



## NIGERIA MONO-CULTURE ECONOMY AND POST OIL ECONOMY EXPECTATION: THE ROLE OF APPROPRIATE TECHNOLOGICAL ADAPTATION IN RURAL AGRICULTURAL DEVELOPMENT

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### ABSTRACT

Since Nigeria gained independence in 1960 oil remained the main stay, as it continued to generate huge revenue. This has subsumed further efforts or attempts to diversify the economic base. No effort is put in place policy wise in preparation for future economic life without oil revenue, at a time when the oil would possibly dry off; being among the non-renewable resources. It is further observed that leaders, past and present have made no significant efforts for rural agricultural farming and agro-allied processing industries. Efforts are only, made based on imported technologies and foreign expertise to handle agricultural development issues in Nigeria. Ignorance of appropriate technological operation and its relevance for multidimensional development, has consequently left Nigeria totally dependent nation on foreign products and lack of basic production of staple food including wheat, rice, among others which the people hope more on foreign supplies, with Problems of shortage of food, hunger and poverty, lack of job creation which has escalated to all forms of antisocial behavior among the jobless youths. Corruption, conflicts, terrorism, culticism, human and drug trafficking have assumed larger space in the society. It is against this back drop that this paper examines future life expectation and success without oil in Nigeria. It is opinion of the paper that appropriate technology in all rural planned development, should be adapted, especially in agro-based entrepreneurship and processing of food. Policy guide and proper execution in that direction would surmount problems of underdevelopment in all fields. The paper considers CAABA model as most appropriate to issues for home environment, tradition, and cultural oriented development concern. It emphasizes rural – agro-thinking with local science base and technology. Survey method of examination and analysis is utilized through extensive literature review including magazine, texts, books, workshop and internet material. Agro-techno-retract (ATR) model is utilized to complement the CAABA model as both have similar scientific standing support for appropriate technological strategic policy in Nigeria sustainable rural economic life without oil.

### INTRODUCTION

Oil occupies front line of multi-development policy, since its discovery at Oloibiri Community of the present Bayelsa State of Nigeria in 1956. Between 1966-1975 of General Yakubu Gowon's administration onward oil contributed at average of 80 percent of the nation's economy. Nigeria has remained till date, a mono-cultured oil economy regardless. Issues of economic diversification remained strange to past and present leaders alike. Nigerians and leaders of thoughts have remained in the comfort of dependence on foreign made goods at the expense of efforts to develop rural communities through agriculture and agro-allied-processing, appropriate technology to achieve adequate food security and job creation. Evidence of indecisive attitudes and the lack of political will among Nigerian leaders past and present abound. One of such evidence is capture in General Yakubu Gowon, GCFR (2008), a onetime military leader of the Federal Republic of Nigerian. A speech he presented at the first international conference of the Niger Delta University,

Wilberforce Island, Bayelsa State, which was aimed at addressing the issues of Nigerian State, oil Industry and the Niger Delta. In a keynote Address delivered at the opening session, as organized by the political science department; March 11<sup>th</sup>, 2008, in collaboration with the Center for Applied Environmental Research, University of Missouri, Kansas City of United State, in his words:

*There was during my administration an appreciation and understanding of this problem and the need to resolve it. We in deed suggested manners of solving the problems. Specific regulations were put in place to remedy and such regulations were to be reviewed from time to time. Efforts were made to develop the oil producing areas. Both the Federal and State Governments considered and entrenched such efforts and plans in their government development plans. Niger Delta is overdue for development. The plans was earlier put in place during my administration which would have addressed the problems were not only implemented but totally abandoned to the detriment of the region and the nation. This is unlike what seem to transpire in Middle East countries such as Saudi Arabia, Kuwait, Qatar, UAE (Dubai) etc where the desert is turned into a green vegetation and a massive physical and infrastructural development. We should do much more than we are doing today in Nigeria to turn the Niger Delta region into economic development area as it is done in similar parts of the world. The problem however is that the oil industry does not seem to have been managed properly to avoid the problem it has created for example, the problem of environmental degradation due to serious oil pollution, destruction of the echo-system and vegetation as well as absence of physical development of the area can be attributed to poor management of the industry. There is a justification of feeling by the communities in the area that much is taken from them without a corresponding return to benefit to the area.*

However, the above exposed the leadership thoughts and styles; full of appropriate speeches without appropriate planning, guidelines, focus, nor appropriate technological prospects put in place, talks less of a dream of a future Nigeria economic survival without oil. Also, it is evident clear at this point that education and knowledge (Science) become meaningless in any nations if they are not applied to solve development problems, economic, social, political, ideological, and more fully agricultural development. Supporting ongoing, Ekpebu (2008:4), posits the following; referring to Nigeria in particular:

*A country that has failed to very seriously address diversification of its economy in spite of limitless abundance of other sources of income is bound to remain highly vulnerable to the vicissitudes o the location of the oil industry.*

The paper will address the ongoing issues the metrically as below:

1. Appropriate Technology



2. Development
3. Post-oil Economy and
4. Science, models in rural agriculture (CAABA & ATR)

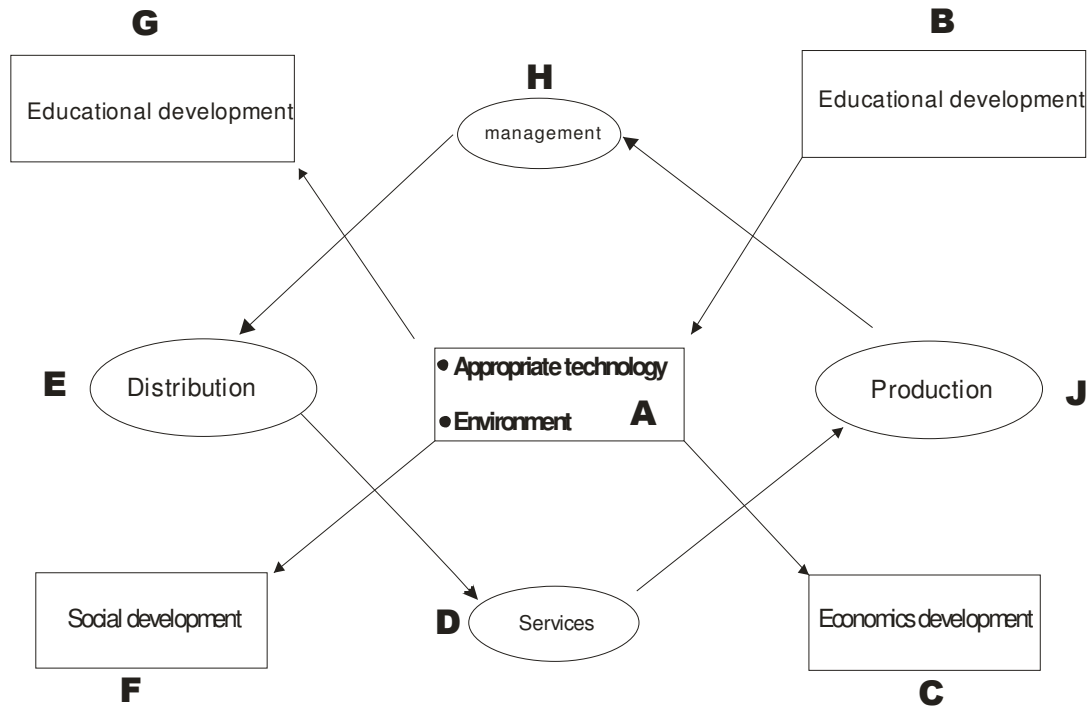
## APPROPRIATE TECHNOLOGY

Technology of production generally helps us to transform, produce and manipulate things. The sign system technology for instance helps us to use symbols, signs or meaning. Technology of war and power help to determine individuals and groups behaviors offensively or defensively. Appropriate technology help to increase the rural productive knowledge base in the conscious world of change. Asogwa (2016: 65) Appropriate technology transcends the shores of basic local needs of people and their operational techniques, tools and environment. Put differently, appropriate technology adaptation has numerous economic advantages to rural development. This has been expressed in recent times India, Singapore, China, South-East Asian Countries, South-Korea are all beneficiaries of appropriate technological project of development planning. Realizing its immense contribution in small scale entrepreneurial development and industrial success Ekerhare (2008: 17) argues.

*A small scale approach to industrialization may set in motion entrepreneurship in Nigeria .... Small holder's industrial enterprises may provide a more effective interface between the rural and informal sector on one hand and large scale formal sector on the other.*

However, early understanding and application of appropriate technology has made Japan to domesticate modern technology to suit and enable her to spur the concept of green revolution known as "a seed fertilizer revolution" (Meier, 1978). Ideas and appropriate technologies rule the world. Man's purpose of generating idea is to help him exploit opportunities within his environment. In other words, that means to conquer obstacle; generate income and extend it to maximize opportunities as life present alternatives. Making alternative choice becomes part of our life styles in the society we find ourselves. Man also, is inquisitive of concepts which arise as thoughts and impression of the mind towards production (goods or services) arises. Neither education nor money alone could make a rich man but ability to think creatively. Appropriate thinking begets appropriate technology which originates from the people's natural, traditional values, techniques and environment. Society desire knowledge, technological innovations and entrepreneurship to meet their needs as wealth is product of man's capacity to grow rich. The ongoing aligns with further argument that "What you incubate stands a better chance of lasting longer and sustainable compared with what is borrowed without knowledge and period of hibernation" (techno-credle, 2013). Appropriate technology is therefore built by farmers-induced techniques. It is also sustain by the peculiar environment of the people which in-turn supports forward and backward operational linkages expansion and progressive planning.

Figure 1-1 shows the forward and backward operational linkage of appropriate technology in a given environment.



Box A above indicates the centrality of appropriate technology and environment as inseparable from each other. Forward and backward linkages are visibly explained as network of operation as indicated by direction of the arrows. Example, economic, political, social and educational system of operation are all interlinked and affected by the existing technology and environment in which they exist. The **BCFG** shows such explanation. While, the **EHJD** provide further explanation of the forward and backward linkages including operational benefits. The foregoing shows that such linkages could extended to expansion of the existing technology and complementary cottage industries across other communities where desired craft, techniques and technologies are deemed appropriate for further productions, structure, organization and services.

## DEVELOPMENT

Development is a multidimensional phenomenon, which cuts across all human endeavor including education, political, cultural, economic, communication among others. Todaro & Smith (2008: 826) defined development as the process of improving the quality of all human lives such as:

1. Raising people's living standards, their income and consumption level of food, medical, economic, and growth processes.
2. Creating conditions conducive to the growth of people's self esteem through establishment of socio-political and economic system and institutions that promote human dignity and respect.



3. Increasing people's freedom by increasing the range of their choice variables as by increasing varieties of consumer goods and services.

However, among the foregoing desirables food and drugs are basic and are determinants of other ways of life in either positive or negative direction. A nation's ability to procure and sustain food security and health promotion determines its position as wealthy or poor. Succinctly put food and drugs are two sides of the coin. They are inseparable entities that are more relevant to man and animals. Therefore, they should attract the economic attention in diversification and onward preparation for shift from the mono-culture oil economy ahead of post-oil economic expectation. This is where agriculture and agro-based processing factories should attract policy priorities. Effects of this failure presently have aroused opposing views of groups, organizations and scholars against Nigerian development patterns. Against this background is the (Daily Sun Newspaper commentary, 2020, February, 27<sup>th</sup> issue pp.15) thus:

*Nigeria boasts of over a hundred drug manufacturing companies which sadly cannot meet up with the drug needs of the people. At present, hardly do the nation's pharmaceutical companies supply as much as 30% of the nation's drug needs many of the pharmaceutical companies rely more on drug importation.*

However, like drugs like food production in Nigeria's development and prospects of nation's life without oil, the Pharmaceutical society of Nigeria (PSN) had made recommendation in the past on how best to sustain the local production of essential drugs. Likewise, the Manufacturers' Association of Nigeria (MAN) made similar contribution, emphasizing local increase of production. In response, expansion fund of ₦300 billion was earmarked for essential drugs, yet a huge gap remained of appropriate technology for the production boost locally, rather than importation of finished products. The existing local producing companies are operating foreign dominated technology and expertise. Nigeria knowledge industry has continued to boom without practical application to boost proportion of the Gross Domestic product (GDP) in terms of development strategies.

## THEORETICAL ADAPTATION

Ideas truly move men into voyages of action following purposive search for suitable instrument (appropriate technology) such as, microscope, telescope, compass reading apparatus, barometer and speedometer among others. In same vein, model or theory is chosen appropriately to suit scientific purpose of analyzing through logical processes, comparative thoughts and conclusion in scientific enterprise. Goldthorpe (1981) understands this when he says thus:

*Science represents accordingly a closer and closer correspondence between phenomena of the 'world out there' and knowledge which is 'in here' inside the head of the scientist. Which, he can communicate to his fellow scientist; theories*

*about societies are ideas which like other ideas can themselves be the subject  
and analysis..... Sociological  
theories are social facts.*

It is against the foregoing that the model 'Community-Agro-Allied-Based Agriculture' (CAABA) is most suitable for this paper based on rural production, rural development, appropriate technology strategy and Nigeria post-oil economic survival prospects. Especially, in relationship with environment safety, including tradition, culture and job security considerations. Complementary to the model is Agro-Techno-Retract (ATR) model which is a no opposition to one another. Both models agree that ideation and models should originate from the local or rural areas where majority of any nations' people reside. Also:

1. That people's behavior, productive interest, unity, organization and structure are being modified by their peculiar circumstances.
2. Difference societies approach to needs.

## CONCLUSION

Nigeria economic life without oil (post-oil economy) remains bleak, with life in continuous needs and search for food and drugs, shelter education clothing and secured environment. These are a 'must-involve-issues', as tools. Appropriate technology, appropriate thinking and governance institutions would boost the cheap labour, food security, from rural agriculture. It helps to create community where the people influence their desired development. It helps communities to develop trust and indigenous adaptation of rural model and prioritization. It helps to promote grass root network opportunities, attract government to supports production. This is as right as Ake (2003:4) argues that:

*Man's capacity, skills, creativity, self discipline and responsibility has to be developed, shaped and channeled towards appropriate technology as the engine bloc designer. Man is the focus of development in terms of driver and beneficiary.*

We must learn to produce more, than we consume, to secure food, drugs and life, Else, my people would perish at post oil Nigeria development battle. "My people perish for lack of knowledge" Hosea, (4 vs 6).

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