

Expert Group Meeting on Harnessing Innovative Technologies to Advance Green Transformation for Sustainable Development in North and Central Asia

Hybrid Meeting Format

26-27 March 2024 | Almaty, Kazakhstan and Online

CONCEPT NOTE

Background

Landlocked developing countries (LLDCs) in North and Central Asia have made progress in implementing the Vienna Programme of Action for Landlocked Developing Countries for the Decade 2014 – 2024 (hereafter referred to as VPoA). However, the COVID-19 pandemic, geopolitical tensions, climate change, and the widening digital divide have exacerbated LLDCs existing vulnerabilities in terms of food insecurity, high transport and trade costs, and the risk of falling behind in the global digital development. Landlockness and these additional challenges impede the progress of LLDCs towards economic transformation and sustainable development in the subregion.

Emerging and innovative technologies can help LLDCs to expedite sustainable development in the subregion. By integrating these innovations into development strategies, LLDCs in the region can catalyse a sustainable and inclusive economic transformation, as well as mitigate the impacts of climate change.

Digitalisation, including artificial intelligence (AI), the Internet of Things (IoT), and cloud computing, is a transformative force that can contribute significantly to the greening of the region. By embracing digital innovation, LLDCs can make informed decisions, improve environmental monitoring, and foster resilience and adaptability in the face of evolving development challenges.

The transport sector continues to play a critical role in enabling regional connectivity and providing LLDCs with access to essential services and economic opportunities. New technologies and innovations, such as electric transport, digitalisation, and sustainable logistics solutions, serve as important tools to make this sector greener and more sustainable. The adoption of these technologies not only increases the efficiency of transport but also significantly reduces carbon emissions, contributing to the overall greening of the subregion's infrastructure.

Access to innovative technologies is needed to increase agricultural productivity and improve rural livelihoods, as the share of agriculture, forestry and fisheries in gross domestic product (GDP) and total employment remains high in several LLDCs¹. Agro-ecology and biotechnology offer solutions for environmentally friendly and climate-resilient agricultural practices, which ensure food security while minimizing environmental impact. New innovations such as crop genomics, precision agriculture, sustainable irrigation practices, and innovative crop management can increase the overall productivity of the sector while transforming the subregion's food systems.

¹ https://www.un.org/ohrlls/sites/www.un.org.ohrlls/files/files/euro_asia_vpoa_review_report_2023.pdf

The urgency of harnessing technology to drive green transformation for sustainable development is increasingly recognised in North and Central Asia. The Euro-Asia Call for Action, adopted at the High-Level Euro-Asia Regional Review Meeting of the Vienna Programme of Action in Bangkok, Thailand in August 2023, noted that limited technological sophistication remains a key constraint for LLDCs in the subregion. It was also noted that emerging technologies could enhance development prospects, partially mitigate geographical and other challenges, and prevent and mitigate the risk of further deindustrialization of LLDC economies. It called on international and regional organisations to strengthen technical capacity and research and to promote greater use of technology-driven and information and communication technology (ICT) -based trade facilitation solutions for LLDCs. Financial and technical assistance and technology transfer are essential for successful transformation².

The United Nations Special Programme for the Economies of Central Asia (SPECA) Economic Forum in 2023, also urged countries in the subregion to consider new technologies and the sustainability of products and services in future planning, and to prioritise climate- resilient agriculture³. The Baku Declaration, adopted at the SPECA Summit in November 2023, highlighted that digitalisation and green transformation in the Middle Corridor as an immediate priority area. Regional cooperation to strengthen digital connectivity, promote digitalisation, and smart transport solutions, as well as innovative technology applications for the Sustainable Development Goals (SDGs) were identified as priority themes. The private sector could play a key role in fostering innovation.

In this context, this Expert Group Meeting will serve as a platform for stakeholders to come together, share insights, and forge collaborations to advance the adoption and adaptation of new innovations and emerging technologies for greener and sustainable economic development in North and Central Asia.

Objective:

The main objective of the Expert Group Meeting (EGM) is to examine how the countries in North and Central Asia could foster innovation and adapt new, emerging, and appropriate technologies to advance green transformation for sustainable economic development. The EGM will examine innovation and technology-related policies and assess their impact on digital development, sustainable transport, and climate-smart agriculture to address persistent development challenges and negative impacts of multiple crises in North and Central Asia. It will provide concrete recommendations for policymakers and facilitate regional cooperation with view to Third United Nations Conference on Landlocked Developing Countries in June 2024, in Kigali, Rwanda.

Participants:

The target participants of the Expert Group Meeting include policymakers from ministries responsible for science, technology, and innovation (STI) policies, experts in digital development, sustainable transport, and climate-smart agriculture. Stakeholders from academia, the private sector, international and regional organisations, as well as civil society and community-based organisations are encouraged to participate.

² <https://www.un.org/ohrlls/events/high-level-euro-asia-regional-review-meeting-vienna-programme-action-landlocked-developing>

³ <https://unece.org/speca/events/2023-speca-economic-forum>

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UN Plaza, 303 Baizakov street, Almaty, Kazakhstan

Programme & Session Overview

| Time | Sessions |
|----------------------|--|
| 26 March 2024 | |
| Morning | <p>Opening</p> <hr/> <p>Session 1: Overview of science, technology, and innovation (STI) policy in addressing development challenges of LLDCs in North and Central Asia</p> <p>The session will discuss, among other things:</p> <ul style="list-style-type: none"> • The status and trends of science, technology, and innovation in North and Central Asia • Enabling policies, regulations, and good practices to enhance science, technology, and innovation activities in the subregion • Education and human resources development policies to enhance innovation capacities and skills • The role of public and private sector in developing infrastructures and ecosystem for innovation in the subregion • Support to innovative entrepreneurship at national and regional level • Sustainable and effective resource mobilization in support of innovation, development, and adaptation of innovative technologies |
| Afternoon | <p>Session 2: Fostering digital transformation and regional cooperation in North and Central Asia</p> <p>The session will discuss, among other things:</p> <ul style="list-style-type: none"> • The current progress and gaps in ICT infrastructure, data management, enabling ICT policy for digital innovation • The status and opportunities of digital economy • Concrete examples of adoption and adaptation of ICT-based solutions in different sectors to advance green transformation • The role of emerging digital technologies, such as AI, IoT, cloud computing, in promoting sustainable development • The need for re-skilling to enable the benefit of AI, automation and other emerging technologies |

| 27 March 2024 | |
|----------------------|--|
| Morning | <p>Session 3: Enhancing digitalization and green transformation of transportation and economic corridors in North and Central Asia</p> <p>The session will discuss, among other things:</p> <ul style="list-style-type: none"> • Promoting electric transportation, digitalization and smart transport solutions, sustainable logistics solutions • Accelerating digital transformation of data and document exchange in supply chains and the implementation of digital transit measures • Concrete examples of using innovation and technologies to build and maintain green and resilient transportation infrastructure in LLDCs in the subregion • Challenges and opportunities in promoting ICT infrastructure deployment alongside transport and economic corridors |
| Afternoon | <p>Session 4: Leveraging innovation and technologies for sustainable and climate-smart agriculture in North and Central Asia</p> <p>The session will discuss, among other things:</p> <ul style="list-style-type: none"> • The potential of innovative technologies to ensure climate-responsive farming and agriculture practices • Innovative practices to enhance sustainable management of water resources effectively in the subregion • Effective use of agro-ecology, biotechnology, and mechanization for food security and minimizing environmental impacts • Innovations and innovative technologies in agribusiness, food processing industries, and agriculture services |
| | Closing Session |