

# **GROUP 41**

**Tsinghua university certificate program**

## **Innovation & Entrepreneurship for Digital Economy Project**

### **Constraints to Innovation and Entrepreneurship: the cases of Ethiopia, Ghana, Guinea, and Nigeria**

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**Title: Constraints to Innovation and Entrepreneurship, the cases of Ethiopia, Ghana, Guinea and Nigeria**

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## **Abstract**

Innovation and Entrepreneurship have played key historical roles in human social, economic, political, and technological progress. They have also contributed to almost all aspects of human life and sciences, both social and natural. The number of Innovation and Entrepreneurship activities and the environments that facilitate them helped countries grow apart in almost all these aspects, some leaping forward and others remaining stagnated. Although there have been several studies showing the significance of Innovation and Entrepreneurship in socio-economic progress, there are very limited studies that thoroughly discuss the constraints to innovation and entrepreneurship, especially in developing countries context. In this project, we discuss the constraints to Innovation and Entrepreneurship in developing countries, with particular focus on Ethiopia, Ghana, Guinea and Nigeria

## **Key Words:**

Constraints to Innovation and Entrepreneurship, Innovation, Entrepreneurship, Developing Countries, Socio-Economic Progresses, Ethiopia, Ghana, Guinea, Nigeria

## 1.0 Introduction

Ethiopia is located in the North East and the Horn of Africa and has an estimated population of 110 million. Ethiopia has been one of the fastest-growing economies in Africa over the past 2 decades. However, Ethiopia has a very long political, economic, and cultural history that explains its underdevelopment of the economy and innovation infrastructures. It is the only major African country that has never been colonized by European colonial powers. This makes Ethiopia home to withhold local culture and values. It has over 80 different ethnicities, over 80 distinct languages, and over 200 language dialects. However, these contributed to the underdevelopment of innovation and entrepreneurship infrastructure. The country didn't have good governance and fair institutions for centuries. A specific ethnic group has been ruling over others without fair treatment to their language and culture. This led to a long time civil wars (Abbink, 1993; Tuso, 1997). Also, it destroyed the country and made it one of the poorest countries in Africa. There was government change in 1991 that led to the recognition of all ethnic groups in the country. However, ethnic recognition was only theoretical. The government practice was further repression and economic exclusions of those who don't support the regime. The inconsistency leadership style led to the underdevelopment of the infrastructure and institutions that are vital to innovation and entrepreneurship.

Ghana is a West African country which has over the past few decades been one of the fastest growing economies in sub-Saharan Africa, and according to Reuters the country is set to become the fastest growing economy in the world in 2018 with a predicted real GDP growth of 8.3% (Wroughton, 2018). Besides this, the country is also set apart from other countries in the region as “west Africa’s haven of stability” (Hirsch, 2013). Compared to several nearby countries, such as Nigeria and Côte d’Ivoire for instance, Ghana is considered a more politically stable environment, due to its history of democracy and smoothly managed elections, which provides incentives for foreign investment and business. However, the country still has a number of institutional problems in common with its neighbors. This affects entrepreneurs as a result of corruption and financial mismanagement by governments.

Ghana’s GDP growth and the country’s ability to reduce poverty by 25% in 20 years has been attributed to the market-based activities. This is specifically pulled by private micro and small enterprises and enabling enterprise policies by successive Ghanaian governments (Chironga et al., 2011, Adomako et al, 2015). The country has received praise in the business press and other publications because of its success in economic transformation policies.

Furthermore, the National Entrepreneurship & Innovation Programme (NEIP) is a flagship policy initiative of the Government of Ghana. Its primary objective is to provide an integrated national support for start-ups and small businesses. NEIP primarily focuses on providing business development services; startup incubators and funding for young businesses to enable them grow and become successful. The National Entrepreneurship and Innovation Programme (NEIP) is therefore set within the context of Ghana’s long-term strategic vision of consolidating

its middle-income status, building an industry-driven economy capable of providing decent jobs that are suitable and sustainable for development (NEIP, 2018). This Programme cuts across all the fields thus IT, Arts and Media, Agriculture, Health, Business services, Food and Hospitality, Construction, Manufacturing and Fashion.

However, this initiative has only benefitted few Ghanaians since its inception resulting in several constraints for innovative and entrepreneurship development Ghana. It is by this view that this area in Ghana's development ought to be researched

Conakry (2019) asserted that, Africa is by far the youngest continent in the world with 200 million citizens aged 15 to 24 years. This figure is projected to double by 2045. Such is the case in Guinea, where 70% of the country's 13 million citizens are under the age of 35. This raises the issue of economic opportunities available to these young people who are entering the job market in increasingly high numbers every year. It is estimated that over 60% of young Guinean graduates are unemployed. This often stems from a mismatch between their skills and employers' expectations.

The tragedy behind the present form of education in Nigeria is questionable. Few out of many final year project carried out by students every year rarely solve pertinent problem compacting with the country. Many curriculums still operate with the content that do not have a stand with what the 4<sup>th</sup> industrial revolution skills demand. With persistence increase in population of Nigeria and more than 60 % comprise of teenagers and youth, there is need to make innovation and entrepreneurship the core value of the youths so as to create more jobs and build a sustainable society. This is in line with the submission of Isabel Neto, World bank senior digital development specialist and a co- author that, as Nigeria remain the biggest economy in Africa with the largest population of youths, Nigeria is in the right fit model to build a good and strong digital economy which will help the country to grow further. Presently, the initiative driving digital economy in African and Nigeria is "DE4A" with strategic interest in digital skills, digital infrastructure, digital financial service, digital entrepreneurship and digital platforms. According to Nigeria still remain the only country in Africa and the

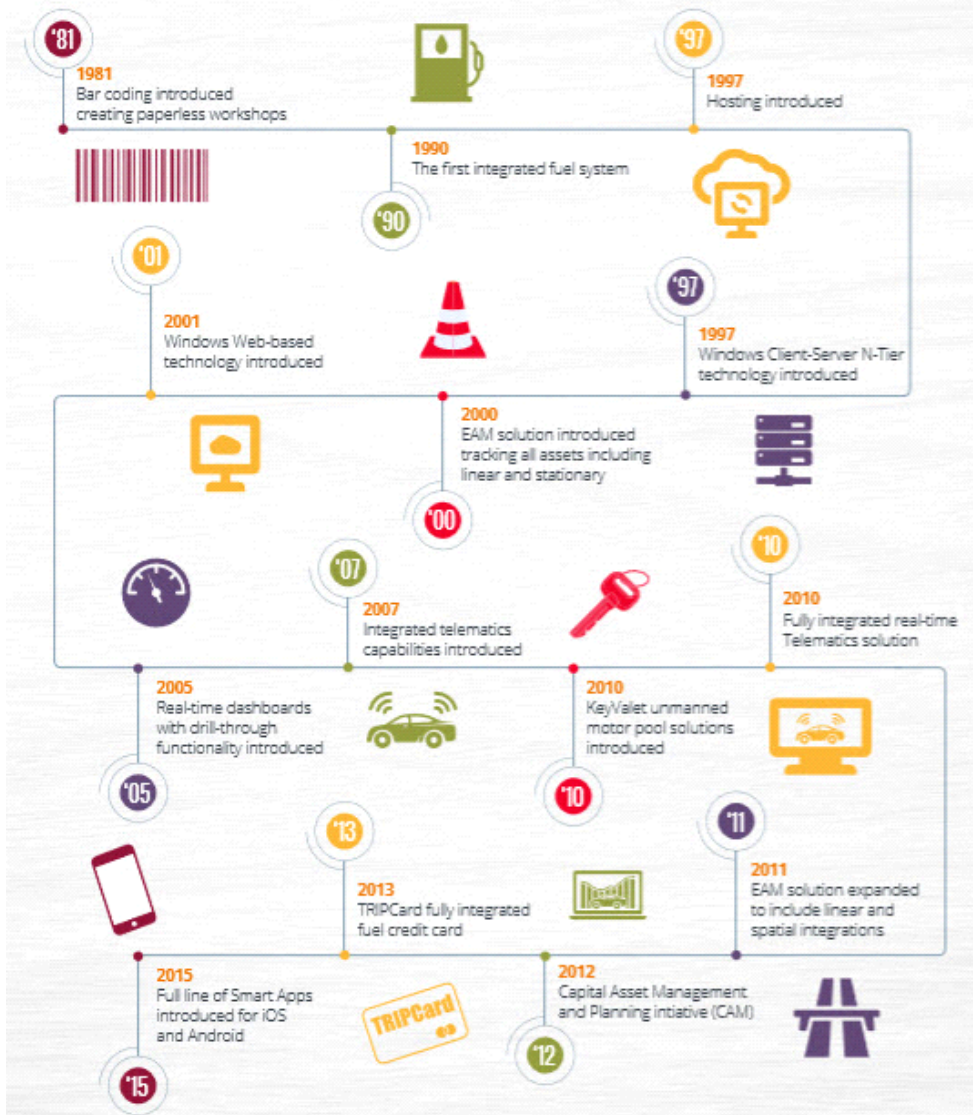
## **2.0 Literature Review**

### **2.1 History and Concept of Innovation**

Innovation and Entrepreneurship have played key historical roles in human social, economic, political, and technological progress. They have also contributed to almost all aspects of human life and sciences, both social and natural. According to Galindo & Méndez (2014), Innovation and Entrepreneurship play important role in economic growth. Innovation and Entrepreneurship help to improve public services (Windrum & Koch, 2008). Innovation and Entrepreneurship contributes to all sectors, even in fashion industry (Ünaya & Zehirb, 2012). Innovation and

Entrepreneurship have also evolved over time.

**Figure 1: The history of Innovation**



The main component over approximately the last half a century.

(source: asset works)

As the world becomes more globalized and complexity and interdependence increases, the role of Innovation and Entrepreneurship also increases. They become key tools to survive, evolve and succeed in such a world.

*We are living in a complex and dynamic world in which innovation and entrepreneurship are occupying a decisive role for economic development. According to Joseph Alois Schumpeter “carrying out innovations is the only function which is fundamental in history”. He also accented that, It is entrepreneurship that “replaces today’s Pareto optimum with tomorrow’s different new thing”. Schumpeter's words that entrepreneurship is innovation have never seemed so appropriate as the nowadays, when modern capitalism is experiencing a serious crisis and lost his strength during last subprime and euro-debt crises.*

-- KAROL ŚLEDZIK

Although there have been several studies showing the significance of Innovation and Entrepreneurship in socio-economic progresses, there are very limited studies that thoroughly discuss the constraints to innovation and entrepreneurship, especially in developing countries context. This project attempts to contribute to reducing this gap.

Gadrey (1994) and Gadrey et al. (1995) undertook the investigation of innovation in service firms in France in 1993 as part of a project for the Ministry of Education. The investigation included the insurance, banking, electronic information services and management consultancy industries and concluded that innovation was taking place in all of them and that innovation activities spread throughout the organizations. Innovation of services is a central component of the strategy in successful firms and recent research confirms its meaning and importance for every organization or firm. Innovations can manifest themselves as changes in the capabilities of a firm that present the key to success in the end, along with service and product development, which should identify and understand the value-creational processes (Gustafsson et al., 2012).

### **2.1.1 Product Innovation**

New products play a crucial role in the economy of countries. Developed countries were once the source of most new products; however, developing countries are today producing products that are significantly cheaper than their western equivalents (Ács et al, 2017). A problem often discussed in regard to entrepreneurship in developing countries however, is that many of the products and/or services are not new, but rather copies of already existing ones. The product innovation component poses the question, is the country able to develop new products and integrate new technology?

### **2.1.1 Process Innovation**

Applying and/or creating new technology is another important feature of high-growth potential

startups. The first aspect of the process innovation component deals with the question of whether businesses in a country use new technology. In other words, are new technologies available to entrepreneurs in a given society?

The second issue of the component is the question of whether businesses are able to access high quality human capital. This question is especially relevant for developing countries and particularly Ghana, as ‘human capital’ was the weakest area of all 14 components for the country in the Global Entrepreneurship Index 2017 (GEDI, 2018). Thus, according to Ács et al. (2013), improving the quality and availability of human capital would be the most vital aspect for policy makers in Ghana

## **2.2 Entrepreneurship**

Entrepreneurship does not always include innovation (Connors & Williams, 2016). It has been the practice of designing, initiating and running a new business, such as a setup company offering a product, process or service for sale or hire. While definitions of entrepreneurship normally center on the launching/running of new businesses and bringing up new business ideas in order to stay in business, a considerable percentage of businesses have to close up due to lack of innovative ideas, bad business decisions, lack of market demand, an economic crisis – or an amalgamation of all of these

Entrepreneurial activity is largely dependent on the institutional environment in a country (Henrekson, 2007). One of the earlier researchers who have contributed largely to the development of this view is William J. Baumol. Previous research used to imply that a slowdown in economic growth was due to a decline in entrepreneurship, which occurred for unknown reasons. Baumol however, introduced the notion that entrepreneurial activity depends heavily on “the rules of the game” that is, the prevailing reward structure in the economy, i.e. factors that are largely shaped by policy (Baumol, 1990 p.894). These formal rules (policies), along with more informal norms, are created by institutions with the aim of reducing uncertainty, and they tend to provide both incentives and barriers in the environment (North, 1990).

At the heart of entrepreneurship are the entrepreneurs responsible for opportunity spotting and accumulating the factors of production necessary for new ventures to be created. They are also responsible for decisions concerning strategy and innovation. In SMEs, the entrepreneur is likely to have an exaggerated impact on the strategy of the firm; thus, any attempt to investigate the innovation ought to include analysis of the characteristics of the entrepreneur (Donckels and Frohlich 1991).

Sackey (2005) has demonstrated that human capital endowment, measured by schooling attainment, is associated with lower poverty. Takyi-Asiedu (1993) also noted that in sub-Saharan Africa elite parents are more likely to encourage their children to aspire for a university



education. It is therefore anticipated that entrepreneurs from middle or upper class families will have higher levels of human capital and will thus be more likely to introduce innovations.

### **3.0 Methodology**

This project's methodology involves three main aspects: (i) information sources, (ii) the method of analysis, and (iii) coordination and compilation of the project document. With respect to the information sources, due to time constraints to collect data, this project uses mainly secondary sources of information and documents thus a search on Google Scholar and review of about 30 journal articles and technical reports was conducted using combinations of the following keywords; Constraints to Innovation and Entrepreneurship, Innovation, Entrepreneurship, Developing Countries, Socio-Economic Progresses, Ethiopia, Ghana, Guinea, Nigeria. Review of references from relevant articles resulting from this search produced additional relevant articles. Articles and reports were included in the review if they addressed one of the three work domain themes of business, entrepreneurship and innovation of developing countries in African over a period of time. In terms of the analysis, we mainly use descriptive analysis. This is again, due to time constraints to gather the data to analyze those using empirical methods. Finally, the coordination and compilation have all been done through remote communication and coordination as the team members are located in different countries due to international travel restrictions to physically meet and work together.

### **4.0 Constraints to Innovation in Ethiopia, Ghana, Nigeria and Guinea**

In this section we briefly discussed the constraints for 4 African countries which are our focus.

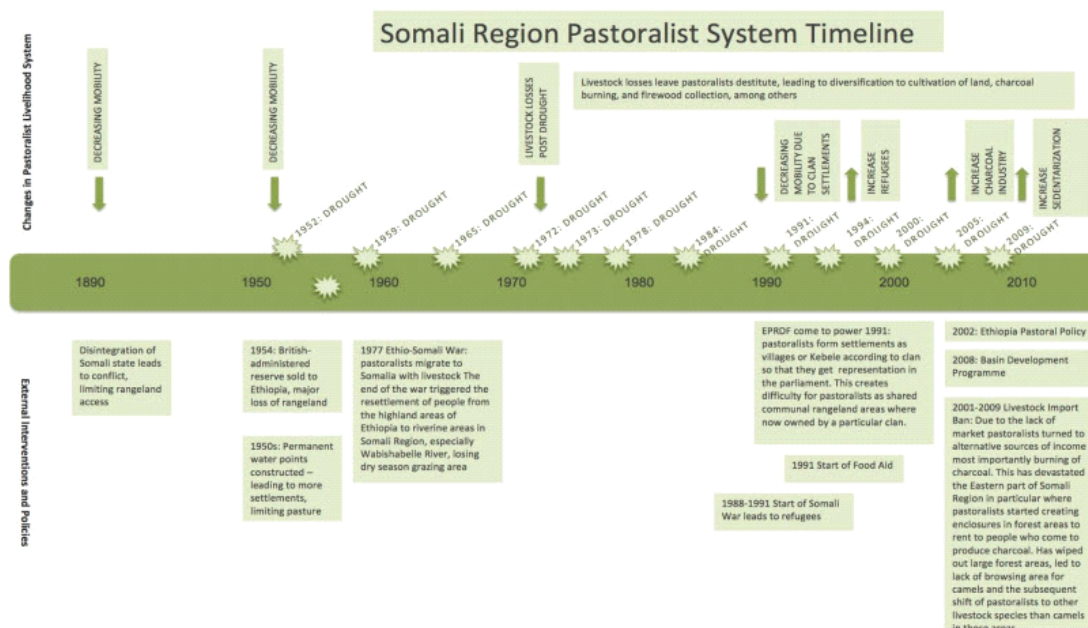
#### **4.1 Constraints to Innovation and Entrepreneurship in Ethiopia**

As we have discussed in the previous sections, Innovation and Entrepreneurship have played key historical roles in human social, economic, political, and technological progress. They have also contributed to almost all aspects of human life and sciences, both social and natural. The number of Innovation and Entrepreneurship activities and the environments that facilitate them helped countries to grow economically and benefit their populations. However, most developing countries, including Ethiopia have not benefited from Innovation and Entrepreneurship. In Ethiopia, there have been several factors that have been constraints to Innovation and Entrepreneurship. Some of them are physical geography, human geography, and culture as well as political factors.

Ethiopia is one of the Sub-Saharan African developing countries. It is located in the North East and the Horn of Africa and has an estimated population of 110 million. Ethiopia has been one of the fastest-growing economies in Africa over the past 2 decades. However, Ethiopia has very unique geography, long political, economic, and cultural history that explains its underdevelopment of the economy and innovation infrastructures. It is the only major African country that has never been colonized by European colonial powers. This makes Ethiopia home to unspoiled local culture and values. It has over 80 different ethnicities, over 60 distinct

languages, and over 120 language dialects. All of these could have contributed to the development of innovative institutions; however, what happened in Ethiopia is the opposite. For example, Ethiopia is known as the water tower of Africa. It is the source of the major source of the longest river in the world. However, Ethiopia is known for frequent drought disasters. The water resources are not utilized innovatively for innovative purposes. Figure 2, shows this tragedy.

**Figure 2, the tragedy of drought in Water Town of Africa, Ethiopia**



Source: Detlef Müller-Mahn and Million Gebreyes (2019)

The diverse cultures are also used to create conflicts instead of using it for innovation and exchange. There are several more constraints that can be discussed, but due to the scope of this project, some additional factors are summarized as follows.

- Absence of sufficient basic infrastructures such as electricity, transportation, market, and finance and property rights that promote innovation and entrepreneurship. Civil war diverted the countries resources from investing in developing these infrastructures.
- Political exclusion disincentives educated youth who are potential entrepreneurs. As much as 50% of top-performing university graduates leave the country and stay abroad. Millions of Ethiopians live in the middle east countries, Europe, the United States, and Australia instead of serving their country, all due to lack of incentives and infrastructure.
- Corruption has been very rampant. Land and even bank loans are offered to those with

political collections.

d) Politicians' involvement in a business is commonplace. People who were poor soldiers two decades ago are millionaires now due to political connection. The political elites used public money to enrich themselves while jailing or extraditing those who attempt to compete with them especially if they are not politically or ethnically affiliated.

e) Absence of capital and skilled labor for innovation and entrepreneurship. Civil wars drained the country's capital and limited the development of training institutions. A considerable proportion of those trained leaves the country due to the aforementioned reasons.

f) Lack of coordination between the public institutions and incentives for innovation and entrepreneurship. This problem still persists.

g) Continued ethnic politics has been emanating from the ethnic-based federal system of the country and hampering innovation.

h) Ethiopia's educational curriculum also doesn't emphasize innovation and entrepreneurship.

All these factors have contributed to draining the country's resources that could be used for the development of Innovation and disincentive potential innovators leaving the country underdeveloped. There has been political reform since 2018 which was brought up through protests, revolution, and other forms of public pressure. The new prime minister brought about several changes. But those changes are far from enough to encourage innovation and entrepreneurship. Thus, we make some recommendations for the country in the Recommendation section below.

## **4.2 Constraints to Innovation and Entrepreneurship in Ghana**

### **Lack of capital**

Access to capital is difficult across Ghana. In many cases, entrepreneurs do not have the capital to create new products before orders are placed, and therefore are only relying on customers ordering products from brochures or as a result of positive word of mouth from other customers. Creativity without capital is a large barrier to innovation for entrepreneurs in Ghana.

Connors & Williams (2016) explained that, entrepreneurship in Ghana, especially for businesses involving hardware. The lack of capital makes it difficult to purchase materials ahead of customer orders. This seemed to be stifling innovation in this sector, because business-owners are financially constrained to only build exactly what customers order. This also affected their ability to advertise, because they can only show their products through images or brochures, as opposed to having extra physical models to demonstrate to customers.

**Figure 3, Infrastructure Challenges to Businesses in Ghana**



### **Innovation Hub**

Starting a business in Ghana is just the first challenge for entrepreneurs. Infrastructure challenges, including lack of electricity and lack of regular computer access can make creating a business even more challenging. Vital for all businesses is access to electricity. In Ghana, part of the process of setting up a business is purchasing electricity. However, this barrier to entry is extraordinary for the average Ghanaian. Infrastructure challenges create a barrier to innovation because they limit the scope of the business and sometimes even limit the amount of work a single entrepreneur can accomplish in a given amount of time.

### **Education**

In order to better understand Ghana's innovation climate, it is paramount to understand the education system in Ghana. The literacy in Ghana, taken from UNICEF, is 71.8 percent of the population (UNICEF, 2016). However; the literacy also varies significantly based upon the region. For example, the Greater Accra Region and Ashanti region have the majority of the population as literate, while other regions, including the Upper East and Upper West Regions have less than one fourth of the population as literate. Therefore, the climate for entrepreneurship is drastically different between cities like Accra and Kumasi, and those in the northern regions. The needs of the population are different.

Many Ghanaians are employed by the informal job sector, and the apprenticeship system in Ghana is a large sector of the informal job sector, especially for teenagers and this have been another way of education informally. The apprenticeship system poses many challenges to a successful entrepreneur. Although apprentices are incredibly valuable as free or underpaid laborers for the business owner, the business owner is then passing along all his knowledge and business practices to his apprentice. Then, after a certain amount of time of learning from a master, the apprentice can go on and start his or her own business, and take a part of the master's market share

### **4.3 Constraints to Innovation and Entrepreneurship in Guinea**

#### **Being Innovative and Seizing Opportunities**

Some of these young people, like Mariama and Mohamed—both determined and full of innovative ideas—have opted to circumvent these challenges by becoming entrepreneurs in order to create their dream jobs themselves. “I always wanted to be independent and start my own business,” states Mariama who, at the age of 24, would like to create an online platform and mobile application for purchasing and repairing home appliances, putting clients in direct contact with technicians. “I thought about this project because today, in Guinea, no tool exists to connect sellers, technicians, and clients with each other,” she explains. “Recommendations are made by word of mouth and people have to systematically travel around to make the simplest purchase.”

Meanwhile, Mohamed plans to enter the beekeeping business to make honey and other by-products, by installing modern beehives in the Kindia prefecture. “There is enormous potential that is not being tapped at the moment,” affirms this 25-year-old young man. “In 2017, Guinea only officially exported 227 kg of honey. I was inspired by the examples of China, Venezuela, and Mexico, which are major honey-exporting countries.”

Mariama and Mohamed are among 100 winners of the Business Plan Competition (BPC) organized by the Stepping Up Skills Project [*Booster les*

*compétences pour l’employabilité des jeunes* BoCEJ], implemented by the Ministry of Youth. With \$20 million in financing from the World Bank, the project aims to boost the employability and employment outcomes of Guinean youth through programs to build or acquire targeted skills in the most promising sectors such as agriculture, health, and energy.

#### **Customized Support**

Organized in three stages, the competition first offered free entrepreneurship training to 100 young beneficiaries with innovative projects. After this training, the top 25 among them were able to move on to an intensive eight-week course to help them enhance their projects and develop a business plan. A nine-member jury including business owners, entrepreneurs, and bankers then selected the 10 most innovative projects to receive technical support from an

incubator over 12 months.

Personalized coaching from business owners was among the most valued modules, with the key element being advice aimed at providing a better understanding of the opportunities and challenges associated with the Guinean private sector. “This training provided me with specific technical skills needed to become an entrepreneur,” states Mohamed. “I hope to be able to produce as much, if not more, honey than beekeepers in other countries in the sub region within three years! With a lot of perseverance and hard work, I can be successfully self-employed and self-supporting.”

Moreover, in order to ensure the quality of the course offerings in higher education institutions, the project also helped create a national quality assurance agency to oversee the quality of university programs and financed with \$5.4 million USD 15 higher education and training institutions.

“The Stepping Up Skills Project seeks, among other objectives, to improve the effectiveness of training programs in universities and vocational

institutions and to provide professional opportunities to young, job-seeking graduates by strengthening their skills through training, internships, jobs, or personalized support for business creation,” emphasizes Assane Dieng, World Bank Education Specialist. “The World Bank invests heavily in human capital and we are working tirelessly to help Guinea respond to the employment challenges facing its youth.”

In total, more than 20,000 young people will benefit from this project, including 18,000 in pre-service training (vocational and university-level) and over 2,800 unemployed graduates.

#### **4.4 Constraints to Innovation and Entrepreneurship in Nigeria**

##### **•Fast Track Achievement Model**

There is much eagerness on the path of youth to achieve a day success without committing necessary effort.

##### **•Funding**

Presently, Nigeria is one of fastest growing countries with fin-tech startups. Meanwhile, the funding for most of these companies is gotten from investor outside the countries.

##### **•Technical Known/ Skills Training**

The present education is not tailored towards the demand of innovative education. Meanwhile, several skills hub and Tech startups are training youths by building their capacity towards the

right skills through incubation training.

**•Institution Impending Innovation**

From policy to infrastructure, Government which is one of the essential factor for the growth of innovative education and entrepreneurship is not performing her role as expected. Youth are ready and loaded with innovative ideas but with limited resources to achieve their startup growth.

Among all the constraints; funding in terms of capital for startups remains very crucial in all the 4 countries. Again the issue of Infrastructures development remains key to National development in terms of Innovation and Entrepreneurship.



## **5.0 Summary**

In Ethiopia, political history, conflict-prone ethnic diversity, lack of good governance, underdevelopment of infrastructure have been the main constraints to innovation and entrepreneurship, and lack of the infrastructure that promotes them. Political solutions to ethnic conflicts, establishing rule of law, reviewing the education curriculum in such a way that it promotes innovation, and working with international experienced partner governmental and private organizations are key to overcoming these challenges.

In Ghana, entrepreneurship does not always include innovation. Starting a business in Ghana does not mean that the business is significantly innovative in the field or different than those around it. However, more innovative entrepreneurs seemed to receive more recognition and be doing better overall.

Again, Access to capital is difficult across Ghana. In many cases, entrepreneurs do not have the capital to create new products before orders are placed, and therefore are only relying on customers ordering products from brochures or as a result of positive word of mouth from other customers. Creativity without capital is a large barrier to innovation for entrepreneurs in Ghana.

Moreover, infrastructure challenges include a lack of internet access nationwide and common incubators. This creates an infrastructure challenge to software-focused entrepreneurs and impacts where a software company would want to be located in Ghana.

In Nigeria, from policy to infrastructure, skills, funding and achievement; Government which is one of the essential factor for the growth of innovative education and entrepreneurship is not performing her role as expected. Youth are ready and loaded with innovative ideas but with limited resources to achieve their startup growth.

In Guinea, Government providing training to citizens and personalized coaching from private business owners was among the most valued modules, with the key element being advice aimed at providing a better understanding of the opportunities and challenges associated with the innovation and Entrepreneurship in the Country.

## **6.0 Recommended solutions**

Ethiopia has been political reform since 2018 which was brought up through protests, revolution, and other forms of public pressures. The new prime minister brought about several changes. But those changes are far from enough to encourage innovation and entrepreneurship. Thus, our recommendations include the following.

- i) Closer government-to-people and people-to-people cooperation mechanisms are needed.
- ii) Property rights reforms and other incentives to encourage innovation and entrepreneurship

through startup funds and other incentives such as tax breaks would be very valuable.

iii) Ethiopia needs to take lessons from other countries and cooperate with firms and governments with success experiences (for example in China).

iv) Improving the university curriculum in such a way that the training prepares graduates to start their own businesses instead of always looking for jobs or trying to leave the country as it has always been.

### **Providing capital**

Investment in software businesses also allows for much more flexibility on capital to start a business and therefore should be encouraged.

However, if one invests in a certain type of mechanical or hardware business, it can be more difficult to pivot directions later and require more capital investment.

On the side of Ghana Government, it created the National Entrepreneurship and Innovation Programme (NEIP) in 2018 but it only covered few individuals who meet the Programme requirement. For this reason more of these brilliant innovators are still struggling with capital to set up their businesses. We therefore urge the government to allocate more funds to cover most of the people who have business ideas in Ghana.

### **Infrastructure availability**

These infrastructure challenges seemed to be the motivating factor for the creation of start-up accelerators and group-working spaces (incubators) in Ghana. These types of buildings share the cost of internet access, for example, making it worthwhile for the companies involved.

In my view creating these incubators/workspace by Government or NGO's will reduce the burden of individuals who are interested in entrepreneurship to establish with ease.

### **Education**

Formal Education provides not only critical thinkers, but also provides connections to other intelligent and motivated people. It serves as a tool when it comes to entrepreneurship. On the other hand, informal education in Ghana thus through apprenticeship training have also contributed to some aspect of the entrepreneurship and the innovation sector. However a lot of education is still needed for example; new technology on farming and understanding the complexities around food safety (Agriculture) it is necessary that farm education be encouraged. For agricultural businesses, the most successful in Ghana occur when the farmer is well-educated and as a fundamental understanding of the lack of food security of the nation.

By this, the education system should be modified to encourage more entrepreneurship as jobs in the formal sector are less common.

Other recommendations include;

1. Platform for funding should be created for entrepreneurs with innovative ideas.
2. Creation of 4<sup>th</sup> industrial economy hub to train people in different field.
3. There should be a thought leadership program for entrepreneur's aside technological skills.

Suggested Project and innovation that can earnest digital economy for youth

- Journals to innovation/Project
- Soft skills inclusiveness to curriculum
- Awareness of Digital Economy Skills in institution
- Incubation Centers for innovative ideas should be created
- Online Webinars to enlighten people on opportunity in digital economy.

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