



INSTITUTE OF DIRECTORS
SOUTHERN AFRICA

Sustainable Development Forum: Water scarcity and its impact on business

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The Institute of Directors in Southern Africa's Sustainability Development Forum hosted a panel discussion on the energy crisis on 20 November 2015. The discussion came against the backdrop of record temperature highs in November, late and scant rains in Gauteng and drought in several areas of the country.

The discussion aimed to help attendees understand the scale of the water issue and equip them to assess the risks their businesses face. Typically classified as a non-financial risk, water scarcity and deteriorating quality, can quickly make a negative impact on the balance sheet if a business has to relocate, halt or alter production schedules or, of course, pay substantially higher costs.

Water, as everybody knows, is essential for life. Yet despite the country's aridity and low rainfall, it is not valued sufficiently until it becomes scarce, at which point price almost becomes irrelevant. The fact that we are now officially suffering drought in many regions means that the complex, unresolved issues around water are exposed, and need to be solved urgently. Even if the summer rains do arrive, the underlying problems will not have been solved.

The panelists brought a range of expertise to the discussion. Karin Ireton, Chair of the Sustainability Development Forum, chaired the panel and offered a business perspective. Other panelists were Professor Coleen Vogel from the Global Change and Sustainability Institute at the University of Witwatersrand; Arthur Kamp, Investment Economist at Sanlam Investment Management; and Dr Nezar Eldidy, Vice Chair: Management and Institutional Division, Water Institute of South Africa.

Important issues and insights that were highlighted during the discussions included:

Water is a complex issue and requires nuanced, inclusive solutions

South Africa's average annual rainfall is around half the global average, and our population is growing significantly. Water scarcity has always been a fact of life in this country, and the effects of climate change/cycles make the likelihood of extreme water scarcity or flooding more likely. But scarcity is not the only issue; because it is essential to life, access to quality water is also an issue of social justice. Thus, discussions about how resolve the water issue cannot focus on technical or economic issues alone, but must take the broader issues into account.

In short, the lenses through which one scopes the problem will influence what type of solutions one comes up with. The importance of creating and supporting broad forums was emphasised in order to co-produce solutions that all sectors of society could accept.

Another important dimension, and one that presents a particular challenge to politicians and many shareholders who have a short term focus, is the fact that one's thinking needs to be extremely long-term. The need to build infrastructure demands this approach, as does the requirement to change behaviours.

Business is a major water consumer, and needs to improve the way it uses water

The top 100 companies on the JSE use approximately 8 billion cubic metres of water annually, indicating just how important water is in multiple sectors. However, South African companies are only average, in global terms, as regards the efficiency with which they use water. From beer brewing to mining, producing food crops or even running corporate buildings we need to benchmark and examine water use. In the Western Cape studies indicated that grape crops produced under water restriction were not markedly different from those produced in years of water abundance. Companies in the same sector vary quite significantly in respect to their efficiency in using water, indicating that there is a lot of scope for improvement initiatives. As water increases in price, and becomes increasingly scarce, efficiency improvements make sound business sense.

Water prices will increase

The Department of Water and Sanitation (DWS) has recently published draft pricing regulations for comment. Water tariffs do not currently reflect the cost of supply and it may take significant increases in price before consumers respond. As we have seen in the ongoing energy crisis, it took fairly dramatic price increases for business to invest seriously in energy efficiency, and it seems likely that DWS will be learning from this experience. The pricing model will be a hybrid one, and waste management charges to prevent pollution of our scarce water reserves are expected to be particularly significant for many businesses.



Massive infrastructure will be needed, but there are challenges

South Africa's water infrastructure is almost fully utilised, and the DWS has indicated it needs to spend R670 billion over the next 10 years, almost half of which will need to be funded by going to the market. This may be hard to do, especially if the new Investment Bill does discourage overseas investors. The regulations for public-private partnerships need to be improved, and an enabling environment created including strict financial and project management. The caution is, however, that adding infrastructure won't solve management problems.

An additional point is that even if this money could be spent, the anticipated benefits might still prove elusive owing to corruption, poor planning or lack of capacity.

Water management needs to be enhanced significantly

Given that South Africa's water resources are finite, and expected to be fully exploited by 2050, we need to resolve the many challenges facing the effective management of what we do have. Some of these challenges include:

- Complex management structure from national department down to municipalities, with unclear lines of governance, conflicts of interest and limited accountability.
- Lack of specialist human resources and an overall leadership crisis.
- Stop-start project implementation.
- Weak management of budgets.
- High funding deficit.
- High levels of corruption.
- Massive budget overruns on infrastructure projects.

Passive management of water resources, for example by protecting natural systems like wetlands and grassland catchment areas, is receiving growing attention. The National Research Foundation is increasing its focus on Earth Systems Science to develop more focus on systemic, cross-disciplinary thinking.

Ineffective waste water management is creating added health and environmental problems, which will ultimately add to the business cost structure. Municipalities and business need to work together to formulate and implement solutions. The high rate of loss via leaks due to poor infrastructure maintenance is relatively easy to fix and could provide significant relief, as well as short term jobs.

What companies and directors can do

- Start reporting on water. There seems little doubt that water reporting will become part of integrated reporting. However, there are many complexities and it could take several years to have good and accurate information, so it would be advisable to start getting a handle on it now.
- Understand the risks. The reporting process can help companies to focus on, and understand, the risks posed by water scarcity and poor water quality. In particular, water risks and costs across the supply chain are hard to establish accurately but can be significant.
- Benchmark their water usage against their peers, nationally and internationally.
- Be willing to participate in dialogue across industry sectors and with government, civil society and academia to come up with systemic, long-term solutions.
- Give input into the national pricing strategy and then integrate its implications into the way the company does business.
- Support educational initiatives to change behaviour patterns, both within business and in society more broadly.
- Look for business opportunities in product innovation that could reduce water usage or assist with water capture or recycling.



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