Round table 2: technology for development in Africa: crafting a path to inclusive technological advancement

Concept note

I. Background

1. Efforts by African countries to achieve the Sustainable Development Goals and attain the aspirations, goals and targets of Agenda 2063: the Africa We Want, of the African Union can be supported through the transfer, adoption and upgrading of productive technology. To achieve that objective, African countries must promote science, education and innovation. It is widely acknowledged that technology can drive socioeconomic development by facilitating trade, industrial transformation, urbanization and the creation of formal sector jobs. Technology facilitates a dynamic interaction among human, physical and natural capital, bolsters competitiveness at the regional and global levels, fosters the creation of decent jobs for a growing labour force and builds resilience to shocks.

2. In 2023, ECA jointly convened the fifth African Science, Technology and Innovation Forum,¹ at which participants discussed ways to accelerate development and promote the dissemination of emerging technologies with a view to fostering the emergence of a green, inclusive, and resilient Africa. Development efforts can be enhanced in numerous ways through the adoption and dissemination of innovative technologies. Progress in that regard has been slow in Africa, however, giving rise to significant technological gaps with other global regions. Development in many African countries is impeded, in particular, by deficiencies in digital infrastructure and, in a recent report, ECA underscored that the portion of total productivity driven by technological progress has been declining steadily in Africa and remains far below the

¹ E/ECA/CM/56/1.
² For further information about the forum, see the forum webpage, available at: www.uneca.org/eca-events/astif2023.
equivalent figures for other global regions.\textsuperscript{2} That decline may, in fact, be associated with the premature deindustrialization that recent research has identified in many parts of Africa,\textsuperscript{3} and with weakness in the area of economic complexity, including in relation to productive knowledge – an area in which African countries perform poorly compared with countries in other global regions.\textsuperscript{4}

3. It is therefore of critical importance to develop the infrastructure, policies, institutions and instruments that Africa needs to support technological progress in the decades ahead. There is, in fact, significant potential for Africa to develop and use advanced technologies by leveraging regional value chains and building on countries’ knowledge and experience to facilitate the cost-effective processing of goods and the efficient provision of services. Regional technology hubs and incubation labs could, moreover, generate the momentum needed to accelerate the development of human capital, infrastructure and other inputs and promote innovation, empowering African businesses to compete at the global level. In that connection, current efforts to promote regional integration could help close the technology gap between Africa and other global regions.

4. It should be noted, however, that Africa has already demonstrated its capacity to lead the way in certain fields in the development and application of technology, including in the field of mobile money. The use of technology is already revolutionizing financial transaction and savings modalities and thus helping to transform people’s lives across the continent. African countries have also successfully leveraged the transfer of technology to strengthen their agricultural sectors and improve health care services and education in remote areas. Digital technology has significant potential to transform other economic sectors across Africa.

5. It should be borne in mind however, that the so-called fourth industrial revolution, which encompasses advances in areas such as artificial intelligence and robotics and the creation of an Internet of things, could pose a significant threat to African economies. Assessments of the potential impact of that revolution have helped draw attention to the significant job losses that it may cause, in particular in manufacturing, although jobs are likely to be created in other economic sectors.\textsuperscript{5}

II. Objectives of the round table

6. During the round table, panellists will endeavour to formulate a set of key policy recommendations and identify the institutions and instruments that are needed to close the technology gap between Africa and other global regions. The panellists will also consider the lessons learned by countries in their efforts to use innovative digital technologies to foster entrepreneurship and support economic development, including in the agriculture and manufacturing sectors.


\textsuperscript{3} See, for example, Dani Rodrik, “Premature Industrialization”, \textit{Journal of Economic Growth}, vol. 21, pp. 1–33 (November 2015). Available at: \url{www.drodrik.scholar.harvard.edu/files/danirodrik/files/premature_deindustrialization.pdf}.

\textsuperscript{4} Harvard University Growth Lab, “Country and product complexity rankings”, \textit{Atlas of Economic Complexity}. Available at: \url{https://atlas.cid.harvard.edu/rankings} (accessed on 4 January 2024).

7. The future of work will be largely determined by the pace of automation – a process that is already transforming African economies. Panellists in the round table will discuss whether Africa is ready to take advantage of the opportunities afforded by technological change and the automation of economic and social activities. In particular, they will seek to answer the following questions:

(a) Although Africa is not new to the idea of adopting, disseminating and upgrading technologies for development, progress made in that regard has been limited and, in some cases, reversed in recent years. What explains the hesitation of Africa to make use of innovative technologies to promote development?

(b) What are the key characteristics of the technological gap between Africa and other global regions? What policies should be adopted to address that gap?

(c) What lessons can be learned from the African continent’s pioneering role in the use of digital technologies to facilitate financial transactions, tax collection, pension administration and the provision of public services?

(d) What insights can be gleaned from the experience of banks and other financial institutions in leveraging digital technologies in Africa? In particular, how can countries promote the interoperability of digital platforms, which could revolutionize the provision of public services, and how can they encourage the adoption of emerging technologies, including blockchain protocols, in primary economic sectors and ensure that Africa adopts global best practices in that area?

(e) What role is played by data governance mechanisms in facilitating the use of digital technologies in development?

III. Target audience of the round table

8. It is envisaged that the round table will stimulate debate on technology development in Africa among a wide range of stakeholders, including:

(a) Government officials;
(b) ECA partners;
(c) Representatives of civil society and youth organizations;
(d) Private sector stakeholders.

IV. Round table focal points

9. The following focal points are available to answer questions and provide further information regarding the round table:

Lead focal point:
Hanan Morsy
Deputy Executive Secretary – Programme and Chief Economist, ECA
(Email: hanan.morsy@un.org)

Technical focal point:
Deka Moussa Ragueh
Senior Programme Management Officer, ECA
(Email: deka.moussaragueh@un.org)