**As noted in OECD (2022), it is widely recognised that the water sector needs robust public policy and institutional frameworks to function effectively,** given the common pool nature of water resources and the public good dimensions of selected water policies and services. Such frameworks also have a profound influence on the water sector’s attractiveness to investors and its ability to recover costs and secure sustainable financing. In later sections of Part 2, various components of the enabling environment and some examples of instruments and relevant examples for WRM, by building block. According to OECD, a strong enabling environment for water-related investment can be broadly characterised as a set of policies, regulations and institutional arrangements that facilitate investment in activities that contribute to water security. This includes sector-specific policies, regulations, and institutional arrangements as well as those relating to the regulation of the financial sector and capital markets. IWRM monitoring – which is SDG indicator 6.5.1 -covers five pillars: enabling environment, institutions and participation, management instruments, and financing. Similarly, the Sanitation and Water for All (SWA) partnership has recognised five key building blocks of the enabling environment: policies and strategies; institutional arrangements; financing; planning, monitoring and review; and capacity building<sup>15</sup>. More recently, as noted earlier, the SDG 6 Accelerator Framework has five accelerators: governance, financing, data and information, capacity development and innovation.

**Table 16. Summary of risks associated with water-related investments**

Risks	Specifications and examples
<b>Macroeconomic and business risks</b>	<p><b>Transfer risk:</b> due to mismatch between revenue and debt servicing currency</p> <p><b>Operating and construction risk:</b> weak performance of utilities and risks related to a variety of technologies and innovative approaches</p> <p><b>Credit risk:</b> inability of counterparty to honour contractual arrangements</p> <p><b>Termination risk:</b> risk of early termination of long-term contracts</p> <p><b>Market risk:</b> demand for service</p>
<b>Regulatory and political risks</b>	<p><b>Regulatory risk:</b> change in tariffs, economic regulation may be weak or absent and regulation on private participation in infrastructure</p> <p><b>Political risk:</b> in the case of government procurement contracts, and due to potential for political interference in the tariff setting process</p>
<b>Technical risks</b>	<p><b>Performance risks:</b></p> <ul style="list-style-type: none"> <li>• Due to lack of experience and data for innovative approaches</li> <li>• Due to obsolesce of utilised technologies given the long-term nature of contracts and multitude of technologies applied.</li> <li>• In the case of WSS investments: performance risks can also arise due to aging infrastructure and leakage</li> </ul>

<sup>15</sup> <https://www.sanitationandwaterforall.org/about/our-work/priority-areas/building-blocks>



<b>Commercial risks</b>	<b>Risks affecting revenues</b> from a particular project (affordability, willingness to charge, willingness to pay)
<b>Environmental/ social risk</b>	<p><b>Environmental risk:</b></p> <ul style="list-style-type: none"> <li>• Variability of water resources availability due to climate change can reduce performance of water infrastructure, for example hydropower production</li> <li>• Increasing water scarcity can lead to increase of cost of bulk water supply</li> <li>• Potential negative environmental impacts of large multi-purpose water infrastructure</li> </ul> <p><b>Social risks:</b></p> <ul style="list-style-type: none"> <li>• Resettlement of households that will be flooded down stream of dams</li> <li>• Affordability constraints related to tariff increases</li> </ul>

**While raising additional finance may seem to be the easiest, it is important to ensure efficient use is being made of the existing finance.** Different options governments can consider include improving timely asset management to reduce operational inefficiencies, sound capital expenditure planning, targeted allocation of public subsidies, improving economies of scale, and creating and maintaining incentives for performance (OECD, 2022).

**There exist a wide range of finance sources and instruments available for boosting resources to water resources management.** These are categorised in different ways. For simplicity, they are categorised here as ‘free’ money (e.g. grants, subsidies), concessional money (lending arrangement, below market rates), and commercial finance (at or near market rates). Each stream of finance has different pre-conditions and objectives, and they are increasingly blended within the same project or programme. The relevant sources and instruments for the GWL programme are explored further in section 2.

**In September 2022, UNICEF released a document** titled “Developing Water, Sanitation and Hygiene (WASH) Finance Strategies: A Guide” in collaboration with Sanitation and Water for All (SWA), Agence Française de Développement (AFD) and IRC Water and Sanitation Centre, The Netherlands. While of broad appeal to a range of WASH sector stakeholders, the publication’s primary audience was national ministries responsible for WASH as well as central planning and finance ministries, in recognition that to be sustainable, financing strategies need to be led and owned by Governments. A finance strategy is also a process that promotes policy dialogue and facilitates consensus building.

**Many of the principles and approaches of a finance strategy covered in the UNICEF WASH Guideline are relevant for Water Resources Management.** Indeed, when talking about a finance *strategy* here, it can in many cases be equally relevant for a finance *plan*, given that the GWL programme will focus more on developing practical finance plans than high level national finance strategies on WRM.

**Essentially, a WRM finance strategy is a strategic document that helps to guide WRM decisions to ensure the financial sustainability of the sector.** A finance strategy (i) assesses the WRM finance gap over a long planning period, (ii) identifies options to close the finance gap (by mobilizing more financial resources and by finding ways to reduce the costs of achieving the WRM sector targets) and (iii) recommends a combination of policy measures that would close the finance gap. A finance plan more concretely identifies the finance instruments and the actions and timelines needed for their implementation.

**In preparing a WRM finance plan targeted at specific bottlenecks, it is important that major stakeholders are present in the discussions and efforts are made to build consensus about the approach to be adopted.** These stakeholders will in part be defined by the stakeholders present in the working groups, and they may include: the various WRM lead ministries; central planning or finance ministry (if possible); committed supporters from the development community and relevant institutions. Consultation should be undertaken with representatives of other strategic actors whose support to the conclusions of the WRM finance plan is necessary. This may include representatives from other ministries, agencies that play a regulatory role, associations of municipalities, large utilities, associations of utilities, private sector representatives, civil society, and technical and financial partners. The consultation and review process will either be in the Working Groups that have been formed, or the next level up such as a Government Committee, a Sector Coordination Group or other multi-stakeholder platform. It is key to allow time for the consultation process, as well as budget for it.

## Annex 2: Full list of bottlenecks and initial proposed solutions per country

The below bottlenecks, working groups and bottleneck details reflects documentation received until early November 2022. It provides a snapshot of working group progress at that time-point. Fuller reports of the stakeholder consultations can be accessed as well as reports from further meetings. The information below is based on information from the Stakeholder Consultation reports and from follow-up conversations with GWL Country Coordinators.

### CAR

The bottlenecks identified have led to four Working Groups being formed to address:

1. Weak application of the policies and regulations
2. Lack of an optimal system for monitoring water resources (water information system)
3. Poor distribution of human resources (lack of human resources, those existing is not set at the right place)
4. Low adequacy between the national budget allocated and the problems to be solved (less than 3% of investment is dedicated in water and sanitation sector)

No further detail was provided in the CAR stakeholder consultation report. In a follow up meeting of the first working group, the following difficulties and issues were identified:

- Impunity enjoyed by some officials in charge of the application of the laws
- Corruption
- Overlapping of competences
- Inconsistency of certain laws
- Lack of implementing legislation for certain laws
- Fragility of the country following multiple crises

### MALAWI

The bottlenecks identified have led to three Working Groups being formed:

1. Low investment in climate resilient water Infrastructure and financing
2. Lack of political will and water leadership
3. Weak coordination, policy enforcement and regulation

#### **Low investment in climate resilient water infrastructure and financing**

Stakeholders felt that low investment and funding were the root cause of lack of climate resilient water infrastructure in the country. Increased frequency of floods and droughts were said to have exposed the country's weak investment in climate resilient infrastructure. Lack of dykes or storm drains have exacerbated flooding in most flood prone areas. Lack of multi-purpose dams have worsened the effects of droughts such as poor access to water for consumption and farming, thereby exacerbate the food insecurity situation in the country. Malawi's total dependence on hydro-power energy has also exposed inadequate investment in climate resilient infrastructure: when flooding led to the destruction of the dam at Kapichira Hydro-power station in 2022, national power generation was reduced by approximately 30 percent<sup>16</sup>, resulting in frequent power cuts and black-outs across the country, affecting the lives of millions of people.

#### **Lack of political will and water leadership**

Stakeholders generally felt that this was one of the main bottlenecks to advancing gender transformative and resilient water resources management in the country, despite water being central to achieving SDGs and the Malawi Vision 2063 in all the sectors. As discussed during the

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<sup>16</sup> Lameck Masina (6 February 2022). "Malawi Loses 30% of Its Electricity to Tropical Storm Ana". Voice of America. Washington DC, United States. Retrieved 12 March 2023.

regional consultations, the National Workshop concurred that the ministry responsible for water and sanitation services has been quite unstable for most times, without proper leadership in the form of a Minister or a Principal Secretary, or both.

In the past two decades, the status of the Ministry kept changing from a fully-fledged Ministry with a Minister as the political head and Principal Secretary as its administrative head, to a mere department under one Ministry or the other, or completely missed out of the Ministerial Cabinet Structure, or at times functioned without a Minister, or without a Principal Secretary, or without both. This mostly happened with changes in government.

The struggle to have a consistent representative or champion during critical high-level budgetary processes, not to mention the changing location of water authority discussed above, has resulted in water issues always falling low within government priorities and, subsequently, budget allocations.

Another major fallout of the shifting dynamics in leadership and ministerial location is that the water sector was not given much prominence in the Malawi Vision 2063, featuring neither among the MW2063 pillars nor the MW2063 enablers. Only the enabler under “Economic Infrastructure (ICT, Transport and Energy)” places indirect connection to the water sector: “Constructing dams and canals along the lake and major rivers to promote irrigation, which will contribute to higher agricultural productivity.” This is problematic because any programme that seeks approval and budget moving forward must demonstrate clear contribution to the MV2063 objectives.

The repercussions of inconsistent political leadership and ministerial home for water extends beyond the national level. At the sub-national level, the water and sanitation sector commands very little influence at the Local Assembly level since its representation is routed through whatever “home” it has at the national level, which as discussed above has changed frequently. This has also affected the administrative positions at the district level, where water and sanitation sector players occupy low positions, and consequently have little influence in the Local Assembly establishment and policy decision-making.

Lack of leadership was also highlighted in the National Water Resources Authority (NWRA). This body, established by an Act of Parliament of 2013, has remained dormant due to lack of leadership with respect to the Board of Governors and the Technical Headship. The NWRA Board was dissolved in 2021 and has not been re-constituted, making it impossible for the Authority to recruit staff or fill vacant positions. Most notably, with no Board to hire an Executive Director, the key leadership and visionary role remains vacant, with an Acting Executive Director in place who may not have the full authority or willingness to make decisive and proactive decisions.

The concern about continuing with this status quo expressed by stakeholders was that the water and sanitation sector would eventually fizzle out of the government structure altogether. Even through there is currently a dedicated ministry, the history of changing ministerial responsibility does not inspire confidence that the solution is permanently solved. Protecting, if not growing, the water sector in national prominence requires concerted effort to raise political will and government commitment to support the sector.

### **Weak coordination, policy enforcement and regulation**

There are a number of conflicts in the water sector that arise due to weak coordination of programmes and activities, or due to weak policy enforcement and regulatory mechanisms. Commonly highlighted conflict areas include:

- Farming and other developments not respecting the water policy on buffer zones along riverbanks, dams, and the lakeshore areas.

- Management of catchment areas, whether by farmers as provided for by the Agriculture Policy, or by Catchment Management Authorities as provided for in the Water Resources Act. The catchment areas ought not to be managed by farmers or irrigation-interested personnel only.
- Decentralisation Policy (1998) through the Local Government Act (1998) which places the planning and management authority of natural resources under area, ward or village level committees.
- Drilling of boreholes in urban areas (under Water Boards) against the Water Works Act (1995) which provides that the “Water Board shall provide a supply of portable water sufficient for the domestic purposes of the inhabitants within the water-area”.
- Violation of minimum allowable distance from a groundwater source to pit latrines as provided for by the National Water Policy.
- Water abstraction rights between large and small-scale users.
- Water pollution control in urban and rural areas.

These are only some of the issues that the water needs to adequately coordinate with other sectors and players in order to enhance water and sanitation service efficiency. Yet, stakeholders felt that this role is not adequately carried out since sectoral players tend to act in silos. Coordination would go beyond policy issues to include programmes and projects that concern water. For example, different NGOs that implement water and sanitation programmes, sometimes in the same area, tend not to be coordinated a way that enhances synergies and value for money.

## NEPAL

The bottlenecks identified have led to three Working Groups being formed to address:

1. Policy execution and implementation
2. Institutional coordination
3. Data and capacity

### **Policy execution and implementation**

Nepal has formulated several policies related to water resources management and climate change. A separate policy on WASH is under formulation. In general, policies are revised every five years. Policies are often not implemented, which may be related to the frequent changes in the government and the corresponding practice of re-formulating new policies and/or amending policies along when the government changes – both both at the political level and the bureaucratic level. Once policies are revised, however, they are also not implemented. Hence, the stakeholders assessed that it would be appropriate to understand the reasons for non-implementation of policies and develop response measures for policy implementation.

### **Institutional coordination**

The government established the Ministry of Water Resources in the early 1970s to manage water resources. This Ministry was bifurcated into the Ministry of Energy and the Ministry of Irrigation in 2009, and water supply was associated with the Ministry of Physical Planning.

In 2014, a separate Ministry of Water Supply and Sanitation was established. In 2018, the decision to split energy and irrigation was reversed, and the Ministry of Energy, Water Resources and Irrigation was (re)established (with water supply still in its separate ministry). There are departments, centres and commissions for water resources management and WASH services. However, water resources management is becoming ever more challenging due to duplication and lack of clarity regarding roles and responsibilities between all the associated bodies. Hence, it is necessary to understand the key challenges and develop response strategies to help the institutions deliver water resources and WASH services effectively.

## **Data and capacity**

Data generation, accuracy and use is comparatively poor in Nepal. Although the Department of Hydrology and Meteorology has some hydro-met stations, challenges of data reliability and accessibility are frequently raised. In addition to the importance of such data for informed decision-making, reliable data is a requirement within GCF and other climate finance vehicles, and the lack of this data may be a long-term barrier to accessing climate finance.

Available data are also not easily shared, and development plans and projects have been developed without facts and figures.

The need for improved capacity building was repeatedly raised, but which area is lacking in capacity is still unclear.

Participants prioritised data and capacity as a key bottleneck to manage water resources and adequately provide WASH services.

## **PALESTINE**

The bottlenecks identified have led to three Working Groups being formed to address:

1. Institutional planning
2. **Social reluctance towards accepting the reuse of treated wastewater**
3. Monitoring & evaluation

### **Institutional planning**

*Objective: To foster institutionalization of national responses to climate change through IWRM and identify strategic action directions to be included in the responsive strategies and plans.*

This WG will coordinate with the Technical Implementation WG to ensure the cascading between strategic and operational performances. Finally, this WG will discuss the KPIs results to align with the on-track progress and performance.

Roles & Responsibilities of the WG:

1. Review the Water Law for climate change alignments to ensure inclusion of responsibilities against Climate Change impacts on water resources.
2. Identify gaps at the institutional levels.
3. Elaborate on and suggest development of joint action plans to foster resilience through IWRM and the Energy-Food-Ecosystem Nexus approach at the national level.
4. Facilitate communication between institutions.
5. Elaborate on developing an advocacy framework.

### **Social reluctance towards accepting the reuse of treated wastewater**

*Objective: To understand social reluctance in reusing wastewater and formulate strategies to overcome it.*

### **Monitoring and evaluation**

*Objective: Foster monitoring of implementation progress of responsive strategies and workplans towards impact.*

Roles & Responsibilities of the WG:

1. Suggest elements of an MRV system
2. Suggest performance measurement tools, benchmark exercises and impact reporting

## RWANDA

Four working groups have been formed to address the four bottlenecks identified:

1. Limited technical capacity in water demand and supply management and low renewable water resources availability per capita (less than 700 m<sup>3</sup>/yr),
2. Limited capacity to manage flood risks across different sectors,
3. Limited knowledge/ awareness by the community and private sector on issues affecting water management and their potential contribution in addressing them, and
4. High siltation of water bodies impacting on water development projects.

### **Limited technical capacity in water demand and supply management and low renewable water resources availability per capita**

- Insufficient water storage infrastructures to capture runoff water in rainy season that will be used in dry season essentially in eastern and southern province with relatively low average annual rainfall.
- Poor management of existing infrastructures leading to reduced production, conflict between users.
- Low institutional capacity in coordination of construction, operation and maintenance of water related infrastructures and awareness creation among water users.
- Insufficient financial capacity to build and operate water storage infrastructure.

### **Limited capacity to manage flood risks across different sectors**

- Prioritize erosion control and catchment restoration in the upstream part.
- Ensures continuous and regular sand mining in areas close to bridges to maintain their hydraulic capacity.
- Quantify the amount of sediments reaching and deposited in floodplains and progressive monitoring of rivers' morphodynamic changes for sustainable river restoration and management and flood risk management.
- To develop and disseminate a practical guide for landowners on natural flood management measures.
- To develop and disseminate a community flood management plan development Guidance Notes.
- Riverbank protection using eco-technology.
- River sand mining management to increase water quality, and generate green revenue.
- River flood mitigation.
- Pilot sand retention dams for beneficial use (sustainable sand quarrying activities).

### **Limited knowledge/ awareness by the community and private sector on issues affecting water management and their potential contribution in addressing them**

- Lack of enough trainings, awareness raising programs and technical assistance in water resources management practices on community level.
- Insufficient number of skilled trainers on community level.
- Difference in traditional gender roles and income can cause some men not to understand their role or contributions in effective water use and management.

### **High siltation of water bodies impacting on water development projects**

- Soil Erosion from unprotected catchments.
- Inappropriate disposal of excavated soil from Road construction projects which later is eroded in rivers.
- Inappropriate compliance to recommended soil erosion matrix.

## TANZANIA

The bottlenecks identified have led to three Working Groups being formed to address:

- Limited knowledge of the available project financing options and low capacity to develop and prepare project to access the available financing options.
- Inefficient utilization of water resources in agricultural activities, the case of Ruvu Sub - Basin.
- Overlapping legal and regulatory mandates impacting inter Sectoral coordination.

### **The full list of bottlenecks identified include:**

1. Challenges in implementation of the policies and strategies that advocate for and or enhance effective stakeholder participation.
2. Fewer opportunities for the National Water Board to effectively engage the Minister of Water as part of their advisory mandate in the sector.
3. Low representation of the key high influential political and private sector players in the National Sectoral Multistakeholders Forum to influence realistic changes for addressing WRM issues.
4. Unbalanced budgeting percentage between WASH & WRM while a pre-requisite for sustainable WASH services is the proper management of water resources.
5. Skill gaps in WASH & WRM staff leading to ineffective planning and budgeting and low burning rates of budgets.
6. The unknown contribution of water in the national economy (value of Water) makes it difficult to support or justify massive investment towards the sector.
7. Uncoordinated and incoherent data management protocols (Quality and Quantity) to justify prevalence, magnitude and trend of WASH and WRM challenges in order to attract investment towards overcoming the challenges.
8. The National Sectoral multistakeholder's Forum lacks the linkage with the Basin level Multistakeholder's Forum leading to one of the forums being seen as irrelevant to some of the stakeholders.

### **The list of initial proposed solutions includes:**

- Redefining the Water Resources Management Institutional Framework to give it more mandate especially to be the central focus of the water sector.
- Establishing the value of water in Tanzania by evaluating the contribution of water resources in the country's economy
- Developing a resource mobilization strategy
- Motivate the Private Sector engagement through clearly providing opportunities to contribute to improving WRM and WASH sectors
- Lobbying and engaging the key decision makers in the forum's composition, sighting an example of the partial engagement with respective Parliamentary Committees which brought some changes in how parliamentarians view SWASH currently in Tanzania,
- Carry out advocacy to support budget allocation on WRM and generation of credible data
- Developing Capacity Development and Mentorship programmes to fill knowledge gap

## UGANDA

The bottlenecks identified have led to two Working Groups being formed:

1. Limited finance, planning and capacity development of key mandated Institutions towards inclusive and resilient water resources management and WASH services and interventions
2. Strengthening legal, policy and institutional framework towards inclusive and resilient water resources management

### **The following were the bottlenecks affecting IWRM**



1. Weak enforcement
2. Poor coordination among NGOs, MDS
3. Ownership of the eco-system on individual basis.
4. Inadequate expertise to propel IWRM activities
5. Absence of an enterprise on IWRM where they can showcase sustainable IWRM.
6. Poverty
7. Inadequate resource mobilization skills
8. Inadequate funding