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**Round-table discussion  
Regional priorities for the coming years in the field of technology  
for development**

**Summary**

The present document serves as a background paper for a round-table discussion on regional priorities for the coming years in the field of technology for development. It provides an account of the challenges that the region is facing in accelerating the pace towards the Sustainable Development Goals (SDGs) and the additional challenges brought on by the COVID-19 pandemic. The present document aims to trigger a discussion on how to build back better and leverage the information society, emerging technologies and innovation to achieve the SDGs.

The Committee on Technology for Development is invited to engage in the round-table discussion and enrich its content by discussing national challenges and ideas for the future.

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## Introduction

1. The present document was prepared as guidance for the round-table discussion on regional priorities for the coming years in the field of technology for development. It provides an overview of the challenges currently facing the Arab region, and proposes strategic directions for the work of the Economic and Social Commission for Western Asia (ESCWA) with regard to the information society, and technology and innovation for development in the coming period.

### I. Challenges in the Arab region

2. At the dawn of the **Decade of Action** to achieve the 2030 Agenda for Sustainable Development, the Arab region is still witnessing tremendous challenges, as follows:<sup>1</sup>

(a) The region is still home to some of the worst humanitarian crises worldwide. War has destroyed countries and communities, turned millions into refugees, and displaced many more;

(b) The region registers the world's highest unemployment rates, especially for women and young people;

(c) Women and girls continue to be marginalized across the social, political and economic arenas;

(d) The region has one of the highest rates of water scarcity globally, impacting food security and rural livelihoods, and increasing urbanization;

(e) The impact of climate change is disproportionately borne by Arab countries;

(f) Civic space requires expansion, and corruption levels remain high in some countries;

(g) Economies are stagnating, and poverty and inequality are on the rise.

3. With the COVID-19 pandemic, those challenges have been exacerbated in an unprecedented manner. The pandemic has resulted in the following:<sup>2</sup>

(a) Magnified problems arising from occupation, conflict and a dire economic situation, which has limited countries' capacity to mitigate the impact of the virus, particularly in Arab least developed countries (LDCs) and those affected by conflict;

(b) Affected all facets of life, including health, education, the economy, business and employment, and underscored the need for regional collaboration;

(c) Revealed weaknesses in food and drug value chains and the high vulnerability of trade; and resulted in extraordinary economic and social implications for people and businesses across sectors;

(d) Caused a loss of at least 1.7 million jobs, with unemployment projected to reach 15 per cent by 2022;

(e) Pushed 8.3 million more people into poverty, raising the number of poor in the region to 101.4 million and the undernourished to 52 million;

(f) Left the most vulnerable in dire situations, especially given the lack of social protection floors and non-inclusive social protection schemes in some Arab countries;

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<sup>1</sup> For a more detailed challenge assessment, see United Nations, *Arab Sustainable Development Report 2020*. Available at <https://asdr.unescwa.org/sdgs/pdf/en/ASDR2020-Final-Online.pdf>.

<sup>2</sup> For a more detailed assessment of the impact of the pandemic on the Arab region, see United Nations, *The Impact of COVID-19 on the Arab Region: An Opportunity to Build Back Better, 2020*, available at <https://unsdg.un.org/resources/policy-brief-impact-covid-19-arab-region-opportunity-build-back-better>; and the ESCWA COVID-19 policy brief series, available at <https://www.unescwa.org/publications/socioeconomic-impact-covid-19-policy-briefs>.

(g) Disrupted global food supplies, impacting food security in many Arab countries because of their high dependence on food imports.

4. However, the pandemic has also accelerated information and communications technology (ICT) development in the Arab region. ICT has been harnessed in the education, health and business sectors to maintain service provision and manage the crisis. The pandemic has also reinvigorated the role of the digital economy in generating economic value by producing digital value products and services.<sup>3</sup>

5. Many Arab countries have launched effective ICT initiatives to quickly respond to the crisis and curb its negative implications.<sup>4</sup> Several countries have also provided stimulus packages to support citizens and strengthen businesses. Various activities have been held to facilitate the exchange of knowledge and success stories in fighting the pandemic. However, Arab countries must exert more effort to provide effective, accountable and inclusive digital services to all and to bridge the digital divide, so as to fulfil the principle of leaving no one behind.

6. Today, transformative change in the Arab region requires more digital development, digital cooperation and digital transformation, in particular, and technological transformation, in general, at the regional, national and subnational levels. This progress is key to dismantling the barriers to sustainable development and unleashing the potential of the region's people to achieve national development plans and realize the SDGs.

## **II. Status and trends of key technology policy areas in the Arab region**

7. Gulf Cooperation Council (GCC) countries score high (above 0.65) in terms of digital technology expansion, while Arab LDCs and conflict-affected countries score low (below 0.34). GCC countries are also steadily moving towards maximizing the societal impact of ICTs through an integrated ecosystem that enables the spread of digital knowledge and literacy among members of society. Some have also specifically targeted emerging technologies in their national digital strategies, covering blockchain, artificial intelligence, big data, smart cities, the Internet of Things and virtual reality, and their application in various sectors including agriculture, finance, urban planning, education, tourism and entertainment, energy, environment and climate, cybersecurity and privacy, industry and manufacturing, transport, and health.

8. Leadership and collaboration are increasingly being recognized as key to advancing scientific and technical research and innovation, and the regional digital agenda and capitalizing on digital development and ICTs in sustainable development across the region. Such efforts are mostly driven by regional entities, including the League of Arab States, ESCWA and other international organizations.

9. One of the first relevant regional strategies was the Arab Strategy for Scientific and Technical Research and Innovation, adopted on 29 March 2017 at the Arab League Summit held in the Dead Sea, Jordan. The Strategy acknowledges the importance of concerted efforts to develop science and technology in ways that are aligned with regional development priorities. A particular focus is improving science education in universities by strengthening scientific research capacity and increasing funding for research and development, so as to bridge the gap between Arab and international research institutes and reduce Arab brain drain.

10. More recently, the twenty-third session of the Council of Arab Ministers of Communications and Information was held in Riyadh on 17 and 18 December 2019 on the theme "An Arab ambition for a digital generation". It discussed the future of joint Arab action in ICT for development, and its implications for the economy, health, education and other sectors in the region. The Council also stressed the importance of unlocking the full potential of individuals, communities and countries to advance sustainable development and

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<sup>3</sup> The results of the 2020 United Nations E-Government Survey are available at <https://publicadministration.un.org/egovkb/en-us/Reports/UN-E-Government-Survey-2020>.

<sup>4</sup> [www.aicto.org/covid-19-arab-ict-initiatives](http://www.aicto.org/covid-19-arab-ict-initiatives).

improve quality of life, and reflected on the Fourth Industrial Revolution, on the need to invest in young people as a force for progress, on the importance of data, innovation and entrepreneurship in all sectors, and on the role of concerted efforts in making the Arab region a powerful player in the digital world. Lastly, the Council endorsed a request to ESCWA by the Arab Working Group on ICT Strategy to provide its views on the intended methodology to develop an Arab ICT strategy in 2020.

11. ESCWA responded to the request of the Council and Working Group by presenting its vision and proposals on the methodology to develop an Arab ICT Strategy, which were endorsed by the Council in 2020. ESCWA is now collaborating with the League of Arab States and working closely with member States on developing a new Arab digital agenda and ICT strategy, in partnership with member States and in collaboration with other United Nations entities and the League of Arab States. ESCWA is also already working on regional measurement criteria for assessing progress in digital development in terms of the digital economy and digital transformation on the one hand, and digital cooperation on the other, including the Government Electronic and Mobile Services (GEMS) Maturity Index and other tools.

12. In July 2020, the G20 Digital Economy Ministers Meeting, which brought together all G20 members led by Saudi Arabia, recognized the importance of measuring the digital economy and of accurate indicators of employment opportunities and skills, including digital literacy and growth. The meeting highlighted trustworthy artificial intelligence principles, such as investment in research, capacity-building, innovation, and free data flows in accordance with relevant applicable legal frameworks. Participants also discussed smart cities and the importance of inclusive and sustainable human-centric smart mobility systems, issues pertaining to security and resilience in the digital economy, and security risk management strategies.

13. Keeping pace with global Internet governance developments, the opportunities they present and the challenges they might pose, the Arab Internet community actively participated in the 2020 Arab Internet Governance Forum led by ESCWA and the League of Arab States, and in the 2020 global Internet Governance Forum led by the United Nations and based on the Secretary-General's Roadmap for Digital Cooperation,<sup>5</sup> whose main objective is to optimize the use of digital technologies and mitigate their risks. Several national and regional multi-stakeholder consultations were also held in 2020 to discuss how the Arab digital development and Internet governance communities could partner to promote safer and inclusive Internet use, and strengthened participation of Governments, parliaments, the private sector and young people for better Internet governance, privacy and cybersecurity.

14. Beyond official processes, recent years have seen an increase in regional initiatives and partnerships focused on technological development, particularly on digital development, innovation and entrepreneurship in the following priority areas:

- (a) Information society, digital economy, e-commerce and open data;
- (b) User-centric evaluation of regional e-government and open government development;
- (c) Large-scale digitalization of core public sector functions;
- (d) Disaster risk mitigation;
- (e) Entrepreneurship for young people and small and medium enterprises;
- (f) Strategic digital policies and implementation plans at the national and regional levels.

15. ESCWA has played an important role in leading or coordinating many of these efforts. It convened its thirtieth session, held in Beirut from 25 to 28 June 2018, under the theme "Technology for sustainable development in the Arab region", resulting in the [Beirut Consensus on Technology for Sustainable Development in the Arab Region](#). The Consensus emphasizes the importance of enabling technological ecosystems, dynamic education systems, skill development and decent employment opportunities,

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<sup>5</sup> United Nations, Report of the Secretary-General Roadmap for Digital Cooperation, June 2020. Available at [www.un.org/en/content/digital-cooperation-roadmap/assets/pdf/Roadmap\\_for\\_Digital\\_Cooperation\\_EN.pdf](http://www.un.org/en/content/digital-cooperation-roadmap/assets/pdf/Roadmap_for_Digital_Cooperation_EN.pdf).

technology-driven social inclusion, supportive governance, environmental sustainability, conflict mitigation and disaster risk reduction, and financing technology for sustainable development.

16. To sustain progress in those areas, it is important to perform the following:

(a) Periodically review and analyse the status of digital development and digital cooperation in Arab countries, and in other areas related to scientific development, innovation and entrepreneurship in general;

(b) Assess the potential and challenges of e-government, e-accessibility, open data, fintech, e-commerce and the digital economy in the region;

(c) Develop legislation and legal frameworks pertaining to all aspects of the information society and technological innovation.

17. Such work rests on the following pillars: technology diffusion and connectivity, and e-trade and the digital economy are driving forces behind digital transformation; data and data inclusiveness are crucial for building inclusive societies; and digital skills are vital for the future of the employment, education, health and other sectors, and for economic empowerment and bridging gender divides.

### **III. Suggested work in the field of technology for development over the period 2021-2026**

18. Achieving full technological transformation in the region, through concerted regional and national efforts, entails the following:

(a) Ensuring the provision of electronic public services; providing required support for pandemic-stricken and war-torn countries to develop multi-channel services; and promoting open data policies and e-participation;

(b) Preparing national reviews and strategies on digital development, and formulating national digital development agendas in member States in line with the 2030 Agenda;

(c) Formulating national innovation policies, national green technology policies and environmental sustainability policies to face challenges in social, economic and environmental development; and strengthening legislative and regulatory frameworks to establish an environment conducive to innovation and entrepreneurship;

(d) Harnessing rapid technological development in digital technologies, big data and artificial intelligence, in addition to new technological areas such as nanotechnologies and biotechnologies, to devise innovative solutions, services and applications in various development sectors, so as to increase productivity and contribute to achieving the SDGs;

(e) Increasing the participation of Arab societies in dialogues on Internet governance and digital cooperation at the national, regional and global levels; and improving joint understanding of Internet governance issues and priorities in the field of sustainable development;

(f) Enhancing cooperation between member States, including public and private bodies, to implement the Arab Strategy for Scientific and Technical Research and Innovation and the Beirut Consensus on Technology for Sustainable Development in the Arab Region.

19. To continue supporting Arab countries in the field of technology for development, the ESCWA secretariat will focus its work on thematic policy areas and issues, including the following:

(a) Digital technologies for development (ICTs for development policy areas, including digital economy and digital transformation and related measurements);

- (b) Internet governance (digital cooperation policy areas);
- (c) E-government/open government (digital government policy areas and related measurements);
- (d) E-accessibility (digital inclusion for persons with disabilities);
- (e) Innovation for development (including entrepreneurship policy areas);
- (f) Emerging technologies and data sciences (including big data).

#### **IV. Topics for discussion**

20. The round-table discussion aims to identify priorities for the Arab region in the coming years in the field of technology for development, so as to guide collective work at the regional level and the work of ESCWA.

21. All the above-mentioned topics can be discussed, with a focus on the following:

(a) Technology and innovation policies in Arab countries, including policies on digital transformation, the digital economy, innovation and new technologies, empowering young people and entrepreneurs, and related initiatives;

(b) Particular challenges faced by Arab countries in those areas and means to overcome them;

(c) Proposals for ESCWA future work in that regard.

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