# Open And Distance Learning (ODL), Human Capital Development And The Challenge Of Realizing Vision 20:2020

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#### Abstract

Human capital development is very fundamental to the development of any nation. Since Nigeria gained political independence, she has been inundated with the task of educating its large and growing population. The Nigerian educational system is replete with cases of lack of access to primary, secondary and tertiary education owing to limited capacities. At the moment, if nothing is done, a large proportion of the population of Nigerians will remain illiterates and will not be able to contribute meaningfully to national development which is very critical to the realization of Vision 20-2020. This is to say that human capital development is very critical to the realization of Vision 20-2020. This paper establishes a relationship between Vision 20-2020, human capital development and ODL. The objective of this paper is to show that human capital development is very fundamental to the realization of Vision 20-2020. Based on this assertion, it advocates the need to enhance access to education, using the ODL as complimentary to, and not in competition with, the conventional mode of study. The ODL takes the distance and lack of access out of education. We conclude the paper by calling for an urgent and accelerated implementation of ODL and the setting up of a commission to regulate its practice in Nigeria.

**Key Words:** Human Capital, Development, Open and Distance Learning, Vision 20:2020

# Introduction

The biggest challenge facing Africa in the 21st century is the challenge of development-harnessing the capacities of its teeming population in order to escape from the tragedy of poverty, illiteracy and economic stagnation. In the case of Nigeria, while she is endowed with abundant human and natural resources, yet it remains one of the poorest countries in the world, with 7 out of every 10 Nigerian living on less than S1 dollar a day (NPC, 2004). The country needs to attain at least 85% literacy rate before it can achieve appreciable level of development that is envisioned by Vision 20-2020. If Nigeria must achieve Vision 20:20:20, she must revolutionalise the educational system by focusing on the pedagogy and andragogy of learning, technology, and instructional systems design that aim at delivering education to the nooks and crannies of our society. The emphasis will be on emerging technology that is globally used in universities and institutions. With rapid technological advancement, distance learning remains the only mode of non-

conventional learning that has the unique advantage of providing individualized attention and communication with students (Wikipedia, 2012).

The methodology adopted for this study centers on the critical analysis of relevant literature: articles, government publications and policy statements on Nigeria's commitment to the education sector. In addition to this, a few interviews were conducted with knowledgeable education experts on Open and Distance learning, development experts and policy makers, especially from the National Planning Commission. These respondents were purposively sampled. The methodology also involved interactions and discussions with some Vice Chancellors and staff of the Federal Ministry of Education, staff of key parastatals under the Federal Ministry of Education like the National Teachers Institute, Teachers Registration Council, National Commission for Colleges of Education, and the National Universities Commission. The author participated in seminars and workshops where Vision 2020 and ODL were discussed. Data collected from the seminars and workshops were particularly useful in analyzing the paper.

#### What is open and distance learning?

In this paper, Open and Distance Learning is used interchangeably with Distance Education. Distance education has been defined in various ways. There are, however, certain defining characteristics or attributes that distinguish distance learning from the conventional mode of study. The National Workshop on Distance Education (FME, 2010) refers distance education as the various methods by which a variety of media and technologies are used to provide and/or improve access to good quality education to large numbers of people, either because they missed the opportunity earlier in life, or because their present socio-economic and family circumstances would not permit them to acquire education through the formal school system.

It is variously referred to as correspondence study, home study, off-campus study, independent study, distance study, telematic teaching or extra-mural system. Explaining further, the workshop regards distance education as a system of teaching and learning which adapts and adopts various instructional media, and capable of providing access and qualitative education for diverse learners in a cost-effective and efficient manner, such that learners will develop their full potentials for life-long and life-wide learning. In his own definition, Jegede (2012) refers to open learning as the flexibility of and access to instruction by the distance education mode, in order to ensure that broad availability of educational opportunities reach as many segments of the population as possible.

He submitted that openness and access disregard age, previous level of academic achievement, and other factors, which normally erect artificial barriers to education as a life-long pursuit in a democratic environment. Distance education include the following components: Open University, Open Polytechnic, Open School, and other specialized or targeted distance learning organizations provisions and outlets.

# Why ODL is important

Scholars and practitioners of ODL have justified the use of ODL mainly from a functional perspective. The justification is underscored by the following reasons which include:

- -Access and equity for comprehensive national development. The need to meet up with international obligation- UNESCO literacy rate;
- -Widens access to education because it provides equal opportunity to all children of school age irrespective of gender, location, and physical attributes;
- -Alleviating budgetary constraints as expenditure on open and distance education has been shown in other countries to be as low as 30% of the total cost of the conventional form of education beyond the take-off costs;
- -Provides the much- needed tool for fighting poverty and the elimination of illiteracy since it equips the recipients with the skills necessary for gainful employment and wealth creation;
- -It is flexible and gives the leaner ample choice to determine when, how and where of the study;
- -Provides a viable alternative to the conventional mode. In our crisis-torn educational system, distance education provides a stable environment and learning culture that is devoid of interruption arising from prolonged strikes;
- -Given the paucity of trained teachers, it provides the panacea for massive production of trained teachers;
- -Since it is ICT- driven it provides spill over effects on the economy as more people are able to acquire information technology skills for the production of goods and services which enables them to contribute to national economic growth and development;
- -Enhances national and international capacity for human capital development; and
- -No need to re-invent the wheels. It has the advantage of adoption and adaptability of various instructional media. Given its dynamic nature, distance education allows for the introduction of courses designed to respond to changes in our contemporary world, and in such a way build a critical mass of manpower as a deliberate way of accelerating national development.

Distance education refers to that system of education that is non- conventional and liberalizes access to educational opportunities as a complimentary mode of study to the conventional mode. Distance education is not only a flexible, cost-effective and a multi-faceted mode of study that is independent of time, location, pace and space, but also offers variety of learning advantages like fulltime, part time, graduate and undergraduate, certificate and continuing education. In a multi-ethnic, multi-lingual and multi-cultural society as Nigeria, distance education plays the unique role of taking education to uneducated Nigerians (the under-privileged Nigerians), who by virtue of being socio-economically marginalized constitute threat to the survival and well-being of the educated minority.

Since distance education is not limited by classroom boundaries and teacherstudent face to face contact, it provides access to divers and vulnerable populations of the society including women; especially those in purdah, dropouts, rural and remote communities, migrant groups etc, whose access to education are limited by the

conventional mode. Due to the critical importance of distance education to national development, the Federal Ministry of Education organized an international workshop with the theme: "Towards a National Policy on Distance Education in Nigeria". The workshop affirmed that ODL is critical to development and stressed the need to encourage technological literacy in Nigeria. In acknowledging 2001-2010 as the Decade of Distance Education in Nigeria, the workshop declared that in order to enhance education as a form of human resource development, and satisfy the exceptionally large demand for education by our huge and rapidly expanding population which is still mainly rural, remote, under-represented, and marginalized through resources, location, economic and other reasons, the stakeholders adopted distance education as a desirable and inevitable mode for providing access to all and the achievement of equitable representation by taking the distance out of education (Jegede, 2012).

The institutionalization of ODL in Nigeria as an alternate mode of learning is very fundamental to human capital development. For more than four to five generations, distance education has been in existence globally, yet its use has remained abysmally low in the country due to ignorance and prejudice. As an ardent believer in the "Education for All Declaration" and the "Millennium Development Goals Treaty", Nigeria can close the yawning gap between access and carrying capacity of tertiary institutions by the widespread adoption of distance learning to cater for the needs of its economy in terms of skilled manpower, technological advancement and the building of a knowledge-based economy.

Given the 140 million population of Nigeria with an annual population growth rate of about 3.5 percent coupled with grossly limited carrying capacity of existing institutions, especially at the tertiary level, distance education remains the only escape route from overwhelming student's population and severe budgetary constraints, through the establishment of open universities, open polytechnics and open schools. For instance, the Australian "School of the Air" has been in use since the 1940s in teaching children, while the FM channel is very popular in India and is being used to broadcast educational programs in such areas as teacher education, rural development, agricultural programmes for farmers, science education, creative writing, mass communication, in addition to traditional courses in liberal arts, science and business administration (Wikipedia, 2012).

#### Theoretical framework

The theoretical framework adopted for this study is the Human Capital Theory. British economists, Sir William Petty (1623-1687) and Adam Smith (1723-1790) are regarded by economists and historians as the primary proponents of the Human Capital Theory. While Adam Smith established the basis of the economics of human capital, Petty examined the role of the state in the economy and emphasized the value of labour. Furthermore, Smith was the first to establish a nexus between the skill of the worker and higher wage levels. The theoretical framework most responsible for the wholesome adoption of education and development policies has come to be known as human capital theory. Human capital theory rests on the assumption that formal education is highly instrumental and even necessary to improve the production capacity of a population. In short, the human capital proponents argue that an educated population is a productive

population (Olaniyan and Okemakinde, 2011). In the new global economy, tangible assets are not as important as investing on human capital.

The theory emphasizes the fact that education increases the productivity and efficiency of workers, by increasing the level of cognitive stock of economically productive capability, which is a product of innate abilities and investment in human beings. The rationality underpinning investment in human capital is premised on three critical assumptions: (a) that the new generation must be given the appropriate parts of the knowledge which has already been accumulated by previous generations (b) that the new generation should be taught how existing knowledge should be used to develop new products, to increase new processes and production methods and social services; (c) that people must be encouraged to develop entirely new ideas, products, processes and methods through creative approaches.

Modern economists are of the view that education and health care constitute the key to improving human capital and ultimately increasing the economic outputs of the nation (Becker, 2010). Because the people constitute the greatest assets of any nation, human capital development constitutes the most formidable weapon for transforming the economies of nations. Harbison (2010) points out that human resources constitute the ultimate basis for the wealth of nations. Capital and natural resources are passive factors of production; human beings are the active agents who accumulate capital, exploit natural resources, build social, economic and political organizations, and carry forward national development.

Although the tangible financial capital is an effective instrument of promoting economic growth of the nation, the intangible human capital, on the other hand, is an instrument of promoting comprehensive development of the nation because human capital is directly related to human development, and when there is human development, the qualitative and quantitative progress of the nation is inevitable. The importance of human capital is explicitly recognized in the changed approach of United Nations towards comparative evaluation of economic development of different nations in the World economy. United Nations publishes Human Development Report on human development in different nations with the objective of evaluating the rate of human capital formation in these nations. The statistical indicator of estimating Human Development in each nation is Human Development Index (HDI). It is the combination of "Life Expectancy Index", "Education Index" and "Income Index".

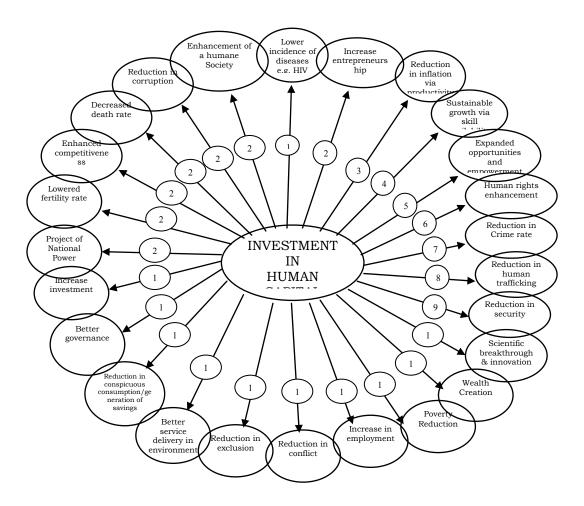
The Life expectancy index reveals the standard of health of the population in the country; education index reveals the educational standard and the literacy ratio of the population; and the income index reveals the standard of living of the population. If all these indices have the rising trend over a long period of time, it is reflected into rising trend in HDI. The Human Capital is developed by health, education and quality of Standard of living. Therefore, the components of HDI viz, Life Expectancy Index, Education Index and Income Index are directly related to Human Capital formation within the nation. HDI is indicator of positive correlation between human capital formation and economic development. If HDI increases, there is higher rate of human capital formation in response to higher standard of education and health. Similarly, if HDI increases, per capita income of the nation also increases. Implicitly, HDI reveals that

the higher the human capital formation due to good standard of health and education, the higher is the per capita income of the nation. This process of human development is the strong foundation of a continuous process of economic development of the nation for a long period of time. This significance of the concept of Human capital in generating long-term economic development of the nation cannot be neglected. It is expected that the macroeconomic policies of Nigeria and indeed all the nations are focused towards promotion of human development and subsequently economic development. Human Capital is the backbone of Human Development and economic development in every nation. Mahroum (2009) suggested that at the macro-level, human capital management is about three key capacities, the capacity to develop talent, the capacity to deploy talent, and the capacity to draw talent from elsewhere. Collectively, these three capacities form the backbone of any country's human capital competitiveness. Nigeria has one of the lowest HDI in the world, depicting the nation as one of the most underdeveloped countries in the world.

As a multipurpose vector, human capital contains cognitive skills, knowledge, technology, socio-political and network skills, health, migration etc as the key elements. It therefore, follows, that investment in education has a generic impact on virtually all aspects of human development, especially in the growth process of economies (Umo, 2011). The 25 elements contained in Figure 1 below depict the benefits that are inherent in investing in human capital. The 25 elements represent the various dimensions of development that can be reaped by an economy, whose government places emphasis on devoting appreciable size of its budget to funding education, and on the development of its human capital.

Robert's study (2012) of a human capital model indicates that education and the creation of a critical mass of human capital was responsible for the differences in labour productivity and the differences in overall levels of technology. More than anything else, it is responsible for the spectacular growth of economies as evidenced by the countries in East Asia like Hong Kong, Korea, Singapore and Taiwan which have witnessed unprecedented rates of economic growth while making large investments in education.

Figure 1



## Vision 20:2020: A framework for development

According to Odusola (2011) national planning and strategic visioning have become the most probable development frameworks for addressing the challenges facing many developing countries in the face of a competitively-divided and unequal world. Thus, a national vision becomes a framework for planning and for the attainment of national developmental goals, with a view to overcoming the challenges of underdevelopment. With strategic visioning, the country assesses the state of its present development, enunciates some development objectives with the necessary timelines and deliverables as well as institute the right mix of reform fundamentals that are needed to

achieve national transformation, with a view to attaining its futuristic and desired economic performance.

According to Webster Comprehensive Dictionary of the English Language, vision refers to the ability to anticipate and make provision for future event. In the face of the dependent state of Nigeria's economy and its structural distortion, Vision 20:2020 depicts Nigeria's initiative to transit from an oil resource-based economy to a knowledge-based and globally- competitive economy. Based on the projections of Goldman Sachs, Nigeria and ten other countries were credited with the potential of becoming high performing economies by 2025. The Federal Government gleefully subscribed to this projection and opted for 20:2020. The government envisages that by 20:2020, Nigeria will have a large, strong, diversified, sustainable and competitive economy that effectively harnesses the talents and energies of its people and responsibly exploits its natural endowments to guarantee a high standard of living and quality of life to its citizens.

To join the league of 20 top economies of the world by 2020, the government identified some key parameters as the necessary conditions for attaining the vision. They include:

- **Polity.** By 2020, the government envisages that Nigeria will be peaceful, harmonious and a stable democracy. The attainment of a peaceful and harmonious society is based on the realization that peace and harmony is the foundation of any serious economic growth and development
- **Macroeconomic stability.** A sound, stable and globally-competitive economy, with a GDP of not less than \$900 billion and a per capita income of not less than \$4000 per annum
- **Infrastructure.** Provision of adequate infrastructural facilities in order to create a conducive environment for the private sector to thrive with a view to positioning it as an engine of growth of the economy
- Education A modern and vibrant educational system which provides for every Nigerian the opportunity and facility to achieve his or her potential and provides Nigeria with adequate and competent manpower to catalyze her developmental process
- **Health** A health sector that supports and sustains a life expectancy of not less than 70 years, and reduces to the barest minimum the burden of avoidable diseases such as malaria, HIV/ AIDS, and other debilitating diseases
- **Agriculture** A modern, technologically enabled agricultural sector that fully exploits the vast agricultural resources of Nigeria, ensures national food security and contributes significantly to foreign exchange earnings
- **Manufacturing** A vibrant and globally-competitive manufacturing sector that contributes significantly to GDP, with a manufacturing value added of not less than 25% (NPC, 2011).

The process of realizing Vision 20:2020 is categorized into three different stages: the first stage focuses on building a solid foundation for Vision 20:2020 between 2008 and 2010. A major component of this is the immediate review of all current strategies

such as the President's Seven Point Agenda, the National Economic Empowerment and Development Strategy 2 (NEEDS), and other relevant documents to form the National Development Plan. The outcome of these reviews will form the nucleus of the Statement of National Priorities that will constitute the core elements of Nigeria's development plans and budgets during 2008-2010, and constitute the foundation for Vision 20:2020. The Statement of National Priorities sets specific targets to be achieved by 2010.

The second stage focuses on realizing the MDGs Targets by 2015 while the third stage entails moving from the MDG to the actualization of the Vision. The first phase of the implementation is the harmonization of NEEDS into the 7 Point Agenda of the Federal Government to form the National Development Plan. This plan is expected to be the first Medium -Term Plan to operationalize the vision. If budget implementation is to be used as a parameter for assessing the commitment of the government to the realization of Vision 20:2020, we can conclude that government has not shown enough commitment and political will towards ensuring that Vision 20:2020 is realized. What is required by government is to rise above the present lethargy of poor budget implementation that is characteristic of the national governance culture and mobilize human and material resources towards making Vision 20:2020 a reality.

# The Nigerian economy: an overview

Despite her endowment with abundant human and natural resources, Nigeria's economic growth has stagnated. Except in the early1960s when robust growth was achieved which compared favorably with the economies of Malaysia, Singapore and Indonesia in terms of high annual per capita income, the country's economic growth since then had been disappointing and grossly inadequate. The economy just grew at 2.2% between 1990 and 2003. With a GDP of \$45 billion dollars in 2001and per capita income of about \$300 a year, Nigeria is one of the poorest countries in the world. With oil accounting for 95% of foreign exchange earnings, the country's economic structure remains largely unproductive and undiversified. While manufacturing accounts for less than 1% of GDP, the agricultural sector is weak as production in the sector is largely subsistence farming with rudimentary implements and obsolete technology.

Unemployment is very high; so is HIV/AIDS which threatens productivity. The country's educational sector is also in deficits. The carrying capacity of the country's educational institutions does not meet admission needs. Nigeria has one of the worst human development indicators. Nigeria ranks 158 out of 177 economies on the Human Development Index (HDI), despite her rich cultural endowment and abundant human and natural resources. The statistics on human capital development are disappointing: the country's health system, according to WHO, ranks a dismal 191 out of 201nations, life expectancy is 45 years for males and 46 for females; infant mortality rate is 260 deaths/1000 live births (this is one of the highest in the world); and about 2.6 million or 4.4% of 15-49 years live with HIV/AIDS. Nigeria's HDI shows that it ranks below less endowed countries. With a rank of 158, compared to Lesotho's 156, and Uganda's 157, Nigeria's life expectancy at birth (47.7) is behind Mali's (48.1), Mozambique's (47.8), and only slightly better than that of the Democratic Republic of the Congo(47.6). Nigeria's combined gross enrolment figure is 53.0%, slightly behind Bhutan's 54.1 and Togo's 53.9 (Okebukola, 2011).

Despite earning about \$300 oil revenue as at year 2000, poverty and inequality are endemic, with about 70% of Nigerians earning less than 1 dollar a day. The incidence rose precipitously from 28.1 percent of the population in 1980 to 65.6 percent in 1996 and from 54% (69 million) people in 2004 to 69% (112.47 million) people in 2010. With the inception of the present democratic dispensation, various reform policies and processes were introduced, especially by the Obasanjo administration to boost economic growth. These reforms notwithstanding, growth is yet to attain the annual 7% GDP growth rate required to make a dent on poverty reduction. Poverty is pervasive: the number of poor people grew constantly between 2004 and 2010 by 8.4% every year. The figure is still worrisome as the rate of poverty reduction will not lead to the achievement of the MDG of halving poverty by 2015. As poverty is rising so is inequality. The Gini coefficient increased from 0.429 to 0.447 over the period 2004 to 2010 showing and exacerbating inequality (Nnadozie, 2012). In terms of the competitiveness of the Nigerian economy, the picture is gloomy. With a Competitiveness Index of 3.38 in 2011, Nigeria is ranked 127<sup>th</sup> out of 139 countries in the world, below 18 other sub-Saharan African countries. The number is worse than the previous two years, when Nigeria ranked 125<sup>th</sup> and 121st respectively. The 2011 World Bank's Doing Business Report indicates that Nigeria was ranked 137<sup>th</sup> out of the 183 economies surveyed compared to its 134<sup>th</sup> ranking in 2010. Among the sub-Saharan African countries, the report ranks Nigeria 17<sup>th</sup> out of the 40 economies; behind Mauritius (1), South Africa (2), Botswana (3), Rwanda (4), Ghana (5), Namibia (6), Zambia (7), Seychelles (8), Kenya (9) and Ethiopia (10) (Nnadozie, 2012).

Another daunting challenge facing the Nigerian economy which must nudge the Nigerian government into making concerted effort to achieve 20:2020 is the problem of population growth. Figures from the National Bureau of Statistics show that Nigeria witnessed an overall population increase from 126.3 to 163 million between 2004 and 2010, showing an annual growth rate of 4.35% (instead of the official rate of 2.16%). This growth rate is high and has obvious social and economic implication for the attainment of Vision 20:2020: a high population growth rate proportionally requires a higher GDP per capita growth if human capital development that is tangential to the achievement of Vision 20:2020 is to be achieved.

# Human capital development, open and distance learning and vision 20:2020

Human capital development, open and distance learning and Vision 20:2020 are locked in a triangular relationship in the quest for Nigeria's development. While there is the absolute necessity of improving the human capital development needs of Nigerians in order to facilitate the attainment of Vision 20:2020, turning the large Nigerian population into assets for realizing the vision becomes a national imperative which can only be realized by enlarging the capacity of Nigerians to acquire education, using the ODL mode. This becomes even more imperative given the limited carrying capacities of conventional institutions. In fact, the vision recognizes the importance of the people as most valuable assets of any nation. Not surprisingly, the 7-Point Agenda regards human capital development as a sine qua non for the achievement of the agenda. The Agenda stresses the critical role of education in human development. Given Nigeria's large population, the need to transform the people into catalysts of growth and lasting

comparative advantage becomes a national imperative (Vision 20:2020). Vision 20-2020 gives abundant recognition to growing the economy to achieve a broad-based and double digit real growth rates annually to meet the MDGs by 2015 and reversing the trend of growth without a corresponding increase in employment.

Against this background, Nigeria stands the risk of not realizing the Vision if she continues to pay lip service to the acquisition of education, skills and techniques by its rapidly growing population. The need to expand the access of its citizens to education through ODL cannot be over- emphasized. As is well known, education is a transformational tool for poverty alleviation, emancipation from disease and ignorance, harnessing of resources from our environment and using them to improve the quality of life of the people. Throughout the history of human civilization, education has always been a powerful tool of change, emancipation and development. Education broadens man's perspective and deepens his capacity to confront the challenges of nature, be they social, economic, technological or environmental.

An educated population is indispensable to the emergence of a productive economy. Productivity enhances economic growth, raises the GDP and the standard of living of a people. Nigeria's present GDP of S113 billion dollar is too paltry to sustain the standard of living that is envisioned by National Plan 20: 2020. For Nigeria to join the league of 20 top economies it must aim at wealth creation with a per capita income of \$1,000 required for sustaining the current democratic experience (Soludo, 2010). Unemployment, political instability and lack of good governance constitute formidable obstacles to poverty reduction and the achievement of Vision 20:2020.

According to Okebukola (2011), education is necessary for: promoting health because knowledge about diseases, nutrition and hygiene is the best preventable medicine, and knowledge is the pre-requisite for inventing new cures; applying new technologies and the advancement of new knowledge, because it provides the training essential for scientists and other professionals; for protecting the environment and ensuring sustainable development, since it gives us knowledge about the web of life and how to preserve it; for advancing gender equality, because educating girls and women is the most important factor for empowerment, accelerating development and improving welfare of children; for extending democracy and good governance, because education enables citizens to know their rights and how to make their voices heard; a major antidote to religious and political conflicts and social unrest; production of human power for exploration, exploitation and marketing of the nation's petroleum resources; and enlightenment of oil communities leading to dousing of recurring tension in oil exploration areas.

A research conducted by the World Bank (quoted in Okebukola, 2011) shows that more than half of the members of the league of the world's top 15 economies boosted their economic growth through education despite less natural endowment. Thus, although the economist regards physical capital as the main factor in determining a country's productive wealth, the fact that natural and human capital are equally indispensible in determining the economic growth of a nation has gained considerable acceptance. With the realization that a healthy and well-educated people make an economy more productive, attention has now shifted to the focus on investment in human capital. Thus,

the development of human capital is now regarded as the primary determinant of a country's standard of living, because its development determines how well a country succeeds in utilizing the skills, knowledge, health and habits of its population. An estimate by Kendrick (2012) indicates that over half of the total US capital stock was human capital while the World Bank (2010) Assessment for 192 countries show that human capital, on the average, accounts for 64% of the total wealth while physical and natural capital account for 16 and 20% respectively. This is substantiated by Abdullahi (2010) who posits that schools will provide the knowledge and skills for the 21<sup>st</sup> century global citizens. Quality education ultimately ensures a dynamic economy because it provides high standard of living, reinforces democratic principles and norms, secures human and natural security. Quality education will also guarantee human capital development; position Nigerians to compete in the global economy while guaranteeing that Nigeria's natural and human will be turned into assets.

Whereas the world is moving away from dependence on natural resources, most African countries, including Nigeria, are dependent on natural resources. Today, knowledge and skills now stand alone as the only source of comparative advantage. With this assertion, it becomes compelling for Nigeria to pay serious attention to breaking the natural resource curse by developing a high stock of human capital. Natural resource curse is not fate; it is a choice (Soludo, 2010). The World Bank asserts that Nigeria's wealth (which is the least in the world on a per capita basis) is based on natural resources and not so much on produced or intangible wealth. In countries like Mauritius, South Africa and Ghana, intangible wealth constitutes about 80% of the national wealth whereas it contributes 71% in Nigeria. A country with a low level of intangible wealth is susceptible to low economic growth, which translates into limited capacity for industrial and technological growth, and jeopardizes the chances of wealth creation and job opportunities. More importantly, the country cannot sustain the level of development that is tangential to poverty reduction and the reduction of inequalities. Growth that is temporarily driven by natural resource extraction could be a phony growth- more extractions leading to higher income (GDP), but unless the income is invested well to create other capacities in the economy; the growth may not be sustainable (Soludo, 2010). This accounts for the reason why many resource dependent countries are susceptible to the boom and burst cycles in the growth process.

Apart from Nigeria's natural growth reserves which are embedded in oil, gas, butimen, limestone, iron ore, columbite, gold, coal, gypsum, etc which have remained largely untapped, another growth reserve waiting to be tapped is the youth population. With the right education and proper orientation, harnessing their potentials can provide the needed momentum for higher economic growth. This is because more than 50% of Nigeria's population is under 18 years of age, and the annual population growth rate of 2.8% is quite high to be left untapped. It is in recognition of the pivotal role of education in national development that the Federal Ministry of Education believes that the objectives of NEEDS (social responsibility, quality service, economic growth, democratic ideals, and global recognition) should be integrated into the primary and secondary schools curriculum. Other goals such as wealth creation, employment generation, resourcefulness, and value re-orientation are seen as big societal and governmental goals.

Education, is therefore, seen as a vital transformational tool and a formidable instrument for socio-economic empowerment (FME, 2012).

Abdullahi (2010) submits that the overriding goal of development is to improve human well-being and to enable human beings to achieve their potential. He argues that the achievement of this main goal is anchored on the pursuit of four (4) smaller goals namely: (a) a healthy, growing economy undergoing structural transformation (b) an economy in which the benefits are widely distributed, (c) a political system that provides for human rights and freedoms, effective governance (d) a political economy that is consistent with preservation of the environment. For a society to achieve the goal of transformation, development must be seen as improvements in literacy rates, life expectancy, reduction in poverty and the provision of adequate political goods and services. The goal of development should focus on human development, high standard of living, expanding choices, guaranteeing peoples freedom, increasing their economic security and the provision of an enabling environment to allow their private and public aspirations to be fulfilled.

# Nigeria's commitment to education and the limited capacity of conventional institutions

As a sign to her commitment to education, Nigeria is a signatory to a considerable number of conventions; 1948 Universal Declaration of Human Rights; 1960 UNESCO Convention against Discrimination in Education; 1989 Convention of the Rights of the Child; and 1990 World Declaration on Education for All and the 1993 UN Standard Rules on Equalization of Opportunities for Persons with Disabilities (Jegede, 2011). Similarly, Nigeria has also demonstrated considerable commitment to education with the introduction of programmes at the national level through the Universal Primary Education, Education for All, Nomadic Education, Education Sector Analysis, Universal Basic Education and the Roadmap for the Nigerian Education Sector. With a population of 140 million people and a literacy rate of 55%, statistics on Nigeria's educational development are appalling and totally unacceptable when considered against its social and economic implication on the country's development prospects. Widespread disparities and daunting challenges cut across primary, secondary and tertiary levels. Broadly speaking, the educational sector has been bedeviled by years of neglect, mismanagement and inadequacy of resources relative to national needs, population growth and demand. This has had the deleterious effect of denying education its strategic importance and ill-positioning it as a transformational tool as well as a formidable instrument for socio-economic development.

In specific terms, the sector has been buffeted by the challenges of access and equity, standards and quality, Technical and Vocational Education Training Needs, funds and resource utilization constraints. The problems of access, funding and infrastructure remain the most critical challenge facing the Nigerian educational system. Emphasis on equity will give Nigerian children equal opportunities and play a significant role in addressing the problem of poverty and inequality. Equity will ensure that opportunity is provided to all children of school age irrespective of gender, family background, location and physical attribute. Equity will also enhance access because it will break the barriers of physical access, quality access and economic access posed by economic, cultural,

urban- rural and public- private barriers etc. To enhance physical access, it is estimated that an infrastructural requirement of 4,000 additional classrooms per annum for preprimary; 22,000 additional classrooms per annum for primary; 10,160 classrooms per annum for JSS; and 950 additional classrooms per annum for nomadic education and other facilities, would be needed for the attainment of the required enrolment levels.

The problem of infrastructure has taken its toll on universities in Nigeria. It has limited access to educational opportunities and impaired learning and research. Nigerian universities are lagging behind in modern infrastructure like ICT, well-equipped libraries and laboratories for science and technological education. The cost of providing modern infrastructure to boost learning is enormous, and not within the budgetary provision of conventional universities. Further, the institutions are replete with cases of inadequate supply of electricity, water and sanitation services. The classrooms are in a deplorable physical state with floors full of holes, dilapidated roofs and broken ceilings, etc. These adverse conditions reduce the quality of teaching, learning and research as well as make the universities less competitive. The implication of this is that our best brains are forced to leave the country in search of greener pastures.

Statistics from the 2006 Nominal Personnel Audit show that there are 54,434 public primary schools in Nigeria (while the 2006 School Census indicates 87,941as the number of primary schools) with an enrolment figure of 24,422,918, out of which the male accounts for 13,302,269(or 54.5%) while the female accounts for 11,120,649 (or 45.5%), indicating a gender parity of 83.62%. More males are enrolled in the primary schools than females in the North while a near parity is recorded in the South. About 65% of primary school children in the North are male while 35% are female. Also, there are 7,129 Public Junior Schools in Nigeria with a total enrolment figure of 3,266,780. Gender disparity exists in male and female enrolment figures at the JSS level nationwide and about 55% are male while 45% are female.

For Nomadic education the required number of teachers is 23,835 while only 11,506 (48%) are available. This shows a shortfall of 12,329 (52%) and a teacher-pupil ratio of 1:50. The widespread disparity between the expected and actual enrolment poses considerable problem of access and equity. For instance, the expected enrolment in Early Childhood Care Development and Education (ECCDE) is 22 million but the actual is 2.02 million, leaving 19.98million out of school. The expected enrolment in Primary Education is 34.92million but the actual is 24.42 million. This creates a shortfall of 10.5million. In Junior Secondary Education (3years) the expected enrolment is 9.27million whereas the actual stands as 3.27 million, leaving a total of 6.0 million unenrolled (FME, 2010).

The story is the same at the non-formal level .Out of the current population figure of 40million non-literate adults, current enrolment stands at 500,000.00, leaving 39.5million un-enrolled. For the Nomadic and Migrant children, only 450,000.00 are enrolled out of the 3.5million school- aged learners, hence 3.1 million are out of school. Other challenges are inadequate and inaccurate data as well as poverty. Available classrooms in formal education in 2012 are 497,871, with a shortfall of 1,152412 while the existing classrooms for nomadic education are 10,469 with a shortfall of 28,931(FME, 2012).

The overall enrolment in the 3 sub-sectors is presented in Figure 2 below:

#### Enrolment

Figure 2

Level	Number of Institutions	Students	No Access
Primary	44,000.00	24million	20million
Secondary Voc and Technical	10,000.00 65	8million 280,000.00	27million 27milion
Coll of Edu.	64	550,000.00	2million
Polytechnics	80	350,000.00	
University	124	1,196,312	6million

Source: Commonwealth of Learning, 2012

#### Access

Figure 3			
System	Enrolment	Carrying Capacity	y Over-enrol ment
Universities	1,096,312	715,000.00	381,312
NOUN	35,000.00	100,000.00	-65,000.
Polytechnics/Monotech	nnics 360,535	198,370	162,165
Colleges of Education	354,387	118,129	236,258
National Teachers Inst	tute 91,259	100,000.00	-8741

Source: National Universities Commission

- These figures are exclusive of enrolments into ODL part-time and unapproved programmes
- Over1.0 million candidates apply annually for admission into universities; only about 150,000 students are admitted.
- In contrast, only about 200,000 students apply for admission into the Polytechnics and Colleges of Education through JAMB
- This preference for university education has adverse implications on the quality of entrants and products of Polytechnics and Colleges of Education and compounds the problem of access in this sub-sector.

In absolute and comparative terms, funding has remained an intractable problem, betraying government's belief in the importance of education to human capital development. Nigeria occupies the 20th position in budgetary allocation, among other countries, in the latest ranking released by the World Bank (2012). Consequently, Nigerian universities have degenerated in terms of standards and are nothing but glorified secondary schools, because of the unwillingness of the Federal government to comply with the minimum budgetary allocation of 26% demanded by UNESCO, whereas Ghana less endowed as Nigeria spends 31% of her budget on education. Is it surprising that Ghana has become an attractive educational destination for Nigerian youths in search of admission? World Bank Report (2012) indicates that from 1997 to 2002 when the UBE program supposedly received government's attention, the recurrent expenditure on

education as a share of the total expenditure declined from 12.3% to 9.1% while the share of capital expenditure has remained unchanged. The statistics at every level of education in the country is appalling. In 1999 when the Universal Basic Education was launched, the number of primary school teachers was put at 590,000 with an average teacher/pupil ratio of 1:45 (Yobe state had the highest ratio of 1:94 while Anambra state had the lowest ratio of 1.20). It is projected that by the year 2010, about 30 million pupils would have been ripe for primary school and would require a teacher's population of about 976,000. It is the same scenario at the tertiary level ie. university. While Nigeria had over 2000 undergraduates in 1962, the combined student population has risen from 700,000 in 2004 to over 1,096,312 in 124 universities. This rising number has obvious infrastructural, tutorial and financial implication as more students cannot be admitted.

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S/N	Country	% Budget Allocation to Education	
	Position		
1	Ghana	31.0	1 <sup>st</sup>
2	Cote d'Ivoire	30.0	$2^{\rm nd}$
3	Uganda	27.0	$3^{\rm rd}$
4	Morocco	26.4	$4^{th}$
5	South Africa	25.8	5 <sup>th</sup>
6	Swaziland	24.6	$6^{th}$
7	Mexico	24.3	$7^{\text{th}}$
8	Kenya	23.0	$8^{th}$
9	United Arab Emirate	22.5	$9^{ ext{th}}$
10	Botswana	19.0	$10^{th}$
11	Iran	17.7	$11^{\rm th}$
12	USA	17.1	$12^{th}$
13	Tunisia	17.0	13 <sup>th</sup>
14	Lesotho	17.0	$14^{\mathrm{th}}$
15	Burkina Faso	16.8	15 <sup>th</sup>
16	Norway	16.2	16 <sup>th</sup>
17	Columbia	15.6	$17^{\rm th}$
18	Nicaragua	15.0	18 <sup>th</sup>
19	India	12.7	19 <sup>th</sup>
20	Nigeria	8.4	20 <sup>th</sup> (last)

Annual Budgetary Allocation to Education by Some Selected Countries (Source-World Bank, 2012)

# The increasing quality deficits of Nigeria's educational system

The nation's educational system is faced with the following challenges of quality which can only be remedied through the introduction of ODL:

 Overcrowding in classrooms from primary to the universities. Pictures of pupils studying under trees in some states of the federation are common in our national broadcasts;

- The number of academic staff especially in the conventional university sector is grossly inadequate- about 16,000 lecturers compared to a minimum of 46,000 required for the system. Assuming that the existing universities can graduate up to 300 Ph.D holders annually (which it cannot) it would take about 153 years to meet the minimum demand;
- Accreditation problem with substantial number of courses in the existing universities. For instance, about 70% of accredited courses have been lost;
- No Nigerian university is listed among the first 1000 quality universities in the world in 2012 and only four are recognized in terms of African ranking of the first 100 in 2012;
- The quality deficit is manifested in the increasing number of candidates who fail WAEC and who are unable to pass the mandatory five subjects with credits (including English and Mathematics);
- The reproach suffered by the nation's academic certificates and the growing number of graduates who cannot defend their certificates. A good number of employers have resorted to administering aptitude tests to applicants and arranging for remedial courses in basic skills (which were expected to have been impacted in school) after employment offer;
- Increasing cases of examination malpractices; and
- Human Capital flight or the brain drain syndrome

The foregoing ugly scenario depicts the gloomy state of the Nigerian university system, both in absolute and comparative terms. Although Nigeria recognizes the inalienable rights of Nigerians to education as evidenced by the international conventions she entered into, a yawning gap exists between access and demand: only 22.1 million out of the eligible 42.1 million Nigerian children are in primary schools; only 10.4 million eligible for secondary education are attending out of 33.9 million Nigerians eligible for secondary education while out

of the 1.5 million Nigerians seeking admission annually to tertiary education, only about 26.5% are admitted. It is therefore evident that enrolment at all levels is below acceptable norms, in spite of the huge absolute numbers: both high quality and maximum access must move in tandem (Umo, 2011). The need to ensure that the nation's educational sector meets international standards in terms of both quality and quantity becomes an absolute necessity. Without high quality, producing half-baked graduates can be more dangerous than not educating them all.

To this end, Nigeria cannot achieve the MDGs and Education For All (EFA) if she does not establish open schools to accommodate those who are out of the school system and to ensure that all Nigerians have access to the first nine years of (UBE) to enhance the achievement of Vision 20;2020. There is, therefore, the need to close the access gap. Experience from other countries shows that no country has been able to meet the demand for education for its citizens through the conventional means alone. This is exemplified by the experiences of many countries including United Kingdom, Australia, Canada, China, South Africa, India, Tanzania, Kenya and Zimbabwe. The realization of Vision 20:2020 requires the education of all Nigerians in order to unleash their creative

potentials for development. ODL provides the most cost-effective, accessible and convenient mode of study which removes the barriers posed by the conventional mode. Given Nigeria's increasing population rate of 3.8% annually and the low literacy rate, the conventional university system cannot cope with the educational needs of Nigerians for the transformation of Nigeria economically. Nigeria's adult literacy rate of 67% while better than India is 30% points lower than the average for the 15 most developed nations.

Investing in education becomes a sine qua non for human resource development. Moreover, in a knowledge-based world characteristic of developed countries to which Nigeria aspires, Nigeria needs to increase its Higher Education Rate (HER). Higher education rate is defined as the proportion of 18-35 groups that are enrolled in tertiary education. The highest HER among the 15 countries is 64% for the US. Greater than 40% is recorded for Australia, South Korea, Canada, Spain, Italy, France, UK and Japan. The lowest HEPR for the league of 15 countries is 10%. Nigeria's rate is placed at 8.1%. The gap needs to be closed in order to match the HER of developed economies which averages 50% (Okebukola, 2011). Distance learning will extend educational opportunities to the underprivileged and unreached communities.

Emerging global educational and economic realities have stimulated changes in the way nations view education. The emerging concept of education is characterized by the following: a change from an elitist-based to mass-based education; recognition of the exponential growth in knowledge with reduced half-life; embraced the shift from an industrial - based to information - based global economy; and accepted the emergence and consequent effect on education for all of a post-modern view of knowledge generation (Jegede, 2012). These global changes have necessitated the need for Nigeria to take concrete and pragmatic steps to introduce the ODL concept of education in order to raise the literacy level, and equip Nigerians with the basic knowledge, skills and techniques needed to compete globally. ODL should be seen as complimentary to, and not in competition with the formal classroom-bound approach of delivering education. The National Policy on Education regards "education" as the most important instrument of change in any society and that any fundamental change in the intellectual and social outlook of any society has to be preceded by an educational revolution. The recognition accorded education by this declaration cannot be actualized if Nigeria continues to rely on the conventional tertiary institutions.

#### Conclusion

While population growth is expanding rapidly, educational opportunities in Nigeria are severely limited. The challenge is that given current enrolment figures, many applicants will be left out of schools, polytechnics and universities, unless urgent and accelerated implementation of ODL is undertaken. This calls for the setting up of a national body to regulate the practice of ODL in Nigeria. Given the challenge of underdevelopment, the need to educate every Nigerian is absolutely necessary. It is, however, one national initiative that the government must universalize for the accelerated achievement of Vision 20:2020. This is because education remains an expensive but transformational tool. Government must strive to remove all the barriers through the introduction of ODL.

#### References

Abdullahi S.A (2010) "Perspectives on Education, National Economy and Development in Nigeria" *Economic and Policy Review* Vol.17, No p21-29

Becker, G.S. (2010)"The Division of Labor, Coordination Costs, and Knowledge"*The Quarterly Journal of Economics*, Vol. 107, No. 4. http://www.proquest.com

Federal Ministry of Education (2000) "Communique for the Workshop on Education", Abuja

Federal Ministry of Education (2012) *The FME 10-Year Strategic Plan for Nigeria* Abuja: Federal Ministry of Information

Federal Ministry of Education (2012) "2<sup>nd</sup> National Workshop on Open and Learning in Nigeria" Abuja

Distance

Federal Ministry of Education (2012) "Roadmap for the Nigerian Education Sector" Abuja

Harbison F.H (2010) *Human Resources as Wealth of Nations* in Odusola A. (2011) "Human Capital Investment and the Empirics of Economic Growth in Nigeria" in Re-kindling Investment in Nigeria published by the *Nigerian Economic Society* p. 257-271

Jegede O. (2012). "The Role of Open and Distance Learning in Achieving Vision 20-2020 (Through 7-Point Agenda, MDGS, EFA Goals and NEEDS-2)"- A Lead Paper at the 2-Day Advocacy Workshop on Open and Distance Learning in Nigeria organized by the Federal Ministry of Education

Jegede O. (2012) "ODL in Nigeria: The Journey So Far" - A Presentation of Nigeria's ODL Activities to Date at the 2<sup>nd</sup> Major meeting of the National Advisory Committee on Open and Distance Education

Kendrick J.W (2012) *The Formation and Stocks of Total Capital* in Odusola A. F (2011) "Human Capital Investment and the Empirics of Economic Growth in Nigeria" in Re-kindling Investment in Nigeria published by the Nigerian Economic Society p. 257-271

Sami Mahroum (2009). "Assessing Human Resources for Science and Technology: the 3Ds Framework" *Science and Public Policy* 34 (7), p.489-499

Nnadozie E. (2012) "Managing the Nigerian Economy in an era of Global Financial and Economic Crises" A Paper presented at the Annual Public Lecture of the Nigerian Economic Society Abuja

National Planning Commission (2004) National Economic Empowerment and Development Strategy (NEEDS) Abuja: Perfect Printers

National Planning Commission (2011) Vision 20:2020 Abuja: Perfect Printers

Odusola A.F (2011) "Human Capital Investment and the Empirics of Economic Growth in Nigeria" in Re-kindling Investment in Nigeria published by the Nigerian Economic Society p. 257-271

Okebukola P (2011) "Education Reform Imperatives for Achieving Vision 20: 2020" The Guardian, Wednesday, April 29 p.36-84

- Olaniyan D.A and Okemakinde T. (2011) "Human Capital Theory: Implications for Educational Development" *European Journal of Scientific Research* p.157-162
- Robert, B. (2011) "Economic Growth in a Cross Section of Countries" *Quarterly Journal of Economics* 106 (2) p.407-414
- Umo Joe (2011) "Moving Nigeria into the New Economy: A Human Capital Perspective" Presidential Address to the 4<sup>th</sup> Annual Conference of Nigeria's Economic Society (NES) held at Sheraton Hotel and Towers, Abuja
- Soludo C (2010) Can Nigeria be the China of Africa? Abuja: Adgozo Press.
- Soludo C (2010) "Nigerian Economy: Can We Achieve the Vision 20:2020"
- Federal Government (2009) Nigeria Vision 20-2020 Abuja: National Planning Commission
- Wikipedia (2012) "Distance Education" <a href="http://en.wikipedia.org/wiki/Distance">http://en.wikipedia.org/wiki/Distance</a> education
- World Bank (2012) "Statistics on UBE Funding" in *The Roadmap for the Nigerian Education Sector* (2009) Federal Ministry of Information: Abuja
- World Bank (2005) "Assessment of 192 Countries on Human Capital" in Odusola A. F (1998)" Human Capital Investment and the Emperies of Economic Growth in Nigeria" *Re-kindling Investment in Nigeria* published by the Nigerian Economic Society p257-271