# Beirut Consensus on Technology for Sustainable Development in the Arab Region

Technology and Innovation for Decent Employment and Empowered Youth

- 1. We, the representatives of member States of the Economic and Social Commission for Western Asia (ESCWA), assembled in Beirut from 25 to 28 June 2018 at the thirtieth session of the Commission, reaffirm our commitment to placing technology and innovation at the heart of the inclusive and sustainable development process in the Arab region.
- 2. We recall General assembly resolution 72/167 of 19 December 2017 on the right to development, the 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs),<sup>1</sup> the Addis Ababa Action Agenda of the Third International Conference on Financing for Development,<sup>2</sup> the Paris Agreement on climate change,<sup>3</sup> and the Outcome document of the high-level meeting of the General Assembly on the overall review of the implementation of the outcomes of the World Summit on the Information Society,<sup>4</sup> all of which have technology and innovation as key components.
- 3. We refer to the adoption of the Arab Strategy for Scientific and Technical Research and Innovation,<sup>5</sup> which emphasizes the importance of concerted efforts on technology and innovation in line with regional development needs. We refer also to the Doha Declaration on the Implementation of the 2030 Agenda for Sustainable Development,<sup>6</sup> which was adopted by ESCWA member States at the twenty-ninth session of the Commission and called for the development of a regional action plan for the achievement of aspects related to science, technology and innovation in the Arab region.
- 4. We state our firm belief that technology and innovation are key enablers of the 2030 Agenda, and can provide creative solutions to achieve people-centred, sustainable and inclusive development. We are convinced of the need to place technology and innovation as pillars of transformation in national development plans, to maximize benefits and minimize threats from technological disruption, in full consideration of local resources, capacities and constraints.
- 5. We are encouraged by the potential for technology and innovation to contribute to sustainable development in advancing the structural transformation of our economies, enhancing productivity and creating decent jobs in the Arab region. Current and emerging technologies in areas as diverse as agricultural and industrial productivity, transport, education, medicine, clean energy, energy efficiency, potable water, sanitation, clean air and climate change offer great promise in finding solutions to many of the challenges facing our countries. More of these solutions should be indigenous to our region: we must develop our own capacity to innovate, and adapt and protect technological breakthroughs.

<sup>&</sup>lt;sup>1</sup> General Assembly resolution 70/1 of 25 September 2015.

<sup>&</sup>lt;sup>2</sup> General Assembly resolution 69/313 of 27 July 2015.

<sup>&</sup>lt;sup>3</sup> Adopted on 12 December 2015 at the twenty-first Conference of the Parties to the United Nations Framework Convention on Climate Change, held in Paris. Available at <a href="https://unfccc.int/files/essential\_background/convention/application/pdf/english\_paris\_agreement.pdf">https://unfccc.int/files/essential\_background/convention/application/pdf/english\_paris\_agreement.pdf</a>.

<sup>&</sup>lt;sup>4</sup> General Assembly resolution 70/125 of 16 December 2015.

<sup>&</sup>lt;sup>5</sup> Adopted on 29 March 2017 by the Arab Summit, held in the Dead Sea, Jordan. Available at http://www.alecso.org/en/2016-04-06-07-56-24.html.

<sup>&</sup>lt;sup>6</sup> E/ESCWA/29/12/Report, p. 5, para. 14.

- 6. We are, however, distressed by the suffering resulting from crises throughout the Arab region, their impact on human development and tragic facts, including the unprecedented numbers of forcibly displaced and aid-dependent populations, which have reached alarming levels and are currently standing at nearly 30 million and 60 million people, respectively. In this regard, we stress the need for the return of the displaced to their countries of origin, which would contribute to reconstruction processes and to alleviating burdens on them and on host countries.
- 7. We note that the region registers the world's highest youth and female unemployment rates, standing at 27 and 40 per cent respectively, while the female labour force participation rate remains the world's lowest, at 21 per cent. 9
- 8. We also note that least developed countries (LDCs) and some middle-income countries in our region suffer from high rates of multidimensional poverty: 40 per cent of households are multidimensionally poor, <sup>10</sup> with education deprivation as a central challenge. We are deeply concerned by the increasing size of the informal sector and share of vulnerable employment, the mismatch between skills provided by education and those required by the market, the pervasively low level of regional labour productivity, and the low investment in research and development in the region.
- 9. We note with alarm the increased weather volatility and frequency of extreme weather events in our region, which is suffering from extreme heat spells that lead to natural disasters, flash floods, sand and dust storms and desertification. In addition, over two thirds of Arab countries are facing increased water scarcity and the negative impacts of sea level rise.
- 10. We recognize that technology can play a pivotal role in addressing the root causes of poverty, enhancing the accessibility and quality of services to reach the poor, promoting the accumulation of human capital, helping to transform the economy and creating decent job opportunities. We recognize also that frontier technologies, such as artificial intelligence, the Internet of Things, cloud computing and blockchain technology, may both contribute to, and detract from, progress on employment, in particular youth employment. An enabling environment based on effective regulation, including regulation of the Internet as a public good, combined with adequate investment in human capital and research and development, will help to contain threats while reaping maximal benefits.
- 11. We recognize further that integrated statistics, geospatial information, earth observations and other sources of data, combined with modern data processing and big data analytics, have become essential for countries to efficiently implement, monitor and evaluate sustainable development policies.
- 12. We stress that gender equality must be mainstreamed in national policies while considering the potential of technology in combatting violence against women and fostering the political and economic empowerment of women. Gender equality is indeed not only a right for women; it is a necessity that brings benefits to the economy and society.
- 13. We condemn Israeli practices and policies that restrict the access of Palestinians to technology, impeding service delivery and hindering development, including restrictions on technology imports, such

<sup>&</sup>lt;sup>7</sup> ESCWA calculations based on end-2016 data for from the United Nations Office of the High Commissioner for Refugees (UNHCR) and the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA).

<sup>&</sup>lt;sup>8</sup> Data from the United Nations Development Programme, *Arab Human Development Report 2016: Youth and the Prospects for Human Development in a Changing Reality* (New York, 2016).

Data from the World Bank, available at https://data.worldbank.org/indicator/SL.TLF.CACT.FE.ZS (accessed on 1 June 2018).

<sup>&</sup>lt;sup>10</sup> E/ESCWA/EDID/2017/2.

as medical and communications equipment, to Gaza. We also condemn discriminatory Israeli policies that impede access to technology in the occupied Syrian Golan.

- 14. We affirm that unilateral economic measures increase people's suffering. Thus, we call for the accelerated lifting of the unilateral embargo by the United States of America on the Sudan, which prevents the society from benefiting from human knowledge and the technology required for delivering health services, creating jobs for youth and realizing inclusive development.
- 15. We stress that the restrictions on access to technology imposed on some Arab countries impede development in those countries. In this regard, we affirm the necessity of ceasing the application of unilateral coercive measures on the Syrian Arab Republic.

## Enabling technological ecosystems

- 16. We will seek to put in place national and regional policies to support the development of technological ecosystems that are adapted to the socioeconomic, environmental and political context of Arab countries and able to attract private sector investment and foster innovation, particularly encouraging the development of local content and entrepreneurship. We will develop legislative and fiscal policy proposals to promote investment in technology and innovation, and encourage entrepreneurs and investors to explore new technologies via targeted incentives.
- 17. We resolve to closely examine social protection and taxation systems, adopt agile policies to embrace and direct new technologies, and help employees and employers to adapt to new demands while ensuring that gains are broadly shared.
- 18. We will develop regional strategies that stimulate technology transfer, and leverage synergies between the industry and research institutions to address gaps in industrial productivity and enhance competitiveness while reducing technological dependencies.

#### Dynamic educational systems for decent employment opportunities

- 19. We will facilitate the integration of graduates from universities, vocational institutes and schools into the labour market through the adaptation of educational outcomes to future employment requirements. We will maximize the availability, accessibility and affordability of quality education in science, technology, engineering and mathematics (STEM), and enhance digital skills at the primary, secondary and tertiary levels. We will improve and expand vocational training to provide youth with skills for today and life-long learning opportunities that fulfil their personal aspirations while meeting the needs of the labour market.
- 20. We will seek to bridge the persistent gender gap in STEM education throughout the region, increasing women's participation in the digital economy, and applying a gender lens when developing and implementing policies that harness technology and innovation.

## Technology-driven social inclusion

21. We will promote assistive technology to guarantee full inclusion of persons with disabilities, in line with agreed international standards. We will ensure that the benefits of technology and innovation reach vulnerable groups, remote communities and those living in cities destroyed by conflict, thus fostering social justice.

22. We will build strong partnerships with civil society in pioneering and promoting technology towards participatory policymaking. We will promote the use of technology to improve the participation of youth in public policymaking, fostering bottom-up innovation for greater inclusiveness.

#### Supportive governance

- 23. We will leverage technology to adopt smart government practices, enhance public transparency and accountability, improve access to information and provide open data.
- 24. We will strive to increase efficiency in the delivery of public services, including e-government, and to adopt new analysis technologies to enhance the efficiency and effectiveness of policymaking and implementation, including poverty reduction, social protection and social services, in reaching the most vulnerable.
- 25. We will increase the accessibility of technological tools and networks to facilitate interaction between stakeholders and stimulate the conversation around the SDGs, support implementation, monitor progress and improve accountability. We will use new technologies such as geographic information systems, earth observations, big data and statistics in support of regional and national development strategies. Efforts will be made to harness these sources of information in a high-quality and consistent manner and use them to complement official statistics in informing policy formulation, implementation and follow up.

## Environmental sustainability

- 26. We will identify, anchor and assist technological advancement in emerging sectors where research and commercialization are making important strides, and ensure the sustainability, affordability and suitability of technological solutions that address natural resources limitations.
- 27. We will facilitate the use and transfer of technology associated with natural resources management where a potential exists for efficiency improvement, in particular water and energy efficiency leading to food security and environmental sustainability, adopting a nexus approach. We will also seek to share, disseminate and transfer appropriate, reliable and affordable technologies.
- 28. We will strive to ensure that all member States fully benefit from financing solutions available for climate-related activities, submitting proposals for financing by global climate funds, seeking technical assistance from global and regional networks for the implementation of our nationally determined contributions and translating them into visions and action plans.

#### Conflict mitigation and disaster risk reduction

- 29. We will leverage technology in accessing, assessing, analysing and disseminating information in the context of climate change action, disaster risk reduction, conflict prevention and response, including tools for humanitarian assistance, early warning systems, in order to strengthen recovery, reconciliation and rehabilitation. We will enhance the use of new technologies to mitigate the impact of natural and man-made crises.
- 30. We will develop or update national cybersecurity strategies, cyberlegislation frameworks and data protection regulations, to cope with the escalating risks of cyberwar, cyberterrorism and cybercrime while defending fundamental rights and freedoms.

31. We will ensure that documentation, analysis and dissemination technologies are fully utilized in raising awareness about Israeli violations of international law in occupied territories and the repercussions of occupation on development.

Financing technology for sustainable development

- 32. We will mobilize and scale up national and regional financing and investment for technology and innovation, especially in LDCs, in support of the SDGs, and utilize all financial facilities available for Arab LDCs.
- 33. We will aim to increase public investment in research and development while incentivizing the private sector to finance technology and innovation, particularly in areas with strong social, environmental and economic development impact.
- 34. We call upon industrialized countries to honour their commitments in terms of financing and transferring appropriate technologies for sustainable development on favourable terms, including on concessional and preferential terms, and in particular commitments made in the context of the 2030 Agenda and the Addis Ababa Action Agenda, to support the implementation of the SDGs.

We commend the ESCWA secretariat's steadfast promotion of cooperation and regional integration, and request that it further its activities in this regard, with an emphasis on technology and innovation. We also ask that the secretariat continue to provide high quality advice on technology and innovation for sustainable development, with focus on the following activities:

- (a) Foster coherent regional responses to rapidly evolving technological advancements, supporting norms and standard-setting and fostering an enabling ecosystem, anchored in the 2030 Agenda, with a focus on the most vulnerable segments of society;
- (b) Provide evidence-based policy advice to promote structural transformation through technology to enhance productivity and sustainability, thereby addressing the root causes of multidimensional poverty, promoting economic and social integration, creating decent employment, and research the impact of technology and innovation on sectoral employment generation;
- (c) Raise awareness on technologies for the inclusion of youth, older persons and persons with disabilities in areas including education, employment and access to public services, and develop informative material on the role of technology in achieving gender equality and the empowerment of all women and girls in the Arab region;
- (d) Share experiences and best practices in technology transfer and adaptation through North-South and South-South cooperation, building member States' capacity to access financial resources;
- (e) Coordinate national and regional policymaking on Internet governance, promote the Arab regional perspective in the international arena and provide support in researching and defining negotiation positions on contentious Internet governance issues;
- (f) Support in filling the legislative and regulation vacuum around unregulated frontier technology issues through policy-oriented research;
- (g) Reinforce multi-stakeholder partnerships on technology and innovation, including convening the Arab High-level Forum on the World Summit on the Information Society and the Arab Internet Governance Forum;

- (h) Support member States in adopting emerging green technologies to address the main regional socioeconomic and environmental challenges;
- (i) Support networking and create a participatory platform for cooperation among Arab States on frontier technology issues.

From Beirut, we reaffirm our commitment to work together on harnessing the power of technology and innovation to build a more peaceful, prosperous and just future for all in the Arab region.

Seventh plenary meeting Beirut, 28 June 2018