



water & sanitation
Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA



agriculture, land reform
& rural development
Department:
Agriculture, Land Reform and Rural Development
REPUBLIC OF SOUTH AFRICA



THE WATER RESEARCH COMMISSION (WRC) AND PARTNERS ARE CONVENING A REGIONAL SUMMIT ON ACCELERATING PROGRESS TOWARDS ACHIEVING THE SDGS THROUGH BROADENING THE WATER-ENERGY-FOOD (WEF+) NEXUS

Date: 19-20 May 2024 | Time: 08:30 – 16:00

LONDON
SCHOOL OF
HYGIENE
& TROPICAL
MEDICINE



Climate Change
& Planetary
Health



WATERnet



Global Water
Partnership



UNIVERSITY OF
KWAZULU-NATAL
INYUVESI
YAKWAZULU-NATALI

CTAFS
Centre for Transdisciplinary
Agricultural and Food Systems



NEXUS Gains:
Realizing Multiple Benefits
Across Water, Energy, Food
and Ecosystems



IHE
DELFT
Institute for
Water Education
under the auspices of UNESCO



Theme: Accelerating progress towards sustainability through the WEF Nexus

Venue: CSIR, Pretoria

Rationale

Global challenges such as advancing climate change, rapid population growth, overexploitation of natural resources, and rapid urbanisation exert additional pressure on the rising demand for freshwater, energy, and food, with severe implications for people and the planet. Water, energy, and food, including the environment and health, are central to sustainable development as they are vital for socio-ecological and socio-economic sustainability and human and environmental wellbeing. Sustainable natural resources management that is people and planet-centric is central to climate change adaptation and mitigation, social justice, equity, and inclusion. Therefore, understanding trade-offs and synergies across water, energy, food, environment, and health is important for sustainable and equitable development under climate change. In most low and middle-income countries, sustainable development, and societal well-being largely depend on goods and services derived from their environment and natural resource base. Hence, we adopt a broadened WEF⁺ nexus approach, which includes environment and health. The environment and natural resources are crucial in efforts to eradicate poverty. Livelihood strategies, food security, and the health of people experiencing poverty depend directly on functioning ecosystems and the diversity of goods and ecological services they provide. Equally, water, food, and energy security, including human and environmental health, which are critical for development, depend on natural endowment. However, several drivers, like climate change, environmental degradation, growing economies, and populations, are intensifying the pressure on water, land, and energy resources.

Within the SDG framework, there is a goal that aligns with each WEF element: food security (SDG 2), water (SDG 6), energy (SDG 7). These are closely linked via environmental and climate goals (SDG 11, 13, and 15), including dimensions of environment and health, creating linkages to SDGs 3 and 12. The improved coordination and partnership espoused by the nexus approach also links to SDG 17 (Partnership). In contrast, the shift from a resource-centric to a people and planet-centred WEF⁺ nexus framework creates further linkages with several other SDGs. The WEF Nexus approach aims to unite different interests in resource use, manage conflicts, and simultaneously respect the planet's ecological carrying capacity limits. In the broadened context, the WEF⁺ nexus acknowledges that water, energy, and food security are inextricably linked with each other and environmental and human health/wellbeing. Hence, actions in any WEF sector impact not only each other but also environmental and human well-being.

Adopting a WEF Nexus approach is a fundamental shift from pure sectoral approaches to solutions that embrace a cross-sectoral, coherent, and integrated perspective. It challenges existing global, regional, and national structures, policies, and procedures.

As the second half of the 2030 Global Agenda on SDGs is already underway, it is evident that developments in the first half indicate a clear disconnection between global aspirations and reality, as there is little meaningful progress in meeting the set targets by 2030. Achieving the SDG targets related to Goals 2, 6, and 7 (water, energy, and food) is critical to realising global aspirations for a sustainable future, including resource security and planetary health. The first step to achieve this is to recognise and appreciate the interlinkages between WEF resources as they form the basis for the SDGs and accelerate progress towards achieving the SDGs by adopting transformative, cross-sectoral, and circular approaches that enhance resource use efficiency and sustainability.

The WEF Nexus approach has evolved immensely over the past ten years, largely in parallel with adopting the Paris Agreement at the COP21 in Paris on 12 December 2015. In the SADC region, most countries' National Adaptation Plans and many Nationally Determined Contributions (NDCs) consider the opportunities for adaptation and mitigation through water resources management and the production and delivery of energy and food. In this region, much work has been done to develop WEF nexus tools and models to advance the cause of the SDGs to achieve sustainability by 2030 and guide strategic policy decisions. However, adoption and implementation are slow mainly due to the lack of collaboration, coordination, and equitable partnerships between researchers, policymakers, and society. The WEF nexus remains theoretical to policymakers, and its relevance is not well-established in society.

Against this background, the Water Research Commission (WRC), in collaboration with the Centre on Climate Change and Planetary Health of the London School of Hygiene and Tropical Medicine, IHE-Delft, the Institute for Natural Resources, the University of KwaZulu-Natal, Nexus Gains, WaterNet, Department of Water and Sanitation, Department of Agriculture, Land Reform and Agriculture and Global Water Partnership Southern Africa, under the auspices of the [Global WEF Nexus Community of Practice \(CoP\)](#), which includes researchers, students, and policymakers, is convening a WEF⁺ Nexus Regional Summit to deliberate on the WEF⁺ Nexus and its operationalisation for accelerating progress towards achieving the SDGs with a focus on southern Africa.

The summit will address the following questions:

- What challenges and opportunities are related to achieving the SDGs?
- How can operationalising the WEF Nexus assist with accelerating SDGs' implementation?
- What capacity is needed to enhance the operationalisation of the WEF nexus?
- What collaboration, coordination, and partnerships are needed to strengthen the science-policy-practice interface?
- How to share knowledge and best practices on integrated and transformative approaches for accelerating progress towards achieving SDGs?

The expected outcomes of the summit include (a) enhancing the goals of the Global WEF Nexus CoP and (b) providing policy with practical examples and case studies on the role of the WEF nexus in achieving water, energy, and food security. This two-day summit will unveil a series of



interventions and guidelines on the role of the WEF Nexus in achieving the SDGs, enhancing resource security, and promoting climate change resilience and adaptation strategies for people and the planet.

Who should attend

The summit targets regional policymakers, sector experts, researchers/academia (including postgraduates and early career researchers), and civil society actors. The broad aim is to include all participants across the science-policy-practice-society interface. While the summit aims to produce outcomes that are implementable at the regional level, the summit will also include global partners, especially from the global South, to promote South-South knowledge sharing and partnerships.

Proposed Venue and date

- Date: 19-20 August 2024
- Venue: CSIR Pretoria



Draft programme

Facilitators: Prof Sylvester Mpandeli and Prof Tafadzwa Mabhaudhi

Day 1

08:30 – 09:00	Registration	Speaker/Organisation
09:00 - 09:20	Opening, introductions, and purpose	Prof Sylvester Mpandeli (WRC)
09:20 - 10:00	Welcome address	Dr Jennifer Molwantwa (WRC)
10:00 – 10:45	Keynote address: Accelerating Progress Towards Achieving the SDGs through Broadening the Water-Energy-Food (WEF ⁺) Nexus	Prof Tafadzwa Mabhaudhi (LSHTM/UKZN)
10:45 - 11:45	Panel Discussion on operationalising the WEF+ nexus for delivering on socio-economic development under climate change	WRC, ARC; DWS; DALRRD; PCC; GWPSA; IHE; Nexus Gains; Penn State
11:45 - 12:15	Lessons from the SADC-EU Regional WEF Nexus Dialogues programme	GWP-SA
12:15 - 12:45	Ministerial Address	
12:45 - 13:00	Discussion and Q&A Session	Prof G Jewitt (IHE)
13:00 – 14:00	Lunch	
14:00 - 14:20	Building capacity to enhance WEF nexus understanding and application	Winter School/CoP alums
14:20 - 14:40	Global WEF Nexus Community of Practice (CoP): <ul style="list-style-type: none"> • Aim and objectives • What are we expected to do? • Discussion 	Global WEF Nexus CoP
14:40 – 15:40	Panel Discussion on capacity development for WEF nexus operationalisation	DWS; DALRRD; WRC, WaterNet, UKZN, LSHTM, IHE, Nexus Gains
15:40 – 15:50	Summary of the day	Prof Sylvester Mpandeli
15:50 – 16:00	Closure and vote of thanks	Prof Stanley Liphadzi (WRC)



Day 2

Facilitators: Prof Sylvester Mpandeli and Prof Tafadzwa Mabhaudhi

09:00 - 09:10	Opening and Recap of the previous day	Prof Sylvester Mpandeli (WRC)
09:10 - 09:40	Keynote 2: What collaboration, coordination, and partnerships are needed to strengthen the science-policy-practice interface?	IWMI-SA
09:40 - 10:20	Panel Discussion on developing case studies for establishing the relevance of the WEF nexus approach	ARC; SU; DWS; DALRRD; AGRISA; WRC, GWPSA, Nexus Gains, OnePlanET, CONNEXION, UCT
10:10 – 10: 30	Questions and Answers	Facilitators
10:30 – 10:45	Mainstreaming the WEF+ Nexus into the NDCs, NAPs, and NBSAPs	Nexus Gains
10:45 - 11:00	Developing appropriate and scalable tools for WEF+ nexus adoption and application	IHE-Delft
11:00 - 11:15	Transdisciplinary networks for supporting WEF+ nexus transformation	Penn State University
11:15 - 11:30	The WEF Nexus and the Just Energy Transition	SANEDI
11:30 – 11:45	Addressing the climate change crisis and transformative adaptation through nexus approaches	Presidential Climate Commission (PCC)
11:45 - 12:30	Panel discussion on addressing the science-policy-practice interface: harmonising WEF nexus research for achieving outcomes for people and the planet	NRF; DWS; DALRRD; AGRISA; PCC, SANEDI, Penn State, IHE-Delft, GWP-SA, UKZN
12:30 - 12:45	Reading the outcome statement of the summit	Prof T. Mabhaudhi
12:45 – 13:00	Closing remarks	Prof Sylvester Mpandeli
13:00 – 14:00	Lunch and departure	

