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

Geneva, Switzerland
21-22 October 2024

Contribution by Iran

to the CSTD 2024-2025 priority theme on "Diversifying economies in a world of accelerated digitalization"

1. **What are the specific challenges your economy is facing to develop or adapt frontier technologies and AI?**

   Here is some of the most important challenges of artificial intelligence development in Iran are:

   Lack of investment: One of the most important challenges for the development of artificial intelligence in Iran is the lack of investment. Investing in artificial intelligence requires a lot of financial and human resources. Considering the international sanctions against Iran, it is difficult for foreign companies to invest in this field.

   Lack of Human Capital: Another challenge of artificial intelligence development in Iran is the lack of sufficient training in this field. For the development of artificial intelligence in Iran, there is a need for specialized and skilled manpower. Considering that this technology is relatively new, there is not enough training in the field of artificial intelligence in Iran. Migration of specialized labour force is another issue in this area.

   Lack of proper infrastructure: The development of artificial intelligence requires proper infrastructure. These infrastructures include access to big data, high computing power, and high-speed communication networks. Due to Iran's economic conditions and sanctions, it is difficult for Iranian companies to access these infrastructures.

   Legal and regulatory problems: The development of artificial intelligence also faces legal and regulatory problems. These problems include issues of privacy, discrimination, and safety. Considering that this technology is still in the early stages of its development, there are no proper rules and regulations for it.

2. **Can you provide successful examples of AI and other frontier technologies uptake in your country?**

   Based on Nature artificial intelligence index 2020, Iran is ranked in the 13th position by total number of publications. In addition, according to the ranking of SCImago, which also evaluates scientific journals, Iran has been ranked 13th in the world in terms of published articles related to artificial intelligence and first in West Asia in 2023.

   In fact, artificial intelligence in Iran has been able to place itself in the evolutionary path of security systems such as facial recognition, manufacturing robots and intelligent devices in the production and industrial fields, navigation, upgrading speech recognition systems such as converting text to sound and vice versa, and designing games and practical areas of education.

3. **Has your country put in place inclusive policies for innovation and economic diversification specifically tailored to diffusion of digital technologies and AI?**

   In the law of supporting knowledge-based companies, different financial and tax supports are provided for companies active in the digital field. Also, with the approval of the knowledge-based production leap law, tax credits were allocated to innovative AI companies that have research and development activities.

4. **Do you have examples of policy instruments in place to favour the diffusion of frontier technologies in the economy and targeting specific sectors?**

Innovative knowledge-based companies with research and development activities in various sectors, including digital technology, are supported through a variety of financial and tax instruments such as tax credits, loans, guarantees with the aim of developing High-tech products.

5. **Has your country put in place mechanisms to strengthen industrial capabilities through partnerships among different stakeholders (e.g., university-industry, or private-public)?**

Based on Article 13 of Knowledge-based production leap, It is asserted that with the aim of developing the relationship between the university and the industry, industries and production units with research and development units that enter into cooperation agreements with related universities or higher education and research centers, with the priority of the province where that industry or production unit is located, can benefit from tax credits in Research and development contracts related to these agreements should be used.

6. **How can international cooperation support the uptake of new technologies and the development of technological capabilities in your country and ensure that industrial policies will benefit all and do not worsen inequality?**

Cooperation with developing countries to jointly produce artificial intelligence platforms

7. **What can do the UN CSTD to support an economic transformation that enhances your country productive capabilities and foster an inclusive digital transformation?**
   - Helping to remove sanctions and create access to artificial intelligence platforms and applications
   - Supporting the development of computing infrastructure in developing countries jointly