

SIWI Input to the 2021 High-level Political Forum on Sustainable Development (HLPF)

‘Sustainable and resilient recovery from the COVID-19 pandemic that promotes the economic, social and environmental dimensions of sustainable development: building an inclusive and effective path for the achievement of the 2030 Agenda in the context of the decade of action and delivery for sustainable development’

Stockholm International Water Institute (SIWI)

Who is SIWI?

SIWI is a water institute. We leverage knowledge and our convening power to strengthen water governance for a just, prosperous, and sustainable future. SIWI focuses on a range of research and development topics within and around water that support decision-makers worldwide. SIWI hosts the World Water Week, the world’s leading annual water event, and awards the Stockholm Water Prize, the world’s most prestigious water award, and the Stockholm Junior Water Prize to foster future generations of water excellence. SIWI also hosts several flagship programs, including the UNDP-SIWI Water Governance Facility, the International Centre for Water Cooperation (ICWC), and the Action Platform for Source-to-Sea Management (S2S Platform). SIWI is also home to the Swedish Water House, which connects Swedish water stakeholders with each other and to international processes.

Water and COVID-19

The impacts

The COVID-19 pandemic clearly demonstrates the importance of ensuring water and sanitation for all for public health and resilience at the individual and societal levels. Handwashing, early on, was promoted as an important practice to limit the spread of the virus, but for the [3 billion people](#) in the world without any basic hand-washing facility with soap and water at home, this crucial and basic protective measure is out of reach.

While SDG 6 is not one of the SDGs under review at this year’s HLPF, progress on SDG 6 is inextricably linked to the success of SDG 3 on good health and well-being in that water, sanitation, and hygiene (WASH) are critical to maintaining a healthy everyday life. But we are not on track to meeting the targets of SDG 6. According to the latest [UN-Water progress update report](#), 2 billion people around the world lack even basic sanitation services, with 7 out of 10 of the 2 billion located in rural areas and 3 out of 10 in Least Developed Countries. 673 million people still practise open defecation. Over half of the population in rural areas and nearly three quarters of the population of Least Developed Countries lack handwashing facilities with soap and water. In Sub-Saharan Africa, 2 out of 5 people have no handwashing facility at all. Good health and well-being are simply not possible without adequate and equitable water, sanitation, and hygiene.

In the same spirit, water is also essential to SDG 1 on alleviating poverty and ensuring a dignified life for all. The 3 billion people without the ability to wash their hands at home disproportionately live in Least Developed Countries, and marginalized communities, such as ethnic minorities, slum dwellers, or indigenous communities, are often most at risk. Leaving no one behind requires a much stronger effort be made to ensure access to water and sanitation for those groups, not least during the pandemic.

The response

The current pandemic has highlighted the need for safe water and sanitation in public places as well as domestic settings and many governments seem to be responding to this, based on [monitoring by SIWI and UNICEF](#). Building new handwashing stations, with soap and clean water, is vital. In parts of India, foot-operated handwashing kiosks are increasing in popularity, such as those seen in the state of Kerala and at the Thiruvananthapuram Central railway station in Karnataka state.

Many countries try to protect low-income households and ensure that they don't lose access to water and sanitation if they fall behind on payments. In Kenya's capital Nairobi, water is distributed for free to informal settlements during the COVID-19 outbreak and other countries have instructed water utilities not to disconnect users for failure to pay their bills. The government of the Democratic Republic of the Congo has promised free water and electricity for citizens and small businesses in Kinshasa for a period of two months. Colombia is actively reconnecting people who have been cut off from water services and trying to improve access for people living in vulnerable circumstances, including indigenous groups. In Gabon, the Clean Hands Operation is trucking water to 40 underserved areas, and in Peru, the Water and Sanitation Services for Lima (SEDAPAL), has been giving out free safe drinking water to families who don't have it in their homes.

Many countries are also rolling out extensive information campaigns about proper handwashing techniques. This is often done online but radio messages, printed materials and other forms of information communication are also important in order to reach people without access to the internet. One example is in Sittwe, Myanmar, where UNICEF has disseminated 7,000 posters and put up LED-powered display boards with information about COVID-19. However, as current research on behavioural change indicates, information alone is not enough. Nudges and reminders are also important. One example is the use of the handwashing emoji as an effective social media communication tool to influence behaviour. Another example is from Ethiopia, where every phone call message prompts a message about coronavirus prevention.

Policy recommendations

The analysis by SIWI and UNICEF indicates five key areas governments need to prioritize in order to encourage safe hygiene behaviour and ensure that everyone has access to a minimum daily volume of drinking water and basic sanitation:

- **Raising public awareness:** Around the globe, there has been a remarkable increase in messages and campaigns about safe hygiene practices, particularly handwashing. It is important to share information but also to use reminders and nudges to make the new habits stick. Equally important is the need to address false information and rumors that are often triggered in times of panic among the public.
- **Strengthen infection prevention and control (IPC):** IPC measures directed at households and institutions are instrumental to stopping the spread of viruses. All households should have a handwashing facility and easy, affordable access to basic hygiene products so that they can keep the home clean and disinfected. It is important to raise awareness of why people with symptoms should isolate themselves and why family members should avoid sharing towels, cups, and cutlery. In institutions, it is vital to secure uninterrupted access to water and sanitation services and adequate equipment for protection and prevention.
- **Access to water and sanitation:** Many countries try to protect low-income households, for example, by ensuring that customers are not cut off from water services for failure to pay their bills. There are encouraging attempts to ensure that even unconnected households get access

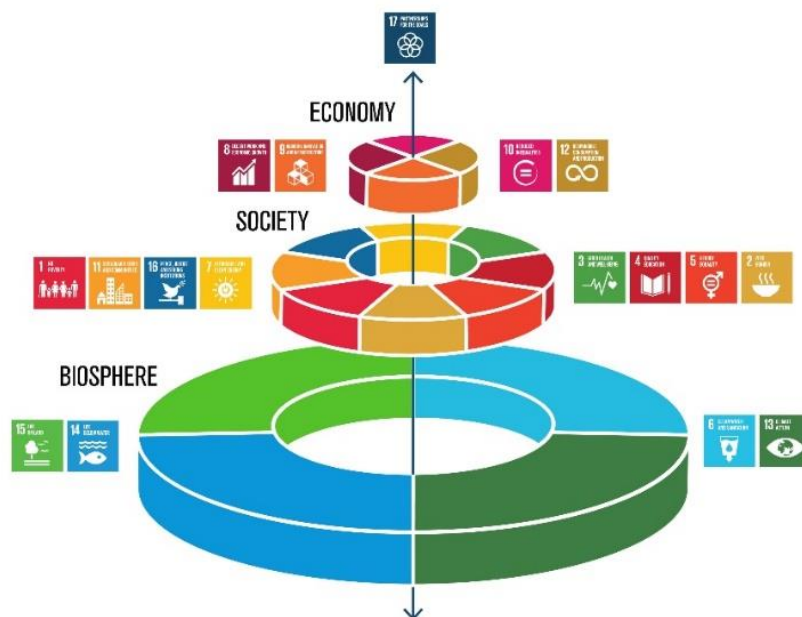
to clean water. Still, the most vulnerable groups are often forgotten, including people living in institutions, people with disabilities, migrant workers, refugees, and the homeless. Rural areas must not be left behind. Everyone should be guaranteed a minimum amount of drinking water.

- **Expand water and sanitation services:** There are many ways to improve access to safe water and sanitation. Some countries are distributing hygiene and water purification kits to households and institutions or finding other ways to facilitate access to soap and disinfectants. Additional water points are also created for vulnerable populations, through water tanks and water trucks. Other countries prioritize the expansion of handwashing facilities in health clinics, schools and public places.
- **Support to service suppliers:** Governments are encouraged to ensure that water and sanitation utilities can continue to function, despite the growing demands and the increased financial pressure caused by the current crisis. Water and sanitation utilities are often struggling to protect their workers when maintaining or expanding their services. Water utilities, small service providers and rural water community-based organizations need technical and financial assistance to continue operating in a safe and sustainable manner.

Any financing directed at supporting emergency interventions must have long-term solutions already in mind. Access to water, sanitation and hygiene must be affordable to all, and this may require additional funding to support service providers and help those who cannot afford it.

Water as a catalyst for a sustainable and resilient recovery

Water is at the heart of sustainable development and resilience building. As illustrated by the SDG Wedding Cake below, freshwater forms the biophysical foundation for economic and social development. However, water extends beyond environmental sustainability: its necessity for humans, society, and the economy to function and thrive means that water provides a holistic roadmap for the COVID-19 recovery and resilience efforts. Addressing the water implications -- co-benefits and tradeoffs -- across all 17 SDG goals is critical to ensuring that the recovery from COVID-19 and other future pandemics is sustainable, resilient, and equitable.



Water and social sustainability – SDGs 1, 2, 3, and 16

SDG 1

Access to clean water is one of the basic human rights and elementary to human dignity and development. Access to water is, for many people, a matter of daily survival or can help to break the vicious circle of poverty. Today, more than two billion people are drinking contaminated water, and as a result, [every minute a child dies](#). Some 844 million people live without access to any kind of water service. Economic growth can contribute to absolute income poverty alleviation, but will not address the multidimensional poverty, which include deprivation and inequalities in access to clean water.

Water and sanitation development often focus heavily on infrastructure investments, overlooking the importance of also investing in the capacities and institutions at national, regional and local levels responsible for delivery, governance and maintenance of water and sanitation services – in other words, good water governance. Water governance refers to the political, social, economic and administrative systems in place that influence water's use and management. Essentially, water governance is about who gets what water, when and how, and who has the right to water and related services, and their benefits. It determines the equity and efficiency in water resource and services allocation and distribution, and balances water use between socio-economic activities and ecosystems. Sustainable water governance is a prerequisite for providing water resources and services for all people, uses and sectors. To ensure this, there is a need for improved transparency, accountability and inclusivity in water governance from local to transboundary levels.

Effort must be made to ensure that the COVID-19 recovery decreases multidimensional poverty, including deprivation and inequalities in access to clean water. To be successful, this must be done not just through the technical extension of service providers, but also through improved governance systems that ensure that access to clean water is affordable for all, including those most marginalized, and that it is guaranteed in the long-term.

SDG 2

Globally, approximately 70 per cent of the fresh water used annually is for the production of food. By 2030, half the global population will live in water scarce areas, and the global demand for freshwater will exceed sustainable supply [by 40 per cent](#). This will create great challenges for a water intense sector such as conventional food production. Climate change is making extreme weather events more frequent and severe. Farmers will be hit not only by disasters such as floods and droughts, but increasingly unpredictable rainfall patterns can also cause crop failure and jeopardize food security.

Investments in rainfed agriculture are crucial to limit freshwater withdrawals for food production. This is especially the case in sub-Saharan Africa, which is one of the driest places on Earth, with highly valuable rainfall. In the coming years, rainfall variability and evapotranspiration are expected to increase, at the same time that the population will grow rapidly. To ensure food security, significant investments are needed in rainfed agriculture as a way to build resilience in the agricultural sector.

The [Transforming Investment in African Rainfed Agriculture \(TIARA\) initiative](#) focuses on how rainfed agriculture and the storage and capture of green water can contribute to reduce poverty among many subsistent famers in Sub-Saharan Africa, for whom lack of water and land degradation creates food and livelihood insecurity. [More than one third of people](#) across the African continent are facing severe food insecurities and 22.8 per cent of the population in Sub-Saharan Africa are

undernourished. The TIARA initiative is working to scale up rainfed agriculture across Africa through financial investments and political leadership, to address inequalities and food insecurity.

There is a need for more sustainable food systems and consumption patterns. Compared to the situation some fifty years ago, the water budget to cater for contemporary food preferences, has increased [by about a ton per person and day](#). The difference is due to an increase in average food production/supply and a higher share of animal-based foods in the preferred diets. To reverse the trend of increasingly water-intense diets, a first step is to become aware of how much water is needed to produce different kinds of food. The world, the poor as well as the rich, needs more nutritious food and efficient and fair distribution, rather than more energy-dense food. Farmers must be given incentives, economic or otherwise, to contribute to a transformation where more nutrition is produced per drop. There is also a need to reduce the losses and waste of food, which includes both overeating and throwing away food, that is currently on the rise.

More efficient use of water in agriculture production in water scarce areas would potentially have much greater impact on local water availability than restrictions on household water consumption level. Hence it is important to work throughout the whole food supply chain, including the food industry and retailers, to assess the sustainability of production and export based on the local context and water availability.

SDG 3

The connections between water and health have already been discussed in the preceding section on the COVID-19 response. The main recommendations from that section – expanding access to water and sanitation to all, including the most vulnerable, as a way to fight the spread of COVID-19 – is equally important for the long-term recovery.

If we want to avoid future pandemics, it is unsustainable that 40 per cent of the global population and 35 per cent of healthcare facilities in low- and middle income countries lack provisions for proper handwashing. Equally dangerous is the fact 60 per cent of the global population does not have access to safely managed sanitation.

Ensuring long-term access to WASH in homes, health care facilities, as well as schools, workplaces, and public places facilitate the maintenance of hygiene and contribute to combatting the spread of future infections. Again, such efforts require not only a technical expansion of services, but improved governance systems as well.

SDG 16

Cooperation over shared water resources can be an important factor in strengthening political stability and peace toward the achievement of SDG 16 on peaceful and inclusive societies and to build effective, accountable and inclusive institutions. Some 276 river basins cross the political boundaries of two or more countries and are home to about 40 per cent of the world's population. However roughly two-thirds of these do not have a cooperative management framework. The likelihood and intensity of water conflicts is linked to the rate of physical or institutional change in the water system, as well as the strength of the cooperative institutions linking countries sharing the same water basin. Hence, very rapid changes that cannot be managed by the existing institutional capacity are at the root of most water conflicts. Good water governance can serve as a model for improving governance

in general. For example, the UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention) can serve as a model for promoting peace, inclusivity, transparency and cooperation between neighbouring states.

Working on water integrity, which includes key elements such as transparency, accountability and participation, is also key to building systems and decision-making processes that prevent corruption. Inclusive and equitable decision-making also require taking into account women's perspectives on water and development issues. These approaches are relevant not only to water management and can be adapted to a range of governance issues and scales. COVID-19 recovery efforts should ensure that decision-making during these challenging times continue to uphold the principles of transparency, accountability and inclusive participation.

Water diplomacy is a dynamic process that seeks to develop reasonable, sustainable and peaceful solutions to water allocation and management while promoting or influencing regional cooperation and collaboration. It enables countries to navigate this risk through the negotiation of agreements on the allocation and management of shared waters such as rivers and aquifers. Water diplomacy opens the cooperation dialogue to multiple stakeholders, including municipalities, provinces and civil society, while recognizing the mandate and responsibility of central government representatives to ensure a water-secure future for their country. SIWI has offered [bespoke water diplomacy training courses](#) to inter-governmental organisations (such as the European Commission), river basin organisations (Mekong, Orange-Senqu, Incomati, Nile) and national governments (Botswana, Ethiopia, Kenya, Palestine, Indonesia).

Water and economic sustainability – SDGs 8, 10, and 12

SDG 8

Sustainable economic growth is not possible without the sustainable use of natural resources. Global freshwater resources are finite, and poor water governance have detrimental impacts on economic productivity and the availability of decent work. The shift to a sustainable circular economy in which the central role of water is fully recognized leads to the creation of more sustainable jobs and much greater social inclusion. [Three out of four jobs worldwide](#) are water-dependent. From its collection, through various uses, to its ultimate return to the natural environment, water is a key factor in the development of job opportunities directly related to its management (supply, infrastructure, wastewater treatment, etc.) and in water-dependent economic sectors including agriculture, fishing, energy, industry and health.

Today, [two thirds of the global population](#) are estimated to live under conditions where water is scarce for at least one month of the year. Climate change is expected to increase that exposure, especially for disadvantaged groups such as rural households engaged in agricultural production in low-income countries. Equitable access to water for agricultural production, even if only for supplemental watering of crops, can make the difference between farming as a mere means of survival and farming as a reliable source of livelihoods. While smallholder farmers constitute the backbone of national food supplies, contributing to more than half of the agricultural production in many countries, they themselves often suffer from food insecurity and malnutrition.

Access to WASH, both at home and at the workplace, is a prerequisite for productive employment. The connection between WASH and productivity is visible through the importance of WASH for physical and mental health, which in turn makes productivity possible, but also through such simple

things as access to WASH at the workplace reducing time spent on walking long distances to gather water. Access to WASH in the workplace can also be seen as part of the right to a safe work environment and part of the rights businesses [have a responsibility to respect](#). In the recovery efforts from COVID-19, more needs to be done to ensure that workplaces are safe and hygienic, and do not contribute to the spread of future pandemics.

During the pandemic, SIWI's Sustainable Textile Water Initiative has instituted a capacity-building program to help employees in the Bangladeshi textile sector stay safe from COVID-19. The objective of the project is to ensure the health, safety, and rights of the workers in the textile and garment industry during the pandemic, and its activities encompass awareness raising trainings, social media and digital campaigns, implementation of constructive measures to improve social dialogue, and the dissemination of informational, educational, and communication materials on COVID-19.

SDG 10

Gaps in access to water services and basic sanitation [increase inequality within and across countries](#). The situation is worst in the LDCs, where only 32 per cent have access to basic sanitation services and only around 27 per cent have home access to handwashing facilities. More than half of the 844 million people without access to water services that are drinking water from unprotected sources live in Sub-Saharan Africa, and 80 per cent live in rural areas. Women and infants in low-income communities in developing countries are faring the worst.

Inequalities related to WASH are reinforced and are formed by structural social, political, economic, and cultural inequalities that permeates each society, but take on different expressions over time, scale and location. As a consequence, women's control and access to and use of a range of resources (e.g. land, income, social networks) and services (e.g. health, education, justice) affect and are affected by inequalities in WASH access, management and use. The COVID-19 recovery efforts need to pay extra attention to alleviating these inequalities and ensure equitable access to WASH.

Indigenous peoples and ethnic minorities also suffer disproportionately from economic, social and political marginalization and human rights violations, including poor access to water and sanitation services. As custodians of many of the world's most fragile and important ecosystems, their knowledge and participation are essential to ensure respect for their rights and to achieve an equitable and sustainable recovery.

SDG12

Water is a key factor for various global supply chains and the demand from all water-using sectors is projected to increase. Efforts must be made so that the water-use is efficient and compatible with the sustainable management of water resources, also taken non-economic demands on water into account. Unless all values of water, for all parts of society, are taken into account, water-use outcomes are likely to be inefficient and to leave the most vulnerable groups without access, contrary to the promises of the 2030 Agenda to leave no one behind.

Production also affect water by what is emitted during and after the production process. In many cases, the unsafe disposal of chemicals and waste puts water resources, and by extension the health and wellbeing of communities, at risk. This is especially important as it pertains to antimicrobial resistance and the risks it entails for the future spread of diseases.

The [Responsible Antibiotics Manufacturing Platform](#), RAMP, is a unique collaboration between pioneers among procurers, regulators, and companies. RAMP brings together procurers, regulators, and companies to co-create a business case for sustainable manufacturing, in everybody's long-term interest. Procurers in the platform are expected to engage in the development of procurement criteria that give companies real incentives to shift to sustainable production methods. Partners provide information, including access to their factories and insights into the procurement process. All stakeholders contribute to mutual learning and improvements. The aim is to contribute to higher standards in production, procurement, and regulations, with the vision that by 2030, the release of antibiotics to the environment from manufacturing is minimized, and broader sustainability gains have been achieved in partnership with industry and governments, international agencies and other related stakeholders to provide a competitive advantage to the implementing companies, ensuring access to functional antibiotics that have been manufactured in a manner that does not promote antimicrobial resistance.

Wastewater reuse is an area with great potential. By harnessing the embedded energy, water, and nutrient content of wastewater, increased wastewater treatment can become a source of net-positive renewable energy, with added benefits for nutrient recovery and circularity.

Water, climate action, and environmental sustainability – SDG 13

Sustaining and nurturing our environmental commons is critical for our future. It is expected that by 2025, 1.8 billion people will experience absolute water scarcity and two thirds of the world population will be living under water-stressed conditions. Drought and water scarcity are often considered to be the most devastating natural disasters, causing short and long-term economic, health and ecological losses.

People and nature alike experience climate change primarily through impacts to the water cycle. Changes in frequency, timing and magnitude of hydrologic events as a result of increasing temperatures are becoming the new normal. The world is experiencing a continuous rise in extreme weather events, which could diminish the many developments low-income countries have made over that last decades. Extreme weather events such as extreme heat, intense rainfall, floods, landslides, sea level rise and drought also disrupt the supporting, regulating and provisioning services of ecosystems.

The sudden changes in water use witnessed during recent months pinpoints the need for water resources management capacity to respond to sudden shocks, while addressing the longer-term adaptation to climate-related impacts on water resource availability and demand. Water Utilities supplying cities over the world experienced an important shift in water supply, almost closing supply to industrial and commercial users and increasing supply to domestic water users working from and staying at home all day long during lockdown. While coping with coronavirus confinement, supply to domestic users increased with 5-10% in Chennai, India, and with 11% in South West UK.

Nature-based solutions, such as maintaining wetlands and green spaces to support water supply, urban runoff, and temperature regulation in a city, are key for resilient water management. Forested watersheds provide an estimated 75 per cent of the world's accessible freshwater resources, on which more than half the Earth's people depend for domestic, agricultural, industrial and environmental purposes. Sustainable forest and multi-functional landscape management is essential for good water management, and it can provide "nature-based solutions" for many water-related challenges.

Productive, multifunctional landscapes – with healthy ecosystems and a mix of trees, forests and agricultural lands – support and regulate the hydrological cycle while contributing to climate change mitigation and adaptation. Water resource management that supports the productivity of landscapes is key to combating climate change while also contributing to poverty reduction and improved livelihoods for people, production of raw materials, enhanced biodiversity, and maintenance of the water cycle. Strengthening multilevel governance arrangements that enable genuine stakeholder participation is key.

The COVID-19 recovery efforts should pay extra attention to potential nature-based solutions that can deliver many co-benefits simultaneously, including climate change adaptation and mitigation, enhanced biodiversity, and improved hydrological regulation. Nature-based solutions, where appropriate in connection with traditional infrastructure, are often cost-effective and increased investment and usage of them is an important step to humans making peace with nature. They can also improve resilience against pandemics: for example, protection of vital wetland ecosystems prevents the spread of zoonotic diseases such as COVID-19 and Ebola as well as the release of stored carbon.

Key messages for inclusion in the Ministerial Declaration

The HLPF Ministerial Declaration should, inter alia, include statements on the need for:

- **Access to WASH for COVID-19 relief:** Water, sanitation, and hygiene are essential tools to limit the spread of COVID-19, and in order to limit the infection, access to WASH needs to be improved, especially for poor and marginalized groups and communities. In the longer-term, stable, equitable, and affordable access to WASH must be ensured to improve resilience against future pandemics and lift people out of poverty.
- **Protecting nature and water resources for people and planet:** COVID-19 highlights that our current relationship with nature and natural resources is not a sustainable one. In the recovery efforts from COVID-19, focus must be on establishing a new pact with nature that ensures the sustainable use of natural resources, including water resources, that meet the needs of people as well as those of the planet.
- **Integrated and holistic approaches to sustainable development:** Accelerated action is needed to reach all SDGs, as well as other global agendas such as the Paris Agreement. We will not achieve our goals if we continue working in siloed approaches and in isolated sectors. Cross-sectoral and multi-stakeholder approaches need to become the new norm for sustainable development.