

Asian and Pacific Centre for Transfer of Technology

Workshop Report

Regional Workshop on Innovative Strategies for Research Commercialization and Technology Transfer 24 November 2021 Tashkent, Uzbekistan (Hybrid)

A. Summary of discussions

- 1. The Regional Workshop brought together 172 participants from 20 member States of the Economic and Social Commission for Asia and the Pacific (ESCAP), namely Azerbaijan, Bangladesh, Brunei Darussalam, China, India, Indonesia, Islamic Republic of Iran, Kazakhstan, Malaysia, Nepal, Pakistan, Philippines, Republic of Korea, Singapore, Sri Lanka, Thailand, Timor-Leste, Turkey, United States of America and Uzbekistan. There were also participants from Switzerland and Ukraine. This included 67 female participants which constituted 39% of the total number of participants. The participants included government officials and representatives from research and development institutions, private sector, technology intermediaries and other relevant stakeholders involved in innovation and technology transfer.
- 2. The deliberations during the Regional Workshop covered the following topics: enabling mechanisms to promote technology transfer and commercialization; and strategies to promote regional cooperation for technology transfer and commercialization.
- 3. It was highlighted that many innovations and technologies are not able to reach the market due to several factors such as weak university-industry linkage; lack of policy support, funding and incentives; and lack of entrepreneurship and incubation support for technology commercialization.
 - 4. The workshop emphasized the need to create better enabling environment for supporting transfer and wider adoption of new and emerging technologies in the developing and the least developed countries. These technologies are playing a vital role in solving some of the key challenges being currently faced such as COVID-19, climate change and food security issues. Strengthening and alignment of national science, technology and innovation (STI) policy frameworks with other policies on trade, industry, investment and Intellectual

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Property Rights (IPR) are considered important in providing the enabling ecosystem for technology transfer and commercialization.

- 5. Political will, strong government and leadership commitment are important to establish an enabling ecosystem including policies, and programmes for technology transfer and commercialization. Regular policy forums are good platforms for discussing and communicating ideas and practices to address issues related to technology transfer. Focused sectoral strategies can be designed to facilitate adoption of technologies ICT infrastructure etc. Human resource development in the area of science and technology (S&T) is essential for strengthening innovation and technology ecosystem.
- 6. Increased budgetary allocation and funding for research and innovation are key to research, technology innovation and technology commercialization. Laws to promote research and commercialization, such as the Innovation Sandbox Act of Thailand, to try out new ideas by innovators and start-up companies, can help in commercialization of innovative technologies.
- 7. Establishing linkage between innovators and business entities can accelerate partnerships and technology commercialization. Skills development, vocational education and incubation centres across the country can be support mechanisms for promoting technology entrepreneurship, start-ups, etc. Financial incentives and technical support (machineries, equipment etc) can help innovators to commercialize their technologies.
- 8. National S&T Parks hosted by universities can be critical for transfer and commercialization of technologies. Student and faculty exchange programmes can play a catalytic role to promote research and innovation.
- 9. There is a need to encourage transfer and commercialization of job-related scientific and technological achievements. The requirement to enhance capacity building in technology transfer to particularly train professionals in R&D institutions, S&T parks etc was highlighted. Innovative ways to foster S&T collaboration between institutions is necessary to promote technology transfer and commercialization.
- 10. Research accelerators can catalyze rapid development and commercialization of research results and innovations. Online platforms to connect researchers, innovators, venture capitalists, and investors, bringing them together could forge win-win partnerships for successful technology transfer and commercialization.
- 11. The workshop highlighted some innovative business models for technology commercialization. These include multi-sided platform, e-commerce, prosumer, freemium, subscription, aggregator, peer-to-peer, and blockchain-based

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platforms. For instance, transactions using modern technology of Blockchain involve decentralized network system on a global scale which enhances trust and allows consumers to transact peer-to-peer. Blockchain based businesses make a profit using tokens and offer Blockchain as a service.

- 12. Government organizations support development of innovative ideas. An example is from Uzbekistan where the government has set up IT parks with provision of incubation, acceleration and hackathons bringing together researchers as well as industry, private sector and start-ups. The government has recently set-up an Incubation Center with the main goal to increase the quality and quantity of created innovative products among talented students.
- 13. There are many examples from Singapore on Industry-Academia-Government collaborations which are helpful to understand the opportunities as well as challenges in inculcating such partnerships to foster innovation and technology commercialization. These include corporate labs, centres of innovation, tech translation platforms, early-stage venture fund (ESVF) and national innovation challenges.
- 14. Collaborative efforts will be crucial to harmonize IP policies for creating an enabling environment for technology transfer and to advance collective economic competitiveness. Role of strengthening international technology cooperation was underscored to advance the adoption of latest technologies.

B. General/Policy Recommendations

- The workshop underscored the need for measuring effectiveness of technology transfer using performance indicators such as research agreements, patent applications, licenses executed, licensing income earned and invention disclosures.
- 2. It was emphasized that policy frameworks to promote indigenous technologies and local products is required. Technology localization is also essential for import substitution.
- 3. An important consideration while supporting research and innovation for technology commercialization should be to ensure that the innovations and their utilization are inclusive and support development of vulnerable population, women and marginal groups.
- 4. Collaborative partnerships like Triple Helix, open innovation and public-private partnerships are required for strengthening research and innovation value chain. It was mentioned that online technology platforms and use of social media to popularize potential technologies should be enhanced.

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- 5. There is a need for making the application process for patents more user friendly and for fast-tracking decisions on them. Guidelines for streamlining sharing of intellectual property should be made available to all start-ups. Advisory bodies, with participation of private sector and innovation participants, should be created for continuously monitoring the problems faced by micro, small and medium enterprises (MSMEs) and startups in translation of their knowledge towards getting protection through IPR.
- 6. The need for cross border collaboration was underscored. It was highlighted that cross-border transfer of technologies should focus on innovations and technologies that can contribute towards sustainable development across the Asia-Pacific region.



