

**REVERSE LINKAGE**

DEVELOPMENT THROUGH SOUTH-SOUTH COOPERATION



# CAPACITY DEVELOPMENT OF THE AFRICA CITY OF TECHNOLOGY



 **SUDAN** (RECIPIENT)  
 **TURKEY** (PROVIDER)

PROMOTING TECHNOLOGY  
LOCALIZATION IN SUDAN

## THE CHALLENGE

The Science, Technology and Innovation (STI) system of Sudan lacks technology incubators, which can help technology-based firms and entrepreneurs in deploying their products in society, making the return on investment for the whole STI system minimal.

To overcome this situation, the Government of Sudan established the Africa City of Technology (ACT), a major enterprise to provide a suitable environment for technology localization and incubation for Sudan's human and economic development.

The ACT is progressing adequately in establishing its infrastructure, with support from the Government of Sudan and both local and external partners. The ACT was given a land area of five million square meters, on which a technology incubation center is being constructed.

However, ACT lacks skilled human resources to run technology incubators and techno-parks. Additionally, ACT has no detailed guidelines and templates for validating technology, mentoring researchers, contracting co-financiers, and business planning for start-up companies. Thus, these challenges hinder the ACT from realizing its long-term objectives.

## THE SUPPLY

Turkey has one of the largest numbers of active techno-parks in the IsDB member countries, and an effective regulatory framework with respect to technology development zones.

The TÜBİTAK Marmara Techno-park (MARTEK) and Uludag University Techno-Park (ULUTEK) are among the most active techno-parks in Turkey, founded in 1999 and 2005, respectively.

With the Scientific and Technological Research Council of Turkey (TÜBİTAK) as its main shareholder, MARTEK works as independent entity, and is a member of the International Association of Science Parks. ULUTEK works under the umbrella of the Uludag University.

The two techno-parks have so far assisted 220 start-up companies to commercialize and export their research outputs in the areas of information and communication technologies (ICT), biotechnology, mechatronics, and advanced materials. Their support to start-up companies includes technology commercialization, consultancy, mentoring, networking, technical support, and exemptions of taxes. Thus, the two techno-parks represent successful models from which ACT can significantly benefit.



THE ACT WILL GET EFFECTIVE HELP TO DELIVER ITS MANDATE WITH RESPECT TO TECHNOLOGY LOCALIZATION AND INCUBATION

## THE MATCHMAKING

Through ongoing dialogue between the IsDB and the Government of Sudan, the need to enhance capacity at the ACT was identified as an effective measure for boosting the output of the whole STI system.

The IsDB worked closely with the ACT to identify the relevant Turkish knowledge-providing institutions, while taking into consideration the Memorandum of Understanding signed in June 2014 between the IsDB, the Turkish Cooperation and Coordination Agency (TIKA), and the Statistical, Economic and Social Research and Training Center for Islamic Countries (SESRIC) concerning Turkey's support for capacity development in IsDB member countries.

Accordingly, it was agreed to link the ACT with both the MARTEK and ULUTEK.

The IsDB then coordinated and funded a peer-to-peer consultation process to undertake detailed diagnosis of the current capacities of ACT. This resulted in formulating a Reverse Linkage project which entails a joint action plan between MARTEK and ULUTEK to raise the human and institutional capacity of ACT.

## THE PROJECT

### GOAL

The project aims to enhance the capacity of ACT in technology incubation, including the development of its business plans, procedures, human resources, and facilities.

### MAIN ACTIVITIES

- Enhancing the ACT master plan to include more service buildings and to improve the interaction between ACT and its surrounding area.
- Preparing the ACT strategic business plan through a collaborative process involving both the ACT team and Turkish experts.
- Organizing instructor-led training in technology incubation and transfer, building of an entrepreneurial ecosystem, and managing intellectual property.
- Providing on-job training on technology incubation and transfer, business growth strategies, understanding the market as well as industry, and marketing in technology-based firms.



**MARTEK WORKS  
AS INDEPENDENT ENTITY,  
WITH THE SCIENTIFIC  
AND TECHNOLOGICAL RESEARCH  
COUNCIL OF TURKEY  
(TÜBİTAK) AS ITS MAIN  
SHAREHOLDER**

- Preparing guidelines and templates for technology validation, mentoring researchers, contracting with co-financiers, and business planning for start-up companies.
- Providing equipment to ACT incubation centers including internet connectivity, solar systems, ICT equipment, and scientific equipment.

## DURATION

18 Months, from 2019 to 2020

## MONITORING AND EVALUATION

The day-to-day work of the project will be managed by two project coordinators from ACT and MARTEK. Furthermore, ULUTEK will designate an alternate project coordinator. A joint coordination committee composed of representatives from all project partners will meet every six months in Sudan to review the progress of the project and propose corrective actions if needed.

## THE WINS FOR ALL

The ACT will receive effective help to deliver its mandate with respect to technology localization and incubation. Improving the performance of ACT will result in filling a crucial gap in the Sudan's STI system.

Both MARTEK and ULUTEK will improve their international relationships and generate visibility regarding their knowledge in the areas of technology incubation and commercialization. Furthermore, the Turkish start-up companies, hosted by MARTEK and ULUTEK, will have the chance to partner with their peers in Sudan.

The IsDB 10-year Strategic Framework recognizes capacity development as an essential cross-cutting strategic pillar to successfully attaining all IsDB's strategic pillars. In line with this orientation, the project will equip ACT with adequate knowledge and expertise, to help Sudanese researchers in several fields to commercialize their products.

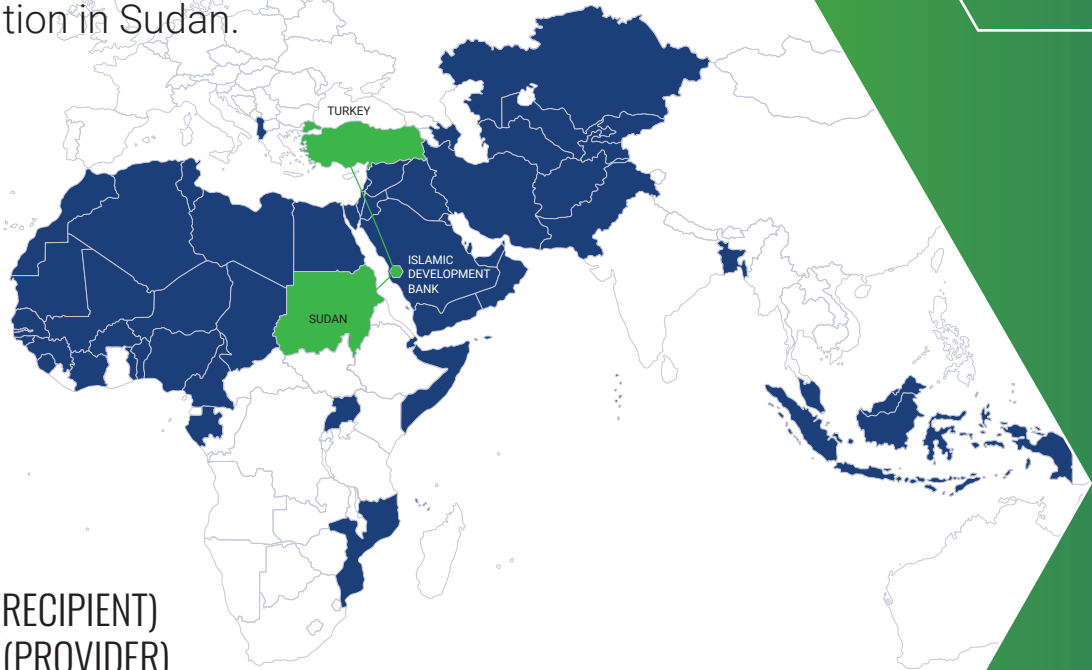
MARTEK AND  
ULUTEK TECHNO-PARKS  
HAVE ASSISTED

**220**

START-UP COMPANIES  
SO FAR

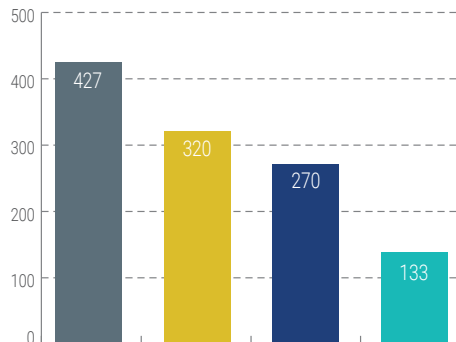


The IsDB is matching the Sudan's needs with the Turkey's experience to enable the two countries to cooperate in promoting technology incubation and localization in Sudan.



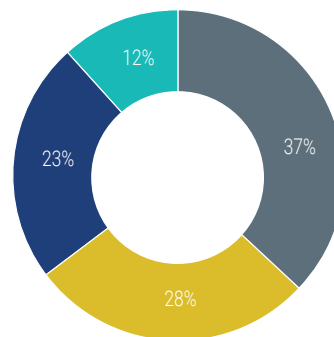
 **SUDAN (RECIPIENT)**  
 **TURKEY (PROVIDER)**

**CONTRIBUTION (US\$ THOUSANDS)**



 GOVERNMENT OF SUDAN  GOVERNMENT OF TURKEY  
 THE ISDB  SESRIC

**PERCENTAGE (%)**



THE PROJECT  
 COMMENCED IN  
**2019**  
 AND RUNS UNTIL  
**2020**

It is at the center of the IsDB's mandate to promote cooperation among its member countries.

In 1981, the Makkah Declaration of the Third Islamic Conference Summit called the OIC member countries to strengthen collaboration, to utilize and foster their talents, skills and technological capacities. The Bank responded and launched its Technical Cooperation Program in 1983. This has then been scaled up via what we call Reverse Linkage.

The structured skills swap under Reverse Linkage helps the recipient country diagnose and analyze a problem while the provider country shares its proven knowledge and expertise to find a solution.

The idea that all partners have something to gain from cooperation lies at the heart of Reverse Linkage.

The learning process is reciprocal, knowledge transfer is in both directions, and benefits are mutual.

## **CONTACT US**

Islamic Development Bank  
8111 King Khalid St.  
Al Nuzlah Al Yamania Dist.  
Unit No. 1  
Jeddah 22332-2444  
Kingdom of Saudi Arabia

**E** [reldiv@isdb.org](mailto:reldiv@isdb.org)  
**T** +966 12 6361400