Chapter 9 Academic Divination: Appraising the Participation of Africans in Knowledge Production

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ABSTRACT

Information is a significant factor of production in the 21st century, and the effectiveness of other factors of production is contingent on the quality of information available. Production of goods and services will be inoperable if not adequately coordinated with current and time-tested knowledge. Hence, application of knowledge is key to increased and optimal utilisation of other factors of production. Available records put the contribution of Africa to global knowledge production at an insignificant rate of 1.1%. Therefore, the drive of this research is to evaluate the limiting factors to Africa's contribution to scientific research by appraising the research environment, publication outlets, policy renewal, academic funding, availability of academic databases, speed and reliability of the internet, and other incentives. The literature reviewed indicates that African academics and researchers are caught in wide-ranging limitations, to the extent that striking a balance between local and international research outlets has become an uphill task. In some cases, the context under which African scholars operate makes their intellectual contribution unattractive to global audiences. According to the UNESCO science report 2015, it was established that between 2008 to 2014, the global knowledge production improved by 23.4%. In disparity, all the 42 countries in Sub-Saharan Africa put together account for 1.4% of the worldwide share of scientific publications in 2014, a modest improvement from 1.2% in 2008. During the same period, China doubled its stake from 9.9% to 20.2% in 2014. In the light of this glaring paucity of the African contribution to scientific research, discovery and literature, this chapter discusses plausible solutions to the problem.

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INTRODUCTION

The knowledge-based economy is defined as the use of intellectual skills to generate goods and services in a geographical area, country, or the entire world, and which indicates that employability today requires expert skills acquired through rigorous academic training obtained from University or technical institutions (Houghton & Sheehan, 2000). This concept is primarily concerned with employing information as a significant factor of production as against manual labour. This concept is closely related to the information economy in which economic activities are driven by the capability to produce, develop, and apply knowledge-based information as a non-physical capital which emphasises information technology as a facilitating tool for development (Stehr, Adolf, Mast, 2013). The idea of the knowledge economy is anchored on the fact that knowledge and education are intellectual products and creative assets with high economic value (Flew, 2008). This means that the knowledge economy is a pivotal element with measurable worth. Consequently, knowledge economy consists of intangible assets such as the value of its employees' knowledge or intellectual property.

Knowledge production is one of the fundamental reasons for establishing a university. The level of recognition of a university is reliant on the contribution to knowledge production that will have significant effects on existing theories, policies, curricula, inventions, discoveries and knowledge in every aspect of human endeavour. Improvement in knowledge production in the context of universities in developing countries needs total transformation in order to make them a developmental university and achieving this, needs the collective efforts of industries and governments who are often, the beneficiary of the production of knowledge (Sutz, 2020). In comparison with other parts of the world, Africa as a continent is behind in initiatives toward knowledge-based economies. This view is affirmed by Fonn (2018), who states that sub-Sahara Africa has 13.5% of the global population and produces 27 000 research publication. This is equivalent to what a country like the Netherlands produces in a year; therefore, this situation calls for collaboration across the continent of Africa to address. Bridging the gap will help African nations to brace up for the challenges of globalisation. In order to achieve this, an appropriate policy framework is necessary to catch-up with other continents.

Africa's contribution to global research is considered negligible. The conservative ranking placed the continent at 2 and 3 per cent. This ranking is considered overrated, considering the aggregate participation of African authors on a paper, using a higher estimate. For instance, the United Nations Educational, Scientific and Cultural Organization's (UNESCO) research report computes any research output with at least an African author as being 'African'. High level of Research collaboration with other parts of the world has characterised research productivity from Africa. As a result, there is just a fractional amount of Africa's share in all author affiliations. By distinction, in the continent of Asia, a region with rapidly growing research contribution, the difference between the research output with at least one author, the proportionate yield is lesser, signifying a lower rate of international research collaboration and partnership with other continents (Tijssen, 2018).

Within the seven leading countries with highest research output in Africa, South Africa and Kenya have performed more than the other five leading countries in terms of average citation rates, the share of publications production cited, and the field-normalised citation scores (Tijssen, 2007). The advantage may also be based on the fact that most of these countries enjoy the heritage of being English speaking nations. It was evident that the English language enjoys more visibility in scientific research than most other languages. This advantage in visibility contrasts with the situation of the North African nations

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