Future Trends Series - GR:EEN Project

Title of the report

**Technology and Innovation Report 2012:
Innovation, Technology and South-South Collaboration**

Area

Science and Technology

Reporter

United Nations Conference of Trade and Development (UNCTAD)

Type of the Reporter

International Organisation

Periodically updated?

Yes

First issued year

2010

Latest update

2012

Official website

http://unctad.org/en/Pages/Home.aspx

Language available

English

Short summary

This report seeks to consider how, and to what extent, South-South technological cooperation could help developing countries overcome certain obstacles to economic expansion and growth in order to achieve specific development goals. More specifically, the report endeavors to address research gaps in the current literature, and aims to contribute new policy insights in the areas of technology and innovation.

The report puts forth the argument that "the similarity of development experiences of the countries of the South (particularly in promoting innovation capacity), and the contextual appropriateness of their technologies, makes them essential complements to existing North-South interactions."

From an analysis of current patterns of South-South exchanges on technology and innovation issues, the report seeks to identify key issues in this area, and derive best practices for moving forward in fostering South-South collaboration on technology and innovation.

The central message of this report is that "developing countries, particularly emerging countries, can be important partners for promoting technological capabilities in the South, and therefore analyzing how South-South collaboration for technology and innovation can be promoted in a systematic way to promote inclusive sustainable development should be a priority."

Key trends

• As more developing countries begin the process of rapid industrialisation, it is expected that the new growth poles will increasingly contribute to changing dynamics in international relations. The result of this process has produced several new important regional leaders, including Brazil, Russia, India, China and South Africa, often referred to as the BRICS. This process is expected to continue, with additional countries (such as Nigeria and Egypt) experiencing similar growth in the future.

• The empirical evidence on ongoing South-South technological exchange shows that the surge of economic growth in developing countries, particularly emerging countries, has been made possible in large part by their growing technological capabilities.

• The growing manufacturing capabilities of a number of developing countries, particularly Brazil, China, India and South Africa, has enabled them to increase their exports of manufactured goods. It has also enabled them to participate in global production networks (GPNs) in both low-cost manufacturing and high-technology, value-added production.

• A predominant factor explaining the rising trend in technology imports is the growth of GPNs, driven by some of the more technologically advanced developing countries. Another factor is the increasing domestic demand in some emerging countries, particularly China and India, due to their large populations and the growing purchasing power of their growing middle classes, which is leading to a surge in imports of technological products from other countries in the South into these economies.

• Globalisation, as well as newer technologies and the move towards the knowledge economy, especially information and communication technologies (ICT), have provided opportunities for these countries to use their existing skilled workforce to accumulate further knowledge and promote technological learning.

• Foreign direct investment (FDI) by developing countries has been rising in recent years, increasing the possibilities for it to be leveraged for technological learning in various other developing countries. FDI trends have been similar to technological empowerment trends of the South, which have tended to be concentrated in some countries, mainly East Asian countries as well as countries such as Brazil, China and India.

Suggestions

The suggestions put forth by this report are centred around the following set of principles:

• The technological needs of all developing countries should be better integrated into ongoing South-South exchange. This form of engagement not only necessitates greater investment in tertiary education, skills training and competence-building within countries; it also needs to be reinforced by enabling greater access to knowledge and technological capacity-building through, for example, inter-firm cooperation, joint ventures and licensing agreements.

• The experience of developing countries in building innovation capacities should be shared more proactively. They are useful in order to glean general lessons and derive best practices on how developing countries can best promote economic catch up. They can also be highly instructive in deriving policy options for promoting linkages between various aspects of innovation frameworks.

• Learning needs to be promoted through South-South alliances and technology transfer.

• FDI needs to be more technology-oriented in order to support the building of technological capacities.

• Developing Countries should pool technological resources to address common challenges. They need technological innovations and platforms that promote smoother transitions towards a green economy, help address climate change mitigation and adaptation, encourage the use of sustainable energy and renewable energy technologies, as well as help improve public health and food security.

• National innovation policies to South-South initiatives need to be more closely linked. This can be achieved through coordination of local and regional innovation policies with South-South initiatives, by providing incentives for shifting towards high value-added activities and by focusing on technological learning in the policies of emerging countries.

• Policies that promote a long-term technological orientation need to be adopted. This can be achieved by adopting policies that link technical and scientific cooperation with technological collaboration and by providing incentives to firms for technological collaboration and technology transfers.

Methodology

Research from primary sources and research from secondary sources.

Reference to other trends reports? If yes, which reports?

/