Need for Strategic Regional Cooperation in the Area of Water to Support Implementation of the WEF Nexus: River Basin Organisations

> Nkobi M. Moleele Chief Scientist, RESILIM

Southern Africa Regional Resilience in the Limpopo Environment Program (SAREP) (RESILIM)

November 2016





PREDICTED SCENARIO

• 850 mm Isohyate predicted to move northwards by ± 150 kms





Challenges Emerging over the next 35 Years

 Key impacting factors – climate change making wetter areas of Southern Africa drier

• Region's human population will double by 2050.

ENERGY

By 2050 – of the predicted 280 million population 70% will live in urban areas

Of the 140 million people in region only 43% have access to electricity.

ENERGY

20% of current installed capacity of 50GW comes from hydropower

To provide projected 73% of population with electricity we need 115GW more – with 50% of that planned to be from hydropower

Challenges Emerging over the next 35 Years FOOD 43% of the 140 million people currently depend on agriculture

By 2030 there will be a 50% increase of under-nourished

FOOD Since 1990 the agricultural footprint in Southern and Eastern Africa has increased by 50%

In South Africa climate change will decrease maize yields by 30%

Challenges Emerging over the next 35 Years WATER Of the 140 million in Southern Africa 40% have no access to safe drinking water, 60% no access to adequate sanitation

By 2050 more than 200 million will be living in urban areas needing access to clean water & Sanitation

WATER Total annual renewable water resources stored in Southern Africa is only 14% compared to 80% in developed countries

Some scenarios point to a 20% reduction in rainfall across the region in the next 35 years

EMERGING SCENARIO.....

- 850 mm Isohyate predicted to move northwards by ± 150 kms
- Reduced water flows in 5 key rivers due to climate change leading to:
 - Reduced access to drinking water generally
 - Reduced water availability for agriculture less food produced
 - Reduced quantities of hydro-energy available
 - Reduced energy will impact on industry and production loss of jobs
 - Greater reliance on fuel-wood in peri-urban areas huge deforestation
 - Migration of people to areas having more food-energy-water
 - Competition for resources increasing tension and conflict



HIGH LEVEL RETREAT





KEY OBSERVATIONS

 If mitigation measures are not identified, developed and initiated within the coming decade, certain thresholds will be reached by 2030, triggering a cascade of negative effects, which will result in multiple negative processes that will be difficult to impossible to reverse.

 Participants agreed that, overall, the region leaned towards a fragmented approach to addressing challenges, and while levels of human and natural capital varied significantly across countries, it tended to be on the low side when viewed collectively.

KEY OBSERVATIONS

Evident that to continue with business as usual

→ region on course for a slide towards the failure of national economies due to a lack of resources (energy, water, access to global finances, etc.);

→ large-scale and widespread migration of populations across boundaries and within countries due to an increasing lack of access to water, food and energy;

ightarrow increasing corruption, poor delivery of services, as well as collapsing security and governance systems.

KEY OBSERVATIONS

 High level delegates concluded the workshop with a deep sense of the need for increased regional cooperation, collaboration and integration of planning across sectors in order to mitigate the challenges that the sub-continent will experience in the next 35 years.

• There was a high degree of buy-in and commitment from delegates to:

- Form the core of an emerging and expanding network of 'champions' across the region who would not only make their colleagues in their national governments more aware of the urgency of addressing the looming challenges to the region
- Harness their participation in developing mitigation measures to ensure that the converging influences of climate change and incremental population growth would be counteracted or addressed – and where possible invoke new and innovative technologies, approaches and processes to ensure the resilience of ecosystems and societies in the region.

Investment Domain By Category





Sequencing of Investors and Investments

