

The Impact of Water on Business

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The world will face a 40 per cent shortfall in water supplies by 2030. The good news is that if we are smart, we can meet the challenge successfully. But this can only happen through co-operation between industry, governments, non-governmental organisations (NGOs) and communities, SABMiller's head of sustainable development, Andy Wales, told INSEAD Knowledge on the sidelines of the LBC's (London Business Conference) 'Corporate Water Scarcity Risk Management Conference' held recently.

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Beverage companies such as SABMiller and Coca-Cola clearly depend not only on the availability of water but on water that is of high quality.

Corporations like Unilever use water differently, and water usage differs vastly within the business itself. In the foods portion of the business, more than 90 per cent of the water is associated with agriculture. In the home and personal care side of the business, over 90 per cent is linked to consumer use.

As countries prioritise water for growing crops and hence set very low prices for agricultural water, this isn't the main problem Unilever faces. "Water scarcity faces us most acutely in the consumer use phase. If consumers have to pay a lot for water, then they are less likely to want to buy products that require a lot of water to use. That's why we're designing products to use less water in the consumers' hands, and targeting that innovation at countries that are facing water scarcity," John Temple, Unilever R&D's Environmental Sustainability Director, told INSEAD Knowledge.

A good example is Surf Excel in India. Traditional powders for hand washing laundry, which is the dominant habit in India, are very high foaming and require a large volume of clean water to rinse the foam away. Unilever's product has a time-release anti-foam in it, which produces foam at the start of the process to reassure the consumer that the product is working to clean the clothes, but then an anti-foam is released, which kills the bubbles and the consumer then only requires a small amount of water to rinse the clothes.

"We estimate that this innovation saves three buckets of water per wash, saving the consumer time and money, as well as making lower demands on the available water resources. This sort of innovation only comes about through detailed consumer habit studies and a focus on reducing environmental impacts," Temple argues.

Strategies for containing water risks

What are some strategies that have been taken to ensure water risks are contained and even lowered?

SABMiller has set a target to improve the water efficiency within its breweries by 25 per cent by 2015. “This is a stretching target but we believe we can achieve it,” says Wales.

But he says the bigger potential challenge for producing beer is upstream in the agricultural element. “This is why we use water ‘footprinting’ - to better understand the quantity, efficiency and geographical context of water used in the beer value chain in order that this resource can then be better managed. The insight provided by water footprinting is used to develop targeted programmes to improve water management.”

Last October, SABMiller announced its global partnership with WWF - The Water Futures Partnership. This builds on existing best practice undertaken by SABMiller and WWF in Colombia, Honduras and El Salvador, and is building a detailed understanding of the risks posed by anticipated pressure on water supplies in Peru, Tanzania, South Africa and Ukraine.

“Our project in Honduras involves helping farmers to introduce biological controls for pest management. They use a fungus (*Metarhizium anisopliae*), which attacks the sugar cane pest, the froghopper (*Aeneolamia postica*). The fungus attacks the froghopper, but is not toxic to humans, animals or the ecosystem as a whole. This eliminates the use of toxic pesticides, saves money and reduces the subsequent run-off into water systems,” says Wales.

In South Africa, one of the projects with WWF involves tackling water-intensive alien vegetation. Sufficient land is rehabilitated to offset the water consumption of the nearby brewery. In addition to addressing the issue of water scarcity, this project also provides high levels of local employment.

Unilever takes the view that knowledge of the total life-cycle will be helpful in guiding its water strategy. From work that the company has done, it knows that its own internal water usage is tiny compared to the volume of water used in agriculture to irrigate crops, and the amount of water used by consumers when they shower or wash their clothes.

“Knowing this has allowed us to focus on doing drip irrigation field trials as part of our sustainable agriculture programme and to set our R&D teams to design products that require less water for consumers, like Comfort Easy Rinse which is doing very well in India. Our low water usage inside our factories means we haven't faced supply problems, but we have already evaluated how many of our sites either face water scarcity today or in the future, and prioritised investment towards targeted water conservation measures,” says Temple.

Growing awareness of risks

The availability of water has always been an issue for utilities, the bottled water industry and any sector that has either a high volume requirement or where water is the primary product, but increasingly, Temple adds, “we see water coming up as a potential issue within a much wider range of private companies.”

As water issues are most relevant at the local level, Temple says companies facing immediate water shortages have to be much more efficient in what they use, make judgements about future risks, and often interact with local governments to try and change the situation for the better. “I see this form of discussion coming up in the CEO Water Mandate meetings, with some best practice companies already quite far down this road, but in general much higher awareness of water as a business risk in the future. Water risk is also being mentioned in investor reports, such as the recent Ceres ‘Murky Waters?’ report.”

Yves Loerincik, CEO of Quantis, a firm in Lausanne, Switzerland, which consults on how businesses impact the environment, says water risk is an increasing issue, and although methodologies are still under development, organisations shouldn't underestimate the risks associated with water use, which can be huge. The water issue is more complex than the climate issue, Loerincik says, adding that unfortunately many companies do not realise that water is going to be the next carbon, and that they should be looking to put in place a strategy rapidly.
