

# CALL FOR PAPERS

# **AFRICAN ECONOMIC CONFERENCE 2014**

# KNOWLEDGE AND INNOVATION FOR AFRICA'S TRANSFORMATION

Abidjan, Cote d'Ivoire 1 - 3 November 2014







Empowered lives. Resilient nations.

#### Background

The theme for the 2014 African Economic Conference is Knowledge and Innovation for Africa's Transformation. How well Africa harnesses knowledge and innovation will shape its future and the fortunes of younger generations for many decades to come. The AU Agenda 2063 and the African Common Position on the Post-2015 development agenda identify science, technology and innovation as key pillars for Africa's development. As the continent pursues its agenda of "an integrated, prosperous and peaceful Africa driven by its own citizens and representing a dynamic force in the global arena," success will depend on adequate accumulation of skills, technology and competences for innovation.

Although most African governments recognize the importance of knowledge generation and innovation, the continent continues to experience an acute skills deficit in areas that are critical for the realisation of the goal of structural transformation. The fact that a significant number of engineers and science graduates are unemployed in Africa further underlines the many facets (including the slow pace of structural transformation) of the mismatch between the demand and supply of skills that exists on the continent. The proliferation since the 1950s of institutions of higher learning and think thanks devoted to addressing the various challenges of Africa's development has not brought about a significant narrowing of the continent's skills/innovation gap. Neither has it enhanced the employability of the labour force. Instead, while opportunities for new economic activities and entrepreneurship have expanded in recent years, the skills mismatch has made it impossible, in particular for the youth and women, to derive direct benefits from economic growth. Consequently, the relevance of the knowledge proffered by African institutions of higher learning is increasingly being called into question.

On the bright side and despite these challenges, a new crop of innovative digital entrepreneurs (young men and women) is rising in Africa with Africa's youth showing a keen propensity for absorbing and adopting new technologies. A key goal of the Conference will be to examine the best ways in which to use knowledge and innovation to boost youth employment and foster the adoption of new technologies by the wider economy as a result.

### Addressing the Skills and Innovation Deficit in Africa

African countries are well aware that their development hinges on how fast and well they acquire technological competences. However, closing the technology and innovation gap in Africa has also been hampered by the lack of coherent national innovation policies (including appropriate regulatory frameworks and incentive regimes), the dearth of strategic public-private partnerships on education and skills development, and insufficient policies aimed at enhancing the availability of venture capital.

The importance of soft infrastructure for economic transformation cannot be overstated. For African enterprises to develop and influence the breath and depth of industrial linkages, they will need skills and technologies to upgrade production processes and identify market opportunities. Similarly, entering global supply and value chains implies that African enterprises will need to upgrade operational competitiveness, meet global technical standards and adopt world-class manufacturing practices — in many cases these require a level of expertise that is not readily available. Much has been said about Africa capitalising on it's commodities to drive industrialisation and structural transformation, but here too the issue of skills, technology and innovation is paramount as backward linkage development to the hard commodity sector is particularly demanding of technological capabilities to compete with global suppliers, unlock the potential of newly discovered resources (such as oil and gas) and rely on greener avenues of growth.

The pace of skills and technology development and innovation has been slow in Africa mainly because of the absence of a critical mass of university-educated skilled labour force, the lack of high quality laboratories and scientific equipment, the unavailability of long-term finance, and weak private sector initiative and managerial capacity. Africa's stock of graduates is still highly skewed towards the humanities and social sciences, while the share of students enrolling in science, technology, engineering, and mathematics averages less than 25 percent. Moreover, women are under-represented in science and technology-related courses and professions, meaning that the continent is doubly disadvantaged because it stands to fail to mobilise a significant proportion of its human resource in the drive for sustainable and inclusive growth.

In terms of innovation and with the exception of Mauritius (ranked 53) and South Africa (ranked 58), African countries continue to be clustered at the bottom of the global innovation rankings.<sup>1</sup> This is partly due to insufficient attention being paid to the provision of technical education. While enrolment in secondary education more than doubled from 20.8 million to 46.3 million in the period 1990-2011, enrolment rates for tertiary level education were just 6 percent for female and 10 percent for male students.<sup>2</sup> Technological progress in Africa has also been hampered by a lack of a focus by education systems on fostering creativity and equipping students with the necessary skills for knowledge acquisition and problem-solving. Gross domestic expenditure on research and development remains very low in Africa. It is moreover dominated by the public sector and skewed towards agriculture; with industrial research institutions are also often weak and insufficiently resourced, with poor linkages with the private sector.

Building the necessary skills will require coordinated action by governments and economic actors to develop appropriate national innovation systems encompassing, among other things, continuous investments in education, research and development, structured on-the-job skills development programmes and the establishment of technical training institutes that are closely linked to industry and emerging technical entrepreneurs. New and strategic partnerships between the public and private sector and intra-industry, will likely need to be forged at the national, sub regional and regional level to boost the skills and innovation necessary to drive and sustain Africa's economic transformation. Bearing in mind that Africa is seeking to transform at a time of rapid global developments in technology and innovation, governments will also need to devise strategies on how to harness new technologies and innovations to realise the potential embedded in Africa's youth bulge.

<sup>&</sup>lt;sup>1</sup> The Global Innovation Index 2013.

<sup>&</sup>lt;sup>2</sup> African Development Bank 2014. Tracking Africa's Progress in Figures. Tunis.

The good news is that Africa is exposed to a wide range of technological opportunities for increasing its economic competitiveness. In some areas Africa has the opportunity to leapfrog technological developments and catapult itself to the frontier of innovation. For example, technological developments associated with mobile telephony are making it possible to rapidly move capital to rural areas and across most of Africa. ICT and biotechnologies are being harnessed to increase food production and the competitiveness of the continent. At the continental level, a number of framework programmes have been developed to accelerate Africa's scientific and technological development. These efforts may well unlock financial resources for research and innovation activities in Africa.

### **Objectives of the Conference**

The key objectives of the African Economic Conference series are to:

- promote knowledge management as an important driver of policy dialogue, good policy planning and implementation;
- foster dialogue that promotes the exchange of ideas and innovative thinking among researchers, development practitioners and African policymakers;
- encourage and enhance research on economic and policy issues related to the development of African economies;
- provide an opportunity for young African researchers, Africans in the Diaspora, regional and sub-regional organizations to disseminate their research findings as well as share information with African policymakers on the work they do in the region

With these objectives, and as has been demonstrated during the past eight annual Conferences since its inception in 2006, the AEC conference series is now firmly established as a major forum that brings together outstanding academics and development practitioners in the field of economics and fosters dialogue and the exchange of knowledge on a wide variety of issues and challenges facing Africa.

### Format of the African Economic Conference 2014

The African Economic Conference 2014 will take place in Abidjan, Côte d'Ivoire on 1-3 November, 2014. This 9<sup>th</sup> edition of the AEC will also coincide with the 50th anniversary celebrations of the founding of the African Development Bank Group. This year's Conference will provide a unique opportunity for researchers, policymakers and development practitioners from Africa and elsewhere, to explore Africa's existing knowledge generation approaches and frameworks, the efficacy of its knowledge and innovation institutions in developing needed skills, technology and innovation capacities. It will look at the policies required in the areas of knowledge generation and innovation to achieve Africa's transformation agenda.

The Conference will comprise a number of plenary sessions as well as break-out sessions that will feature presentations and discussions by prominent academics, policy makers, business actors (including emerging technological/digital entrepreneurs and the youth) and opinion leaders, as well as representatives from development partner organisations.

Break-out sessions will allow for more in-depth and technical analysis of salient issues arising from the thematic focus of the Conference.

Policy-oriented papers relevant to the overall theme of the Conference are of particular interest. Papers addressing the following sub-themes, which are intended to enable a broad range of discussions on the current state of Africa's transformation capacity and generate valuable insights for improved policy making, are welcome:

#### Knowledge Generation for Structural Transformation

- The impact and role of tertiary institutions in promoting structural transformation
- Assessing the relative contribution of the Sciences and the Arts to transformation
- Best practice in generating knowledge for structural transformation; lessons learnt from African and other regional experience
- Financing educational reforms

#### Addressing the Skills Deficit

- Estimating the magnitude of skills required to achieve economic and social transformation objectives (analysis by different economic sector or by goal e.g. breaking into global supply/value chains etc.)
- Best practice in exploiting regional and sub-regional opportunities for skills development
- Best practice on adapting skills to industry requirements
- Financing skills development
- Industry-government-academia cooperation on skills development

#### Technology

- Role of technology in social mobility/inequality reduction
- Best practice in fostering technology transfer
- Financing technological upgrading
- Innovative strategies for promoting technology commercialization

#### Innovation

- Identifying critical innovation barriers and gaps in Africa
- Best practice in financing innovation from public and private sources
- Exploiting regional and sub-regional opportunities for fostering innovation
- Best practice in addressing barriers and empowering youth

Accepted papers will comprise original work not previously published. Young African women and men researchers are especially encouraged to submit papers. The AEC series is particularly envisaged to provide young African researchers with the opportunity to share their work with as broad an audience as possible, with a view to expanding their

networks. As is the tradition, a distinguished panel will assess the papers presented and award a prize to the author of the paper deemed as the best Conference Paper. The winning paper will be announced at the closing ceremony.

#### **Time Frame for Submission of Papers**

Authors must submit their papers in accordance with the instructions on the AEC 2014 website (<u>www.uneca.org/aec</u>)

Participants and experts submitting papers for the Conference must adhere to the key deadlines stated in table 1.

### Table 1: Annotated Time Frame

Annotation	Deadline Date
Deadline for paper submission	1 September 2014
Notification of final acceptance	10 October 2014
Submission of revised manuscripts	17 October 2014
Closing of flight bookings	24 October 2014
Conference Dates	1 - 3 November 2014, Abijan

## Sponsorship

On submitting their papers, authors are requested to indicate whether they require support to cover expenses (travel, accommodation and daily subsistence allowance) associated with their participation at the Conference. Only one author per paper accepted for presentation will be eligible for support. Support is reserved for presenters and young researchers from Africa.