



Global South-South Development Expo 2022
Advancing South-South and Triangular Cooperation for Sustainable
COVID-19 Recovery:
Towards a Smart and Resilient Future



P-LINK
People's Livelihoods Initiative
through water-energy-food Nexus
in the MEKONG Region

GSSD Expo 2022 Side Event The Role of Science and Technology in the Water-Energy-Food (WEF) Nexus

Tuesday, 13 September 2022 (Hybrid)
11:50 -13:05 hrs (Bangkok Time)

Meeting Room F (MR-F), UN Conference Centre, Bangkok, Thailand
Zoom Meeting ID: 817 3443 2401; [Link](#); No passcode

CONCEPT NOTE

1. Background and Context

The “Water-Energy-Food (WEF) Nexus” concept has emerged as an integrated approach to respond to climate and socio-economic changes in recognition of interdependent natural environment and human livelihoods. First introduced at the World Economic Forum (WEF) in 2011, the approach describes the interlinkages between the three sectors (water, energy and food), with the ultimate goal to identify potential synergies and minimise trade-offs between the three sectors.¹ The modality is intended to facilitate a more balanced process entailing cost effective policymaking, planning, implementation, as well as monitoring and evaluation related to the cross-cutting WEF Nexus, while promoting active multi-stakeholder dialogue and engagement.

The UN Secretary-General has underscored the vital role of technology in closing the digital divide and called for concerted actions based on “science, solidarity and smart policies to fight a once-in-a-lifetime pandemic”² and driven by “science, technology and innovation critical to food security, economic growth and the environment”³ to tackle the devastating social, economic and environmental emergencies. Science, Technology and Innovation (STI) can be harnessed to combat pressing environmental and development challenges and reduce socio-economic discrepancies. Already many existing and emerging technologies in early warning, irrigation, agro-processing, renewable energy and climate-smart solutions have proven to contribute to improving people’s livelihood.

In the context of the WEF Nexus, STI serves as a catalyst in bringing together multi-stakeholders to collaborate and create synergies in the management of water, energy and food in an efficient and effective manner. The STI component is usually embedded in many WEF Nexus projects at the global, regional and national levels. Some examples are, [SIM4NEXUS](#), [Urban Nexus](#), [Water and Energy for Food \(WE4F\)](#) and [P-LINK](#).

In September 2021, the United Nations Office for South-South Cooperation (UNOSSC), the Republic of Korea (RoK)’s Ministry of Science and ICT (MSIT), and the Mekong River Commission (MRC) launched a project entitled, “Triangular Cooperation on Sustainable Development in the Lower Mekong Basin based on the Water-Energy-Food (WEF) Nexus”. The project, also known the “RoK-UNOSSC Facility Phase 3” and P-LINK, is intended to strengthen access to water, food and energy for vulnerable communities living in the Lower Mekong Basin (Cambodia, Lao PDR, Thailand, and

¹ Hoff, H., 2011. Background paper for the Bonn 2011 Nexus Conference: The Water, Energy and Food Security Nexus. Stockholm Environment Institute, Stock.

² Guterres, António. 2020. [All Hands on Deck to Fight a Once-in-a-Lifetime Pandemic](#). New York: UN, 2020. COVID-19 Response..

³ United Nations Department of Economic and Social Affairs (UNDESA). 2022. [UN Ocean Conference opens with call for urgent action to tackle ocean emergency](#).

Viet Nam) through strengthening development approaches and management in these sectors. It will take integrative and multi-sectoral approaches in the application of highly demanded technologies on water, energy and food to improve the livelihoods of the people based on South-South and triangular cooperation (SS & TrC) modalities.

In this respect, it is timely and important to identify the role of STI in the WEF Nexus. Thus, on the sidelines of the 2022 Global South-South Development Expo, the Mekong Institute (MI), the Science and Technology Policy Institute (STEPPI) and UN Office for South-South Cooperation (UNOSSC) will co-organise a side event on the “Role of Science and Technology in WEF Nexus”. The organisers and partners that have implemented WEF Nexus projects focused on introducing innovative technologies will share knowledge on their experiences.

2. Objectives

The objectives of the event are as follows:

- Facilitate sharing of water, energy and food development solutions for vulnerable communities and applications of appropriate technologies;
- Discuss the critical role of STI as an effective means in the WEF Nexus application in line with the 2030 Agenda for Sustainable Development;
- Exchange ideas, experiences, good practices and lessons learnt as well as to showcase successes, address challenges, and
- Highlight the value added of South-South and triangular cooperation in knowledge sharing and technical transfer by showing evidence from concrete partnerships and their results.

3. Expected Outcomes

- Networking of like-minded stakeholders to share their work and learn from each other; and
- Increased awareness on the role of STI in Water-Energy-Food (WEF) Nexus.

4. Organizers

Mekong Institute (MI)

Mekong Institute (MI) deepens regional cooperation and integration through capacity development, dialogue, and advocacy for the acceleration of sustainable socioeconomic development and poverty alleviation in the Greater Mekong Subregion (GMS). Founded and represented by Cambodia, P.R. China, Lao PDR, Myanmar, Thailand, and Vietnam, MI’s strategies are aligned with the core tenets of the GMS Cooperation Program Strategic Framework 2030, ASEAN Economic Community, and the 2030 Agenda for Sustainable Development.

The Office of the National Water Resources (ONWR)

The Office of the National Water Resources (ONWR) of Thailand as the main organization that systematically regulate and manage the policies of integrated national water resources management, also acts as the Thai National Mekong Committee Secretariat (TNMCS). As TNMCS main focal point coordinating with Mekong River Commission Secretariat (MRCS), National Mekong Committees (NMCs) and the line agencies. ONWR practically and effectively drives the implementation under the national master plan, reaching to the substantial accomplishment and the sustainable water resources management in Thailand.

The Science and Technology Policy Institute (STEPI)

The Science and Technology Policy Institute (STEPI) is a national research institute of the Republic of Korea (RoK) affiliated to the National Research Council for Economics, Humanities, and Social Sciences under the Prime Minister's Office, devoted to science, technology and innovation (STI) policy research and technological innovations for public service. As a leading think-tank, STEPI has significantly contributed to the RoK's development and improvement of the quality of life through STI policy, and committed to its mission, STEPI's research focuses on the improvement of national competitiveness, the quality of people's lives and strengthening international cooperation. Furthermore, STEPI conducts joint research, capacity building and development cooperation projects on STI in collaboration with global partner institutions including academia, NGOs, the private sector and international organizations, to share the RoK's development experiences and provide technical guidance in designing STI frameworks, policies and practical solutions.

UN Office for South-South Cooperation (UNOSSC)

UNOSSC serves as a robust knowledge hub providing advisory services to Member States, UN entities, IGOs, NGOs and other stakeholders on SS & TrC. In order to respond to the requests of Member States and the United Nations system, UNOSSC focuses its work along three pillars: (1) intergovernmental and UN support, (2) knowledge sharing, and (3) innovative programming.

5. Event Modalities

The Meeting will be organised in a virtual format. The face-to-face event will take place in Bangkok, Thailand. It will consist of opening, panel discussion and closing sessions. The duration of the event will be about 75 minutes.

6. Participants

Invited participants from:

- Government and development cooperation participants
- Government ministries working on development cooperation
- Academics and policy experts
- UN agencies, international and regional organizations
- NGOs
- Private sector

7. Provisional Agenda

TIME	ITEMS
-	Registration
11:50 - 12:00	<p>Opening Session</p> <p><i>MC: Ms. Yejin Kim, P-LINK Project Manager, UNOSSC</i></p> <ul style="list-style-type: none"> • Welcome Remarks: Mr. Denis Nkala, Chief, Intergovernmental and UN Systems Affairs, UNOSSC • Welcome Remarks: Mr. Chumlarp Tejasen, Director of Foreign Affairs Division, Office of the National Water Resources (ONWR) • Congratulatory Remarks: Mr. Joyoung Jeon, Minister and Deputy Chief of Mission, Embassy of the Republic of Korea (RoK) in Thailand • Opening Remarks: Dr. Mi Ock Mun, President, Science and Technology Policy Institute (STEPI), RoK
12:00 - 12:20	<p>Keynote Sessions</p> <ul style="list-style-type: none"> • Keynote 1: The implication of WEF Nexus approach in the Mekong region and suggested role of STI -Dr. Hwanil Park, Chief Director, Division of Global Innovation Strategy Research, STEPI • Keynote 2: WEF Nexus in the Context of COVID-19 Recovery, SS & TrC and the implications for the Lower Mekong Basin -Mr. Suriyan Vichitlekarn, Executive Director, Mekong Institute (MI)
12:20 - 13:02	<p>Panel Discussion</p> <p><i>Moderator: Mr. Kyungkoo Philip Kang, Economic Affairs Officer, Sustainable Urban Development Section, Environment and Development Division, UNESCAP</i></p> <p><i>Panelists (~5 mins/speaker)</i></p> <ul style="list-style-type: none"> • Dr. Wisnu Utomo, Director, of Foreign Policy and Int'l Development Cooperation, Ministry of National Planning (BAPPENAS) -Integrated Village Development in Sukabumi, Indonesia (RoK-UNOSSC Facility Phase 2) • Mr. Youngwoo Kim, Environment Advisor, UNDP - WEF Nexus related initiatives in the Republic of Korea • Mr. Ole Henriksen, Project Director, GIZ -Thai Rice NAMA (Nationally Appropriate Mitigation Action) • Mr. Radtasiri Wachirapunyanont, South and Southeast Asia, Regional Innovation Hub Manager -Water and Energy for Food (WE4F) <p>Q&A (5mins)</p> <p>Guiding Questions</p> <ul style="list-style-type: none"> ▪ <i>WEF Nexus and technology applications</i> How did your initiative/project translate the WEF concept & approach to practical applications well perceived by national & local stakeholders? What range of STI solutions did you introduce & apply? ▪ <i>Multi-Stakeholder Collaboration</i> How did your initiative/project bring together different stakeholders (from water, energy & food sectors) to promote the inclusive and balanced approach of the WEF Nexus and create an enabling environment for collaboration? ▪ <i>Achievements, Challenges and Lessons Learnt</i> Please share key achievements, challenges & lessons learnt through your WEF Nexus project implementation ▪ <i>South-South and triangular Cooperation (SS & TrC)</i> How can SS & TrC be deployed to support inclusive, sustainable and resilient mgmt. of water, energy & food to support most vulnerable communities dependent on these resources?
13:02 - 13:05	<p>Closing Remarks</p> <p>UNOSSC</p>