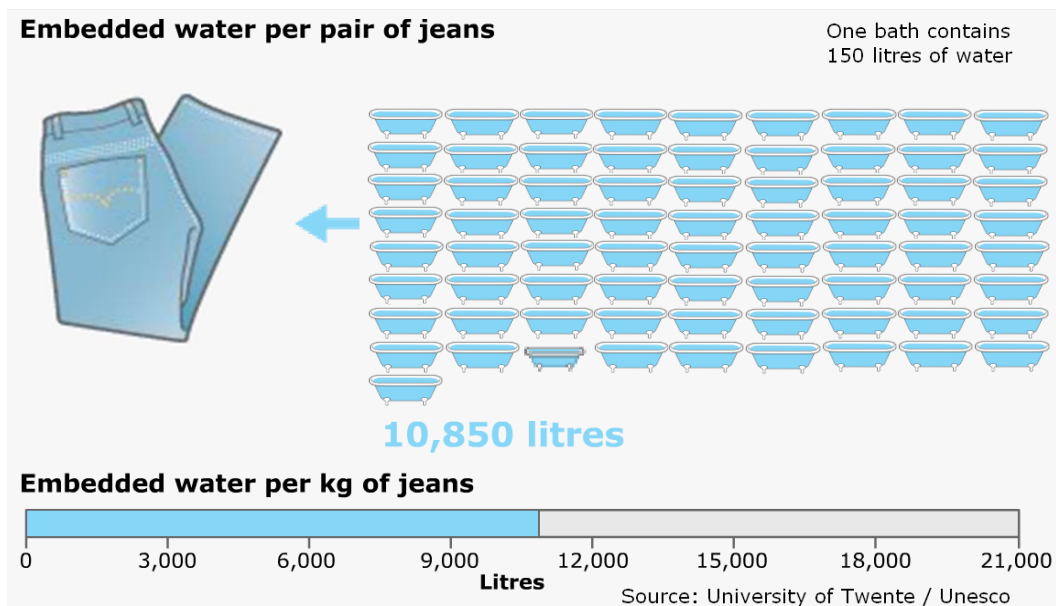


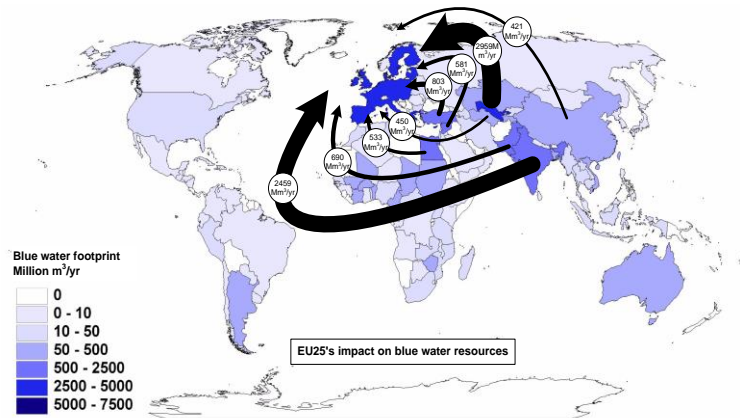
Global Water Security – Introduction



River and coastal water quality still often poor world-wide ⇒
Hydrodynamics and Sediments are the vectors of pollutants from Source to Sea



The Water Footprint of a pair of cotton jeans is typically 70 baths of water



SOURCE;Hoekstra & Chapagain, 2008

Much of Europe's cotton comes from the Indian/Asian Region ⇒ EU citizens therefore have a direct impact on water resources and quality (water security) of another continent



Wastewater discharged from crop production (e.g. cotton) often contains high levels of pollutants ⇒ transported by hydrodynamics to river and sea



State-of-the-art vertical farming uses only 1% of the water of conventional food production ⇒ design optimised with hydro-thermodynamic modelling