Session on: Science, Technology and Innovation Policies for Africa's Structural Transformation and Development

Background

Agenda 2063 – The Africa We Want, which, at its core, is a plan for Africa's structural transformation, has seven aspirations, where the 1^{st} and the 7^{th} talk to the central issue of the agenda – structural transformation. The first aspiration being, A Prosperous Africa based on inclusive growth and sustainable development, and the seventh being, Africa as a Strong, Resilient and Influential Global Player and Partner.

At the center of the two aspirations is Africa that is capable of adding value to the diverse wealth of her natural resources, and thereby creating massive employment and decent jobs for individuals in Africa and income for the government that is capable of providing first class services for the people of Africa, which in turn leads to high standard of living in the continent. The Agenda also foresee Africa that is self reliant and equal player in global trade, exporting not only natural resources, but also manufactured goods of highest quality.

As observed by renowned scholars¹ and as experience of the now developed countries indicate, at the heart at of the structural transformation and such characteristics of Africa we want, is science, technology and innovation (STI) capabilities. And therefore as also explained in the Agenda itself (pg 11), the continent will not be able to achieve all the above without adequate capabilities in STI. As demonstrated by the examples of more developed countries, where the example of the Asian Tigers² is particularly telling, building STI capabilities require well guided and evidence informed STI policies that are carefully coordinated with sectoral policies. Such policies in turn require quality research that is informed by theoretical propositions on the working of the national systems of innovation emanating from the empirical evidence from the region itself.

Objectives

Given the importance of STI policies for Africa's development as indicated above, the major objective of the session is to present a brief status and discuss challenges around the design and implementation of STI policies in Africa. Specifically:

- 1. To discuss the extent to which STI policies are aligned with the objectives of Agenda 2063 and Sustainable Development Goals (SDGs), especially those related to structural transformation.
- 2. With major focus on structural transformation, to discuss best practices and challenges around STI policies in Africa.
- 3. To discuss challenges around the production of evidence for STI policies in Africa: discussion to be focused on two important points- appropriateness of frameworks used and expertise in the region.

¹ For instance According to Romer (1993) no economic policy can generate sustained economic growth unless it is at the same time accompanied by scientific discoveries – both radical and incremental – that are required to create more value from a fixed set of natural resources.

² According to Winston (2006), these countries transformed their economies by improving the technological performance of their industries through purposeful science and technology policies

4. To deliberate on the way forward.

Outcome

Proposals on the best way forward for the design and implementation of STI policies for Africa's Structural Transformation and Development.

Structure of the session and presenters

The session will take approximately 90 minutes in total as shown in table below:

Name	Activity and time	Affiliation
Dr. BitrinaDiyamett	Moderator: Introduce the session with quick highlight on the critical role, status and challenges around STI policies	Science, Technology and Innovation Policy Research Organization (STIPRO), Tanzania
Prof. Abdelkader Djeflat	in Africa (15min) Presentation 1: Challenges around the expertise and conceptual framework for innovation studies in Africa – implications for policy (25 min).	Science, Technology and Innovation integration in North African countries. The Maghtech Network (Maghtech.org)
Prof Alexis Habiyaremye	Presentation 2: Innovation policies for African industrialization : technological upgrading, green industrialization and the role of hubs	South African Research Chairs Initiative (<i>SARChI</i> SARChI-ID University of Johannesburg
All	General discussion (25min)	

References

- AUC, (2014). Agenda 2063 The Africa We Want: A Draft Document A Shared Strategic Framework for Inclusive Growth and Sustainable Development &A Global Strategy to Optimize the Use of Africa's Resources for the Benefit of all Africans
- Romer, P. 1993. "Implementing a National Technology Strategy with Self-Organizing Industry Boards." In Brookings Papers on Economic Activity, Microeconomics Vol. 2, edited by Martin Neil Baily, Peter C. Reiss, and Clifford Winston, 345–399. Washington: Brookings Institution.
- Winston, T. 2006. "Singapore's Transition to Innovation-Based Economic Growth: infrastructure, Institutions and Government's Role." R and D Management 36 (2): 143– 160. Research Collection School Of Economics. https://ink.library.smu.edu.sg/soe_research/100