

# Appreciating the heterogeneity in the unity of Africa: A socio-ecological perspective on Africa's geographies

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## Key Messages

- Africa is not one country; it is a massive continent with often forgotten islands and is culturally, ecologically, and economically diverse.
- Despite low agricultural productivity, Africa largely feeds itself, is rich in biodiversity, and people utilize nature for well-being and nature conservation.
- Innovative scholarship that recognizes change and/or development of alternate systems enabling creativity based on existential knowledge will be a key vehicle for transformation of the continent.

*The African continent is known by various metaphors and geographies, but for many there are also unknowns about the continent. Geopolitically, Africa is a continent that is considered remote—an economically emerging continent seen as entangled in persistent challenges of wars, political dictatorship, poverty, disease, and more recently migration. Given these predispositions it is typical to stereotype events, practice, and behaviour as “African.” There is, however, now recognition of the continent as emerging economic power house. But unpacking the diversity of Africa reveals a huge potential with respect to resource endowments, diversity of ecology, socio-cultural economic advancement, politics, language, and demographics. Colonial history coupled with traditional Africa shaped the geopolitical boundaries that have added to the confusion about this massive and diverse continent. Intellectual discourses either amplify the differences due to specificities of geographical focus or generalizations such as the contested notion of “African.” However, using socio-ecological lenses, Africa is unified by these very differences in addition to being a massive landmass with several big and small island states. Appreciating these differences is useful to understanding the observed patterns of social, economic, and political systems that unify the continent. This paper illustrates the notion of “African” to describe the heterogeneous nature of a “unified” continent. Some illustrative examples between Africa and other continents are used.*

Keywords: Africa, socio-ecological, geopolitics, heterogeneity, unity

## Hétérogénéité et unité en Afrique: une analyse socio-écologique des géographies africaines

*Le continent africain est décrit par différentes métaphores et divers termes géographiques mais ceux-ci illustrent mal les réalités de l'Afrique. Sur le plan géopolitique, l'Afrique est un continent qui est considéré comme éloigné, émergant sur le plan économique ou empêtré dans des problèmes récurrents de guerres, de dictatures, de pauvreté, etc. Cependant, la mise au jour de la diversité de l'Afrique révèle un potentiel énorme en ce qui a trait à la richesse des ressources, aux écosystèmes, aux progrès économiques et socio-culturels, à la politique, aux langues et à la démographie. Selon nous, tant le passé colonial que les traditions africaines en matière de délimitation des frontières ont semé la confusion sur ce continent immense et diversifié. Les*

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*discours intellectuels amplifient fréquemment les différences en fonction de l'approche géographique utilisée ou des tentatives de généralisations de situations localisées, ce qui contribue à une conception inexacte de ce qui est « Africain ». Néanmoins, en utilisant l'approche socio-écologique, le continent apparaît unifié à travers ses différences en plus de se révéler comme un espace terrestre immense auquel se greffent des États insulaires. L'évaluation de ces différences est utile pour comprendre les modèles économiques, politiques et sociaux qui unifient le continent. Le présent texte met en exergue la notion « d'Africain » pour décrire la nature hétérogène d'un continent paradoxalement « unifié ». Pour ce faire, certains exemples sont utilisés afin de comparer l'Afrique à d'autres continents.*

Mots clés : Afrique, socio-écologique, géopolitique, hétérogénéité, unité

## Introduction

There are many views and perspectives through which Africa as a continent is described. The diverse geographies of Africa notwithstanding, geopolitical and social perspectives have long shaped the way in which Africa as a continent, or parts of Africa, are described and understood (Bloom and Sachs 1998; Reyntjens 2009). Over time, stereotypes have evolved about Africa including the notion of “African” that threads through this paper and which is discussed to illustrate the diversity and unity of the massive African continent with the often forgotten Island states. Socio-ecological lenses are applied here to understand Africa as a continent unified by its heterogeneous geopolitical, ecological, social, economic, demographic, and cultural orientations as illustrated in the subsequent section. The basic unifying factor for Africa is its massive landmass, which one would expect to enable geographic connectivity; but with a different reality (Bosker and Garretsen 2012). Africa is, rather, unified in diversity. Although this is contested, the stereotypes of differences are reinforced about the continent and its people. Africa has always been assertive in many ways, from contesting slavery and colonialism to economic and international political assertiveness through the colonial and now post-colonial periods (Carruthers 2004). Legacies of this assertiveness can be discerned to include symbols of African resistance in many cities of the countries on the continent, as well as other cultural artefacts like museums, nationalist symbols, and literature. Influenced largely by geopolitics, signals of assertive Africa can be discerned from the economic relations the continent has with select economic giants, including China, Brazil, and India. These relations are linked to the natural resources of the continent. For example, the repositioning of economic alliances

from West to East can be interpreted as geopolitical assertiveness in order to negotiate more equitable economic relationships with the Western World (Carmody and Taylor 2010). This viewpoint provides a window for critical analysis of the diverse geographies of Africa that unify the continent, to provide a perspective through which the heterogeneity of the continent can be understood and appreciated by both the people on the continent and, even more so, by those from outside the continent. But Africa is also undergoing a political, economic, and ecological transition (Power and Mohan 2010) with rapid population growth, urbanization, ecological fragmentation, and emergence of mixed democracies. This paper analyzes these contested notions of unity in diversity with illustrative examples and ends with considerations for African scholarship, in support of repositioning Africa's unity in diversity.

## Africa: A diverse continent

Africa is often known for what it is not, rather than what the continent is (Sistika 2018). As introduced earlier, Africa is diverse in social, economic, geopolitical, cultural, and demographic dimensions, and this diversity unifies the massive continent and the Islands. There are many references to Africa as a single country by outsiders, yet currently Africa is composed of 54 states. The erroneous reference to a single country is common in North America and also in some Asian countries, which illustrates how much is perhaps unknown about Africa. Those who live in Africa, in turn, may also know little about the other continents.

Africa is diverse with respect to its peoples and cultures, though it is common to stereotype its cultures as “African.” Traditional African cultures have been long fused with colonial influences, leading to geographical patterns of generic

cultures within which diversity is common. The continent of Africa is largely comprised of Arabic peoples in the north, black Africans in the Sub-Saharan region, and Creole peoples in the coastal regions and Islands. As such, blocks of countries within Africa share similar ethnic composition. Individual countries, however, depict more diversity and, in many instances, peoples and cultures are separated by international colonial borders that are also associated with the colonial languages of English, French, and Portuguese. There are many ethnic groups in Africa and this is not the subject of this paper, separated by international boundaries. The diversity in governance and political manifestations is, however, important to unpack (Reyntjens 2009). Whereas some African countries have functioning democracies, many countries are either under military rule or dictatorships (Ake 2012).

With a diversity of ecosystems across the continent—mountainous regions, tropical rain forests, grasslands, woodlands, ocean, riparian, cryosphere, deserts, and Sahelian ecosystems—the African continent represents almost all the global ecosystems and ecotones (Büscher 2007). The geology and geomorphology of Africa is even more diverse, with block mountains (South Africa, East Africa), plains, plateaus (Central Africa), coastal zones (all around Africa), rift depressions (East Africa), volcanic mountains, and networks of river systems (such as the Nile and Niger) that traverse parts of the continent, providing the lifeline of cultures, people, and economies. Alongside the diversity of ecosystems and geomorphology, there is the diverse economic specializations that utilize the natural resources. The description of Africa as a single mass often obscures this diversity and rich resourcefulness of the continent. From a geopolitical perspective, the continental economic blocks also tend to straddle the alliances Africa has with Western and Eastern economic superpowers, particularly China as the emerging Eastern power (Harris 2005; Kariyado and Hatsugai 2015). The traditional superpowers of Europe and America have been joined by the emerging superpowers of Brazil, China, India, South Eastern Asian countries, and arguably South Africa. Some scholars have argued that this has created a new wave of recolonization in Africa, driven both by the competition to control and manage Africa's huge natural resource base and to

capitalize on an emerging consuming population whose propensity to spend is on the rise. This apparent neo-colonialism is leaving diverse imprints of physical developments and is transforming sociocultural behaviour in the different African countries. This paper will illustrate this transformation using examples of behaviour in food systems and behaviour associated with the physical development of infrastructure.

### **Socio-ecological lenses and many views about Africa**

Given the commonly held views about Africa, one can use several lenses to understand this continent. One of these lenses is the socio-ecological system which, in the context of this paper, describes how the science of nature meets and interacts with culture (Cote and Nightingale 2012). This is the human-environment coupled system in which livelihood and the basis of survival for the African peoples is dependent on the natural material world close to them. Although this can be localized, the connectivity and technological transformation has also enabled distal relations on the African continent and beyond, allowing, for example, the access of materials by one part of the continent from more distant regions of the continent and worldwide. Applying the principle of maximizing benefits by society is the ultimate goal in relating with natural systems (Doxiadis 1970). The maximization of benefits is based on the principles of minimizing contact with nature, minimizing the effort to achieve man's potential and actual contacts with nature, optimizing protective space, and optimizing the quality of relationships with natural and other systems. This explains why African cultures and people are still heavily dependent on each other and on the nature around them, in part because it provides most of what is needed. The reliance on nature is the most economic and technologically feasible way for African people to draw on support of the natural material world around them.

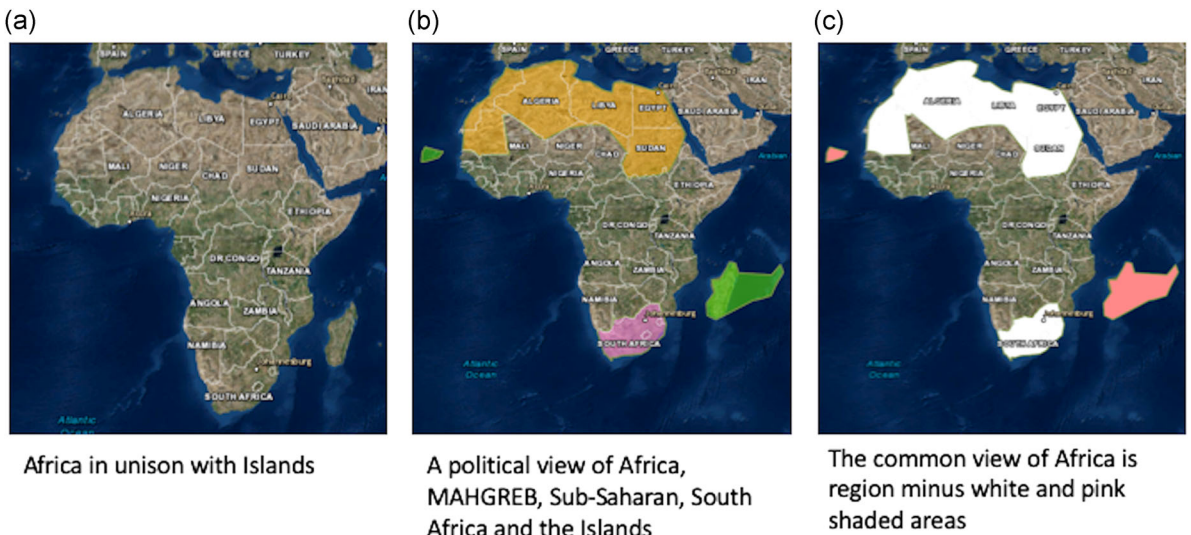
From a geopolitical perspective, informed by a socio-ecological lens, Africa may be seen as comprising four regional blocks including Maghreb; Sub-Saharan Africa, which is further divided into the blocks of Anglophone and Francophone Africa (which are commonly referenced, unlike the less frequently referenced area known as Lusophone

Africa); and Southern Africa. There are differences within each of these blocks just as there are between the blocks; these differences relate to the political alliances between countries on the African continent and with the Western and Eastern world alliances (Allen 1995). From a development perspective, Africa is viewed slightly differently—as North Africa, Sub-Saharan Africa, and South Africa. Note that the latter is referring to a country whereas “Southern Africa” is seen as a block of countries. As a consequence, Madagascar, Mauritius, Seychelles, Comoros, and Cape Verde are often not included through this lens. Using the most commonly-held lens, Africa is seen as North Africa and Sub-Saharan Africa, clumping all the countries from the Sahel as Sub-Saharan Africa and those north of the Sahel as North Africa (Figure 1). Each of these lenses have meanings and philosophy behind them. The geopolitical lens is based on the United Nations regional definitions. For example, the Maghreb region encompasses northwest Africa and northern Africa to the Arabian gulf. Sub-Saharan Africa includes all the countries in the region from the Sahel to the south, which has an ecological border with the Sahara desert and the tropical African region. The islands of Africa are

often excluded from this description (Kasajja 2013). Likewise, this definition excludes South Africa.

### International perspectives about the geographies of Africa

Given these lenses, many people from outside Africa may have insights about the continent, but the knowledge about its diversity seems limited. This is partly because the knowledge about the continent is benchmarked on the geographies of Europe, Asia, and the Americas. Key influencing factors include the World Order, and its associated economic dispensation. This emergent geopolitical regime has defined how the other “worlds” of Europe, Asia (particularly China), and the Americas (specifically the United States and Brazil) relate with African countries. Bilateralism is surpassing multilateralism in this geopolitically polarized world and Africa is once again the victim of the competition between the economic giants of the world to access Africa’s natural resource base. Among the many ostensibly characterized stereotypes is the notion of “African,” a notion that in



**Figure 1**  
The many faces of Africa.  
SOURCES: <https://www.google.com/map>. Map data for a: Data SIO, NOAA, US Navy, NGA, GEBCO, US Dept of State Geographer, Landsat/Copernicus; map data for b: Data SIO, NOAA, US Navy, NGA, GEBCO, US Dept of State Geographer, Landsat/Copernicus; map data for c: Data SIO, NOAA, US Navy, NGA, GEBCO, US Dept of State Geographer, Landsat/Copernicus.

this paper describes behaviour, practices, and events understood from a socio-economic setting. The predispositions defined through the lenses outlined in the preceding section form the basis for describing behaviour at the individual, group, and country level as “African.” It is thus common to identify a certain practice of timekeeping as “African.” So common is it also to identify practices of management, operation, and maintenance as “African”; this happens frequently in the domains of ethics, politics, and public management (Szeftel 1998).

From Africa, these perspectives are seen as contradictions and with intellectual tensions because the stereotypes reinforce the colonial legacies of differentiated capabilities of humans related to ethnicity. While the scholarship on the African continent reinforces these stereotypes, there is an emergent scholarly community that has contested the stereotypes, arguing about the subtle implications of superiority associated with the practices and behaviour. But the real issue is the obscurity of the capabilities, innovativeness, and creativity of African society in the spheres of life. From technological innovation and intellectual productivity to models of economic transformation and governance systems, Africa’s capabilities are under-represented under these commonly held views. Instead, Africa is seen as a continent, unified by the notion of “African,” which requires help and support to develop, transform, and govern itself better. Thus it is common to read international project documents, many of which highlight a perceived need for “capacity building.” This view also tends to be reinforced by the African elites. Likewise, planning for collaborative research or other projects is often laden with allowance for “African” behaviour, practice, and management style. As evidenced in the scholarly literature and based on personal experience, these stereotypes seem to be pervasive in people of all ages in the Western and American worlds. For example, research is needed in Africa—this is true—but too often the leads must come from other countries and not Africa. The nature of research funding and international research collaborations has strongly sustained many of the stereotypes. For example, research funding and collaboration are focused on the geopolitical regions as aligned with colonial relations and particular Western and Eastern country alliances. The outcome of this is that

experienced professors and senior researchers are often turned into research assistants to sometimes inexperienced junior researchers from other countries. This may be inadvertent, but self-reflection and critique are important in enabling awareness about African capabilities. In agriculture, industry, the service sector, IT, and engineering, the dominance of northern-based collaborators is ubiquitous. These collaborators may lack regional understanding; it is common, for example, to hear references to West Africa when operating in East Africa and vice versa, with team members being totally unaware about the regional differences. These misunderstandings can be found in research about many types of relationships including African people’s relationships with natural resources as the case of small-scale agriculture, cities and informality, and poverty.

### **Some examples of Africa’s differentiated geographies**

The African continent is known by various descriptions and geographies but it is also fairly unknown to many outside the continent. Geopolitically Africa is remote and economically emerging but in the minds of many it is still thought of as being a continent characterized by persistent challenges with wars, political dictatorships, poverty, disease—and more recently, international migration. But Africa has its own systems that need to be appreciated. In terms of food systems, for example, the agricultural production systems have struggled to be “modernized” based on European models, yet the African model demonstrates resilience in many countries. Even in places like Sudan where large-scale monoculture systems were introduced during the colonial period, some of these systems have since been reversed to small-holder farming systems (Warf 2010). This reality relates to the earlier argument about the closeness of the material world and how societies seek to maximize the benefits from it. With respect to food systems, a burger is considered an exemplar of a compact food system, sustainable in the economic and social sense and organized in a way that is predictable. The shared food system in Africa, on the other hand, may be similar across the regions but localized differences are enriched by cultural diversities. It is also typical to see pictures of queuing by people at a bus stop

or in a restaurant in the Western World, in contrast to the non-systematic access to buses or restaurants which has been characterized as “African.” These differences are very important to appreciate because universalism in behaviour is contested in the African context due to the very specific tribal and ethnic yardsticks of behaviour.

Another example is related to the concept of “order”—particularly in reference to cities or urban centres. The Western World model of a city is the well-known circulation-based grid-type urban development that is pre-planned before occupation. The African model of order in a city is based on an organic physical development that weaves socio-ecological materials with societal aspirations and possibilities (Dodman et al. 2017). The differences rely on procedure and standards with respect to what is considered decent and adequate, yet both models have long provided opportunities for residential dwelling. The “African” model is described as informal, unsystematic, and requiring modernization. The Western model is seen as systematic, modern, and the benchmark for transformation of other areas including Africa. The question is who defines “order” and for whom? Is it possible to find an ontological “African”? The answers are as diverse as the many faces of Africa. Whereas the cultural, ecological, economic, and political parts of Africa clearly relate to each other in particular ways, there are also contestations of the description of these ontologies as “African.” This is because through history, the continent has had various types of relationships with other cultures, regions, and countries. Thus it is possible to think about African geographies as a socio-cultural and political fusion of Western, Asian and traditional African systems. Political geographies in Africa are characterized by a multitude of regional alliances and trade blocks, as well as those with Europe and Asia. Economic geographies depict regional connectivity and trade blocks (SADC, EAC, ECOWAS), but the international economic agreements between these blocks have been surpassed by bilateral agreements. The most recent example is how individual countries in Africa are entering into long-term agreements for resource access by China, as well as infrastructure development, thereby producing a new type of geopolitical and economic geographies. For example, Africa-China relations differ at the country level, while Africa-Europe relations are largely bilateral rather

than multilateral, although the European Union does have influence on the continent. This contributes to shaping the nature of infrastructure development on the continent. While from the Chinese perspective, Africa may be seen as one continent, recent developments show that economic fora in China are collective but the resource and infrastructure development agreements are bilateral. These developments further illustrate how Africa is unified by heterogeneity.

### **Africa’s diversity that unifies the continent**

Africa is characterized by resource endowments, diverse ecosystems, socio-cultural domains, colonial histories, economic advancement, politics, language, and demographics. These diversities shape the geopolitics of the massive and diverse continent. Intellectual discourse amplifies the ontological understanding of the continent, but the continent is diverse and the notion of “African” is loaded with contradiction and contestations. Development imprints, processes, practices, and systems differ across the continent; this is explained by underlying socio-ecological systems and the observed patterns of social, economic, and political systems that unify the continent. Africa is also unified by diverse natural assets and opportunities that come with nature. The alignment of African leadership with global politics is an interesting domain which is also associated with yet another different African map.

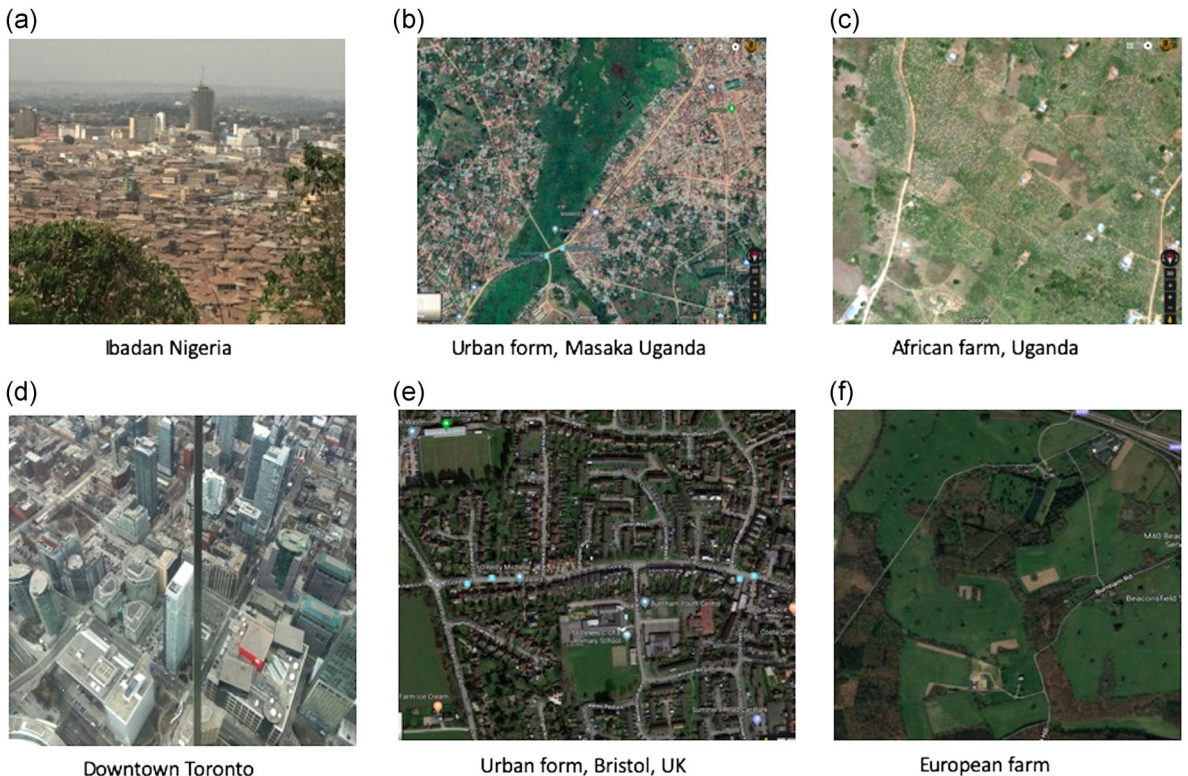
Urban Africa is diverse in typology and the nature of urban development, with a weave of historical urbanism, modern urbanism, and organic physical urbanism. Africa is urbanizing faster than any other region. African urbanism is characterized by increasing consumerism, energy use, and resource flows. With the emerging middle class in Africa, urban imprints are transforming and have mixed architectures at the plot level but with aspirations for mega-city forms such as those in China. In fact China is building several of the capital cities or parts of them in Africa. Juba, Kigali, Lilongwe, and several others have imprints of Chinese urban architecture and design. While many African cities mirror the urban forms from Europe, the United States, and Canada in particular due to the longstanding reliance on consultant

planners from these countries. But the dominance of the emerging (often informal in literature) urban form in Africa is overwhelmingly depicting the differences. As Figure 2 shows, the notions of urban order and urban forms in Africa are different from other global regions.

One of the dimensions on which Africa is perhaps most unified is the economic connectivity and trade between African countries. This is enabled by geographic contiguity but hindered by the difficulty in navigating the connections between blocks of countries, both in terms of linguistic blocks and infrastructure challenges. Despite low agricultural productivity, Africa still largely feeds itself and there is minimal exchange of agricultural produce across the region, compared to within countries. Thus what has emerged is connectivity driven globally related flows. The first is information technology and mobile

telephones which are connecting Africa more than before. Secondly, the flow of goods, mainly from China, through containerized systems and road transportation is very evident on the African continent. The ports of Mombas, Kinshasha, Lagos, Dar es Salaam, Durban, and Port Elizabeth are linked by a web of road infrastructure that traverses the continent.

Assertive Africa is reflected at a national level, and also regionally within the continent; it is redefining geopolitics to unify the continent under diversity. For example, the regional considerations of withdrawal of Africa from the International Court of Justice have been echoed by a number of countries whose democratic and human rights record is questionable. "African democracy" is evolving and negotiated power-sharing is becoming common while the dominance of regimes redefines the democratic map of Africa. This is associated



**Figure 2**  
Urban order in perspective.

SOURCES: Elements a and d: author. Elements b, e, and f: Image@2019 Maxar Technologies. Element c: Image@2019 Airbus <https://www.google.com/maps>.

with the regional integration which exists, while at the same time there is also regional disintegration due to the power struggles with the regional blocks. For example, the contestations in the East African community about the intentions and strategy of Uganda are questioned by other countries, while in this block the question of Burundi and South Sudan lingers with regard to the strength of integration. This is related to the emergence of African political superpowers such as Uganda, Nigeria in ECOWAS, South Africa in SADC, and Egypt in Maghreb.

There is also intra- and inter-country differences in power, control of resources, and leadership associated with inter-racial tensions as is the case in Chad, Sudan, South Africa, and Libya to mention but a few. The exploration and identification of natural resources like oil and gas is also enabling an assertive Africa. Global resource development with a well-intentioned development agenda is happening on the continent, but it misses a socio-ecological perspective because it is extractive in nature. Despite the loss, Africa is still biodiversity-rich and people utilize nature to live, and also to reduce risk so that connections with nature are not only for the benefit of wealth. Africa is diverse but unified by long-standing experience with extreme weather events and natural hazards. Seasonal variation has provided a longstanding time basis for learning and regions like the Sahel, the Horn of Africa, and Southern Africa are places that demonstrate how people have long adapted to variable climates.

## Repositioning geographical scholarship on Africa

The potential of African scholarship is yet to be harnessed if the strengths of Africa are to be fully appreciated. Funding and patronage have perpetuated skewed relationships in scholarship, including inequitable relationships in collaborative research, where experts are from the Global North with Africans as assistants. But Africa has a strategic role in shaping or influencing global policy. Stepping up scholarship on Africa by transforming international funding for South-led international research will not only require innovative funding systems but also a mix of journal editorship, critical editorial boards, reform of academic

institutions, and incentive systems that would break the cycles of inequitable relationships in international research. These are the seedbeds for appreciating the diversity and assertiveness of Africa. The emerging co-production of knowledge may arguably be a longstanding research approach in Africa, but it is branded as new. This is one example of the notion of building capacity because participatory research in Asia and Africa has defined much of the research, yet Africa is still seen to need capacity and is, therefore, being taught what it has been practicing for a long time (Chambers 1983).

Innovative scholarship that recognizes change and/or development of alternate systems enabling creativity based on existential knowledge will be the vehicle for transformation of the continent. Africa can also develop theories based on African knowledge and African co-production of knowledge. Appreciating the community roles in knowledge production and preservation is important. This will depend on the expansion of knowledge frontiers and decision-spheres of governance. Geographical research, education, and training are vital for advancing Africa's diverse knowledge in navigating the skewed relationships. The increasing role of Africa-based scholars and the power of experiential knowledge that links to existential wisdom and needs in Africa are also emerging with initiatives such as AGRA, the CGIAR Challenge program, and sustainability initiatives. However, Geography as a discipline is under threat in Africa because it is not considered to be practical and the trained human resources are unemployable. What has not been deeply assessed is whether Africa's human resource needs are the same as those in the Western model of development.

## Conclusion

As outlined in the rest of the paper, it is our understanding that Africa is unified in diversity and that the continent shows a fusion of western, traditional African cultures based on the utilization of Nature and the maximization of benefits. Appreciating Africa's differences requires a deeper understanding of its diverse cultural and national individualities. Africa is assertive and has an emerging knowledge-based power that flows from its diversity but the potential of this knowledge remains inadequately



harnessed. The many faces of Africa may be rooted in colonial legacies, but Africa is now emerging as an assertive continent in all spheres so it is critical to understand that negating African scholarship runs the risk of a continued depiction of Africa as a continent with a deficit, rather than recognizing that it is an endowed continent. The knowledge economy has to appreciate, embrace, and advance African scholarship which will enable deepened appreciation of its potential.

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