INTERSESSIONAL PANEL OF THE UNITED NATIONS COMMISSION ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT (CSTD)

Geneva, Switzerland
25-26 October 2022

Contribution by UNWTO

to the CSTD 2022-2023 priority theme on "Ensuring safe water and sanitation for all: a solution by science, technology and innovation"

PRIORITY THEME 2: Ensuring safe water and sanitation for all: a solution by science, technology and innovation

United Nations Commission on Science and Technology for Development (CSTD)

To Whom it May Concern,

The 25th CSTD annual session selected "Ensuring safe water and sanitation for all: a solution by science, technology and innovation" as one of the priority themes for its 26th session (2022-23 period). This theme addresses SDG 6 on Clean Water and Sanitation.

Water is a most critical natural resource for human beings while clean water and sanitation is essential for human's daily life. The latest available data shows that in 2020, 26 per cent of the world population did not have access to a safely managed drinking water service while 46 per cent did not use a safely managed sanitation service. Lack of access to safe water has clear gender impact as the burden of securing water falls disproportionally on women and girls with consequences for their income and educational opportunities. Lack of sanitation also creates specific risks for women and girls' safety.

A range of technologies provide effective and affordable opportunities to improve the management of water and sanitation. Some are purely technological (e.g., water purification technologies, wastewater treatment technologies and increasing water availability technologies) while others relate to information and data management and sharing (e.g., hydrological observation, data exchange and forecasting).

Under this theme, the Commission will examine the key challenges facing developing countries in providing safe water and sanitation to their population. It will also highlight successful practices in applying science, technology and innovation (STI) to the management of water and sanitation services. Finally, it will explore how to enhance experience and technology sharing among countries to effectively address water and sanitation challenges.

The CSTD secretariat is in the process of drafting an issues paper on the theme to be presented at the CSTD inter-sessional panel meeting on 25 -27 October 2022. In this context, we would like to solicit inputs from international organizations, UN entities and agencies, and regional commissions on this theme. We would be grateful if you could kindly answer the following questions based on your organization's work at the global, regional, and/or national levels.

1. Can you give examples of projects/policies in your organization helping countries improve the management of water and sanitation and provide access to safe water and sanitation for all? What are the main challenges confronted (including the gender dimension) while trying to implement these projects/policies?

2. Could you share specific examples that have successfully used STI, including frontier technologies (e.g., AI, drones, etc) or other forms of innovation in general in addressing the above challenges?

3. Can you provide examples of policies/projects/initiatives specifically aimed at strengthening national STI capabilities to address these challenges?

4. Could you share case studies of regional/ international cooperation that have strengthened STI developing countries' capacities in managing water and sanitation and improve their access for all?

Please indicate contact person(s) responsible for projects/policies and international collaboration in this context in case we need clarification on the inputs.

Please send your responses and any further inputs on the theme to the CSTD secretariat (stdev@unctad.org) by 31 July 2022. We look forward to receiving your valuable inputs.

Sincere regards,

CSTD secretariat

Tourism, as a cross-cutting sector, has the potential to positively contribute to the achievement of the Sustainable Development Goals worldwide. To this end, it is essential to strengthen the global innovation and entrepreneurship ecosystem by fostering the flow of knowledge, best practices, technology and investments amongst its stakeholders, namely Governments, institutions, corporations, investors, accelerators, education centres and startups, which shorten the time of finding disruptive and forward-thinking solutions.

On the other hand, it is key to focus on education, especially on the development of digital skills and the use of new technologies so that more added-value jobs can be created in all economic sectors, and especially in tourism.

Science, Technology and Innovation (STI) have been promoted through UNWTO initiatives and used by its participants in order to address the above-mentioned challenges.

Artificial Intelligence, Internet of Things, Blockchain and, Augmented and Virtual Reality have been identified as the most common technologies in the **UNWTO Startup Competitions and Innovation Challenges Programmes**. Through calls and selection processes characterized by the participation of both private and public sectors, best startups are awarded, mentored, and connected to the global ecosystem.

For instance, the **UNWTO SDGs Global Startup Competition** received responses from 10,000 participants from 138 countries and all economic sectors. The 25 winning projects entered a curated programme of benefits with the support of 21 partners and collaborators (such as, Globalia, Qatar Airways, Qatar National Tourism Council, Amazon Web Services, Mastercard, Google, Amadeus, IE University, Telefónica, IDB Lab and Plug and Play), including mentorship, access to technological support, connection to Member States, corporates, and investors for opening the doors to funding and pilot projects opportunities. Likewise, **Top 25 Innovators Working for a More Sustainable and Innovative Tourism catalogue** was created to facilitate Member States and private sector access to solutions which cover projects for **decarbonization, monitoring of sustainability indicators, water access, women empowerment, smart mobility,** amongst many others.

More top startups at the **Finalists and Winners website** and the **Top 100 Innovators Catalogue**, but some specifically working in tourism to accelerate the SDGs are highlighted below:

- **Identified Startups working on SDG 6 "Clean water and sanitation"**

- **Source** (United States) www.source.co

Brief:
"Source Global, PBC is a sustainable technology company that serves one of humanity's most fundamental needs: Access to clean , safe drinking water. Our transformational technology can produce perfect drinking water , anywhere in the world and using only sunlight and air".

- **ECOLOO Greentech Malaysia SDN BHD** (Malaysia) www.ecoloogroup.com

Brief:
"ECOLOO is an onsite biological treatment toilet system that employs enzyme to terminate odour, break down human waste into ashes & converts urine into fertilizer that is odour free, rich with nutrients, perfect for garden/farm.
ECOLOO is eco friendly, odour free, water free, sewage free, energy free & hassle free with minimal maintenance cost. It is easy to maintain & saves water from being flushed. There is no sewage created so no septic tank or suction required.

ECOLOO was co-invented in Sweden & mass produced in Malaysia with global presence in 25 countries".

Other UNWTO Programmes:

- **UNWTO Digital Futures for SMEs Programme:** seeks to accelerate economic recovery of the tourism sector by scaling up innovative Small and Medium-sized Enterprises (SMEs) to unleash digital technologies to create jobs and enhance future resilience in the linkages of the tourism value chain post COVID-19. It aims to provide digital training on connectivity, business growth, e-commerce, big data and analytics, payments and security to 1 million beneficiaries.

- **UNWTO Startup Competitions and Challenges:** Global calls and selection processes characterized by the participation of both private and public sectors, best startups are awarded, mentored, and connected to the global ecosystem.

- **UNWTO Tourism Online Academy:** UNWTO is working closely with top universities to up-skill tourism workforce in destination planning, sustainability, and management.

- **UNWTO Jobs Factory:** UNWTO joined forces with Hosco, the professional network specially designed for the hospitality industry. A platform that will support and improve your competitiveness regarding job creation and help you leverage human capital development in your country and region, helping the tourism workforce access the best job opportunities.

  The UNWTO Jobs Factory harnesses the power of Hosco's machine learning to match candidates with suitable positions, connecting employers with the very best talent our sector has to offer. It will allow monitoring current and future skills development, facilitating intelligent labour market data collection, insights, and forecasting. In addition, to identifying trends and the shift in occupations due to the digital transformation, ensuring agile response to change in the educational and training institutions, and helping our Member States make important decisions to support jobs based on the latest, trusted data.

- **UNWTO Investment Porgramme: Investment Readiness for Green Finance Mechanisms** in partnership with the International Finance Corporation (IFC).

UNWTO Invetsment Guidelines

- UNWTO Investment Guidelines – **Enabling Frameworks for Tourism Investment** (2021)
- UNWTO Investment Guidelines – **Strategies to Safeguard Tourism Investments during COVID-19** (2021)
- FDI Intelligence **Tourism Investment 2020 – Global Greenfield Investment Trends in Tourism** in collaboration with UNWTO

Other documents

- UNWTO Travel and Tourism Tech Startup Ecosystem and Investment Landscape (2021)
- UNWTO Top 100 Innovators Catalogue (2021)
- Top 25 Innovators Working for a More Sustainable and Innovative Tourism Catalogue (2021)