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# Shaping Prosperity by 2030: The Role of Universities in Africa's Socio-Economic Transformation

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# SHAPING PROSPERITY BY 2030: THE ROLE OF UNIVERSITIES IN AFRICA'S SOCIO-ECONOMIC TRANSFORMATION

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This paper is the keynote address presented by Dr Emmanuel Mutisya during the annual Ibadan Sustainable Development Summit (ISDS) organised by CESDEV which held at the Trenchard Hall, University of Ibadan on 28 August 2018

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#### 1. Introduction

Allow me to start my presentation by expressing my special gratitude to the organizers of the Ninth Annual Ibadan Sustainable Development Summit (ISDS), for giving me this opportunity to give a keynote message and to share my thoughts on "Universities as mega-trends that will determine the prosperity of national and global prosperity by year 2030", one of the special sessions by the Centre for Sustainable contribution Development (CESDEV) the 70th Anniversary of the University of Ibadan. It is a great privilege and honour, to not only deliver my message in front of a distinguished audience of eminent academicians, but more so to do it at the University of Ibadan, a leading centre of excellence in the continent and globally. I have had the opportunity to work and partner with this university, and in the several times I have visited, I have become more emotionally connected, and made this place my home in Nigeria. My talk will focus on "shaping prosperity by 2030: the role of universities in Africa's socio-economic transformation", and will outline the role of universities in building continental knowledge-based economy well positioned to advance inclusive development, green growth and resilience by year 2030.

Socio-economic transformation in Africa has continuously become a central focus in the continent's development

agenda. Over the years, we have seen the region grow rapidly with rising population and economic growth. However, the continent continues to face monumental challenges of improving the social welfare of Africans including poverty, climate change, food insecurity, water scarcity, and diseases coupled with unsustainable rapid urban growth and environmental degradation. The current global development paradigm has shifted to the knowledgebased economy informed by scientific research, evidence and data to solve socio-economic challenges and to promote industrial competitiveness and sustainable development. Navigating the challenges would require extensive search for relevant knowledge, innovative creation of new knowledge, proactive sharing of knowledge for societal transformation, in addition to coping with continental and global competition.

As the drivers of development, universities are the core creators of knowledge-based economies of African countries. With changing development demands and challenges, African universities are today getting recognized as avenues of instilling practical knowledge and skills applicable to sustainable development in Africa. According to Mutisya & Nagao (2014), unlike in advanced countries where university education has and still is the centre for current and future innovations, Africa's higher education sector has for decades lacked focus on development. The decline in real value of

university budgets, increase in undergraduates' intakes, increase in academic staff turnover, and research facilities deterioration has put university education in the region under severe pressure leading to a decline in admissions and completion of higher education. In addition, with poor university research and innovation support to development, Africa risks lagging behind the rest of the world in all important aspects of life such as the economy, technology, and quality of life.

The widespread recognition that university education is a major driver of economic competitiveness in an increasingly knowledge-driven global economy has made high-quality education more important than ever. Countries with higher skill levels are better equipped to face new challenges and master technological discoveries. The imperative for countries is to raise higher-level employment skills, to sustain a globally competitive research base and to improve knowledge dissemination to the benefit of society. For universities to significantly shape Africa's prosperity by 2030, they must facilitate creation and access to knowledge, sharing best practices, generating new information and innovations, promotion of the relevance of academic research output to development, and transboundary collaboration between higher education and the industry.

### 2. Shifts in development thinking in Africa

The rising concern of socio-economic transformation in Africa has been characterized by some significant changes in development thinking and practice. In the chapter on "The Role of Higher Education in Developing Sustainability", Nagao, Mutisya & Kudo (2018) discusses 4 shifts in development thinking.

# 2.1 Transition from MDGs to SDGs: acceptance of longterm perspective of international development efforts

The rising concern of the international community for sustainable development has been characterized by some significant changes in development thinking and practice. One such change manifests itself as a trend in international development efforts to adopt a longer time horizon than hitherto for development planning and policy-making purposes. This is perhaps inevitable as the world is increasingly concerned with longer-term global environment and development issues, such as global systemic transition challenges (Kates & Parris, 2003) and planetary boundary issues (Rockstrom et al, 2009). In the development policy practice, the seamless transition from the MDG to the SDG agenda, each with 15-year duration, seems to indicate the global acceptance of a longer time horizon for international development efforts.

The corresponding shift can be observed for Africa's development efforts as well, as outlined in the African Union's 50-year development agenda, the Agenda 2063 of the "Africa We Want" (African Union Commission, 2015). Even at the national level, governments are adopting development plans and strategies with longer than 10-year horizons as, for example, in Kenya, Vision 2030 (Government of Kenya, 2008), and South Africa (National Planning Commission, 2009). One obvious implication of these trends toward longer-term development visioning is that the policy-makers would rely more and more on systematic policy research as their working modality.

## 2.2 Shift from mono-disciplinary to inter-, multi/ transdisciplinary approaches

The shift from mono-disciplinary outlook to more integrated one, employing inter-, multior trans-disciplinary approaches, in viewing the development phenomenon is another change we are witnessing today. The diversity of problems and issues subsumed under the 17 SDGs and the obvious inter-linkages among them makes this change critically important. Trans-disciplinary focus and the employment of integrated and holistic approaches in practice has opened ways for multi-stakeholder collaboration in tackling societal problems (Shiroyama et al., 2012).

# 2.3 Role of science in sustainable development: planetary boundary conditions and development gaps

The increasingly recognized role of science and scientists in sustainable development policy discussions is another important shift. The role of science in international negotiations on such issues as climate change and biodiversity was noted almost from their beginning in the 1990s (Lanchbery & Victor, 1995; Biermann, 2000). More recently, however, there is increasing scientific concern on wider fronts, including not only the planetary boundary conditions but also the development gaps in such areas as poverty, health, sanitation, nutrition, education and environment, concerns which are more crucial for Africa.

# 2.4 Development and spread of ICT: 3<sup>rd</sup>/4<sup>th</sup> industrial revolution

The other shift is the phenomenal development and spread of information and communications technology (ICT) since 1990s, which has not only altered the pace and pattern of information transmission but has also changed the nature of production process of new ideas, goods and services. The resulting globalization of markets has forced private enterprises to compete for creation of new scientific and technical knowledge and innovation (Nonaka & Nishiguchi, 2001). While ICT opens up new development opportunities, globalization pressure has put African countries with weak

ICT capacity at great risk to lose in international competition endangering their prospects for sustainable development.

### 3. State of Higher Education in Africa

African universities face a myriad of concerns that pose a formidable challenge to the universities as centers of knowledge creation and sharing and advancing their role of Africa's socio-economic transformation. The first concern is African universities' poorly funded research and innovation, as most countries spend less than the recommended 1% of national GDP. Only Malawi, Uganda and South Africa spend above 1% of their GDP on R&D, whereas the remaining countries spend less than 0.5% (Africa innovation Outlook, 2010). As a result, African universities produce minimal research output and accounts for less than 2% of global publications and international scientific research output. This has a negative implication on development, since innovation and socio-economic transformation should be research-driven. The end result is weak universities' capacity to articulate with Africa's socio-economic needs.

Enrolment in African universities is very low, an average of 7% unlike 79% for primary and 50% for secondary education, which means that the number of university graduates added into the human capital pool on the continent is very low. Lack of enough quality workforce has

resulted to poor delivery of development agenda. In addition, the enrolment landscape continues to be dominated by humanities and social sciences, and less of science and technology. Advancement in science, technology and innovation is fundamentally altering the way people live, connect, communicate and transact, with profound impacts on economic development. With meager investment in Science and technology research, Africa continues to miss on technological and scientific revolutions that underpin economic advances, improvements in health systems, education and infrastructure.

Widening inequities in gender, social class, geographic location in universities on the continent is a common feature. And although many governments are deliberately working to close the gap, it still remains an uphill task to many universities, with most of them enrolling more male students in essential subjects, socially marginalized groups getting locked out of university education, and most universities being located in regions that keep away many qualified students. This has led to further disparities consequently enlarging the social class gap and negatively affecting national development.

Universities in Africa are also faced with an aging population of professors and trainers. As evident, the continent faces low generational renewal, as senior faculty members refuse to create space for the next generation. This situation is exacerbated by the poor working conditions and low rewards common in most universities in Africa. The working and living conditions of faculty and students do not provide an attractive environment to the young generation.

The increasing role of higher education in Africa's development has put these challenges in spotlight. African governments, international organizations and other stakeholders have come up with policy directions, strategic plans, and long term development visions to enhance universities' contributions to development.

### 4. University role in long-term development visions

The following are some global and continental futuristic long-term development agenda that which are aligned to the needs of today and the future:

# 4.1 UN 2030 Sustainable Development Goals (SDGs) Agenda

The implementation of the SDG agenda puts universities at the center, to provide sustainability research and innovation leadership role through partnerships. The agenda mentions higher education, and dedicates SDG4 to education – "by 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university". The main objective of this

goal is to achieve inclusive and equitable quality education and promotion of lifelong learning opportunities. It aims at substantially increasing the number of youth and adults who have relevant skills, for employment, decent jobs and entrepreneurship." African universities' have a role of supporting the implementation of every SDG for the continent's development, through learning and teaching, research, organizational governance, culture and operations and external leadership.

### 4.2 AU Agenda 2063 of The Africa We Want

The Agenda 2063 envisions a prosperous Africa based on inclusive growth and sustainable development with a focus economic transformation, growth industrialization. It calls for the catalyzing an education and skills revolution and actively promote science, technology, research and innovation, to build knowledge, human resources, capabilities and skills for the African century, where development is people-driven, and unleashes the potential of its women and youth. As part of this Agenda, the African Head of States and Governments during the 25th Assembly established the Committee of 10 Heads of State and Government as African champions of Education, Science and Technology. The initiative is part of the efforts to strengthen the role of Science and Technology towards economic growth on the continent. The role of universities in implementation of the science, technology

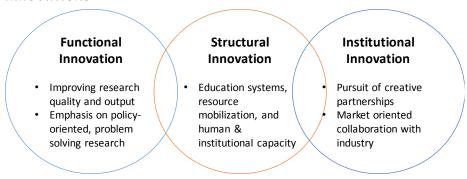
innovation strategy for Africa is crucial to ensure that it drives economic growth (AUC, ).

# 4.3 African Development Bank's 10-year strategy (2013-2022)

The African Development Bank (AfDB) has developed a vision, inform of a 10-year strategy, for Africa's socioeconomic transformation. The agenda is designed to place the Bank at the center of Africa's transformation and to improve the quality of Africa's growth. It also aims to bring about growth that is not just environmentally sustainable, but also economically empowering. When growth is inclusive as well as "green", it creates the jobs that the continent needs now and that it will need as millions more young people enter the job market, with energies and aspirations to match (AfDB 2013). The strategy prioritizes 5 core areas, referred to as the High 5s, that include; (i) power and light up Africa, (ii) feed Africa, (iii) Industrialize Africa, (iv) integrate Africa, and (v) improve the quality of life for the people of Africa. To implement this, the Bank has come up with a Human Capita Strategy that guides its work on education and skills development, youth employment, health, nutrition, and social protection. With main focus on technical and vocational education training and tertiary education, the Bank is providing support for infrastructure, program development and scientific research.

The current changing development demands and challenges in Africa require tertiary education institutions recognition as avenues of instilling practical knowledge and skills applicable to sustainable development in Africa (Mutisya & Nagao, 2014). These long term development visions clearly show that universities' role cannot be ignored. It is a departure from traditional development frameworks that put higher education at the periphery of economic growth and industrialization. A new role for universities in Africa should be premised on transformative innovation for sustainable development which takes into consideration, the functional, structural and institutional innovations.

Figure 1: University functional, structural and institutional innovations



# 5. Africa universities Vision 2030: dovetailing development and promoting global competitiveness

The vision of African universities in tackling development challenges and promoting the continent's competitiveness globally will call for the enhancement of the role of universities by first addressing the problems bedeviling their capacity to deliver. This should start with commitments by governments to allocate a minimum of 1% of GDP to research and innovation, to expand scientific research output. This will include expanding competitive grants and awards to nurture young and accomplished African researchers. The research output should be linked to the development of priority areas and enhancement of global competiveness. In addition, the provision of adequate infrastructure and resources to strengthen the institutions' delivery capacity will be required. This should include the consolidation and expansion of centres of excellence and enhance linkages.

The continent needs to produce future leaders who will promote better governance and management in all sectors and facilitate innovative solutions to society's problems. Universities are best placed to build such leaders needed as the drive for knowledge-based economies builds momentum on the continent (Azcona, 2008). To shape Africa's prosperity by 2030, universities should place a strong emphasis on the following:

#### 5.1 Institutional relevance

Aligning universities outputs with Africa's developmental gaps and economic needs is an important role of universities. The programs and courses offered in universities should be in tandem with the socio-economic concerns of today and the future. They should have the right content whose delivery must be done by a faculty team with the right qualifications. More emphasis should be placed on science, technology and innovation, areas that lag behind in the continent. Also, the research output should address longterm sustainable development concerns, and should accelerate the implementation process of national development agenda.

### 5.2 Institutional competitiveness

Program quality and excellence is important in developing and driving innovations for development. The quality of higher degree programs in addressing Africa's challenges is a problem most African governments need to tackle in their approach to expanding university education. Targeted policies that can help improve the quality of education include providing learning materials, removing barriers to women's access, reforming curricula, training teachers to implement new pedagogical concepts in the classroom, and using information and communications technologies to reach more students.

#### 5.3 Industry collaboration

University partnerships and fostering institutional relationships are the foundations of a strong community outreach and societal impact. Collaboration between universities is an efficient and effective way of engaging with local communities. University partnerships provide a huge amount of opportunities for students and staff alike. More importantly, collaboration between universities and the industry provides a platform for the creation and implementation of ideas, knowledge and innovations which Africa direly needs for inclusive growth, green development and resilience. There is an urgent need to spearhead university/industry collaboration within Africa promote the south/south collaboration.

### 6. Summary conclusion

The expanding developmental needs of Africa, and the increasing demand for a socio-economic growth that benefit all, universities remain the cornerstone of knowledge creation and management that informs sustainable development. With the exponential growth of Africa's youthful population, improving enrollment and completion rate in secondary education, there is immense pressure across the continent to expand the university education system in order to meet the rising demand. Governments are now facing a dilemma on how to make quality private

higher education more affordable and public-funded higher education more qualitative. A possible avenue to tackle this challenge will be to strengthen existing education regulatory framework, and promote proper governance. Further, stakeholders must consider other innovative mechanisms to support higher education, as the world continues to changing rapidly, more so with the fourth industrial revolution.

However, the nature of the current state of universities and the challenges they face should first be addressed. From providing funds that are proportionate to national GDP, to leveraging on digital platforms, universities should adopt to change and improve their relevance, competitiveness and community impact in support of Africa's prosperity. They need to explore avenues of utilizing information and communications technology as a tool for management and quality delivery of higher education. Distance learning, open learning are a few of the ways that ICT can offer costeffective sharing resources, support quality access to underserved communities, equalize opportunities to learn and enhance affordability. This would involve a major transformation of these institutions through reform of their internal structure as well as development of collaborative working relationships with various stakeholders. To realize and sustain any meaningful sustainable development by 2030, the role of universities must be repositioned and

centrally placed in the development agenda of African countries, and this will further contribute to global knowledge pursuit for global sustainability.

#### References

- African Science and Technology Indicators Initiative (2010), Africa innovation Outlook 2010, NEPAD
- African Union Commission. (2015). *Agenda 2063: The Africa We Want*. Addis Ababa.
- Biermann, F. (2000). Science as Power in International Environmental Negotiations: Global Environmental Assessments Between North and South. Belfer Center for Science and International Affairs (BCSIA) Discussion Paper 2000-17, Environment and Natural Resources Program, Kennedy School of Government, Harvard University. (<a href="http://environment.harvard.edu/gea">http://environment.harvard.edu/gea</a>.)
- Ginette Azcona et al (2008); Harvesting the future: the case for tertiary education in Sub-Saharan Africa. (The Maxwell School of Syracuse University, 8 June 2008).
- Government of Kenya (2008), Kenya Vision 2030, Ministry of State for Planning
- Kates, R. and Parris, T. (2003). Long-term trends and a sustainability transition. *Proceedings of National Academy of Sciences (PNAS)* 100(14) 8062–8067. doi\_10.1073\_pnas.1231331100
- Lanchbery, J. and Victor, D. (1995). The role of Science in the Global Climate Negotiations, in Helge Ole Bergesen,

- Georg Parmann, and Øystein B. Thommessen (eds.), *Green Globe Yearbook of International Co -operation on Environment and Development* 1995 . Oxford: Oxford University Press, 29–39.
- Mutisya, Emmanuel and Nagao Masafumi (2014), The Role of Higher Education for Sustainable Development in Africa, African Journal of Sustainable Development, Volume 4 Number 3, pp 1-16 (2014)
- Nagao Masafumi, Mutisya Emmanuel and Kudo Shogo (2018). The Role of Higher Education in Developing Sustainability, Book title: Sustainability of Higher Education: A Global Perspective; Universiti Sains Malaysia Press
- National Planning Commission (South Africa). (2009). National Development Plan 2030: Our future - make it work, Pretoria.
- Nonaka, I. and Nishiguchi, T. (2001). Introduction, in Nonaka, I. and Nishiguchi, T. (Eds.) . (2001). *Knowledge Emergence: Social, Technical, and Evolutionary Dimensions of Knowledge Creation*. Oxford: Oxford University Press, 3-9.
- Rockstrom, J., et. al. (2009). A safe operating space for humanity. *Nature* 461, 472-475.
- Shiroyama, H., Yarime, M., Matsuo, M., Schroeder, H., Scholz, R., and Ulrich, A. (2012). Governance for sustainability: knowledge integration and multi-actor dimensions in risk management. *Sustainability Science* 7 (Supplement 1):45–55. doi 10.1007/s11625-011-0155-



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# ABOUT CENTRE FOR SUSTAINABLE DEVELOPMENT (CESDEV)

The Centre for Sustainable Development (CESDEV) was established by the University of Ibadan through Senate paper 5386 in May 2010 as a demonstration of the University's commitment to Sustainable Development. It was based on the need to provide intellectual platform for identification of issues germane to sustainable development, critically analyse them, and provide leadership in finding enduring solutions that will enhance sustainable development.

The establishment of CESDEV was sequel to series of events, paramount among which was the winning of a USD 900,000 grant from the MacArthur Foundation to establish the Master's in Development Practice (MDP) Programme. The University of Ibadan was one of the ten original Universities that won the grant in a global competition involving over 70 Universities. Further brainstorming led to defining the composition of the emerging Centre beyond the MDP Programme. It was resolved that a number of development programmes that were "hanging in the balance" be moved to the Centre. The Centre for Sustainable Development (CESDEV) thus became a Teaching and Research Centre with a mandate in multiand inter-disciplinary approach to Sustainability issues affecting not just our continent but the whole universe. The Centre is designed to be a Teaching, Research and Development unit in the University. Presently, CESDEV has the following academic and outreach programmes:

- Development Practice Programme (DPP)
- Tourism and Development Programme (TODEP)
- Indigenous Knowledge and Development Programme (IKAD)
- Sustainable Integrated Rural Development in Africa Programme (SIRDA)
- Climate and Society Programme (CSP)
- Environmental Protection and Natural Resources Programme (EPNARP)
- Leadership and Governance Programme (LGP)
- Annual Ibadan Sustainable Development Summit (ISDS)

