

RUFORUM WEBINAR SERIES-2020

Education from foundations and skills to advancements in science, technology and innovation: Considering fundamentals for transforming Africa

Webinar 7 Synthesis Report

Introduction:

Education is a recognised human right. It is transformative and a life equalizer in many respects; health, gender, income, and notions of identity. Education is a unique engine for fostering development and at the individual level, provides a raft of benefits that include employment, earnings, health, poverty reduction and life fulfilment. Further, the transformative potential of education on societies is immense as it influences medium to long-term economic growth, ignites innovation, strengthens institutions, and fosters social cohesion. Thus, investing in education is investing in people and changing the direction and destiny of societies. In this regard, the World Bank Education Strategy 2020 and African Union Continental Education Strategy for Africa (CESA) and Science, Technology and Innovation Strategy for Africa (STISA-2024) stress *learning for all*. However, education for its own sake without the acquisition of requisite knowledge and skills, will not drive economic growth, development or poverty reduction. Skills are a vital conduit for success and for realising returns on investment on education from individual to societal levels. Additionally, 'learning poverty' puts the attainment of the Sustainable Development Goal 4 on quality education in question and calls for comprehensive coverage of the full Educational Value Chain from beginning to end by educational projects or programmes of any kind, and for the purpose of ownership, sustainability, effectiveness and impact.

This report covers points of action and emerging issues from Webinar 7 organized by RUFORUM on ***Education from foundations and skills to advancements in science, technology and innovation: Considering fundamentals for transforming Africa*** held on 13th August, 2020.

The Problem:

Africa's transformation into a global powerhouse requires the unlocking of opportunities in agriculture, agro-industries and agribusiness, strengthening initiatives for fighting poverty and inequality, reinventing labor, skills and production, increasing financial services and investment, and improving health care and human capital. However, all this requires that Africa *fixes* its education sector and heeds the call to increase investment in science, technology and innovation in order to support other sectors and developmental processes.

Webinar Objectives:

The Webinar on ***Education from foundations and skills to advancements in science, technology and innovation: Considering fundamentals for transforming Africa*** aimed to address:

1. Means through which Africa can eliminate the 'learning poverty' using home grown approaches that are attuned to the political realities of each country, socio-cultural realities, national and regional growth disparities as well as historical injustices;

2. Meaningful and seamless transition and throughput across the educational value chain-from primary school, secondary school, tertiary to university;
3. Achieving greater efficiency and better outcomes in skills-building that delivers both productivity growth and skills for today's workforce and tomorrow's labour market promise and expectation in Africa;
4. The role of African public and private education institutions in driving science, technology and innovation capacity development adaptive to the realities to Fourth Industrial Revolution to catalyse the continent's competitiveness, and;
5. Policy and financing modalities needed to enable the African education sector better respond to the current and emerging needs especially the aftermath of the COVID 19 pandemic.

This Webinar was moderated by **Prof. Theresa Nkuo Akenji**, Vice Chancellor, University of Bamenda, Cameroon and RUFORUM Deputy Board Chair.

The presentations and discussions were given by:

1. HE Prof. Sarah Anyang Agbor, Commissioner for Human Resources, Science and Technology, African Union Commission
2. Dr Amit Dar, World Bank Africa Regional Director for Human Capital Development
3. Hon Dr. Itah Kandjii Murangi, Minister for Higher Education and Training, Namibia
4. Hon Pr. Dr Eleonore Ladekan Yayi, Minister of Higher Education and Scientific Research, Benin
5. Hon. Dr. Brian Mushimba, Minister of Higher Education, Lusaka-Zambia
6. Hon. Prof. Aiah Gbakima, Minister of Technical and Higher Education, Freetown-Sierra Leone

Key Learning and Action Points:

1. ***Fixing Africa's Education Sector:***
 - i. African Governments should learn from each other on the development and implementation of value chain based and well-connected education systems that can build a formidable and skilled human resource to support the achievement of the aspirations of African Union Agenda 2063, the *Africa We Want*. This will require the formation of additional ministerial knowledge sharing platforms that can bring African ministers and experts together to share experiences and facilitate cross learning. In this vein, RUFORUM should consider consulting ministers when planning the Ministerial Roundtable Meetings, as planned for the Benin Triennial Conference in December 2021, to ensure that pressing and specific matters are considered for joint learning, commitment, action and follow-up;
 - ii. African policy makers, particularly ministers responsible for the education sector should expound the role of knowledge in national economies and recreate competitive education systems that can sufficiently feed into other sectors;
 - iii. African Governments through their ministries of education and together with their partners need to increase investments in early child education to motivate and prepare children to

learn, while taking into consideration the full educational value chain. Particular attention needs to be paid to strengthening science and mathematics at the basic levels of education and in TVETs;

- iv. African Governments should support the establishment and hosting of Centres of Excellence for training and research in their countries as part of strengthening higher education. In this vein, RUFORUM and its Secretariat have made efforts to develop five (5) initiatives¹ that have components for establishing such Centres. The support towards the operationalization of such centres would not only enhance agricultural higher education but also strengthen and encourage training within the continent (thus curb brain drain), development of regional training programmes based on identified skills gaps, context-relevant student research, and intra-Africa collaboration and mobility. The on-going processes within the World Bank to support the operationalization of the Strengthening Higher Agricultural Education in Africa (SHAEA) is greatly welcomed, and needs to be supported and followed-up by African Governments of the focus countries (Kenya, Malawi, Mozambique, Cameroon, Cote D'Ivoire and Ghana) and possible expansion of the initiative to other countries should be considered;
- v. African Governments through their ministries of education need to rethink the concept of education, and elaborate actions that turn education into a culture of learning and convert classrooms into actual learning spaces. This will require bringing different stakeholders to the table to firstly understand the new concept, and then develop strategies, programmes or policies to guide the change process. Among things to consider is the safety of educational spaces, inclusiveness, gender equity, fragility, innovative solutions, effective curriculum, and affirmative policies to keep girls in school, possibly benchmarking the success and example of Sierra Leone. In addition, through the Specialised Technical Committee on Education, Science and Technology of the Africa Union Commission, African Ministers of Education should strengthen and expand teacher training;
- vi. Organisations like RUFORUM should champion the transformation of human capital on the continent and help universities, NARS and other research institutions by training more staff in the continent. RUFORUM should support the formation of Alumni Fora that can support the transformation of higher education and advancement of science and technology on the continent.

2. Investing in Science, Technology, Innovation and agricultural Education:

- i. The training of high quality technicians, engineers and scientists for Africa requires the commitment by African Governments and their partners to build the capacities of African

¹ The five continental initiatives include: 1) Strengthen Higher Agricultural Education in Africa (SHAEA), 2) Build Africa's Science, Technology and Innovation Capacity (BASTIC), 3) Strengthen Africa's Innovation and Entrepreneurship Capacity (SASTIE), 4) Escalate Postgraduate Training in Africa, and increase staffing capacities and the pool of Women Scientists in African Universities (RISSCAW), and 5) African Digital Agriculture Programme (AfrIDAP)

education and training institutions. The current model of funding for higher education by the World Bank in partnership with African Governments has been successful and could serve as an example for other funding mechanisms. African Governments should follow up with the World Bank on current initiatives and commitments that support higher education, science and technology and explore further opportunities;

- ii. African Governments should increase their budget allocation and disbursement to education, provide student loans and bursaries where possible, and improve the quality of education to ensure that actual learning takes place and that education is relevant to the needs of their countries;
- iii. African Governments should invest in the establishment of eLearning platforms, enable free access to online learning resources, develop strategies for promoting teaching and learning through radio and television, and focus their attention on reducing the digital divide;
- iv. As a Network, RUFORUM should remain positioned to take advantage of the investments and opportunities for building higher education, science and technology in the African Continent.

3. *Building Strategic Partnerships for Better National and Continental Education Outcomes:*

- i. With the current COVID-19 Pandemic, it has become more evident that Africa is far behind the establishment of resilient education systems and that strategic collaborations among education institutions is imperative now more than ever. Strong private-public partnerships are needed to inform the processes of education programme development, funding prioritization and allocation, curriculum development, and skills development in response to industry labour needs;
- ii. African Union Commission should consider championing the five continental initiatives agreed upon by African Ministers on 5th December 2019 in Cape Coast Ghana and urge agencies such as the African Development Bank, European Union Commission, and others to support their implementation;
- iii. As part of promoting pan-Africanism, African Governments should contribute to the efforts by the African Union Commission to promote Academic Mobility and research across the continent;
- iv. African education institutions should partner and take advantage of the African Union Commission support towards the advancement of higher education, science and technology through Intra-Africa mobility, African Union research grants, to mention but a few. Further, the Pan-African Quality Assurance and Accreditation Framework developed by African Union Commission to promote harmonization and quality assurance in higher education within the African continent forms a solid basis for forming strong training and research partnerships, and student exchange and mobility programmes;
- v. African higher education institutions should continue to promote academic mobility, development of a continental research framework, curriculum reform, harmonisation and quality assurance in education, and strengthen innovation, as key areas for strengthening human capital in the region;

- vi. African research and higher education institutions should take advantage of artificial intelligence, and partner to promote open research, data science and virtual laboratories, among others.

RUFORUM Secretariat- 21 August, 2020