Water, water, everywhere? Maybe, but not at the time and place of demand! There is plenty of water on earth, but only 3% of the world’s water is fresh water; about 69% of this is locked away in frozen glaciers and polar icecaps. The rest is found mainly as groundwater, with only a very small fraction available in surface waters or in the air [1].

The essence of global water scarcity, and forces driving it
- The following forces drive the rising global demand for water:
  - The increasing world population, improving living standards, changing consumption patterns, and increased crop irrigation to meet biofuel demand [2-5].
  - Water pollution and climate change are expected to amplify the problem [2-4].
- At the global level and on an annual basis, there is enough freshwater to meet the global water demand, but there is a geographic and temporal mismatch between water availability and demand, leading to water scarcity in several parts of the world during specific times of the year [5,6].
- Water scarcity can be due to physical shortage or scarcity in access due to the failure of institutions [7].

The challenges
- Water scarcity is a global concern, affecting everyone. The World Economic Forum ranks water crises as the greatest global risks in terms of potential impacts to economies, environments and people [8].
- Some 844 million people worldwide lack access to water; inadequate sanitation is a problem for 2.3 billion people [9].
- Two thirds of the global population (4.0 billion people) live with severe water scarcity at least one month of the year [4]. This figure is expected to increase to 4.8-5.7 billion by 2050 [10].
- Water bodies like the Colorado River and Lake Mead in Arizona are drying up.
- Around half the world’s wetlands have disappeared [11].

How to mitigate the problem
- Unlike unpredictable natural disasters such as hurricanes or earthquakes, the general location and timing of water scarcity are well known [1, 11], giving us ample lead-time to mitigate the potential risks [10], if we are willing to act.
- Some of the actions that we need to take in order to minimize the threat posed by water scarcity to biodiversity and human welfare include, but are not limited to [12]:
  - putting caps on water consumption by river basin, and
  - setting benchmarks and increasing water-use efficiencies.