

ECONOMIC DEVELOPMENT THROUGH ENTREPRENEURSHIP AND SKILL ACQUISITION

BY

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PROTOCOL

1.0 INTRODUCTION

I count it a great privilege to have been invited to present the 2nd annual lecture in honour of the father of the Ado Ekiti Branch of the Nigerian Society of Engineers , Engr. Dr. A. A Esan. Our path first crossed at the University of Ilorin in the early 1980s. He was a lecturer in in the Faculty of Engineering while I was a student in same Faculty. He was later our Dean at the Faculty of Engineering of the then Ondo State University (Now Ekiti State University, Ado-Ekiti).

- ▶ Today's lecture is unique for the following reasons
 1. Presenter is a mentee of Dr. Esan
 2. It addresses the problem of economy which is one of the two major problems in the country. The other is security
 - The major problem of Nigerian engineers is lack of skill
 - There is a gap between university education and the real world. University education is mainly paper qualification
 - Engineers should be trained to see opportunities and create wealth
 - SWEP, SIWES and pupilage including NYSC are not being properly implemented.
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- Economic development can be achieved through wealth creation
 - the ingredients for creating wealth include; entrepreneurship, adequate skill and functional infrastructure.
 - Lack of relevant skills is the major challenge of graduate engineers.
 - Anyone that can solve problems is already creating wealth.
 - Engineers should be able to identify opportunities, acquire relevant skills and be productive
 - Paper qualifications are not enough.
 - Skills can be acquired from less educated people.
 - Needed by Nigerian engineers to be productive are skills, identification of opportunities and risks and mobilize human and material resources
 - For any nation to be productive, the citizens should be able to create wealth and be productive
 - This paper is about economic development of individuals and the nation
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1.1 Entrepreneurship

- ❖ Entrepreneurship is the creation or extraction of value. It is a change extracting risk beyond what is normally encountered in starting a business.
- ❖ It has to do with how to identify opportunities, identify risks and likelihood of success and mobilize resources
- ❖ Entrepreneur is an innovator, a source of new ideas, goods, services and business/or procedures.
- ✓ This is different from just starting business or copying what is in vogue
 - There is a relationship between Entrepreneurship and Socio-economic development
 - Unemployment rates in India, China and Nigeria in 2022 are 7.9%, 2.7% and 33% respectively

1.2 Skill

- ❑ These are competencies acquired through education, training and experience.
- ❑ Singapore – World leading international financial centre
- ❑ South Korea and Taiwan- world leaders in manufacturing electronic computers and devices
- ❑ This is where competitive advantage is important

2.0 INFRASTRUCTURE AND ENTREPRENEURSHIP

- ❑ There is a direct Correlation between Infrastructural development and economic development
- ❑ Energy and telecommunication are needed for businesses
- ❑ In addition to infrastructure is the issue of comparative advantage

2.1 Infrastructure and National Development

- Infrastructure is bed rock of Entrepreneurship and spur economic development
- It enhances productivity
- It has direct effect on GDP
- Asian Development Bank recommends 6% of GDP spending on infrastructure.

2.2 Overview of Infrastructural Development in Nigeria

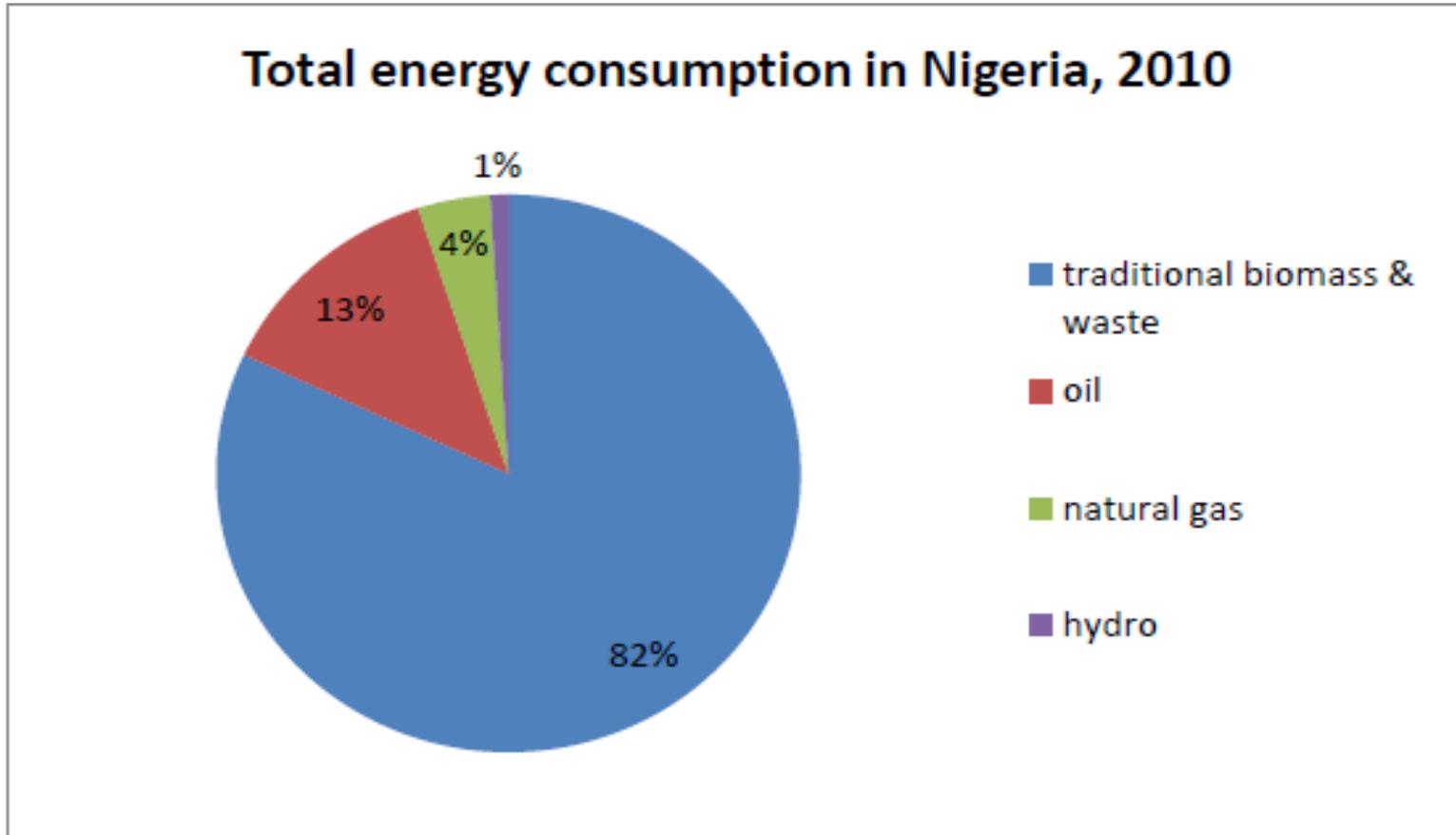
- ❖ Low investment in Infrastructure
- ❖ Nigeria Infrastructure spending contributed only 1.9% per annum to GDP
- ❖ Akinyosoye (2010) recommends Infrastructure spending to increase to 18% to bridge gap with Asian Countries in 15years and 24% to bridge the gap in 10years
- ❖ Unemployment rate high in Nigeria

2.2 Energy

- ❑ Energy is one commodity on which provision of goods and services such as industrialization, agricultural production, Infrastructural development and entrepreneurship depend.
- ❑ No country can move towards industrialization, macroeconomic stability and economic growth without reliable electricity
- ❑ **2.3.1 Nigeria's Energy source and consumption.**
 - In 2011, EIA estimates energy consumption to be 111,000 kilotons of oil equivalent.
 - Biomass and waste accounted for 83%
 - Brazil and Pakistan, two countries with similar population sizes generate 24 times and 5 times more power than Nigeria

Figure 1.0 presents energy consumption by distribution in 2010

Figure 1.0



- Nigeria is the third largest country without access to electricity
- Only 10% of rural house hold and 30% of the country's population have access to electricity
- 79% of energy generation in 2012 was from fossil fuels and about two thirds of thermal power is derived from natural gas, while rest from oil Nigeria ranks 46th in the world in Co₂ emission with 73.69 metric tons released in 2011
- These is need for focus on renewable energy

Table 1.0 compares Nigeria with other countries in per capital consumption of electricity

Table 1.0

Energy per Capita in some Countries

S/N	Country	Energy Per Capital (Kwh)
1	Iceland	51,142.11
2	Canada	14,350.58
3	U.S.A	12,185.94
4	South Korea	9,165.99
5	Russia	7,285.73
6	Japan	6,763.79
7	Israel	6,221.83
8	Nigeria	144
9	Ghana	301.32

2.3.2 Comparison of Indonesia and Nigeria

- ▶ Comparing Nigeria with Indonesia in the last forty or fifty years will be contrasting

In 1965 both countries were poor and raw materials based with GDP of \$4-5 billion with population in the neighborhood of 100million each. Oil exports were similar at about \$500 million

- ▶ In 2010, Indonesia non oil exports stood at \$30billion while Nigeria was yet to reach \$ 1billion. Indonesia's total GDP has grown to \$225billion (about five times that of Nigeria). Indonesia generates seven times more electric power than Nigeria

Table 2.0 shows that industry contribution to GDP is still low in Nigeria compared with Indonesia and India. Comparing the GDP of Nigeria with Indonesia and India put Nigeria far behind as shown in Table 3.0

Table 2.0: GDP Composition by Sector (percentage)

	Nigeria	Indonesia	China
Agriculture	24.14	13.7	7.3
Industry/manufacturing	28.22	41.9	39.4
Services	46.39	44.4	53.3

Year 2020/2021**Table 3.0 GDP of Some Selected Countries**

S/N	Country	GDP (US\$) No in the world	
1	USA	23.00 trillion	1
2	China	17.7 trillion	2
3	France	3.06 trillion	3
4	India	3.0 trillion	4
5	Indonesia	1.15 trillion	5
6	Nigeria	440 Billion	6

SKILL DEVELOPMENT

To make graduates of engineering to provide solution to local problems and be able to compete globally, there is need to develop competencies in communication skill, leadership, innovative thinking and managerial strategies.

Skills are competencies acquired through education, training and experience. Example is the Igbo traders. There is an interesting story about some tourists in South Africa. They requested to see live elephants. They were driven through jungles to locate elephants. The guide kept explaining the signs and characteristics that will reveal the abode of elephants. He knew so much about the theory of elephants. He spoke English fluently to the tourists. Inside the jeep conveying the tourists was a man without formal education but had some experience about elephants. He kept quiet because he could not speak good English

As the journey continued in the jungle, the man suddenly exclaimed “Elephant is Ova Dere”. Truly, elephant was found there. This is what skill is about. There is a link between skill and wealth creation. Sometimes, I introduced a Ph.D. degree holder in Thermo Fluid to a lady in barbecue business. His Ph.D. thesis was actually on Fish Dryer. The idea was to produce Fish Dryer that will be able to utilize modern technology rather than the old method of charcoal. That would have been a turnaround financially in the life of the man. Unfortunately, the Fish Dryer he produced did not function well. The lady had to return to the manual method of fish drying after wasting money on the Fish Dryer.

A lot of engineers and lecturers in engineering profession cannot create wealth due to lack of adequate skills. They cannot function as consultants effectively due to lack of adequate practical experience. The courage needed is for graduates of engineering to be ready to learn from experienced non-graduates.

3.0 Skill Development

There is need for competencies in communication skill, leadership, innovative thinking and managerial strategies

- ❖ Competencies can be acquired through education, training and experience
- ❖ Example of South African Tourists and Fish Dryer.
- ❖ Major challenge of Nigerian Engineers is lack of skill
- ❖ SIWES and SWEP not been properly implemented.
- ❖ Great disconnect between classroom and the real world.
- ❖ Employers of graduates in Nigeria claimed they are poorly trained.

4.0 RELEVANCE OF ENTREPRENEURSHIP AND SKILLS IN SOCIO ECONOMIC DEVELOPMENT

- ✓ Entrepreneurship and skills needed to develop SMEs
- ✓ Economic development has to do with creativity of the Entrepreneur
- ✓ Lack of Entrepreneurial skills contributed to increase in graduate unemployment in Nigeria
- ✓ SMEs accounts for 80% of industrial base of the developed counties.

✓ In India, SMEs provide employment for about 20million persons, account for about 40% of value added in manufacturing sector, 34% of total national export and 7% GDP.

✓ Problems of insecurity in Nigeria is largely economic

Table 4.0 shows 55.6 percent of SMEs in India are graduate/Diploma holders

Table 4.0 Education Qualifications of Small and Medium Enterprises in Nadu, India.

Educational Qualifications	Percent
Illiterate	8.9
School	20.4
Graduate/Diploma	55.6
Post Graduate	1.8
Professional qualification	13.3

4.1 Development Indices in Some Selected Countries

- Population, growth rate and unemployment rate are needed for planning African countries have similar socio-cultural pattern as shown in Table 5.0

Table 5.0 Socio- Economic Indices in selected countries.

S/N	Country	Population	Population Growth Rate	Unemployment rate
1	USA	325,360,000	0.74	4.3
2	UK	86,000,000	0.75	4.6
3	Germany	81,771,000	0.11	3.9
4	Japan	126,920,000	-0.20	3.1

5.0 WAY FORWARD

- Educational system in Nigeria does not support productivity. NUC needs to look into Top up programmes, and other programmes
- Specialized universities of Technology and Agriculture should remain focused.
- Aggressive development of SMEs should be encouraged by granting enabling environment and incentives
- African market should be a target.
- Universities should collaborate with industries
- Researches should be to solve local problems.
- Government should make use of findings of research
- Government should provide bailouts where necessary. Cost of production should be brought down. Research facilities should be provided
- SIWEs and SWEP should made to function properly

6.0 CONCLUSION

- More SMEs should be encouraged to develop and targeted at African market.
- Nigeria should consider exporting skills as done in 1990s through Technical Aids programme.
- One year training of graduate engineers should be embarked upon like the case of law school but mainly for entrepreneurial skill
- Government should give enabling environment to the private sector to thrive
- Those that will occupy position of leadership should have created wealth and have second address

7.0 Appreciation

I wish to express my gratitude to the chairman of Ado Ekiti Branch of the Nigerian Society of Engineers, Engr Afuye for the opportunity to deliver this paper in honour of our leader and mentor, Dr. A.A. Esan. Dr. Esan has paid his dues as the foundation branch chairman and for his contributions to the development of the engineering profession as an academic and Director of Energy Commission in Nigeria. I join thousands of other engineers to celebrate and honour him and to wish him more years in the service of God and humanity.

I thank you all for listening.