AFSD 2021

Arab Forum for Sustainable Development
Accelerating progress on the 2030 Agenda post-COVID

Forum arabe pour le développement durable
Accélérer le progrès vers la réalisation du Programme 2030 post-COVID

المنتدى العربي للتنمية المستدامة
إسراع العمل نحو خطة عام 2030 ما بعد كوفيد

29-31 March 2021 — 2021 آذار/مارس 31-29

17 PARTNERSHIPS FOR THE GOALS

SDG 17

PARTNERSHIPS FOR THE GOALS

Strengthen the means of implementation and revitalize the global partnership for sustainable development: technology

The digital divide between the Arab region and the world persists, posing challenges to the means of implementation of the 2030 Agenda. Internet use varies widely between Arab countries. At the national level, Internet access and mobile penetration gaps are observed between the poor and well-off, between rural and urban areas, and between male and female users.[1] Technological disparities and gaps are also observed at the subregional level. High-income countries, namely Gulf Cooperation Council (GCC) countries, have implemented advanced infrastructural and service projects, whereas middle-income countries are still at less advanced levels. Conflict and post-conflict countries face the challenge of destroyed/disrupted infrastructure and services, and least developed countries lag behind considerably.

The role of digital technologies in achieving the SDGs has become clearer owing to the COVID-19 pandemic. As disruptions affect various vital sectors and bring some to a complete halt, digital technologies have become key solutions, and sometimes the only means, to overcome sectoral disruptions, maintain continuity, and provide access to information and services. Groups and countries that suffer from a digital gap face greater challenges in moving work to the digital space. In some Arab countries, emerging technologies, such as artificial intelligence, are gaining attention for their role in enhancing transparency, and in analysing big data to monitor climate change, biodiversity loss and predict pollution. Emerging technologies are also being utilized for contact tracing and social distancing during the pandemic.

Arab countries are aware of the need to adopt ethical and legal frameworks which ensure that technology development, transfer and use serve society without causing harm to vulnerable individuals or the environment. Today, the international community's role in achieving SDG 17 is more critical than ever. The global commitment to support developing countries through technology transfer and related instruments must be vitalized to strengthen the region's progress towards the SDGs and a sustainable recovery from the COVID-19 crisis.

Impact of COVID-19 on technology in the Arab region
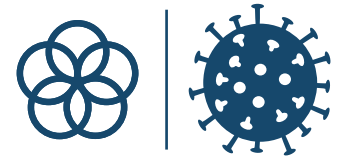
Technological gaps and vulnerabilities have been revealed. Lockdown measures adopted worldwide and in the Arab region to contain the spread of the pandemic have resulted in severe disruptions to vital sectors. Arab countries that already had well-established digital infrastructure, good connectivity, and advanced innovation have been able to ensure continuity in businesses, education and trade during the pandemic, which was mostly the case in GCC countries. Where available, e-government services have ensured the continuity of service delivery, and maintained the relationship between Government and citizens. In contrast, Arab countries that do not have appropriate infrastructure and suitable platforms or e-services to ensure work continuity in Government, the private sector, schools and universities, and the provision of information and delivery of essential services, have struggled to adapt. This was mostly the case in the Arab least developed countries and those affected by conflict.

The pandemic has driven digital transformation efforts as part of country response plans. The COVID-19 crisis has accelerated digital transformation efforts globally and in the Arab region, including the expansion of online education and use of digital open education resources, and the development of artificial intelligence systems, notably in the health sector.

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1   ITU, Measuring digital development: Facts and figures, 2019.

The crisis has also triggered government action and innovation in devising solutions to the pandemic. The role of Government has been reinforced, as has its obligation to be innovative, agile and effective in providing a timely response that targets people's needs and safety requirements. Examples of this can be seen in Egypt and Lebanon, where digital capacity-building programmes have been organized for government employees. Kuwait implemented Social Watcher, an online open community service platform that provides a dashboard with daily statistical updates on COVID-19,[2] resulting in legal and regulatory decisions to implement mechanisms that manage the crisis and provide an enabling environment for the post-pandemic period. Similar dashboards were set up in several other Arab countries.

Sectoral impact: food systems and agriculture

Food systems across the region need to change to ensure healthy diets for a growing and increasingly urban population, in a context of water scarcity and climate change. Such transformations should address the challenges of ensuring availability, access, stability and use of food in ways that provide smallholder producers and rural communities with opportunities in terms of driving income growth, employment and increases in food production and productivity, while ensuring the sustainability of the region's ecosystems and addressing climate change adaptation and mitigation targets. The use of innovation and digitalization in this field remains limited in the region, so harnessing their power is an efficient way to promote transformations in food systems towards sustainable development.

Limited access to digital transformation opportunities for women and girls

Various studies have found that the digital transformation imposed by the pandemic has not been inclusive, further widening the digital divide for women and girls because of their unequal access to the Internet, lack of awareness of digital tools, and limited access to investment finance in leap technology. Many women and girls have therefore missed the opportunities provided by this digital transformation.

Measures taken by Arab Governments

Digital transformation is vital to respond to COVID-19 health crisis, and to implement recovery efforts following the pandemic. The virus has triggered government action, expediting national efforts towards digital transformation, and promoting openness and transparency in government operations.

1. **E-services have been deployed and strengthened in several Arab countries to facilitate citizens transactions during the pandemic.** In Egypt, digital transformation has been expedited, with a transition to smart digital work environments, digital inclusion and digital literacy. E-payment has also been deployed for mobile phone bills, coupled with incentives to use e-transactions and enhance access to telecommunication services. In the Syrian Arab Republic, an e-government portal was launched to reduce in-person public services, and an e-payment system was launched that provides 18 services from 10 public entities. In Tunisia, the Ihmi application was developed to track and detect COVID-19 cases. It is connected to the database of the Ministry of Health, and relies on several

Role of technology in education during the pandemic

In a number of Arab countries, schools, universities and the Government have created innovative methods, tools and programmes to keep the education system operational. For example, through a ministerial resolution, Saudi Arabia has implemented distance learning for public and private universities, as well as tools and portals to ensure continued education for over 7 million students. In the United Arab Emirates, distance learning has been implemented in schools and higher education institutions, and complemented with teacher training, free satellite broadband services for students in areas lacking connectivity, and free home Internet connection for households without Internet.

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2 ITU, WSIS Stocktaking Special Report, 2020.

technologies, including Bluetooth and encryption protocols, to protect personal information.[3]

2. **Strategies, policies and laws have been formulated and enacted.** For example, in Kuwait, a digital transformation strategy was published for public consultation, and the Sanad e-services gateway application was updated to include over 200 e-services to reduce in-person visits during the pandemic. Tunisia has issued new e-government laws to facilitate e-payments, the exchange of data and teleworking, and developed a national electronic identifier.

3. **Some Arab countries have launched digital or technology-focused initiatives to support the job market.** To ensure employment stability in the private sector of the United Arab Emirates, the country adopted the Virtual Labour Market to help the foreign workforce negatively impacted by pandemic response measures to explore new job opportunities. Qatar has launched an initiative to support small and medium enterprises (SMEs) and facilitate their digital transformation to increase business efficiency during and after the pandemic.

Most at risk of being left behind

A detailed review of the Arab region revealed that SDG technology targets will not be met by 2030 for the following social groups,[4] whose vulnerability has been amplified by the pandemic.

Groups and areas disadvantaged by the digital divide: In the Arab region, only 51.6 per cent of people use the Internet, and only 57.1 per cent of households have a computer.[5] The digital divide between urban and rural areas, and between men and women within countries, affects access to the Internet and its various services. It is not yet clear how this picture is changing as a result of the pandemic and the increasing need to be digitally connected.

Digitally illiterate people: Digital literacy is crucial for the basic use of digital technology. Some people in the region still need training on basic ICT skill to take advantage of digital technology. The ICT skill indicator varies between 31.98 per cent in Yemen and 84.93 per cent in the United Arab Emirates, with a regional average of 64.68 per cent, which is higher than the world average of 52.84 per cent.[6]

Countries with low levels of technological development and legal gaps: Some Arab countries still lack regulatory and ethical frameworks that protect individuals and the environment from being harmed as a result of inappropriate technology use. Only

Countries are fostering the use of Fourth Industrial Revolution technologies, namely artificial intelligence (AI), through strategies and the establishment of specialized national bodies. Examples include the National Program for Artificial Intelligence of the United Arab Emirates,[a] and the National Council for Artificial Intelligence of Egypt.[b] Several AI higher education programmes and AI incubators are being established, including the Faculty of Computers and AI at Cairo University [c], and the AI incubator at Alexandria University [d]. Although these examples are not in response to the pandemic, they build a strong digital ecosystem to mitigate the pandemic's impact. If a structured and phased approach is adopted, and Arab countries across collaborate to build a robust ecosystem that supports this transformation, the region will be better able to weather future crises.

a   https://ai.gov.ae/.
b   https://mcit.gov.eg/en/Artificial_Intelligence.
c   https://cu.edu.eg/FacultiesCairo.
d   www.arabfinance.com/en/news/details/egypt-economy/517405.

3   https://e7mi.tn/index.html.
4   ESCWA, Arab Sustainable Development Report, 2020.
5   ITU, Measuring digital development: Facts and figures, 2019.
6   Network Readiness Index 2020.

a few countries are using emerging technology to transform development sectors, such as agriculture, energy, transport and industry.

Persons with disabilities: In the Arab region, persons with disabilities do not always have suitable access to computers and the Internet, and are at a higher risk of being digitally excluded.

Young people: The post-COVID-19 job market will demand a new set of skills, which may not be compatible with the majority of the 1.5 million young people who enter the informal sector annually. Young people who live in underprivileged areas are the most vulnerable to being left behind, and the pandemic has further limited their prospects of receiving training.

Policy recommendations to ensure an inclusive recovery and promote technology for sustainable development

The Arab Sustainable Development Report 2020 identifies the following recommendations to accelerate the achievement of SDG 17 in the region and support action on other SDGs. These recommendations also facilitate the COVID-19 recovery and enhance resilience to future shocks and crises.[7]

- Ensure inclusive access to technology and accelerate the digital transformation of the public and private sectors, including by improving ICT infrastructure and strengthening broadband services

- Prioritize and invest in building the absorptive capacity of populations to use, adapt, customize and develop technology applications according to development needs

- Introduce strategies to improve research and development, and strengthen the local technological capacity of researchers, innovators and entrepreneurs, especially women and young people, communities of practice, policymakers and the media

- Encourage entrepreneurship in its various types, including social entrepreneurship, and fields, such as agritech; and facilitate the emergence and establishment of SMEs

- Promote the use of digital and emerging technologies in development sectors, including the health, agricultural, energy and transport sectors; and promote artificial intelligence and build an enabling environment for it, including by developing sectoral strategies and ethical frameworks

7   For a comprehensive analysis of these recommendations, see ESCWA, Arab Sustainable Development Report, 2020.
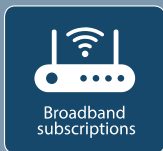

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Key Facts on SDG 17 - Technology

	ARAB REGION	WORLD

Fixed Internet broadband subscriptions per 100 inhabitants

Broadband subscriptions

8.1 per 100 inhabitants had fixed broadband subscription in 2020

+22.87% since 2005

15.2 per 100 inhabitants had fixed broadband subscription in 2020

+9.81% since 2005

Internet users per 100 inhabitants

Internet users

54.6 per 100 inhabitants were Internet users in 2019

+13.38% since 2005

51.4 per 100 inhabitants were Internet users in 2019

+7.74% since 2005

Proportion of population with primary reliance on clean fuels and technology

Clean fuels and technology

87% of the population had access to clean fuels and technology in 2018

+1% since 2000

63% of the population had access to clean fuels and technology in 2018

+1% since 2000

Proportion of medium and high-tech industry value added in total value added

Tech industry

31% of total value added was medium and high-tech industry in 2017

+1% since 2000

44.85% of total value added was medium and high-tech industry in 2017

0% since 2000

Proportion of population covered by mobile network

Mobile network

90.8% of the population was covered by mobile network in 2020

+3.33% since 2015

93.1% of the population was covered by mobile network in 2020

+2.93% since 2015

Source: ESCWA Arab SDG Monitor. http://arabsdgmonitor.unescwa.org. (Figures have been rounded).