

High-level Thematic Round Table 1

Tuesday, 5 August 2025, 3 - 6 pm

Awaza, Turkmenistan

CONCEPT NOTE

High-level Thematic Round Table 1: Structural transformation, diversification, and science, technology and innovation (STI) as drivers of prosperity in landlocked developing countries (LLDCs)

Introduction

The Landlocked Developing Countries (LLDCs) face significant structural challenges that limit their ability to transform their economies, eradicate poverty and achieve sustainable development. These challenges include geographical isolation, transit constraints, remoteness from international markets, and dependence on primary commodity exports¹. Consequently, most LLDCs are often at the lower end of regional and global value chains.

Many LLDC governments prioritize building resilience and promoting structural transformation for sustainable growth as integral components of their national development plans and industrial policies. This focus entails creating decent and productive employment, increasing domestic savings, and diversifying their economies, often leveraging science, technology, and innovation (STI).

Current state of structural transformation in the LLDCs

Despite registering steady economic growth that has generally outpaced other developing countries in recent decades, many LLDCs have made little progress on structural transformation and diversification of production and exports.

Agriculture continues to play a crucial role in LLDC economies, contributing 19 percent of GDP and employing 53 percent of the workforce in 2023. However, agriculture in LLDCs is often characterized by low labor productivity, primarily in subsistence farming activities.

Over the period 2014 to 2024, manufacturing value added (MVA) as a share of GDP stagnated at around 12 percent in LLDCs. Medium- and high-tech MVA accounted for 15 percent of totals (2022), reflecting limited technological development in manufacturing.

The services sector in LLDCs represents 47.4 percent of GDP in 2023, with limited diversification and heavy reliance on international tourism and transport. This lack of diversity makes LLDCs highly vulnerable to external shocks, as evidenced by the COVID-19 pandemic, which caused their services exports to plummet by 35 percent between 2019 and 2020, a more severe decline as compared to global averages.

The impacts of climate change threaten food security and macroeconomic stability in LLDCs, potentially increasing the current account deficit, particularly for net food-importing LLDCs.

¹ Primary commodities accounted for more than half of the exports of 27 out of 32 LLDCs in 2014–2022– and accounted for more than 80 per cent of all exports of goods of LLDCs as a group.

Science, technology and innovation (STI) as key drivers of change

The total population in the LLDCs amounts to 605 million people, including a sizeable proportion of young people. These countries also have a vast natural resource base. If properly leveraged, the recent wave of technological innovations can therefore unleash opportunities for inclusive growth in LLDCs.

However, LLDCs face significant challenges in this area. Achieving universal connectivity will be a daunting task - in 2024, only 39% of the population were online, lagging far behind the global average of 68%. In addition, gender disparities persist, with fewer females (36%) using the internet compared to males (43%). Regarding innovation, according to the World Intellectual Property Organization (WIPO) Global Innovation Index, in 2024, 12 out of the 33 countries in the bottom quartile were LLDCs. The share of high-tech manufacturing exports over total exports, a proxy for structural transformation, is below 1 percent for all but three LLDCs. Investment in Research & Development (R&D) is similarly constrained; the latest available data reveals that R&D spending as a percentage of GDP stood at just 0.2 percent in LLDCs, significantly below the global average of 1.95 percent.

Way forward

The challenges posed by external shocks, such as the pandemic, food and energy price macroeconomic shocks, geopolitical tensions, and climate change impacts, have hindered and in some cases reversed, progress on SDGs in LLDCs. The interconnectedness and challenges require integrated and coordinated action.

A structural transformation agenda for LLDCs requires shifting resources to higher-added-value activities that boost productivity; ensuring decent job opportunities are created to employ the rapidly growing labor force; and enhancing the participation of LLDCs in global value chains, particularly for commodity-rich countries.

Promoting infrastructure development, creating a regulatory environment conducive to private sector growth, investment and innovation, and developing human capabilities are critical. New technologies bring opportunities but require rapid skills development to leverage their potential.

Improving digital connectivity and infrastructure is crucial for LLDCs to leverage the benefits of the digital economy and e-commerce.

A dynamic private sector is essential for achieving structural transformation and sustained, inclusive economic growth in LLDCs. Strengthening entrepreneurship in these countries requires reducing costs, improving access to finance, addressing skill shortages, and building institutional capacity.

LLDCs are among the most vulnerable countries to the impact of climate change. It is critical that efforts toward just, sustainable, and inclusive transitions support the structural transformation of LLDCs. This is consistent with Article 4.7 of the UNFCCC, which states that economic and social development and poverty reduction are the "first and overriding priorities of the developing country Parties".

The Awaza Programme of Action for the LLDCs (APOA) sets ambitious, quantifiable, and time-bound targets for structural transformation and innovation. Key targets include increasing labor productivity and decent employment opportunities across all productive sectors by 50 per cent by 2034, with a focus on women and youth, and doubling the output of service sectors, especially in tourism and high-productivity knowledge-intensive areas. The APOA also aims to double the contribution of manufacturing value added to the GDP of LLDCs by 2034, as well as double the share of medium and high-tech manufacturing in total value-added manufacturing. These targets are complemented by commitments to establish regional agriculture research hubs and enhance digital literacy and proficiency in advanced technologies.

To achieve these targets, the APoA identifies several commitments. These include promoting targeted technological and financial support for LLDCs to facilitate digital transformation, establishing regional digital platforms for peer-to-peer learning and capacity building, and strengthening or establishing centers of science, technology, and innovation. The programme also commits to enhancing conducive business ecosystems for private sector development in LLDCs, broadening and diversifying their entrepreneurial base to better include women and youth. Additionally, there's a commitment to substantially increase investment from all sources in research and development, and in building accessible, reliable, and affordable digital infrastructure for e-learning, e-governance, and e-commerce in LLDCs.

With a view to implementing the APOA, robust partnerships and international support measures are urgently needed for LLDCs. Similarly, domestic policies and strategies implemented by development partners should take into consideration the economic circumstances, needs, and national priorities of LLDCs.

Against this backdrop, the round table will focus on strategies for enhancing structural transformation and progress in science, technology and innovation in the LLDCs. The panel will discuss strategies, lessons learned and new approaches for structural transformation and sustainable development, which are key priorities of the APOA.

Guiding questions

- 1) What innovative strategies can enhance agricultural productivity, promote sustainable practices, and integrate with other sectors to drive structural transformation?
- 2) How can LLDCs substantially leverage their critical mineral resources to integrate into regional and global value chains and promote equitable development?
- 3) How can the technological gap between LLDCs and developed countries be bridged, and what kind of support can the international community provide?
- 4) What policies/measures can LLDCs adopt to boost local entrepreneurship and promote science, technology, innovation, and R&D?
- 5) How can the Awaza Programme of Action foster structural transformation, diversification, and innovation in LLDCs, considering their diverse conditions and the global conjuncture?