Forum:	Economic and Social Council
Issue:	Improving infrastructure for technological growth in developing African Economies
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Introduction

Infrastructure development is a vital component in encouraging a country's economic growth. Developing infrastructure enhances a country's productivity, consequently making firms more competitive and boosting a region's economy. Not only does infrastructure in itself enhance the efficiency of production, transportation, and communication, but it also helps to provide economic incentives to public and private sector participants. The accessibility and quality of infrastructure in a region help shape domestic firms' investment decisions and determines the region's attractiveness to foreign investors. According to the World Bank, one in six people worldwide, mostly the poor, have inadequate access to water, more because of limited access to infrastructure than because of water scarcity. The availability of clean water is a requisite for maintaining a healthy population. This shows that without a firm infrastructure, development in any direction in a nation is nearly impossible.

Developing nations have developed technology rapidly in recent years. These nations are integrating various forms of technology, such as computers, radios, cellular phones, televisions, newspapers, and the internet into their daily lives. This research shows that technological growth in developing nations result from a mutually dependent process: technology use spurs understanding, which in turn spurs greater use.

Definition of Key Terms

Infrastructure

Infrastructure refers to the fundamental facilities and systems serving a country, city, or other area; including the services and facilities necessary for its economy to function. It is composed of public and private physical improvements and telecommunications.

Technological Growth/Progress

Economic growth models (the Solow growth model for example) often incorporate effects of technological progress on the production function.

Developing Countries

A country based mostly upon agriculture who is seeking to become more advanced economically and socially.

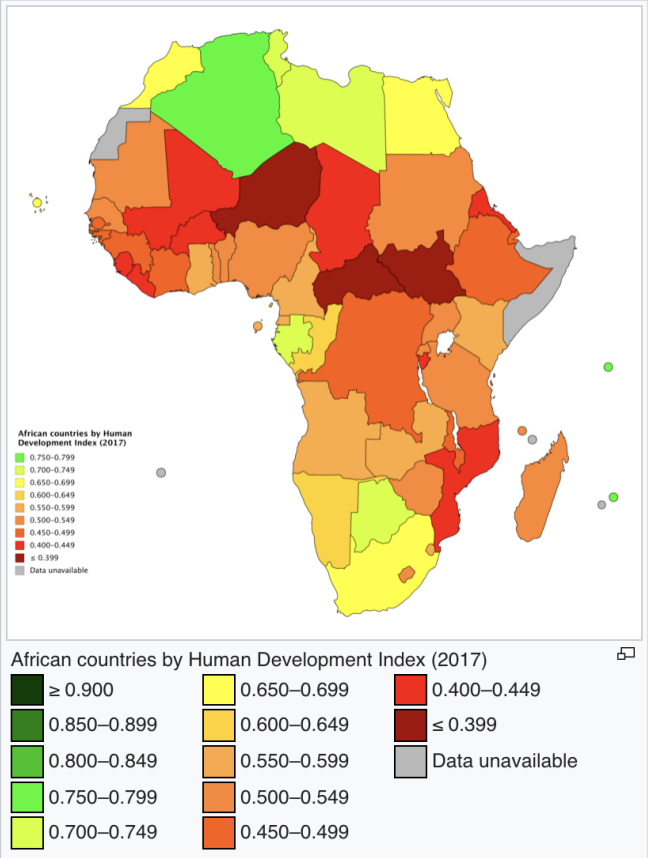

Figure 1: African Countries by Development (2017)

Digital Age

The digital age, also known as the information age, is defined as the time period starting in the 1970s with the introduction of the personal computer with subsequent technology introduced providing the ability to transfer information freely and quickly.

General Overview

Africa's growth continued to increase rising from 3.7 per cent in 2013 to 3.9 per cent in 2014. The performance was underpinned by improved macroeconomic management, diversified trade and investment ties with emerging economies among other factors. Africa's social development indicators reveal the weakness of the observed economic performance: high unemployment and poverty coexisting with robust growth. This is a paradox.

During the past four years South Africa has become cumulatively more involved in the ECA. Mutually beneficial visits are now taking place, especially at the technical level in the areas of science and technology, information technology, telecommunications, agriculture, finance, food security, good governance, gender affairs, agriculture, fisheries, nuclear technology, energy, mining, road safety, transport, civil aviation, environmental protection, tourism, trade and regional integration.

While technical cooperation at the senior official and NGO levels is expanding, participation at policy level has been very disappointing and no Minister has attended the Commission Ministerial meetings held annually until now and biennially from 1998 onward. The Commission meeting lays down policy directives for the running of the ECA during the year ahead. South Africa's absence sends out a noncommittal message in respect of the African Renaissance and is partly attributable to the fact that no established one specific political officer bearer has so far accepted overall responsibility for South Africa's role in African multilateral economic development, especially in the African Economic Community.

History & Developments

Africa has the world's oldest record of human technological achievement: the oldest stone tools in the world have been found in eastern Africa. The history of technology in Africa since then has, however, received relatively little attention compared to other regions of the world, despite notable African developments in mathematics and architecture, and other fields.

Over the last few decade, Africa as a whole has undergone a revolution in information and communication technologies. Between 1995 and 2005, private investors and operators invested around $25 billion with the purpose of technological growth.

Central African Republic (CAR)

There are several reasons why the CAR is in such a state. However high among them is that it's Africa's most remote country, with nearly no connections to the outside world.

Even concepts struggle to cross its borders. quick web and mobile-phone reception is on the market solely in and around Bangui (The capital city). Its folks are mostly illiterate. It is, in short, a rustic that technology has passed over.

The primary style of those new prospects came once mobile phones swarmed across the continent a decade past. Within some short years many countless folks were ready to phone and text for the primary time, bypassing noncompetitive state-owned phone firms that unbroken customers looking ahead to landlines indefinitely. And leapfrogging over recent technologies and business models with mobile phones quickly created different varieties of leaps attainable.

The monetary support going into African technology comes not from philanthropists however from realistic investors searching for engaging returns. In 2016 African technical school corporations raised a record of $367 million though paltry by the standards of geographic area, this can be serving to stimulate the putting in place
of corporations like Flutterwave, a Nigerian payments company, and Zipline, that uses drones to deliver blood to clinics in Rwandese Republic.

To be sure, the argument that continent will catch up with the West through technical creative thinking has several critics. To start with, many countless Africans are still while not power or safe water. Corruption and misgovernment are widespread, and too several economies depend upon artifact exports. Moreover, technology is advancing much more slowly in this continent than it's within other parts of the world.

The gaps have been widening in the recent years.

“The economic condition gap may be a technology gap,” says Kwabena Frimpong Boateng, Ghana’s science and technology minister. The relevancy of technology and economy is unavoidable. It is crucial that the economic infrastructure is developed in order for any technological improvements to take place.

Additionally, it is a data and education gap. If the education system cannot prepare children for jobs in a very technical school economy, continent risks falling even any behind.

Issues in industrializing through trade

Two but related challenges facing the continent are to maintain the strong economic growth and to transform it to productivity-induced sustainable, inclusive, employment-generating, poverty-reducing, and environmentally-friendly growth. The greatest deficiency of the current growth episode is its inability to promote structural transformation of the economies of the region. Rudimentary agricultural practices and provision of services dominate the structure of African economies. This overt dependence on traditional agriculture and services sectors can only support limited growth. Industrialization with its capability to generate direct and indirect employment, strong forward and backward linkages with other sectors of the economy including external sector not only promises to transform African economies but also to ensure that growth translates into sustainable development.

UN Involvement, Relevant Resolutions, Treaties and events.

United Nations Economic Commission for Africa (ECA)

The ECA is the regional arm of the United Nations, mandated to support the economic and social development of its 53 Member States, foster regional integration, and promote international cooperation for Africa's development. Established in 1958 and based in Addis Ababa, Ethiopia, ECA is one of five regional economic commissions under the administrative direction of UN Headquarters. It reports directly to the UN Economic and Social Council (ECOSOC) through the Conference of African Ministers Responsible for Economic and Social Development and Planning, and convenes a number of intergovernmental organs and committees.

South Africa, the founder member of the ECA, resumed formal participation in the work of the ECA at its 30th Session, encompassing the 21st Conference of Ministers, in Addis Ababa on 1 - 4 May 1995 after being expelled in 1963. South Africa has various benefits to gain from the research and organizational abilities of the ECA Secretariat and its access to UN funding and logistical support (e.g. through ECOSOC). The ECA presents an inclusive African forum and valuable research and coordination center. Research documents already include specific references to South Africa.

Relevant Treaties/Protocols

Convention concerning the Protection of the World Cultural and Natural Heritage
Convention for the Protection of Cultural Property in the Event of Armed Conflict
A biennial Conference of Ministers, the main legislative body, is attended by all Ministers of Finance, Planning and Development of the Member States. At this Conference policy matters on economic and social affairs are discussed and prioritized. All Member States are expected to be represented by their Ministers. Unfortunately, no Minister from South Africa ever attended these ministerial conferences since we rejoined the ECA in 1995.

The Conference of Ministers is advised by the Technical Preparatory Committee of the Whole and there are Sectoral Ministerial Conferences, advised by appropriate committees of officials, to assist the functioning of the Commission. All Member States are also expected to be represented by their experts at these meetings. South Africa is fairly represented by experts at this level.

The ECA is parent to the Abuja Treaty calling for the harmonization and rationalization of regional groupings and an African Economic Community. The possibility of an African Economic Community, and perhaps an African Parliament (also mentioned in the Treaty) will have to be considered.

South Africa will have to prepare its position on the Treaty and subsequent protocols (free movement of persons, rights of residence and establishment; transport and communications; rules of origin; customs cooperation; industry; and on relations between the African Economic Community and sub regional economic communities).

Timeline of Events

1990-1993: PADIS; Implemented a pilot project in electronic networking in Africa, linking some 18 African Institutions in a FIDO-net based network. Through this project, more than 24 African countries were able to install electronic networks

1996: The LELAND Initiative. The US spent over $15 million to connect the 20 African countries to the Internet.

1996: AISI (African Information Society Initiative) is formed as an action to advance the framework that has been the basis for information and communication in Africa.

1997: Acacia Project is launched. A dedicated program to experimentation and learning in Africa. (A monitoring program, ELSA is later formed that identifies success and failures in the regions and which will determine the ongoing operations in Africa.

2000: SDNP Programme; Reached close to the African Nations in efforts to promote greater use of ICTs for sustainable and human development.

2001: The new partnership for Africa's Development (NEPAD) is created; adopted in Lusaka, Zambia

Possible Solutions

One solution could be **creating a shift in the structure of the economies**. Economies have followed a growth flight that reworked the economic structure from agriculture to producing to services. The twenty first century introduces the subsequent economic structural shift, wherever the worth are driven by digital assets, intellectual and data merchandise, and data. this variation poses each opportunities and threats to the economic process of rising markets and developing economies. On one hand, technology will facilitate countries overcome several barriers to growth across the board terribly quickly: from on-line education to maternal health following, from food following on the worth chain to drone delivery of medicines, from the availability of presidency services through mobiles, to access international markets by producers. On the opposite hand, the digital divide separating economies that may adapt to new technologies to people who cannot exasperate international inequalities, produce financial condition traps, and exacerbate vicious cycles of financial conditions.

Utilized within the digital age, technology has altered what ancient labor seems like. The twenty first century saw the arrival of shoppers marketing merchandise and services to alternative shoppers at a worldwide scale, acting each as producer and client. Among internet-facilitated peer-to-peer exchanges, shared economies enable optimization of underutilized resources by sharing access to merchandise and services among users. Shared economies blur the lines between formal versus informal sectors, producers and shoppers, and employers and workers. Not solely will this new economic structure blur these lines however it conjointly raises participation within the economy. Now, African countries are already a number of the foremost active participants in international outsourcing platforms like Upwork, and also the Nigerian government launched a "Microwork for Jobs initiative" Naijacloud in 2013. With these increasing international job opportunities, it's imperative to take a position in education, significantly in

STEM (science, technology, engineering, and mathematics) and language skills to make sure fight within the future digital international economy.

Economic progress in 2018 depends on the digital adoption in the public sector, even on the non-public sector to ensure a cohesive digital setting for growth and to maximize human welfare. “Govtech” could be a growing space of technology that aims at increasing effectivity and potency of presidency functions. Particularly, the block chain technologies facilitate the expansion of localized networks that cut back the requirement for third-party verification and minimize paperwork. If the net currently offers means that of human activity like never before, it's dynamic could mean that governments, citizens, and also the non-public sector have interaction, similarly facilitating international action, coordination, and implementation.

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