

Global Water Security-the single most significant impact and investment opportunity

Thomas SCHUMANN

Thomas Schumann Capital
Founder

Kübra KOLDEMİR

Argüden Governance Academy
Sustainability Researcher
&
SustainFinance
Business Writer

That water is essential to planetary well-being is undeniable. It is indisputable that securing water for different uses provides countries with socio-economic development. However, investing in water resource development is still challenging for governments and corporations worldwide. Energy has alternatives (solar, wind, nuclear, etc.), but there is NO substitute for water.

Water demand is projected to grow by 55 percent by 2050 (including a 400% rise in manufacturing water demand). By 2050, 1 in 5 developing countries will face water shortages. Today, the challenge of water security is global and growing. The criticality of this challenge is reflected in the World Economic Forum's 2015 Global Risks Report, in which water is ranked as the global risk with the single most significant potential impact on economies over the next ten years. Reduced freshwater availability and competition from other uses — such as energy and agriculture — could reduce water availability in cities by as much as two-thirds by 2050, compared to 2015. Together, global water use, storage, and distribution — and the lack of wastewater treatment — contribute 10% of global greenhouse gas (GHG) emissions, making it key to the net-zero transition. Reflecting the value of water in investment decisions and disclosing exposure and vulnerability to water-related risks in investment portfolios could further help align the financial sector with water security objectives.

According to Wood Mackenzie, Global GDP is projected to reach \$170 trillion by 2050. A World Bank report on Climate Change and Water suggests that investing in global water security mitigates the potential loss of up to 6% or \$10.2 trillion of global GDP per year.

There are two critical aspects of financing water security for the future. By far, the most considerable amount is what must be financed by governments and municipalities to support water extraction, delivery, and sanitation. The OECD estimates investment needed until 2030 to achieve SDG 6 is approximately \$1.7 trillion (3 times the current spending). Moreover, this represents only a fraction of the water investment agenda: projections of global financing needs for water infrastructure range from \$6.7 trillion by 2030 to \$22.6 trillion by 2050, and these figures do not cover the development of water resources for irrigation or energy (they are wrapped into the clean energy investment estimates).



estimate of global economic losses related to water insecurity, which are nearly \$500 billion per year. Taking action on water risks is essential for climate action and makes business sense. That is the business and investment case for Global Water Security. This issue has yet to include establishing a fair price for Water that the Global Commission on Economics on Water is working on. A price for water and creating a water credit similar to the carbon credit ensures additional upside for investing in global water security.

TheIMPACT Sept. 28, 2022 episode – Alicia Nieves talks with Thomas Schumann, founder of Thomas Schumann Capital, about reviving America's Water System with traditional and alternative bundling. Thomas expounds on achieving the UN's Sustainable Development Goal 6, the connection of the water crisis to the climate crisis.

Food and water use are inextricably linked, of course. Agriculture is rapidly draining aquifers and surface water reserves worldwide; in most countries, [agricultural pollution is the leading cause of water degradation](#). According to a Ceres report, [Feeding Ourselves Thirsty](#), it is noted that crop irrigation accounts for 75% of total consumptive use of water in the United States, with most of it, used to grow crops for livestock. As the single water user across the nation, irrigation for cattle feed crops is the leading cause of water depletion in a third of all western U.S. sub-watersheds.

"We must invest in companies innovating to shift the global food and water supply system away from industries that use disproportionate amounts of precious resources of land and water if we are to have enough resources to feed a growing global population of almost 10 billion by 2050," says Elysabeth Alfano, CEO of VegTech™ Invest, Advisor to the world's only Plant-based Innovation ETF, [EATV](#).

From a corporate investment perspective, the numbers are smaller but still material in terms of the impact on corporate earnings in the future. "There is a compelling economic case for investment in water. The benefits from strategic investment in water security could exceed hundreds of billions of dollars annually." The recent analysis provides a partial