

Framework for assessing the enabling conditions to finance water security

This paper will inform discussions at the ninth meeting of the Roundtable on Financing Water (Geneva, 7-9 February 2023), particularly session 4 on “Changing finance for water: the role of governments and public finance”.

The background note builds on existing literature and OECD’s experience. It may not reflect the opinion of the OECD, UN Water or their Member Countries.

Introduction

Water-related investments can deliver substantial benefits for water security and sustainable development. “Water-related investments” refer to a broad range of investments that contribute to water security through the delivery of water related services such as water and sanitation, irrigation, hydropower, the management of water resources and water-related risks (“too much”, “too little” and “too polluted”). Beyond the water sector, water-related investments connect multiple other sectors and policy agendas, including agriculture, energy, urban development, public health, and climate mitigation (OECD, 2022^[1]).

Climate change is increasing pressure on water systems and heightens the value of investments in resilience. Water is on the frontlines of climate change. It channels the main impacts of climate change to all aspects of the economy, society, and environment. Diminishing water supplies can translate into slower growth that threat economic prospects and produce biodiversity irrecoverable losses. Also, changes in water availability and variability can induce migration and ignite civil conflict.

The UN Conference of the Parties 27 in Egypt was an illustration of the growing interest by all economic sectors in water. The opening remarks of Csaba Kőrösi, President of the United Nations General Assembly, “This is the water COP” and the creation of the “water day” at COP show the linkages and willingness of the international community to connect water and climate solutions, including investments. However, funding and financing flows for water-related investments are far outweighed by funding flows to other sectors, which can increase pressures on water resources and exacerbate exposure and vulnerability to water-related risks. Indeed, investments in these sectors and activities often fail to adequately account for their implications for the water sector and water policy objectives (OECD, 2022^[1]).

While investment in water security makes economic sense, this does not always translate into investment at scale. The widespread under-valuing of water resources and of the benefits associated with water investments by both public and private actors constrains financing opportunities. Since 2017, the Roundtable on Financing Water and related analytical work have contributed to a better understanding of the distinctive bottlenecks that hinder the mobilisation of the full range of sources of finance to contribute to a water secure future. Among these bottlenecks, a weak enabling environment appears as a major barrier in many countries (OECD, 2022^[1]). Within the enabling environment, multiple reasons can be cited as obstacles such as concerns over contract structures, the business model, particularly the ability to price water; counterparty risk; and the very local nature of water.

The OECD has developed a score card to assess the strengths and weaknesses of the enabling environment for investing in water security at country level. This tool aims to identify the requirements for attracting sustainable investment in water security. It focuses on how to make the best use of existing funding and how to attract new sources of finance. The tool is currently being pilot tested in eight countries in Asia, in collaboration with the Asian Development Bank. During 2023, a second phase is planned in Eastern European countries.

This background note presents the analytical framework and the tool for assessing the enabling environment for investing in water security. The document is part of a series of background notes aimed to facilitate the discussion during the 9th Roundtable of financing water, co-convened by the OECD and UN-Water.

An analytical framework

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 (OECD, 2022^[2]).

To date, the framework focuses on water security, and therefore it covers all water sectors: water and sanitation, irrigation, hydropower, the management of water resources and water-related risks. This may be reviewed, based on the results of the pilot test or to respond to specific needs.

Investment is defined as any investment which directly involves a water sector or affects water resources (including green and blue water¹). For example, it includes private equity, venture capital taking an equity stake in a national institution which may subsequently invest in water security from a privileged position and investment in early-stage companies pursuing disruptive innovation. It also includes traditional public investments such as infrastructures development and capacity building for services authorities and service providers. The scope of the definition may be reviewed based on the results of the pilot test.

Preliminary analyses suggest that an enabling environment for water-related investments combines 4 dimensions:

- A policy framework for investment (not specific to water)
- Water policies and regulations that are conducive to investment
- The capacity to develop projects which are both bankable and beneficial for communities
- An economy-wide water lens.

These four dimensions are interlinked and have or can have cascade effect in the other categories. For example, an inefficient land acquisition process can reduce attractiveness for investment in water security such as irrigation systems or wastewater treatment plants. On the contrary, an improvement on contract arrangement between water service providers and service authorities can be a model for other sectors and even influence regulatory improvements at national level. These four dimensions will be described in detail in the next section.

Dimensions

The following paragraphs presents the different dimensions that can be found in the tool. Each dimension groups vital elements to ensure water security investments.

A policy framework for investment

The first dimension focuses on the generic investment climate in the country. It aims to assess if the country is attractive for investors in general. The highest level of the investment environment of a country is crucial to attracting and subsequently growing private investment. As noted by the OECD Policy Framework for Investment: “A good investment climate is one which provides opportunities for all investors: public and private, large and small, and foreign and domestic” (OECD, 2022^[2]).

Numerous organisations identify a set of elements required for a strong investment environment (OECD Policy Framework for Investment, G20 Infrastructure Hub, or the World Bank). These elements are common in some cases and differ depending on the objectives of the analysis or the nature of the investment study. They coalesce around

¹ Green water is defined as the fraction of water (regardless of its physical state liquid, solid or gas) which is not directly available for use. For example, it can be the fraction of rainfall that infiltrates into the soil and is available to plants. It includes soil water holding capacity and the continual replenishment of reserves by rainfall. It also includes the water in gas form, known as humidity. Blue water refers to water in a liquid form available for use such as surface water and groundwater.

investment policy, including promotion and facilitation, trade, corporate and public governance, procurement, business conduct, institutional arrangement, including independent oversight, decentralisation and accountability (OECD, 2022^[2]).

The tool assesses a set of elements considered by the OECD as minimum requirements for attracting private and public investment in the country: macro-economic indicators, availability of finance, corporate and public governance, policy coherence, regulation, accountability, non-economic risks and decentralisation. The tool uses existing indicators from the World Economic Forum, the World Bank, the International Monetary Fund, and the OECD. When data is not publicly available, a set of questions have been developed to assess these elements.

Channelling investment to water: are water policies and regulations conducive to investment?

While a sound investment environment will attract and grow the scale of investment at a national level, the challenge remains to channel this investment into water. As the Policy Framework for Investment notes: “Part of this effort to channel investment will involve removing sector-specific impediments, whether policy-induced or specific to the market structure of each sector. This effort might be complemented by targeted and well-designed incentives, but more broadly, it will also require policies to ensure that returns to investors in that sector are sufficient to entice them to invest.” (OECD, 2022^[2]).

As noted above, an attractive investment will demonstrate a robust business model, the potential for strong revenue streams, and a low risk profile. However, given that other sectors of the economy are also seeking investment, there is a need for the business model and revenue streams for water-related investments to be at least comparable with other investment opportunities in the country. That said, it is important to note that not all investors are the same, and there may be niche investors who will seek out investment opportunities where the fundamental conditions are lesser than the wider investment market (OECD, 2022^[2]).

Put simply, this dimension views the enabling conditions through the water lens of business model, revenue stream, and risk profile. This may include consideration over valuing water and multiple benefits of water security, water tariffs or charges, the customer base, etc. However, it is important to note that the legacy and culture within a country can have a significant impact on these dimensions.

The capacity to develop, implement and manage projects that are both bankable and beneficial

The sustainability of a project can be assessed through different lenses, requiring a wide range of variables. Financial sustainability will focus on the size, the revenue streams, the business model, risk-returns, returns time of a project. Social and environmental sustainability will focus on outcomes, (unintended) consequences, inclusion or justice among others. For an investment in water security to be sustainable, it must address all these elements.

While financiers typically focus on the availability of a pipeline of bankable projects, government authorities and project developers should also situate these pipelines within broader strategic investment pathways to ensure they are resilient and contribute to water security and sustainable growth over the long term and preferably at the least cost (OECD, 2022^[1]).

This pillar documents the capacity in the country to develop such projects. It considers issues related to inclusion and stakeholder engagement in project development, administrative capacities and transaction costs.

An economy wide water lens: how economic sectors factor water security?

Water is a significant factor in the wider economy. Therefore, investments in energy, urban development and others can have significant consequences on water availability and demand, and exposure and vulnerability to water risks. For example, increased floodplain development can lead to higher risk exposure and economic losses, development in water scarce areas creates pressure for often controversial water transfer schemes, etc. In these wider sectors of the economy there is already well-established practice for the investigation, implementation, and maintenance of infrastructure projects. However, water issues are often a secondary consideration. A key to managing water effects

and unintended water consequences emerging from infrastructure projects in other sectors are the mechanisms in the ideation and investigation phases (OECD, 2022^[2]).

An enabling environment for water-related investments includes a rigorous and holistic approach to investigations on impacts on water that can apply to any infrastructure project or activity in relevant sectors. Looking through the lens of a transport or agriculture project, the goal is to look at the wider impacts (social, economic, and environmental) on water. Water security is one element of the investment framework for green growth according to the Policy Framework for Investment.

The score card

The following table presents the questions offered to assess the enabling environment for investing in water security. Each question is composed of sub-questions and indicators, which guide the user to assess the level of maturity of the country for a particular element. Sub-questions are not presented in the table. The tool is currently accessible through an online survey.

Table 1: List of questions in the score card.

A sound investment environment
What is the strength of domestic financial markets?
Are macro-economic indicators conducive to a sound investment?
Is domestic finance available?
How strong are public governance mechanisms?
How strong are corporate governance mechanisms?
What government policy coherence mechanisms are in place?
What level of regulatory permits and approvals are required and are they streamlined?
What accountability mechanisms are in place to ensure responsible business conduct?
What is the level of non-commercial risks for investors?
How effective and practical decentralisation is for policy and investment?
Channelling investment to water
Is a strategic water security investment plan in place?
How does the investment opportunity compare to other sectors of the economy?
Is the water regulatory sector attractive for investors?
Are economic policy instruments (tariffs, subsidies, or taxes) in place enough to ensure investment?
Are there niche investors, or is the approach more mainstream?
Is the legal status of organisations participating in the investment clear? Is it appropriate for the size, scale, and operating parameters of different investors?
Can water service providers access affordable finance?
What are service providers, service authorities and investors capacity levels?
What intermediaries are in place to connect water and finance communities?
Projects sustainability
To what extent are the community, stakeholders, third parties, engaged in ideation of projects?
Is there a standard methodology for assessing the social and environmental value and impact of investment?
How are wider impacts of water projects measured? Does it apply beyond the boundaries of the water project?
How are cost benefits methodology carried out to ensure impartiality?
Is data, process and methods for projects collected and published? How is the data used for future decisions-making?
Are mechanism to solve conflicts between water users effective?

An economy wide water lens

Do national strategies for climate change mitigation, adaptation, agriculture, economy, development, and energy transition include water security targets?

How other sectors of the economy assess their vulnerability and exposure or potential impact on water-related risks?

Does the government innovation policy incentivise technologies decreasing trade-offs related to water security?

Is data on current and future water resources availability, demand and supply forecast and water risks available?

References

OECD (2022), *Financing a Water Secure Future*, OECD Studies on Water, OECD Publishing, Paris, [1]
<https://doi.org/10.1787/a2ecb261-en>.

OECD (2022), *Strategic Framing of Enabling Conditions. Towards an analytical framework for the strategic framing of enabling conditions as the*. [2]