

# **Investment, Enterprise and Development Commission**

Tenth Session

Geneva, 3 December 2018

Talking Points

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I am pleased to welcome you to this session of the Commission, during which my Division's substantive contribution will address the role of science, technology and innovation (STI) in enterprise development.

STI for enterprise development presents multidimensional challenges. We suggest as focus for discussion at this session three sets of issues that developing countries need to address urgently:

- (1) supporting and funding investment in STI,
- (2) facilitating linkages, networking and clustering of innovative firms, and
- (3) enabling digital entrepreneurship.

## **1. Financial constraints faced by innovative entrepreneurs**

As we noted in the TIR 2018, finance is critical to support the emergence, advancement and evolution of STI capabilities in firms and industries. And it is particularly important for harnessing frontier technologies.

- Innovative enterprises in developing countries, particularly during the early stages of start-up, regularly encounter difficulties in securing financing because they are considered to be less of a safe bet than non-technologically innovative firms.
- Investment for innovation in developing countries is also limited by smaller market sizes and consumer demand, inherently weaker financial sectors, reduced absorptive capacities of firms and fragmented policy support.

- There is a need for funding mechanisms that reduce risk and uncertainty for potential investors. The key is to develop an appropriate mix of direct and indirect support measures that can address the specific financing concerns in each country.
- New, innovative approaches to finance, such as impact investment, green funds, socially responsible investing, multi-stage financing and crowdfunding, among others, can make important contributions to development financing of the innovation needed to meet the Sustainable Development Goals. For example:
  - According to the 2017 *African Investing for Impact Barometer* – an annual publication of the Bertha Centre for Social Innovation and Entrepreneurship at the University of Cape Town – over \$400 billion were reported as been directed to investing for impact in Sub-Saharan Africa, as more than half of the investment funds covered in the Barometer are engaged in some form of impact investment strategy.
  - Social impact bonds are another innovative financial instrument with the potential to be leveraged for investment in innovative enterprises. The *Women's Livelihood Bond*, for example, is a listed bond with dual focus on financial and social returns, which aims to empower the lives of over 385,000 women in Southeast Asia by growing their businesses and scale social impact.
- These type of new financing mechanisms potentially create opportunities to leverage private capital to scale new technologies to tackle the priority areas identified in the 2030 Agenda for Sustainable Development.
- They can also help to fill the \$2.5 trillion funding gap associated with the SDGs. To make the most of these opportunities, this Commission could consider policies responding to two broad sets of questions:
  - (1) how to go about scaling financial resources for innovative entrepreneurship? and
  - (2) how to ensure that resources flow as a matter of priority towards innovative firms and industries with a strong transformative potential?

## **2. Networking and clustering of innovative firms**

- Examples ranging from Silicon Valley to emerging tech start-up hubs such as *Sheba Valley* in Ethiopia, show how inter-firm collaboration in R&D and technological innovation through

networks and clusters, helps facilitate innovation and access to technologies and gradually increase the technological sophistication of firms and their innovative capabilities.

- A good example of networking and clustering that we identified through our STIP Review programme, is Peru's technological innovation centres that use different forms of organization, including private and public sector collaboration to support the transfer of innovation and technology and provide technological services for companies along various productive chains. They contribute to innovation capacity, to the generation of added value and to the productivity and competitiveness of SMEs.
- Science and technology parks are a widely used instrument to promote innovation-oriented collaboration. Today, there are approximately 400 S&T parks in operation worldwide, including a fast-growing number in developing countries, such as the Botswana Innovation Hub, Egypt's S&T Park for Electronics research and Industry, and the Namibia Business Innovation Institute, to name a few.
- But experience tells us that for S&T parks to have an impact in any development context, at least two conditions need to be met:
  - Firstly, it is essential that there is a presence of leading actors in knowledge and technology. The success of a science and technology park as an innovation catalyst critically depends on the active involvement of research and technology institutes that can create opportunities for knowledge spill-overs.
  - Secondly, it is necessary for there to be in place a national policy that proactively identifies strategic innovation linkages, promotes the development of connections within the innovation system, and facilitates, attracts and supports knowledge and technology-focused firms.
- These are challenging conditions to achieve for any country, no matter how developed, and again, the Commission could facilitate the sharing of existing experiences and good practice.

### 3. Promoting digital entrepreneurship

The third block of issues that I would like to invite you to consider has to do with how the digital economy creates opportunities for new forms of entrepreneurship with strong development potential.

- Digital connections are spreading fast. By 2021, it is predicted that there will be 9 billion mobile subscriptions, 7.7 billion broadband mobile subscriptions, and 6.6 billion smartphone subscriptions (including an additional 730 million subscribers in the Middle East and Africa, and 230 million in Latin America).
- In the two flagship reports prepared by my Division, the TIR and the IER (now being renamed Digital Economy Report), we have explored the development implication of these trends and of the key technologies and processes that predominantly give life to the digital economy.
- Digital and other emerging technologies create opportunities that are both unprecedented and difficult to harness with traditional policy approaches. The transition to a digital economy can provide a boost to competitiveness across all sectors, new opportunities for business and entrepreneurial activity, and new avenues for accessing overseas markets – including linking domestic companies and SMEs to global value chains.
- But as we highlight in our eCommerce Weeks and through the eTrade-for-all initiatives, international cooperation is needed to facilitate the exchange of experiences and good practices, for policy support to enterprises as they engage in this transition.
- Challenges include ensuring that entrepreneurs have the required capabilities to engage in e-commerce, in both domestic and cross-border trade, such as capabilities in digital marketing and the ability to comply with various trade rules.
- The digital economy presents not only new opportunities for entrepreneurship, but also will lead to the creation of new jobs and occupations in various sectors, including in the production of new goods and services that utilize big data analysis, artificial intelligence, and three-dimensional printers, to name a few. Similarly, there is likely to be job growth

in pure digital firms. For example, in Viet Nam, in August 2015, some 29,000 people were engaged in developing mobile applications.

UNCTAD is actively helping developing countries address these key challenges, and others that countries need to resolve in order to effectively harness STI for sustainable development. I will brief you in detail about our activities at a dedicated session next Wednesday, but I would like to refer now to some highlights:

### ***Our efforts in policy research and analysis***

UNCTAD is engaged in work to support the adoption of digital technologies and the transition to a digital economy. Allow me to give you some brief references to that work, that will be developed at a dedicated presentation later this week:

- Earlier this year, we launched the Technology and Innovation Report 2018 on *Harnessing Frontier Technologies for Sustainable Development*, which discusses the opportunities and challenges associated with the adoption of digitally-enabled technologies.
- The rebranded *Digital Economy Report* will focus next year on recent trends in the global digital landscape and examine opportunities and challenges for developing countries to capture more value from it. The analysis will also draw on the 15 Rapid eTrade Readiness Assessments we have conducted for LDCs in the past two year.
- Since the last Commission, we also launched of the Egypt National E-Commerce Strategy; with the objective of helping the country to leverage e-commerce as a catalyst for innovation, growth, trade and social prosperity, by providing policy recommendations. We will also be publishing E-Commerce Strategies for Oman and Rwanda in early 2019.
- By the end of this year, we will have completed 15 UNCTAD rapid eTrade readiness assessments for LDCs, including Burkina Faso, Lao PDR, Liberia, Madagascar, Myanmar, Senegal, Solomon Islands, Togo, Uganda, Vanuatu and Zambia, for the year;

### ***Our efforts in STI policy capacity-building***

- Since the last Commission we have commenced the STIP Reviews of Uganda and Ethiopia. We have pending requests for STIP reviews from Panama, Sri Lanka, Botswana

and Zambia, and we hope to be able to implement these projects expeditiously with the support of interested donors.

- The new methodological approach, which we are finalizing and will present to the next UN Commission on Science and Technology for Development in May, will address in a more holistic manner the challenges of sustainable development and will be a response to the Maafikiano's mandate to continue and enhance the STIP review programme.
- Also, in the area of capacity-building UNCTAD organised, in collaboration with the Ministry of Science and Technology of China two workshops in September 2018. These workshops focused on "STI policy for achieving the SDGs", and "High-tech parks and incubator development", and lasted two weeks each. 23 participants from 16 developing country member states of the CSTD participated in these workshops.
- We will soon issue a call for participants for the "Young Scientists" programme, which will allow scientists from developing country member States of the CSTD to spend six months to one year in a Chinese research institute or university.

#### ***CSTD Priority themes 2018-2019***

- Finally, let me give you a heads up about the work of another important body dealing with STI that UNCTAD services: The UN Commission on Science and Technology for Development (CSTD), one of ECOSOC's functional commissions. At its last annual session, last May, the Commission selected two priority themes for consideration at its twenty-second session, in May 2019:
  - (1) "The impact of rapid technological change on sustainable development" and
  - (2) "The role of science, technology and innovation in building resilient communities, including through the contribution of citizen science".
- The CSTD mission will hold a first discussion of these themes at the forthcoming meeting of the intersessional panel, which will take place in Vienna from 15 to 17 January 2019. Inputs and views from all member States are encouraged and welcome.

Distinguished delegates,

- A year ago, the agreed conclusions of this Commission recognized the need to expand UNCTAD discussions on the matter of science, technology and innovation for development, to address, inter alia, new policy frameworks that leverage STI for more inclusive and sustainable development. I would like to thank delegations for the trust they placed on us and I hope that the efforts that I just referred to will satisfy you that we are making progress in that direction.
- I would also like to thank Member States for incorporating the discussion on technology and innovation as a regular feature of the TDB, which further accentuates its role as an effective means of implementation of the Sustainable Development Goals.
- I look forward to an interactive debate on the issues of STI, including the role that UNCTAD can play in strengthening the capacity of developing countries for SDG-focused STI, and I wish you a very successful session of the Commission.