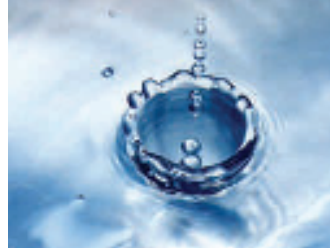


Environment & Natural Resources

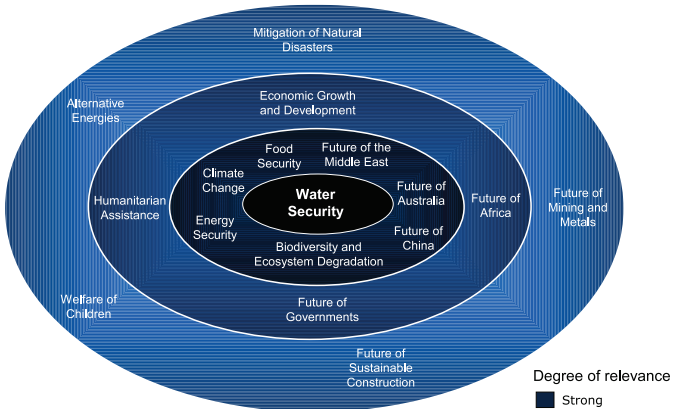
Water Security

A. Description of the issue

Our wealthier, more populous, more climate-variable world is fast becoming a more water insecure world. Water insecurity poses a very real threat to the economic development and security of numerous countries.



Our global society will soon face a fundamental rethink of how water is viewed and what it represents to us as human beings. This rethink will have deep philosophical, religious, political and structural economic implications. There are no technological alternatives or substitutes to water; we simply have to better manage the resource. No government, business or NGO can solve the water challenge on its own. Global institutions are not currently configured to provide the multidisciplinary, multistakeholder platforms required to discuss, highlight and collectively solve the water challenge before it becomes a crisis.



B. Dimensions

- **Agriculture:** Given that the agricultural industry accounts for nearly 70% of global freshwater withdrawal, greater consideration and debate must take place regarding agricultural governance and policy reform.
- **Pollution and water quality:** The unrestrained use of harmful pesticides and unregulated industrial discharge have led to a serious deterioration in water quality in a number of important rivers and lakes. Proactive measures to replenish aquifers, purify local water supplies and increase investment in and the promotion and use of technologies are necessary.
- **Human health/sanitation:** Many regions face serious difficulties regarding the access and distribution of potable water. Tangible and affordable solutions to the problem of water service delivery will be central to addressing the impact of decreasing freshwater availability and related sanitation concerns such as waterborne diseases.
- **Regulation/policy issues:** To more effectively address freshwater management issues, governments must take greater initiative to find lasting and widespread solutions. Such sensitive water issues as pricing and water allocation must be carefully evaluated.
- **Infrastructure and financing:** Innovative financing mechanisms, including public-private partnerships, should be explored and implemented to provide more reliable and efficient water services.
- **Energy and water usage:** With domestic energy needs rising steadily in many parts of the world, significant investments are being made to exploit the hydroelectric potential of certain regions. Beyond the need to build more efficient dams, it is also necessary to improve the amount of energy required to extract water from aquifers, transport water through canals and pipes, and manage and treat water for personal consumption and agriculture.
- **Water politics/conflicts:** Transboundary water disputes and increased migration are likely to become increasingly frequent in future decades. Exploring negotiation techniques and benefit/cost sharing scenarios between countries will be of extreme importance to maintaining peaceful relations.
- **Regional issues:** The wide scope of contemporary water issues depends on the geography, history, politics and industrial development of different nations. As a result, certain water debates and potential solutions have a specific regional focus. Some possible regions or countries to consider are China, India, Australia, Spain, south-western United States, North and Sub-Saharan Africa and the Middle East.