WRC CEO, Dhesigen Naidoo

Fluid Thoughts

The year in focus - 2015

The year 2015 has been a vanguard year globally.

We have as the global community confronted some of the conventional wisdoms and dominant trends on the wake of the reality bites of some of the crispest challenges facing us in all of our time on Earth. The water year began with the World Economic Forum concluding in the Global Risk Register that water (the challenge of water security and the possibility of water crisis) constitutes, on a combination of likelihood and impact, the single highest risk factor to the global economy.

This convergence of the global community of both public and private sector players, unique in modern times, served as an important stimulus to another important coming together, now of global leaders, to develop an important international work-plan for the next 15 years. In September, heads of state and government met at the United Nations and agreed on the most ambitious set of targets we have seen in recent times – the Sustainable Development Goals or SDGs.

The SDGs build on the achievements of its predecessor, the Millennium Development Goals (MDGs), with a much higher level of ambition and resolve with the primary goals of the complete eradication of poverty and ushering of a world where the basic needs of all human beings are met in a sustainable manner. In many ways this reminds us of the local discussions we ourselves had converged on at a much smaller scale with the RDP or Reconstruction and Development Programme. Among the 17 SDGs is a stand-alone goal for water and sanitation – SDG6 – which has the target of achieving by 2030 the universal access to safe water and dignified sanitation for all human beings on Earth.

There are three different tensions that we have to align if these ambitions are to be achieved in our lifetime. On the positive side, we have never had such a dramatic global convergence on such an ambitious set of global targets for the poor and vulnerable before. At the same time, we have to be realistic and expect that the different global political tensions will indeed play themselves out in the implementation plan.

The second tension is that we have adopted this plan in the middle a difficult period of global economic contraction, one where the rapid and quick wins of the emerging markets have sobered in their maturing into the formidable challenge of stagnating demand in the developed world. In this domain, Africa remains an interesting positive outlier albeit from a lower baseline.

Unfortunately, because of the mature characteristics of its economy, South Africa falls a little outside this net. But the big question on the SDGs is of course the financial barriers to achieve implementation. There are many innovative financial models currently in discussion, ranging from cooperatives development to newer, easier models for raising debt capital and the emergence of new players in the Development Bank space like the BRICS Bank.

The third tension is the seemingly unstoppable juggernaut of increasing global inequality, both between nations as well as between individuals. Our challenge is to find within this tense, but highly fluid environment, the strings of innovative convergences that will eventually result in a more sustainable world. The test platform of Cop 21 of the United Nations Framework Convention on Climate Change (UNFCCC) is almost upon us in this regard. When the world's leaders addressed this matter in New York, this matter they embraced the ambition and recognised the challenges.

In the words of Narendra Modi, Prime Minister of India, "Just as our vision for Agenda 2030 is lofty, our goals are comprehensive." This is indeed true. The 17 SDGs are described in 169 targets and have to perform adequately to 834 indicators. Zimbabwean President, Robert Mugabe, offered a succinct summary of the moment when he said that the SDGs represents a "pathway to a brave new world", one that can only be achieved through "conscious construction" and calls for the creation of "a new global citizen".

Closer to home, we begin this journey in the midst of one of the most severe drought events in the democratic South Africa. We have declared disaster areas in three provinces to facilitate the release of resources for emergency interventions to safeguard affected people and where possible their livelihoods in the agricultural domain. In addition, the science indicates that this is due to the coming together of two natural phenomena. The first is that in the manner of wet dry cycles in South Africa, this dry spell is overdue by about five years. The current severity is however unprecedented.

The second is that the world is in year two of an El Niño cycle and one of the affected areas of this precipitation frameshift is

National and international water experts together contemplated South Africa's water future at the recent WRC Symposium.

of course Southern Africa. This may mean that we are in year two of a five to seven-year dry cycle. Add to this the vagaries of climate change with 2015 predicted to be the warmest year in recorded history globally.

These matters were deliberated at length in the September Water Research Commission Symposium and Water Technologies Summit. The primary conclusions were that while we already have many of the technological solutions at laboratory scale, we need to rapidly increase our investments in moving them to market ready products that can be use on the ground to increase our water security.

The second is that we need to empower the roll-out of the Water Research Development and Innovation Roadmap so in a decade from now we not only ensure basic water security, but organise that our water resources and water products become a key player in South Africa's economic growth and global competitiveness. To enable this we need to facilitate the development of large pools of skilled talent in the water sector and the development of a significant private sector component in the South Africa water Industry. Minister of Water and Sanitation, Nomvula Mokonyane, and Minister of Science and Technology, Naledi Pandor, have been explicit about government's commitment to this agenda. We need to rapidly expand that team with higher participation of the business sector and civil society.

South Africa has been a dry country in all of human recorded history, and our ability to thrive has always depended on our water ingenuity. From the Khoi San using ostrich eggs for water capture, storage and transport innovations in ancient times to becoming the world foremost nation in the field of water transfer technology and inter-basin plumbing we have enjoyed world leadership. This opportunity once again has come around, this time around smart water purification, supply diversification and heralding a sanitation revolution characterised by no and low water sanitation solutions. Water smart citizens – individual and corporate – are at the centre of this narrative. Team South Africa can and must lead in the water domain to ensure a successful Mzansi.

Diary

Young Water Professionals
November 16-18
The theme for the 4th YWP South African biennial conference, which will be held in Pretoria, is 'Stop talking, start doing'. Conference topics include domestic and municipal water and sanitation; drinking water and bulk water supply; industrial and mine-water; environment water; and capacity building and training. Enquiries: Jaco Seaman (Conference organiser),
Tel: +27 (0)11 805-3537; Email: events@wisa.org.za; Visit: www.ywp-za.org/

Water loss
February 1-3
The International Water Association (IWA) Water Loss conference will take place in India. Visit: http://www.waterloss2016.com/

Large dams
May 15-20
The 84th Annual Meeting of the International Committee of Large Dams will be held in Sandton, Gauteng. This is the first time since 1994 that this international conference is coming to South Africa. Visit: www.icold2016.org

Water
May 15-19
The Water Institution of South Africa is hosting its biennial conference at the ICC in Durban with the theme 'Water – the ultimate constraint'.
Enquiries: Jaco Seaman (Conference organiser), Tel: +27 (0)11 805-3537;
Email: events@wisa.org.za; Visit: http://www.wisa2016.org.za/

Wastewater technologies
June 13-16
The 13th IWA Leading Edge Conference on Water and Wastewater Technologies will take place in Spain with the theme, 'Evaluating impacts of innovation'. Visit: http://www.let2016.org/

Geology
August 27 to September 4
South Africa is hosting the 35th International Geological Congress in Cape Town. The event is aimed at, among others, contributing to the advancement of fundamental and applied research in the geological sciences and to provide a space where ideas and information can be exchanged across the geoscience disciplines. Visit: www.35igc.org

World water
October 9-13, 2016
The IWA World Water Congress will take place in Brisbane, Australia with the theme 'Shaping our water future'. Visit: http://www.iwa-network.org/event/world-water-congress-exhibition-2016/