

# UN Technology Bank for Least Developed Countries

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#### Who we are

The call for a mechanism to close the science, technology and innovation (STI) gap between least developed countries (LDCs) and the rest of the world was first raised in the Istanbul Programme of Actions in 2011. To respond to this long-standing need, the **United Nations Technology Bank for Least Developed Countries** (UN Technology Bank) was established in 2016 by the General Assembly as a United Nations entity and became operational in 2018. Since then, the UN Technology Bank has served as a focal point for strengthening the STI that LDCs need to meet the UN Sustainable Development Goals (SDGs). The UN Technology Bank has been working with all 46 LDCs and supporting graduated LDCs for up to five years after their graduation from the LDC category.



# **Our guiding principles**

#### Demand-driven, responsive to LDCs' STI needs

The activities of the UN Technology Bank are guided by the needs and priorities of the LDCs.

#### **Leveraging partnerships for impact**

The UN Technology Bank has a commitment to building and leveraging networks and partnerships in support of STI deployment and development in LDCs.

#### Agile and strategic

The UN Technology Bank is agile, adaptable, and responsive to new challenges and opportunities.

#### Focus on comparative strengths

The UN Technology Bank focuses on needs assessment, policy advocacy, facilitating technology transfer and forging partnerships to address LDCs' individual and collective STI needs.

#### Commitment to promote equal opportunities in STI

The UN Technology Bank ensures its programming integrates a gender-mainstreaming approach and is supportive of equal opportunities in STI.

#### **Accountability to stakeholders**

The UN Technology Bank will continue to strengthen its monitoring, evaluation, reporting and learning practices to meet the expectations of LDCs, current and prospective donors, and implementing partners.

# Our four major programme lines

**Technology Needs Assessments** 

**Technology Transfer** 

STI Policy & Capacity Development

Strategic Partnerships & Advocacy

Enable LDCs to identify technologies required to meet their development needs while analysing barriers and challenges hindering the acquisition, deployment and diffusion of prioritized technologies

Support LDCs to bridge the current technology gaps by facilitating the transfer of appropriate & affordable technology

Enhance STI policymaking and develop need-based STI capacities in LDCs

Place LDC's STI opportunities and needs at the forefront of development programme collaboration and advocacy dialogues

#### **Our activities in numbers**

hbers \*as of February 2022



# Technology Needs Assessments

LDCs completed or are in the progress of their Technology Needs Assessments



# **Eco-industrial design**

scholarships in industrial design engineering were awarded to LDC students



#### **Academies of Science**

Academies of Science were established & launched in Angola, DRC, Lesotho and Malawi



# Training on digital access to scientific & research tools

participants from LDCs accessed professional digital resources of health, agriculture, environment, innovation or global justice



#### **Biotechnology**

fellowships awarded to LDC researchers



#### SDG impact accelerator

startups were supported in Bangladesh and Uganda



#### Satellite technologies

LDC policymakers attended the workshop on satellite data analysis for climate change adaptation & disaster risk management



## **Knowledge products**

reports. 1 on the entrepreneurship development, gender & technology in Bangladesh, Cambodia, Ethiopia & Senegal and 1 forthcoming report on the status of STI in LDCs

### Our programme examples

#### Conducting Technology Needs Assessments (TNAs) in LDCs

The TNAs serve as the foundation for LDCs to:

- identify their specific technological needs in priority sectors
- improve national and regional policy technological coordination
- mobilize support to enhance innovation capacities
- mobilize resources towards country-specific STI priorities

The TNA process results in a practical **Technology Implementation Plan** (TIP), which is specific to each country and serves as a basis for the country's technological development initiatives in line with its national development goals and the SDGs. The TIPs are a powerful tool to support a demand-driven approach to innovation and technology transfer. Between 2019-2020 the UN Technology Bank completed five TNAs in **Bhutan**, **Guinea**, **The Gambia**, **Timor Leste and Uganda**. In 2021, TNAs were concluded in **Cambodia**, **Lesotho and Rwanda** with reports under finalization. There are 16 TNAs planned for 2022.

#### **Promoting technology transfer in LDCs**

To contribute to international efforts in addressing the technology transfer challenges of the LDCs, the UN Technology Bank will undertake technology transfer projects that identify, transfer and implement technologies:

- Project on sustainable and affordable rammed earth dwellings: The project aims to provide selected LDCs with affordable, sustainable, eco-friendly and accessible sheltering by utilizing mainly locally available stabilized earthen construction materials.
- Technology transfer to address post-harvest challenges in agriculture: This project will respond to the challenges of
  post-harvest handling and the lack of storage facilities by transferring solar dryers, cold chain storage, food
  processing and preservation technologies.
- Establishment of a technology transfer office in The Gambia: The project is carried out by the UN Technology Bank,
  TÜBİTAK and University-Industry Cooperation Centers Platform (USIMP) and aims to develop a model for technology
  transfer offices suitable for LDCs.

#### Providing technology solutions for hearing loss in Bhutan

The UN Technology Bank partnered with the **Kingdom of Bhutan** and **Medtronic Labs** on **strengthening the ear and hearing care for all Bhutanese children**. This three-year project from 2021 to 2024 aligns with Bhutan's national policies and is centered around the needs of children aged 0–14, by supporting the interventions required to address hearing loss and preventive ear disorders across the whole continuum of care. The UN Technology Bank is leading the project coordination and management, as well as the technical activities related to technology, knowledge transfer and technical training.

#### Providing fellowships on biotechnology for scientists from LDCs

The UN Technology Bank partnered with the International Centre for Genetic Engineering and Biotechnology (ICGEB) and the World Academy of Sciences (TWAS) to set up a ProgrAmme of CollaboraTions with LDCs, known as PACTs. The programme aims to strengthen biotech capacity in the LDCs and promote networking among researchers and research institutions. The biotechnology programme awards fellowships to early-career scientists from the LDCs, consisting of exchange visits at the ICGEB laboratories in Italy, India and South Africa, where scientists can pursue their research on biomedicine, biotechnology and agriculture. In 2021, 13 fellowships were awarded. The programme also strengthens biotechnology policies and regulatory capacities of LDCs through a series of workshops on biotechnology policy and regulatory science that will be implemented, primarily in sub-Saharan Africa.

#### **Building capacity on industrial design for LDCs**

In partnership with the World Eco-Design Conference (WEDC) and the International School of Design at Zhejiang University in Ningbo, China, the UN Technology Bank is supporting LDCs to enhance their industrial design capacity. In 2021, 36 students from LDCs were awarded scholarships to pursue industrial design engineering studies. The project will also organize dedicated training and workshops to foster technical exchanges between eco-design experts. The 2022 scholarship selection process is ongoing. The UN Technology Bank will also co-host WEDC Summit.

#### **Building the capacity on satellite technology for LDCs**

In partnership with the **UN Institute for Training and Research** (UNITAR), the UN Technology Bank provided capacity-building programmes to the LDCs that are particularly affected by **natural disasters and climate change**. In 2020, the UN Technology Bank and UNITAR together delivered capacity-building training in the use of satellite data in the **Gambia**, **Mozambique and Uganda**. The one-week training was followed by a one-day workshop on the use of satellite data for informed decision-making. Over 60 professionals took part in the training, and over 100 decision-makers from various governmental departments attended the workshop on decision-making. Moreover, an artificial intelligence model for flood mapping was launched in **Mozambique**; the model provides punctual data to select the most effective response strategy during a flood. The programme will be extended to other LDCs in collaboration with partners to strengthen policy and decision-making using satellite data beyond disaster risk mitigation and management.

#### **Building an SDG impact accelerator for LDCs**

The UN Technology Bank has been partnering with the Government of Turkey and UNDP on the SDG impact accelerator project. The project aims to support startups who leverage technology-based solutions to solve challenges LDCs face and further promote systemic, cross-country knowledge transfer. The project provided financial and technical support to selected startups in the acceleration and implementation phases. A total of 1074 applications were received from 74 countries, in which 10 startups were chosen for the acceleration phase that included a series of mentoring activities. The acceleration phase was completed in 2021 with focus areas on digital agriculture in Uganda and financial inclusion in Bangladesh. Five startups were selected for the implementation phase. The UN Technology Bank was on the Governance Board to oversee the selection of the startups and provide mentoring in branding and intellectual property rights.

#### Establishing Technology Makers Labs to enhance STI skills for young people in LDCs

The UN Technology Bank is developing a project on establishing Technology Makers Labs in LDCs to provide young people under 30 years of age with an opportunity to develop their STI skills. In collaboration with the programme partners, UNTB Technology Makers Labs will provide yearlong training modules in the selected LDCs. The programme also aims to share an innovative collaborating model between LDCs, including Ministries in charge of technology development, universities and other relevant entities, and the International Technology Makers Lab shareholders. Within the Training Calendars, students will be able to join online/offline modules on essential STI skills, such as entrepreneurship, creative thinking, critical thinking, problem-solving, effective communication and teamwork, as well as technical courses such as design and production, robotics and coding, electronic programming and internet of things, aviation and space technologies, energy technologies, materials science and nanotechnology, and artificial intelligence.

#### Fostering strategic partnerships and advocacy for LDC's STI development

The UN Technology Bank partner with the Member States, UN system, research institutions, foundations and the private sector to mobilise the necessary resources for LDCs to fulfil their STI potential and achieve sustainable development. Some of our partnerships and advocacy examples include a partnership with the Massachusetts Institute of Technology Solve (MIT Solve) and Plasma Ventures that advocates and supports LDC innovators' participation in the social entrepreneurship incubation. In collaboration with Thomson Reuters Foundation, we contributed to journalism training for over 40 journalists from the LDCs to report development needs and opportunities from the STI lens, thus enhancing advocacy for the Fifth United Nations Conference on the Least Developed Countries (LDC5). Similarly, through various international fora, such as the Africa STI Forum, in partnership with UNESCO and UNECA, as well as the UNIDO's Ministerial Conference on LDCs, we place LDC's STI opportunities and needs at the forefront of development programme collaboration and advocacy dialogues.

#### **Our contact**

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