



Issue No. 12 | June 2022

## Nexus Regional Dialogues Programme Newsletter



### Water-Energy-Food Security Nexus

A service by the Nexus Regional Dialogues Programme

Dear readers,

We are back! While we are almost halfway into the year, the last months have been filled with exciting accomplishments for the Nexus Regional Dialogues (NRD) programme. It has been busy, and we are happy to share that we have transitioned from the planning phase to implementation mode with core activities to mainstream the Water-Energy-Food (WEF) Nexus approach.

A clear milestone reached for the NRD programme is the development of a new WEF Nexus training and its implementation to inspire participants to become “WEF Nexus Ambassadors”. The training material is now available for free – learn where to access and download it in this edition!

We want to show the added value of the WEF Nexus approach in practice and therefore support concrete demonstration projects in different regions – from promoting WEF Nexus based farming practices in Egypt to uplifting livelihoods through solar-powered irrigation in Niger. Read up about recent activities and progress from the ground!

As part of our Nexus interview series, you will get to know Kristine Herbomel, regional coordinator of the project “Support to the Integrated Management of Water Resources of Lake Kivu and the Ruzizi River”.

Before you dive into this latest newsletter edition, we would like to take this opportunity to announce a change within the NRD Newsletter editorial team, our longtime editor Tina Schmiers will sadly be leaving us. While we wish her all the best, we would also like to welcome Cecilia Vey, who will be taking over this role, leading the communications and outreach activities of the Nexus team.

Happy reading!

**Your  
Nexus Regional Dialogues Programme-Team**

## GLOBAL NEWS

- » New Water-Energy-Food Nexus Training available!
- » Becoming a Water-Energy-Food Nexus Ambassador! WEF Nexus Training of Trainers was greatly received in the MENA region, Latin America and the Caribbean and the Niger Basin
- » Solving the WEF Nexus puzzle at the 9th World Water Forum. A Global Nexus Dialogue on multi-level Nexus governance in shared waters.

## NEWS FROM THE FIVE NEXUS REGIONAL DIALOGUES, LAKE KIVU AND FREXUS PROJECTS

- » Nexus Regional Dialogue in Central Asia
- » Nexus Regional Dialogue in Latin America & the Caribbean (LAC)
- » Nexus Regional Dialogue MENA
- » Nexus Regional Dialogue in the Niger Basin
- » Nexus Regional Dialogue Southern Africa
- » FREXUS Project - Improving security and climate resilience in a fragile context through the Water-Energy-Food Nexus
- » Support to the Integrated Management of Water Resources of Lake Kivu and the Ruzizi River Project

## NEWS AND RESOURCES BEYOND THE NEXUS REGIONAL DIALOGUES PROGRAMME

- » Nexus Blog // From Torrents to Trickles: The Future of Irrigation?

## NEXUS FACTS FROM THE NEXUS RESOURCE PLATFORM ARCHIVE

## UPCOMING EVENTS

- » Governing the Water-Energy-Food Nexus: A policy-science dialogue

## Global News

# New Water-Energy-Food Nexus Training available!

Inspiring WEF Nexus implementation worldwide!



The Nexus Regional Dialogues (NRD) Programme created a new Nexus Training to inspire an increased application of the WEF Nexus approach in planning, policymaking and implementation.

The WEF Nexus training material consists of theoretical and very hands-on knowledge, such as concrete case studies

and the presentation of decision-support tools. It is made up of three different modules that can be used individually, together, or mixed and matched according to specific knowledge levels and needs of the target group:

- Module I: Introduction to the Water-Energy-Food Security (WEF) Nexus
- Module II: Nexus for cross-policy making and WEF Nexus institutionalisation
- Module III: Case Studies: For cross-policy making and related project design and planning

It also includes a Trainer's Manual, offering a structured guideline on how to plan and conduct the WEF Nexus training as well as additional information, literature and online sources referring to the WEF Nexus approach and the available techniques to conduct interactive training seminars.

**Download the full training** [here!](#)



WEF Nexus Training in Jordan (May 2022)

[Find more information on the new WEF Nexus Training here »](#)

## Becoming a Water-Energy-Food Nexus Ambassador!

WEF Nexus Training of Trainers was greatly received in the MENA region, Latin America and the Caribbean and the Niger Basin

The NRD Programme facilitated a WEF Nexus training in the MENA region, Latin America and the Caribbean and the Niger Basin throughout the months of May and June 2022.

The training provided participants with theoretical and practical knowledge and competencies to conduct WEF Nexus trainings within their own projects and institutions.

The trainings were met with enthusiasm and encouraged lively discussions and engagement among the participants representing the water, energy and agricultural sectors, academia, implementing authorities and implementing agencies.



[Read the full article on the Nexus Resource Platform »](#)

## Solving the WEF Nexus puzzle at the 9th World Water Forum

A Global Nexus Dialogue on multi-level Nexus governance in shared waters.

***“Each of the Water, Energy and Food sectors should appreciate, that they can only achieve real impact together”.*** (Dr. Dumsani Mndzebele, SADC)

How can an integrated natural resource management approach – such as the Water-Energy-Food security Nexus – be successfully implemented in regional governance

structures? A diverse and high-level panel with representatives from five different regions came together to discuss this interesting question during the 9th World Water Forum in Dakar 21st – 25th March 2022. After two years of virtual exchanges, it was a pleasure for Robert Kranefeld - regional coordinator of the NRD Niger Basin - to host the discussion in person and come a step closer to solving the complex equation that is WEF Nexus governance.

**Watch the recorded session** [here!](#)



[Read the full article about the session outcomes here »](#)

## News from the five Nexus Regional Dialogues, Lake Kivu and FREXUS projects

### Nexus Regional Dialogue in Central Asia

Maintreaming the Water-Energy-Food Nexus in educational curricula.

The Nexus Regional Dialogue in Central Asia hosted three Water-Energy-Food Nexus trainings with the aim to mainstream the Nexus approach in educational curricula in Central Asian countries. The heart of the training is the Nexus Game - a simulation game, which allows participants to experience challenges of transboundary water management for energy and food production in an interactive way. The trainings were held in Uzbekistan (March 2022), Tajikistan (March 2022) and Kyrgyzstan (February 2022).

***"Training on the principles of cross-sectoral thinking in such digestible, interactive format perfectly complements the existing theoretical material that we provide to future leaders of the country, and can be a guarantee of environmental rationality and economic decision-making quality in the future,"*** - Aina Mamytova, Head of the Research Department "Green Economy", Academy of Public Administration under the President of the Kyrgyz Republic.

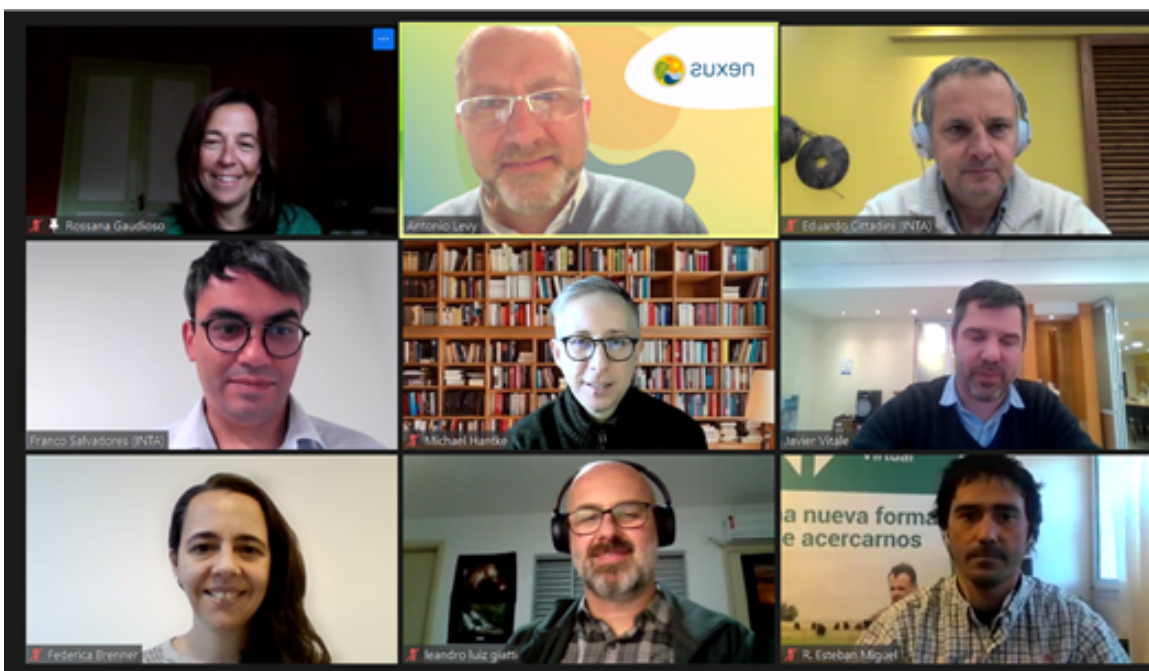


18 faculty staff from educational institutes of civil servants and universities that train WEF specialists in Uzbekistan learning about the Nexus approach. @CAREC

[Read the full articles on the Nexus Resource Platform](#)

## Nexus Regional Dialogue in Latin America & the Caribbean (LAC)

A virtual policy dialogue on land-use planning with a Nexus lense.



Virtual Nexus Regional Dialogue with representatives from Argentina, Chile & Uruguay.

The Nexus Regional Dialogue in Latin America and the Caribbean held a virtual policy dialogue in the beginning of June, exploring joint learning and the application of the WEF Nexus. Co-organized with the Instituto Nacional de Tecnología Agropecuaria en Argentina (INTA) and the Ministerio de Agricultura, Ganadería y Pesca de Argentina, the aim of the event was to strengthen territorial planning and integrated watershed management.

Keep an eye out on the Nexus Resources Platform for the upcoming article summarising the

exchange of ideas and recommendations presented by the panelists from Argentina, Brazil, Chile and Uruguay!

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## Nexus Regional Dialogue MENA

Encouraging WEFE Nexus capacities in the Mediterranean: online-training material available for download!



Bildunterschrift...

The 3-day online workshop aimed at equipping the research community of the Mediterranean region with a wide plethora of experiences, best practices, tools concerning the application of the WEFE Nexus in practice. **All presentations and recordings of the 6 sessions are freely available on the Nexus Resource Platform.**

Over 300 participants joined the training “The water-energy-food-ecosystems (WEFE) Nexus: from research to practice”, hosted by PRIMA and the MENA Nexus Regional Dialogue from December 6th – 8th 2021. A range of renown Nexus experts provided inputs on a wide range of topics from understanding the Nexus, analysis and operationalization of the Nexus and implementation of WEFE Nexus solutions, as well as information on how to write successful project proposals. The online workshop presents a broad and comprehensive compilation of Nexus topics and tools/methods.

### We invite you to have a look here:

Day One: Understanding the WEFE Nexus

Day Two: Analysis and Operationalization of WEFE Nexus

Day Three: Implementation of WEFE Nexus Solutions and Successful Project Proposals

[Download the training material on the Nexus Resource Platform »](#)

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Launching the Nexus Farms Initiative in Egypt – How to secure food supply and rural livelihoods in the context of climate change.



Over 40 participants representing local government, academia, finance institutions and the private sector engaged in lively debates and interactive exercises to address the importance of increasing the climate resilience of small and medium sized farms in Upper Egypt for enhanced livelihoods and local food security. The policy dialogue held on the 16th of June marked the beginning of the Nexus Farm Initiative, which is implemented by Gebal Egypt and Dendara Development Center.

The project aims to promote Nexus technologies at farm level, including integrated and solar-powered greenhouse systems, aquaponics etc. In doing so, the project will organize targeted trainings and awareness-raising workshops with farmers and governmental extension services. It will further develop business models of existing Nexus Farms in order to convince local banks and investors to develop more tailored finance products geared towards small and medium sized farms, ultimately allowing for a wider uptake of these innovative and integrated practices! The launching event was organised in a policy dialogue format. The following important questions were raised during the event:

**How can Egyptian farmers raise their agricultural outputs in order to enhance food security in under climate change conditions and while using less water and energy?**

**How can a nexus approach help design new and innovative solutions?**

**What policy framework conditions as well as financing products need to be in place to ensure**

the use of these technologies in scale among small and medium-sized farms?

During the upcoming 8 months, the Nexus Regional Dialogue in the MENA region is looking forward to accompanying Gebal Egypt and Dendara Development Center on this important journey!

## Quotes from the Policy-Dialogue Kick-off Event

### “Nexus Farms Initiative in Egypt”



*The soil is not giving us as much production as it used to, diesel prices are rising, and climate change is bringing us new plant diseases. Farmers can see the challenges as an incentive for change. But we need more training and information.*



Protected agriculture and integrated farming give us more production per m<sup>2</sup>, as well as a competitive advantage in planting outside the season and a better-quality product.



Seeing innovative and functioning models on the ground gives farmers an incentive to change. But farmers will ask: How much will it cost me? What profit will I make?

[Read the full article on the Nexus Resource Platform »](#)

## Nexus Regional Dialogue in the Niger Basin

World Water Forum 2022: Showcasing the benefits of the WEF Nexus approach in the West African region.



The 9th World Water Forum in Dakar, Senegal thrived under the motto “Water security for peace and development”. Robert Kranefeld, regional coordinator of the Nexus dialogue in the Niger Basin, presented recent activities within the “WEFE for Africa” session at the European Union Pavilion. He specifically highlighted two demonstration projects: the Lagdo Dam in Cameroon and the Women’s collective in Kollo, Niger. The fusion of theoretical and practical experiences in the application of the WEF Nexus approach was met with great interest.

[Read the full article on the Nexus Resource Platform »](#)





**T**oday, all 40 women working with us are able to meet their daily needs! Before, we had only one vegetable garden, but now we have three, and each garden is run by ten or more women, with other members joining us!

— Amina, leader of a women's cooperative in Niger

Get to know Amina, who is leading a women's cooperative with 40 members in the department of Kollo in Niger in West Africa. Traditionally, she and her fellow cooperative members practiced rainfed agriculture to cultivate vegetables and fruits during the rainy season and used petrol pumps for irrigation in the dry season. For over 30 years the cooperative relied on stored rainwater to irrigate the crops. However, with prolonged dry periods due to climate change, crop cultivation became too expensive.

**Read in her story how the WEF Nexus approach combined with solar-pumped irrigation promotes clean energy, economical use of water, uplifts the communities' livelihoods and empowers Amina and her cooperation.**

[Read the full story on the Nexus Resource Platform »](#)

### Exploring WEF Nexus potential of the Lagdo hydroelectric dam in Garoua, Cameroon



© GIZ

The Lagdo hydroelectric dam in Garoua Cameroon provides the region with potable water, electricity, and irrigation to surrounding farmlands. The Lagdo Dam is situated in the Benue River Basin, which is shared by Cameroon, Nigeria and Chad, and has enormous Nexus potential with respect to aspects of hydropower production, irrigation, ecosystem management, and water supply. This article highlights main outcomes of a consultation process - based on the Water-Energy-Food Security (WEF) Nexus - to assess if and how its associated infrastructure can be declared a common

infrastructure by the three countries sharing the Benue River Basin.

[Read the full article on the Nexus Resource Platform »](#)

## Nexus Regional Dialogue Southern Africa

WEF Nexus National Dialogues held in the Democratic Republic of Congo, Tanzania, Madagascar and the Seychelles.

Four Nexus Dialogues have successfully been organised under the Southern Africa Development Community (SADC) WEF Nexus Regional Dialogue Project called "Fostering Water, Energy, and Food Security Nexus Dialogue and Multi-Sector Investment in the SADC Region: Phase II". The dialogues are designed to help regional and national stakeholders to develop concrete policy recommendations and action plans for future investments, particularly for multi-sector infrastructure and related capacity development.



Participants of the Tanzania WEF Nexus Dialogue

[Read the full article on the Nexus Resource Platform »](#)

The Government of Madagascar commits to leading Change for Investments in Water, Energy and Food Sectors.



Minister of Energy, His Excellency Andry Ramaroson (left) and Minister of Agriculture, His Excellency Harifidy (Right) attend the Madagascar WEF Nexus National Dialogue

As a result of the Nexus Dialogue held in Madagascar, the government committed to leading changes for investments in the Water, Energy, and Food sectors. The WEF Nexus approach links closely with Madagascar's National Strategy and Policy documents where energy and water are parts of the pillars of the country's economic development. With such high-level commitment and the identified national WEF Nexus investments, the foundation is set to propel Madagascar to water, energy, and food security in the face of climate change.

***"The government of Madagascar is therefore resolved, in accordance with the Nexus approach, to do everything possible to ensure that the project that has been set up for the country is successfully carried out in partnership with SADC and GWPSA, with funding received from the European Union. I thus want to reiterate our commitment and our will to set up the technical working group which will serve as a reference point for the realization, and the follow-up of the progress for this project."*** - H.E Harifidy

The next Nexus Dialogue in Southern Africa will be held in Namibia on June 27, 2022.

[Read the full article on the Nexus Resource Platform »](#)

**WEF Nexus Winter Masterclass**  
Date: 15 June 2022  
Time: 10 AM to 1 PM (Pretoria Time)

Shamiso Kumbirai, GWPSA SDG Water Investments Specialist

Global Water Partnership Southern Africa | SACREEE | CCARDESA | GCCA+ | nexus

Thriving to inspire a new generation of WEF Nexus experts, Global Water Partnership Southern Africa (GWPSA) hosted a 3-day masterclass mid-June 2022 with over 70 participants. This capacity-building initiative aimed at supporting early career researchers, postgraduate students, managers, and practitioners in understanding nexus thinking as a transformative approach to sustainable natural resources management and socio-economic development.

The Nexus Regional Dialogue Southern Africa shared their experiences on day 3 of the Master Class and presented how the WEF Nexus approach can be anchored within institutions and processes through good governance and coordination systems. Practical examples such as the SADC WEF Nexus governance framework and the WEF Nexus screening tool underpinned the theoretical input.

[Read the full article on the Nexus Resource Platform »](#)

## FREXUS Project - Improving security and climate resilience in a fragile context through the Water-Energy-Food Nexus

A response to resource conflict in the Sahel region



Moving from the diagnostic phase into developing and implementing actions, the FREXUS project is geared towards improving security and climate resilience in the Sahel region. Two analysis tools, one global and one local, are being developed in cooperation with the Water Peace and Security Partnership to assess the links between natural resources, climate change impacts and conflicts. And while early warning tools keep on improving, the discussion on the elements needed for decisions and policy makers to move from Forecast to Prevention is gaining attention.

[Read the full article on the Nexus Resource Platform »](#)

Recap: sessions held to discuss human security and building resilience to climate-security risks in fragile contexts

“Development and Peace in Uncertain Times” was discussed during the World Bank’s Fragility Forum held in March 2022. Focusing on building resilience in dynamic, fragile, and conflict-affected contexts, representatives from public and private sector came together in a virtual session. Highlighting the intersection of fragility and climate change was discussed upon practical implementation and lessons learned by the panelists. **Recap on the insights and watch the recording on the Nexus Resources Platform.**



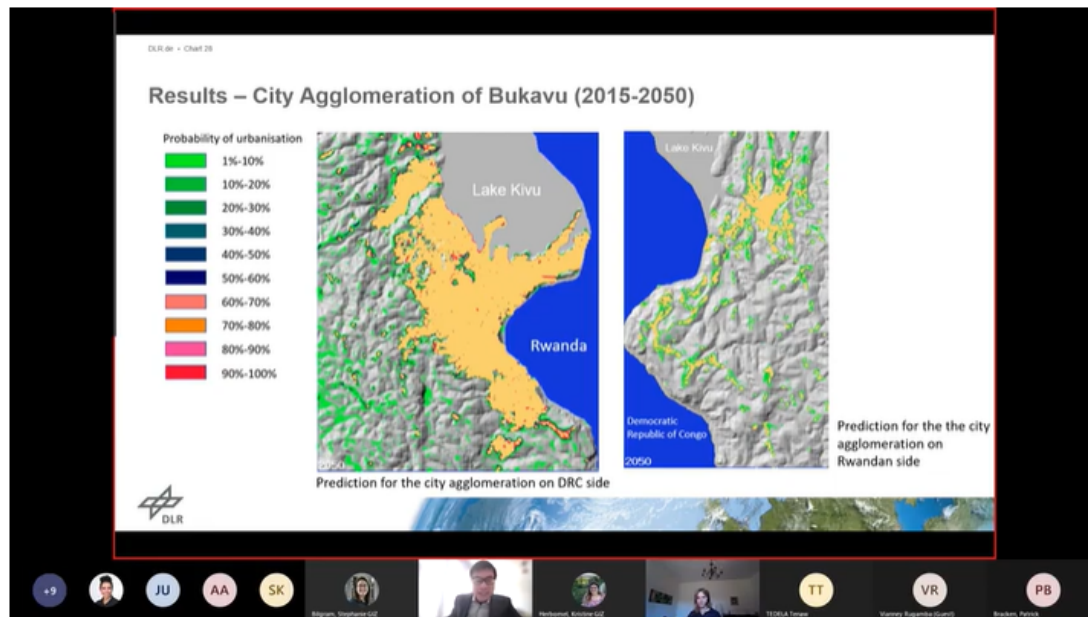
This year’s Stockholm Forum on Peace and Development held in May 2022, was titled “From a Human Security Crisis Towards an Environment of Peace”. The FREXUS project was pleased to share its practical and policy solutions in a virtual session centered around “Building resilience to climate-security risks in the Sahel: Insights from research and practices”.

***“I believe we can only mitigate climate security risks in the Sahel through a process connecting local communities’ voices into national and regional policies”.*** (Boko Boubacar, GIZ)

[Read the full article on the Nexus Resource Platform »](#)

# Support to the Integrated Management of Water Resources of Lake Kivu and the Ruzizi River Project

German Aerospace Centre presents results from their assessment of erosion risk in the Lake Kivu and Ruzizi River basin



This article presents the findings on the risk of erosion calculated using earth observation data in the transboundary lake Kivu and Ruzizi River Basin. Lake Kivu, one of the African Great Lakes, and the Ruzizi River are connected watercourses that lie along the border of Burundi, the Democratic Republic of the Congo (DRC) and Rwanda. Soil erosion is of growing concern in the area and is further exacerbated by the negative effects of climate change.

**Watch the video** to listen to the results of the study or have a look at the comprehensive **conference poster** uploaded on the Nexus Resource Platform.

[Read the full article on the Nexus Resource Platform »](#)

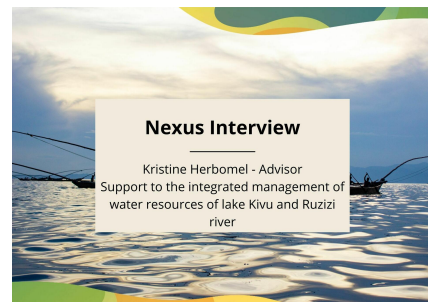
## Nexus Interview Series

Kristine Herbomel, Advisor Support to the integrated management of water resources of lake Kivu and Ruzizi river



**“** If we consider the WEF nexus as a triangle, that triangle would sit inside a larger green circle that represents the environment.

With this interview series, we want to provide a better picture of the people working for the Nexus Regional Dialogues Programme, FREXUS and Lake Kivu projects and their perspectives on WEF Nexus challenges and opportunities. In this episode, we invited Kristine Herbomel, Advisor Support to the Integral Management of Water Resources of the Lake Kivu and Ruzizi River.



[Read the full interview on the Nexus Resource Platform »](#)

## News and Resources beyond the Nexus Regional Dialogues Programme

### Nexus Blog // From Torrents to Trickle: The Future of Irrigation?

Five areas helping to ensure irrigation to thrive and navigate today’s climate, energy, and food security challenges.

By Claudia Ringler.

Globally, irrigation has contributed in many ways to food security and development and has been key component of agricultural intensification and transformation. At the same time irrigation has accelerated water depletion, degradation, and pollution. This article reviews the challenges and contributions of irrigation and identified five areas that help irrigation to contribute to water, energy, and food security for the development of sub-Saharan Africa.



[Read the full article on the Nexus Resource Platform »](#)

## Nexus Facts from the Nexus Resource Platform Archive



### Nexus Facts

From the Nexus Resource Platform Archive

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In South Africa, **89% of all households have access to water supply infrastructure. However, reliability of water supply is low due to local municipal conditions** (Lebek et al. 2021, p. 271). It is therefore imperative to look at **WEF security at the local or household level, instead of only focusing on regional scales.** (Truelove, 2019, Sultana 2021). *Nexus disrupted: Lived realities and the water-energy-food nexus from an infrastructure perspective*

Among the Small Island Development States in the Caribbean, **the Bahamas has the highest population growth rate (1.5%)**. At the same time, it is projected to display **the greatest change in water security**, slipping from sustainable into water stress by 2050, which has **implications on water, energy, food security**. *Sustainability of the Water-Energy-Food Nexus in Caribbean Small Island Developing States*

**60% of global food production comes from rain-fed (green water) agriculture, while 70% of the global water withdrawals are used for irrigation.** This reflects the **importance of green water**. Sustainable irrigation is key to increasing the resilience of food systems. *The Future of Water for Food*.

## Upcoming Events

### Governing the Water-Energy-Food Nexus: A policy-science dialogue



Food and Agriculture Organization  
of the United Nations

## 2<sup>nd</sup> round Webinar Series: Scaling up WEF Nexus Solutions

Governing the Water-Energy-Food Nexus: A policy-science dialogue!

June 23<sup>rd</sup>, 2022 | 14:00 – 15:30 pm CET via Zoom

*How can cross-sectoral coordination and decision-making successfully be integrated in governance structures?*

We want to answer this question by bringing together both science and practice to reveal existing barriers, challenges and opportunities with a focus on the MENA region.

### Speaker



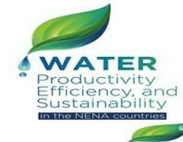
Dr. Ines Dombrowsky, German Development Institute (DIE)



Dr. Louy Qoaider, Energy Efficient Water Sector (EEWS), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

This webinar is hosted by the Nexus Regional Dialogues Programme.

[www.water-energy-food.org](http://www.water-energy-food.org)



Date: **23.06.2022, 14:00-15.30 CEST**

Organizers: FAO, GIZ, WEF Africa Initiative, SEI

### How can cross-sectoral coordination and decision making be successfully integrated in governance structures?

This webinar - hosted by the Nexus Regional Dialogues Programme - aims to address how cross-sectoral coordination and decision making can be successfully integrated in governance structures. It is part of the webinar series “Solutions Using Water-Energy-Food Nexus Approaches” organized by the Food and Agriculture Organisation of the United Nations (FAO).

[Find more information about the event on the Nexus Resource Platform »](#)

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The Nexus Resource Platform is a global Nexus information hub operated by the Global Nexus Secretariat as part of the Nexus Dialogues Programme. The Secretariat provides support to the Regional Nexus Dialogues and ensures knowledge exchange and global analysis on the topic across the participating regions and beyond.

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