Expert Group Meeting (EGM) on Mechanisms to Advance Innovation for Inclusive Sustainable Development in the Arab Region

Promoting Collaboration and Bridging Gaps

Beirut, 1-2 November 2016

Recommendations

Experts participating in the Expert Group Meeting (EGM) agreed on the importance of science, technology and innovation (STI) in sustainable and inclusive socioeconomic development. They discussed the mechanisms necessary for enhancing innovation and the role of various stakeholders in the Arab region. They also stressed the importance of security and political stability in order to build an enabling environment in which innovation can thrive in the Arab world - which is stipulated in SDG 16.

The participants commended the study prepared by ESCWA on "Innovation Policy for Inclusive Sustainable Development in the Arab Region". ESCWA has considered feedback and comments made during the meeting to enhance the study, including observations on the importance of peace and security in the Arab region and the need to establish a culture of innovation.

The following is a list of the main recommendations made during the meeting thematically categorized.

A. Recommendations for governments and international and regional organizations

1. Innovation policies for sustainable development

- Urge Arab governments to develop and adopt national general or sectoral policies and strategies for innovation, or amend existing ones, so that they are based on the concept of inclusive sustainable development. Such policies/strategies should take into account all economic, social and cultural dimensions, focus on the human value and the interaction of humans with their environment, and consider compatibility with national plans and strategies for development and with local situation.

- Demand Arab governments to activate the implementation of innovation strategies that have clear objectives and are supported by appropriate governance/management structures. This implies that Arab governments should formulate action plans and implementation programmes; ensure the provision of implementation requirements; facilitate fruitful collaboration and interaction with stakeholders; and adopt monitoring and evaluation modalities.

- Increase the impact of innovation in economy through the provision of an appropriate enabling environment for innovation encompassing all necessary components such as infrastructure,
economic and social climate, amendment of business sector laws and policies as well as the legislative and procedural framework of intellectual property.

- Promote integration, cooperation and coordination among Arab countries in STI policies and strategies, including the implementation of the Arab Strategy for Scientific and Technological Research and Innovation, that was adopted in 2014, activate the role of regional institutions and launch innovation initiatives that aim to achieve inclusive sustainable development.

- Exchange and share information on good practices and national experiences in the development and implementation of STI policies and strategies, including information on challenges, difficulties and obstacles as well as proposed solutions to overcome them.

- Improve coordination between United Nations regional commissions and other regional and international organizations to promote innovation policies and activities in the Arab region and contribute to the 2030 Agenda for Sustainable Development as well as negotiate with the European Union and other regional organization to include research, development and innovation (RDI) partnerships as an integral part of collaboration and partnership agreements.

- Develop a framework for measuring innovation indicators nationally and regionally, which will require a deep analysis of its implications and a commitment by Arab government to collect, disseminate and regularly analyze innovation data, especially those related to the outputs of innovation and its impact.

- Encourage Arab governments to develop legislative and procedural framework for intellectual property in the region, in light of its role in stimulating innovation, while considering modern trends and new types of licenses and the need to employ them in a flexible manner which is consistent with current problems and needs.

- Amend laws and policies that pertain to the business sector such as tax and investment laws to promote RDI in the private sector. Additionally, other elements of the overall enabling environment should also be activated for stimulating innovation.

2. Innovation for achieving inclusive sustainable development

- Develop studies on the role of innovation in achieving the SDGs at national and regional levels taking into account the priorities of the region and local productive sectors as well as the requirements of an enabling environment for innovation which includes infrastructure development, legislative framework, economic and social climate that incentivizes investments in innovation and improve its effectiveness in the development of the economy. Such studies should be linked to national development plans.

- Allocate financial and human resources to convert knowledge into wealth that can be employed in inclusive and balanced development, leverage innovation to generate wealth for the development of poor and marginalized communities and establish national and Arab trust funds for innovation to be coupled with better use of the funding provided to universities and national research centers.

- Support the move towards open access, open innovation and open science while providing the necessary requirements and considering implications on intellectual property systems.

- Push Arab governments to enact policies for retaining local talents and attracting those that have immigrated; i.e. brain gain, and propose cooperation initiatives with expatriates to benefit from their expertise in the STI field.

B. Recommendations for scientific research and academic/university institutions
Increase spending on R&D in universities, research centers and production sectors, due to the fact that they are two essential pillars of the innovation value chain and are important for achieving the 2030 Agenda for Sustainable Development. This should be accomplished by means of a clear national and institutional vision on desired outcomes of such spending targets and the need to close the loop for the innovation value chain in a manner that ensures investing and marketing its results successfully at the national level.

Link scientific research to the needs of the market and national development by focusing on the demand side.

Improve the quality of education towards building capacity in innovative fields and work on development of critical and creative thinking, especially at a time where the Arab countries are experiencing a youth bulge. This requires the development of educational systems, enhancing vocational and technical education, and the use of technology to support the educational process.

Rethink the vision and mission of educational institutions to incorporate scientific research and innovation as key elements and to encourage the formulation of special curricula for innovation and entrepreneurship as part of their programmes.

Make use of open online education, such as Massive Open Online Courses (MOOC), and develop similar courses in Arabic, or Arabize already available courses in collaboration with the developers according to specific agreements.

Activate and enhance the reliability of academic accreditation institutions at the Arab regional level.

Expand the use of Arabic as a teaching language in scientific subjects at universities and colleges.

Establish full-time researcher posts and/or post-doctoral researcher posts in universities and strengthen cooperation between universities and the productive sectors in order to finance such posts.

C. Recommendations for the private sector and national production institutions

Formulate a national digital economy strategy to reinforce the important role of digital technologies in improving productivity and facilitating the shift towards digital economy.

Prompt the private sector to carry out and fund RDI activities in order to maintain local, regional and global competitiveness. Particular attention should be given to provide support to stimulate innovation in SMEs, which represent a major part of national economic activity in most Arab countries.

Award special focus to product development and design which are essential pillars of innovation processes in order to facilitate converting outputs of scientific research into marketable products. This will require the provision of means for product modeling, such as rapid prototyping, and then production based on technologies and existing production lines or through the development and localization of appropriate production technologies.

Strengthen the absorptive capacity of new technologies in local markets and their various usages in business.

Stimulate collaboration between the private sector in Arab countries and the international companies to facilitate technology transfer and its adaptation to the needs of the region.

Put in place systems for protecting innovative private companies in the Arab countries towards the corresponding protection systems in developed countries.
D. Recommendations for various stakeholders

1. Cross sectoral initiatives, partnerships and mechanisms

- Request that all stakeholders, including governments, the research and academic sector, the private sector, civil society and international organizations, increase their cooperation and interaction in the RDI domain in order to achieve inclusive sustainable development as well as find solutions to pressing issues such as climate change threats, economic decline and multiplying inequalities among different segments of society.

- Strengthen linkages between the various components of the National Innovation System, encourage the participation of the private sector in promoting innovation, and support institutions that advance innovation such as incubators, technology transfer offices, innovation centers, technology parks and co-working spaces especially in subjects that touch on inclusive sustainable development.

- Vitalize the link between academic institutions and the business sector, or the industrial sector, through institutions that support innovation and appropriate policies.

- Stimulate cooperation between public and private sector organizations within the value-added chain.

- Encourage Foreign Direct Investment (FDI) in areas related to new and emerging technologies and support funding for innovative activities through institutions that provide venture capital, seed funding and other types of investments.

- Build a culture of innovation within society, particularly among young people, by making success stories more visible at national and regional levels, exchange knowledge on best models of innovation, and also share failures to enrich the knowledge about the innovative process.

- Develop a platform or dedicated portal on distinctive innovation initiatives in the Arab region and utilize such portal for disseminating successful stories in Arab countries.

- Nurture social innovation activities and the inclusiveness of all segments of society, especially women and youth. Additionally, nurture innovation in social aspects including refugee issues and those faced by marginalized communities.

- Organize training courses on innovation outside of schools, such as technological skills workshops, ideation session and hackathons;

- Adopt non-linear models of innovation which allow multiple entry points to the innovative process to obtain innovative products.

- Give attention to grass-root innovative initiatives in order to have accumulation of national innovation based on bottom-up approaches.

- Establish specialized platforms for networking between experts, innovators and national and regional institutions that support innovation, in order to share information, experiences and best practices and coordinate efforts.

- Focus on modern innovative and emerging technologies that are of practical value for finding solutions to problems facing the Arab region particularly within the context of the 2030 Agenda. This includes: biotechnology, nanotechnology, 3D printing, renewable energy, water desalination, cloud computing, big data, social networking, and mobile apps.

- Pay attention to innovation in various areas that are not only technology-based or the result of scientific R&D, such as public sector innovation, service delivery innovation, and innovation in organizations and business models.
2. **Youth, entrepreneurs and start-ups**

- Utilize the potential of youth in Arab countries by building their innovative capabilities, nurturing talent and training talented youth to contribute effectively to innovation-based development in the region.
- Establish a suitable enabling environment that is conducive to entrepreneurship and encompasses legal, legislative and financial components.
- Encourage women to participate in entrepreneurship, and stimulate gender equality in innovative and entrepreneurial initiatives.
- Promote confidence in Arab youth and entrepreneurs and support them to facilitate the success of their business and diffusion of their innovative work.