

Foreword

Regional integration, innovation and competitiveness interact dynamically. By bringing networks of people, institutions and markets together—the main functions that set innovation in motion—even a loose arrangement between two or more nations is bound to spur innovation and related creative activities. The cross-pollination of ideas and experiences greatly benefits innovators, who can use their enhanced knowledge to adapt and apply innovation—and to push beyond its current frontiers—contributing to competitiveness within economic blocs.

Innovation capacities are vital for diversifying and differentiating the production and trade portfolio, providing a chance to “leap-frog”—technological progress and factor efficiencies may well account for half the economic growth in dynamic economies. But evidence in this report for 15 African countries for 1995–2010 shows that growth in most of these countries was through factor accumulation, not through gains in input combinations tied to innovation. Furthermore, African industry’s contribution to exports is minimal, with growth in merchandise exports still driven by commodities.

Against this backdrop, *Assessing Regional Integration in Africa VII* examines how the three elements of regional integration, innovation and competitiveness are interlinked. It explores the prospects for harnessing them within the framework of Africa’s normative regional integration development model oriented to foster structural change. And it aims to shed light on the issue of raising innovation and competitiveness in the broader context of development policy and strategy in Africa.

After providing an overview of regional integration trends in Africa, the report examines the dynamic complementarities between the three elements, delineating the role of regional integration in supporting favourable conditions for innovation and how the deployment of innovative capacities can in turn enhance competitiveness and structural change.

Given the importance of the global intellectual property regime in setting a framework for regulating innovation and other creative endeavours, ARIA VII assesses the impact of the global intellectual property protection regime and examines the challenges facing African countries as “late developers.” The advanced countries of today applied intellectual property protection in a very selective manner to meet their industrial and other policy objectives. And so today, the design of intellectual property rules and policies should be adaptable to African countries’ changing development needs, notably through the “flexibilities” offered by the global trading regime to enhance policy space.

Looking to Asia, the report highlights India’s striking advances in developing an extensive tertiary education system that offers a platform for achievements in key sectors from pharmaceuticals to informatics to space technology, and discusses that country’s experience in tapping its diaspora in building a knowledge economy back home. It then reviews the remarkable transformation of countries in the Association of Southeast Asian Nations in fostering innovation and competitiveness, primarily in regional supply and value chains.

The report makes recommendations to African policy makers, suggesting they start with crafting and then effectively implementing policies anchored on human capital development, with special attention to higher education. Today’s reality is that Africa’s higher education system is in a parlous

state, with frequently poor education institutions generating below-standard learning outcomes. The numbers of Africans enrolled in science, technology, engineering and mathematics disciplines at graduate level are low relative to other global regions, with especially low female participation. Underfunded and inadequately managed, Africa's tertiary institutions appear in the bottom ranks of the world's universities—only three make it to the top 400. Yet with rapid technological change, the need for these graduates is rising inexorably. Some of them will conduct research for mitigating the impacts of fossil fuel-based energy and for developing new, cleaner technologies. Reforms to higher education must also include greater alignment between education policy and science, technology and innovation policy on the one hand, and industrial policy on the other, to ensure the relevance of educational output.

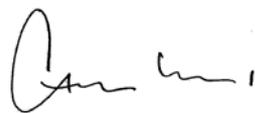
The report further recommends that African leaders grasp the opportunity to negotiate an intellectual property agreement through the Continental Free Trade Area initiative. Tied to this, the decision taken by the African Union summit to establish a Pan-African Intellectual Property Organization presents an opportunity to bring about intellectual property policy coherence on the continent and a common approach to negotiating rules in trade and investment agreements with external partners.

What must be done is clear. Just as African governments have shown leadership in improving physical infrastructure and connectivity, so must they now upgrade Africa's human capital to meet modern demands and the aspirations of Agenda 2063, the long-term plan for transforming the continent. The Science, Technology and Innovation Strategy for Africa 2024 sets out a means to follow through on the Agenda, feeding into the recognition of technology and innovation as mechanisms to implement the recently adopted Sustainable Development Goals.

This important report addresses themes critical for the future of our continent. We commend its analysis and policy messages to policy makers, academia, development partners, investors and other stakeholders in Africa's development.



Nkosazana Dlamini Zuma
Chairperson
African Union Commission



Carlos Lopes
UN Under-Secretary-General
and Executive Secretary,
Economic Commission for Africa



Akinwumi Adesina
President
African Development
Bank Group