

Dr. Shamshad Akhtar, Under-Secretary-General of the United Nations & Executive Secretary of The Economic and Social Commission for Asia and the Pacific

Keynote Opening Address at the 12th Session of the APCTT Governing Council

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Your excellency Mr. Rana Tanveer Hussain, Federal Minister of Science and Technology, we are thankful to your Ministry and the Government of Pakistan for hosting the Twelfth Session of the Governing Council of the Asian and Pacific Centre for Transfer of Technology (APCTT) and the "International Conference on Innovation Strategies for Sustainable Development."

Distinguished guest and colleagues,

As a major driver of economic growth and trade, our region is home to some of the most technologically advanced countries and technologically deprived countries in the world. Reflecting this contrast, the number of Asia-Pacific countries ranked in the top quartile of the Global Innovation Index (GII) is the same as the number ranked in the bottom. Thus, it is a region of contrast and stark diversity. This asymmetry of regional Science, Technology and Innovation (STI) expertise, while of concern, offers large scope for diffusion and sharing of STI experience in our region through APCTT's platform -- a subsidiary body of the United Nations Economic and Social Commission for Asia and the Pacific.

Delivering on the 2030 Agenda for Sustainable Development, the Paris Agreement for Climate Change and the Addis Ababa Action Agenda requires that Asia-Pacific works towards catalyzing sustainable and inclusive development through effectively harnessing STI, trade and finance. To this end, a number of factors have the potential to offer new impetus to advancing, integrating and leveraging STIs for development. Let me make a few points to outline the significance of this agenda.

First, the SDGs have galvanized the development community to take long-term, integrated development approaches, which balance and calibrate economic, social and environmental dimensions. Earlier these things were looked at in isolation. STI, finance, and trade, enshrined in Goal 17, offer a means of implementing the 16 sustainable development goals and their associated targets and indicators. These 3 means of implementation can encourage the development of sustainable solutions at grassroots, industry and high tech levels. For this to occur, however, STI must be mainstreamed in the policies, legislation and regulations of holistic and coordinated SDG institutional frameworks.

Second, we are on the verge of a Fourth Industrial Revolution that will fundamentally alter our societies and the way we work and live in them. The unprecedented speed and scale of technology diffusion is increasingly blurring the lines between physical, digital and biological spheres. Digital innovations such as big data, the Internet of Things, massive open online

courses, three-dimensional printing and digital automation have started transforming how we develop and apply knowledge, manufacture goods and deliver services.

Third, the "T" in STI will be a defining force of the 21st Century. Technology is already altering the scale and path of (i) scientific analysis and research: (ii) how we tap, process and combine big data, sensors and analytics to solve previously unmanageable challenges; and (iii) the clean energy revolution. Technology-enabled platforms are also transforming the way we produce and consume goods and services, leading to the emergence of new models and processes of business, commerce and services.

Government policy aimed at creating new markets rather than just dealing with market failures will be critical to shaping the innovative industries of the future. This will require strategic and forward-looking public policies that not only maximize the benefits and minimize the downsides¹ of the digital revolution, but also overcome the large digital divide in access and affordability that exists in our region.² To support member States in overcoming this digital divide, ESCAP has been promoting the Asia Pacific Information Superhighway to seamlessly connect the region moving forward.

Fourth, there is now a recognition that the model of global partnership has to change as the call of the 2030 Agenda to "leave no one behind" means we have a collective responsibility to ensure that the benefits of technology be shared and reach those who need it the most. As many advanced economies in our region are reaping the benefits of the advanced technology that they are developing and absorbing, South-South cooperation is also gaining traction and helping to narrow STI gaps in the developing economies.

Lastly, our region's rich human capital together with rapid urbanization, a growing middle class, and increased efforts to transition low carbon pathways provide rich opportunities and deep markets for the growth of innovation and knowledge-based economies. However, capitalizing on STI-driven growth is complex, especially for the many least developed countries in our region. Understanding global technology trends and synchronizing these with national innovation systems requires long term policy setting in education, training, as well as R&D investment and infrastructure. While this may be challenging, the Republic of Korea, Singapore and many others have demonstrated that the payoffs for getting it right can be significant.

Allow me to now highlight some concrete ways in which APCTT has been serving the region:

- 1. It has delivered tailor-made capacity building activities on science and technology parks, technology innovation and transfer, and innovation for sustainable industrialization and development. In the past year, this work reached over 1,400 stakeholders from 28 member States.
- 2. APCTT has strengthened the cross-border technology transfer capacity of stakeholders in planning and managing projects in renewable energy and sustainable agriculture. We are hoping that APCTT along with ESCAP's Energy Division will play a more functional role in trying to provide a more effective understanding of renewable energy sources.
- 3. APCTTs knowledge products, including online periodicals like the Asia Pacific Tech Monitor and Value Added Technology Information service, have enabled crossfertilization of experience and knowledge sharing within our region.

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¹ Downsides include a net loss in 5.1 million jobs between 2015 and 2020 due to robotics and automation alone (World Economic Forum); privacy and security concerns that are come along with Big Data potential; and technology-driven reductions in transportation costs which are leading to massive increases in air travel and its associated emissions.

² Only 6% of the developing population of Asia and the Pacific is connected to high-speed internet.

4. Finally, it is important to recognize that APCTT has forged meaningful partnerships with over 25 agencies, including among others, the International Renewable Energy Agency, USAID, the International Solar Alliance, as well as a number of other national development organizations from the Asia-Pacific.

Moving forward, however, we must collectively scale up the human and financial resources of APCTT's platform to support the implementation of SDGs. Implementing a newer and dynamic strategic positioning of APCTT calls for its membership support.

APCTT can be strategically positioned to undertake the mapping of emerging technologies against the SDGs; to develop policy advice to address the enormous gender gap in STI; to facilitate knowledge sharing on low carbon technologies, as well as project the future skills and corresponding investment needed for them; to deepen diagnostic work on national innovation systems for least developed countries; to examine the potential of venture finance in supporting technology innovation; and, finally, to enhance understanding on the potential of open innovation platforms to address shared technology gaps across the Asia-Pacific. APCTT and ESCAP will also work more with capital market regulators to enhance startup's and SME's access to capital.

To conclude, this year's Governing Council and the associated International Conference on *Innovation Strategies for Sustainable Development* will focus on creating an enabling environment to foster STI and innovative entrepreneurship in the Asia-Pacific region. The recommendations you make and the proposals you put forward will be incorporated into APCTT's future programme of work.

To fully harness STI for sustainable development, APCTT must turn its attention

- To new and emerging areas of innovation with strong developmental impacts,
- To new and more-cost efficient modes of delivering capacity-building activities to maximize impact, such as e-learning tools; and,
- To strengthening its institutional capacity and to effectively implementing new initiatives.

I wish to reiterate the request for all member States to enhance their contributions to APCTT to allow it to rise to the challenges ahead and to realize your collective STI aspirations.

I thank you and wish you the very best in your deliberations.