

PUBLIC EXPENDITURE ON EDUCATION AND HUMAN CAPITAL DEVELOPMENT IN NIGERIA

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Abstract

The paper seeks to examine public sector expenditure on education and human capital development in Nigeria. The study adopts descriptive method. In spite of the remarkable progress achieved in the development of human capital, witnessed in the expansionary trend in enrolment and number of schools in the primary, secondary and tertiary institutions, government expenditure on education revealed a stagnant nature. The implication is that the expenditure on education in Nigeria has been far from satisfactory and has not been able to meet the needs of the educational institutions whose enrolment increases from year to year. This has resulted in poor educational infrastructures, inadequate classrooms, lack of teaching aids, dearth of quality teachers and unconducive learning environment. Therefore, Nigeria should reposition herself as a potent force through the quality of her educational products from the primary, secondary and tertiary institutions by channelling more and adequate funds to the sector.

Keywords: Public expenditure, Human Capital, and Educational infrastructures

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Background to the Study

It has been widely acknowledged that effective investment in human capital is a key component of long-term economic growth and increased productivity. A well-educated population is an objective in itself as well as the conduit to accelerate social and economic development. The differences in the level of socio-economic development across nations is attributed not so much to natural resource endowment and the stock of physical capital, but to the quality and quantity of human resources. Human resource development tends to improve the quality and productivity of labour which in turn leads to economic growth (Uwatt, 2002). According to Harbison (1973), 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. Clearly, a country which is unable to develop the skills and knowledge of its people and to utilize them effectively in the national economy will be unable to develop anything else.

Furthermore, Oladeji and Adebayo (1996) asserted that human resources are a critical variable in the growth process and worthy of development. They are not only means, but more importantly, the ends that must be served to achieve economic progress. In addition, the wealth and prosperity of nations rest ultimately upon the development of people and the effective commitment of their energies and talents.

Education has been seen as the engine of growth and development. It facilitates the redesign of human development and environment with a view to achieving and sustaining a better quality of life.

There can be no significant economic growth in any country without adequate human and natural resources. In the past years, most of the planning in developing countries was centred on the accumulation of physical capital for rapid growth and development, without recognition of the important role played by human capital in the development process. Adamu (2002), opined that the stock of human capital, like the stock of natural and physical capital, will deteriorate and decay if not increased and maintained through improvements in public health and sanitation, social welfare services, good nutrition and guaranteed employment schemes. Therefore, human capital development indices should be integrated into the planning process in order to achieve a sustainable growth and development.

Furthermore, human capital has been recognized globally as one major factor that is responsible for the wealth of nations. According to Smith (1776) and Oluwalobi and Ogunrinola (2011), human capital refers to the acquired and useful abilities of all the inhabitants or members of the society. Uwatt (2002), also opined that human resources (human capital), refers to the aggregate stock of a nation's population that can be drawn upon for present and future production and distribution of goods and services. It comprises the essential variables, that is, knowledge, skills and attitude available within each unit of a nation's human resource stock. The United Nations Economic Commission for Africa (UNECA, 1990) describes human resources as the knowledge, skills, attitudes, physical and managerial effort required to manipulate capital, technology, and land

among other things, to produce goods and services for human consumption. In economic terms, it could be described as the accumulation of human capital and its effective investment in the development of an economy (Harbison and Mayers, 1964).

In Nigeria, the importance government places on human resources development over the years, has led to the establishment of educational institutions throughout the country. In Nigeria, the planning and administration of education is undertaken by all the three tiers of government, that is, local, state and federal government, corporate bodies, individuals, religious organizations, international agencies, Non-Governmental Organisations (NGOs) and community – based organizations (CBOs). However, the management of education is under the aegis of the federal government with the administrative mechanism devolving from the centre to the state and local governments. The basic policy on education with regard to structure, curriculum and school year is centrally determined. Public schools are largely funded by governments. Therefore, in this study, public schools will be used in the analysis because of the availability of data on government funded schools.

In the past, several studies have been conducted in an attempt to empirically determine the impact of public expenditure for education on human capital development. Most of the studies were macroeconomic and often seek to explain differences in economic growth rates across countries in terms of levels and changes in education and human capital (Schultz, 1999). In these studies a number of variables were used as proxy for human capital accumulation, thus signifying the existence of measurement problem. These variables include primary and secondary enrolment level and ratios, literacy rates, educational spending, student teacher ratio, stock of educational capital estimated using perpetual inventory method, etc. While each of these proxies of human capital has its own problem, the results of these studies yielded conflicting results. Hence, in order to avoid the problem associated with empirical analysis, this study will use descriptive method.

The study is outline as follows: After the introduction in section one is the background to the study in section two. Section three reviews various related literature. Section four discusses Nigeria's education system. Section five presents the analysis of expenditure on education as it affect human capital development. Section six deals with the constraint to educational development in Nigeria, and section seven provides conclusions and recommendations.

Literature Review

One major challenge facing the global community is how to achieve sustainable development. According to the IMF (2002), sustainable development is made up of three pillars. They are economic development, social development and environmental protection. Oluwatobi and Ogunrinola (2011), opined that the essence of these pillars are to maintain and enhance the capacity and capability of future generations while meeting the needs of the present generation. To accomplish these multi-dimensional tasks, human capital should be strategically cultivated and positioned for the preservation of

both the present and the future economic growth and development. Thus, according to Lyakurwa (2007) human capital development has the capacity to enlarge people's choices and opportunities, improve health living through acquired skills and knowledge and eventually enhance growth in the nation's gross domestic product through increased productivity.

Schult (1966), examines the impacts of education on the growth of the United States economy between 1929 and 1957 using an ordinary least square technique. He discovered that education and other improvement on labour contributed 1.25% per annum to the growth rate of the economy. In the words of Drucker (1994) an organization has to provide today the men who can run it tomorrow. The means is education. Education has been defined as all efforts, conscious and direct, incidental and indirect, made by a given society to accomplish certain objectives that are considered desirable in terms of the individuals - owned needs as well as the needs of the society where that education is based (CEF, 2006:1).

In their separate studies, Olomola (2002) and Ramcharan (2004) corroborated earlier studies that improvement in the labour quality is a significant contribution to economic growth and development in sub-Saharan African Countries which indicate that there exists a positive and statistically significant relationship between public expenditure on education and economic growth.

Adenuga (2002), has also demonstrated that investment in education has a direct effect on individual productivity and earnings. Most of the evidence comes from agriculture. Studies comparing the productivity and innovativeness of schooled and unschooled farmers and high-yielding seed varieties were available for improved farming techniques. The annual output of a farmer who had four years of schooling averaged 13.0 percent higher than that of his counterpart with no schooling experience. Even when these inputs were lacking, the schooled farmers output was 8.0 percent higher. The strategy for human resource development, according to Meier (1970), concerns the two-fold objective of building skills and providing productive employment for non-utilized or under utilized manpower. Oyinlola and Adam (2002), maintain that both have their roots in changes inherent in the development process and are related in part to education. Education is therefore, a sound economic investment that raises the quality of life, improves health and productivity in market and non-market work, increases individuals access to paid employment and often facilities social and political participation (Hill and King 1991, Bellew and King 1991). Investing in education raises per capita GNP, reduces poverty, and supports the expansion of knowledge in society Gemmill (1996).

Education sets off an intergenerational process of poverty reduction, because better-educated persons are more likely to ensure the education of their children and also attend to the health requirements of their wards (Oduola 1998). The impact of education on distribution and social equity is also well acknowledged, for instance, the achievement of East Asian Countries was largely due to successful educational strategies (World Bank 1993).

Appleton and Teal (1998), survey Africa's record in human capital development and appraise the challenges that lie ahead. The study compares Africa's human capital development record with those of other developing regions, particularly South Asia. The index of human welfare they computed, which is a composite of income, education and health, shows that Africa's level of human development is the lowest of all regions in the world.

Grammy and Assane (1996), using various indices such as school enrolment, improvements in health, reduction in poverty and enhancement of social security, as a proxy for human capital development engineers growth in per capita income and contributes immensely to economic growth. Still on the impact of human capital investment show that human capital development on economic growth, Mbanefoh (1980), undertook a cost benefit analysis of University education in Nigeria, and found that university education boosts productivity and hence, growth when the discount rate is between 1 and 10.

Ncube (1999) provides a quantitative evaluation of the effects of educational policy on economic growth in Zimbabwe. The study uses a regression analysis to establish the relationship between real GDP and other variables in the model, such as investment – GDP ratio, employment rate, and human capital factor proxied by total enrolment in Zimbabwe. The results of the study provide strong support for a long-run relationship between human capital investment and economic growth.

Nigeria's Education System

Nigeria's education system before 1976 according to Mordi, Englama and Adebusuyi (2010), could be classified into three categories, namely primary, secondary and tertiary institutions. The first level of education is the pre-primary education with a duration of two to three years. Children between 3 and 5 years attend the pre-primary / play group prior to their admission to the primary school of six years duration for children between 6 – 11 years old. The next level is the secondary education with a duration of six years, which is split between the junior and senior secondary education. Children proceed to the junior secondary school at about the age of 12, and the senior secondary school at about 15 years. The final tier of formal education comprises the universities, colleges of education and polytechnics designed for students aged 18 and above and the duration of learning ranges between 3 and 7 years, depending on the discipline being pursued. The non-formal system consists of functional literacy, remedial, continuing, vocational, cultural, political and environmental education for youths and adults.

Educational Development in Nigeria

The Nigerian government realized the importance of human development right from the first National Development plan. Massive establishment of Universities, Polytechnics, Colleges of education and allied institutions such as secondary, primary and Nursery schools were carried out. In part, scholarship and free education at certain levels was encouraged.

Table 1 shows the national summary of primary school statistics in Nigeria and the level of expansion in the education in the primary school sector. In 1960, there were 15,703 primary schools in Nigeria and total enrolment was 2,912,600 (Vision 2010 Report 1997). By 1970, enrolment had risen to 3.5 million while the number of primary schools stood at 14,902. The substantial increase in primary school enrolment level in the 1980s reflected the launching of the free universal Primary Education (UPE) in 1976. The summary of primary school statistics showed that in 1980, 13,760,030 children were enrolled in 35,626 schools. Since then primary school enrolment had maintained an uninterrupted upward trend reaching a peak in the 21st century. For instance, in 2009 total enrollment was 20,080,976 in 98,631 schools. Moreover, total male and female pupils enrolment was also on the increase. In 1980, the number of male enrollment was 9,173,353 while female enrolment was 4,586,677. In 2010, it rose to 13,775,870 for male and 6,887,935 for female.

Furthermore, the total number of teachers was increasing. In 1980, the number of male teachers stood at 237,163 while female teachers was 118,582. This upward trend was maintained in the years of the 21st century. In 2010, the number of male teachers was 384,128 and female teachers was 192,065. However, the number of classrooms witness an unimpressive and fluctuating increase. In 1980, the figure stood at 253,415, 444,985 in 1994, 1,072,059 in 1995, 252,585 in 2005 and 265,492 in 2010. This is attributable to lack of maintenance of the existing structures. Hence, most of the classrooms suffered from dilapidation. The pupil teacher ratio which stood at 1:38 in 1980 and 1:36 in 1990, rose to 1:41 in 1999. It maintained this trend until 2004 where it declined to 1:36. It showed an upward trend again from 2007 where the ratio was 1:65, 1:83 in 2008 and 1:154 in 2009. When compared to the United Nations stipulated minimum of 1:26, it is seen that Nigeria has not performed well. The increasing slide from the benchmark is due to increasing number of pupils available for school enrolment arising from intensive campaign of UPE and increased awareness from promotional educational schemes and programmes.

Besides enrolment, the primary education drop-out rate has been high. In table two, the drop-out rate for both males and females exhibited deceleration from 1991 to 2005. Furthermore, gender disaggregation indicated that the drop-out rate was higher among females as only 70 percent of total female enrolment completed the six years of primary education in 2005 compared with 85 percent for boys in the same year. In some part of Nigeria, early withdrawal of girls for marriage and apathy for western education accounted for the incidence of high drop-out, especially among females. Other reasons in various parts of the country included reluctance by some parents to send their daughters to school under the guise that a woman does not need education to be a good housewife.

The secondary education system inherited from the colonial Masters (Britain) at independence was made up of the secondary grammar, secondary commercial, secondary technical and teacher training and vocational institutions. From 1960 to 1975, secondary education was a five year programme. In 1976, there was a shift to another regime of educational system, spanning six years divided into three years each of junior and senior secondary schools. The summary of national post-primary schools statistics in table 3 showed an increasing trend within the period of study. For instance, in 1980, the

total number of schools was 4,472 with 1,877,057 students enrolment, 1990 was 6002 schools with 2,901,993 enrolments, and in 2007 the number of schools was 30,648 with enrolment of 6,009,869 students. Both male and female enrolment was on the increase. The male students enrolled in 1980 was 1,251,371, female 625686. In 2007, the male enrolment was 4,006,579 while female enrolment stood at 2,003,290. The number of teachers employed was also on the expansionary trend. In 1980, the number of teachers stood at 100,155, while in 2007, it was 153,287. However, the number of male teachers employed was more than the female teachers. In 1980, the number of male teachers was 66,770 while female teachers was 33,385. In 2007 the number of male teachers stood at 10,291 while female teachers was 51,096.

This further strengthens the general apathy of western education for girls and that a woman does not need education to be a good housewife. The national policy on education stipulates a teacher/students ratio of 1:40 at the secondary school level. The ratio ranged from 1:19 in 1980, 1:21 in 1990, 1:31 in 2000 to 1:39 in 2007. However, in reality there were instances where the ratio was far above the stipulated standard especially in the urban centres. The facilities improved considerably since 1999 due to sustained intervention of the multilateral agencies towards the attainment of the MDGs. More schools were available in the urban centres than in the rural areas.

Uwatt (2002), posited that in spite of the increase in the national enrolment in post-primary schools, the number of students constituted only 21.5 percent of the secondary school population (12-18 years) in 1991 rising to 32.3 percent in 1996. Even then, the performance is poor compared to other countries. For instance in 1991, secondary school enrolment ratio reached 96.0 percent in Japan, 102 percent in Canada, 88 percent in Israel, 107 percent in Singapore, 52 percent in Zimbabwe, 60 percent in Malaysia and 75 percent in Egypt. In South Africa and Namibia, the figure was 75 and 55 percent respectively in 1992 whereas in South Korea it was 96.0 percent in 1994 (CBN 2000:103). The higher education sub-sector also witnessed remarkable development. The education at this level was provided by the Universities, Polytechnics, Colleges of Education and Colleges of Technical Teacher Education. They were owned by federal government, state government, private organizations, churches and individuals.

The national summary of tertiary institutions statistics is provided in table 4. As at 1971, there was six universities in Nigeria, 13 in 1975, 16 in 1981 and 28 in 1987. As at 1995, there were 16 federal and eight state owned conventional universities, five federal and four state Universities of Technology, three Universities of Agriculture and one military university (Uwatt, 2002). In terms of private universities only three private universities existed in the country in 1999. Between 2001 and 2003 four (4) new ones were licensed to commence operation. However, as at 2006, more licenses were granted thus bringing the total number of private universities in Nigeria to 34 (Mordi, Englamia and Adebusuyi, 2010).

Middle level technical manpower is produced by the Polytechnics and Colleges of Technology. As at 2007, there were 52 polytechnics, 21 of which were owned by the federal government, 25 owned by the states and 6 owned by private entities. Total student enrolment in the polytechnics rose from 54,993 and 115,329 in 1990/91 and 1993/94 academic sessions to 360,535 in 2005/2006 respectively (National Board for Technical Education, 2007). Furthermore, Colleges of Education also provide middle level manpower. As at 2006, there were 72 Colleges of Education, 21 and 12 of which were owned by the federal government and private bodies, while the rest is owned by the State government. Generally, the number of tertiary institutions is increasing from year to year. In 1988, it was 104, 122 in 1990, 138 in 1997, 144 in 2000, 413 in 2007 and 459 in 2010. Similarly total enrolment was also on the increasing trend. In 1980, it was 57,742, 219,119 in 1988, 326,557 in 1990, 1,032,873 in 2000, 2,144,175 in 2006 and 1,453,237 in 2010.

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 |
|------------------------|------------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|
| Total Schools | 35,626 | 37611 | 37888 | 38211 | 35181 | 35281 | 35433 | 34266 | 33,9796 | 34,904 |
| Total Enrolment | 13,760,030 | 14285437 | 14574523 | 14383487 | 13612765 | 13025287 | 29148701 | 11540178 | 12690,798 | 12721087 |
| Total Male Enrolment | 9173353 | 9523624 | 9716348 | 9588991 | 9075176 | 8683524 | 1943246 | 7693452 | 7308218 | 6997356 |
| Total Female Enrolment | 4586677 | 4761814 | 4858175 | 4794496 | 4537589 | 4341763 | 971624 | 3846726 | 5382580 | 5723731 |
| Total Teachers | 355745 | 395634 | 387892 | 399508 | 413562 | 454186 | 102443 | 358258 | 308178 | 344221 |
| Total Male Teachers | 237163 | 263756 | 258594 | 266338 | 275708 | 302790 | 68295 | 238838 | 204,178 | 190979 |
| Total Female Teachers | 118582 | 131878 | 129298 | 133170 | 137854 | 151396 | 34148 | 119450 | 104004 | 153242 |
| Total Class Rooms | 253415 | 245532 | 260317 | 271540 | 291578 | Na | Na | Na | Na | 373726 |
| Teacher Pupil Ratio | 1:38 | 1:36 | 1:37 | 1:36 | 1:32 | 1:28 | 1:28 | 1:32 | 1:41 | 1:37 |

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Total Schools | 35433 | 35,446 | 36610 | 38234 | 38649 | 41531 | 40204 | 41342 | 40876 | 49326 |
| Total Enrolment | 13607249 | 13776854 | 14805937 | 15870280 | 16190947 | 15741078 | 14796074 | 17397553 | 16945567 | 17907008 |
| Total Male Enrolment | 7729677 | 7741897 | 8273824 | 8930650 | 9056367 | 8729421 | 8935865 | 9837394 | 9232885 | 10058434 |
| Total Female Enrolment | 5877572 | 6034957 | 6532113 | 6939680 | 7134580 | 7011657 | 6560209 | 7560195 | 6812682 | 7848576 |
| Total Teachers | 331915 | 353600 | 384212 | 428097 | 435210 | 437619 | 419997 | 426961 | 418715 | 432096 |
| Total Male Teachers | 189499 | 202753 | 211650 | 336266 | 233305 | 230287 | 216950 | 227430 | 219941 | 211150 |
| Total Female Teachers | 142416 | 150847 | 172562 | 191831 | 201905 | 207332 | 199797 | 201531 | 198774 | 21150 |
| Total Class Rooms | 376611 | 377439 | 407987 | 447859 | 444985 | 1,072059 | 405002 | 440059 | 456512 | 102943 |
| Teacher Pupil Ratio | 1:36 | 1:37 | 1:39 | 1:27 | 1:37 | 1:36 | 1:35 | 1:40 | 1:40 | 1:41 |

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Total Schools | 49,326 | 49306 | 51870 | 59131 | 60189 | 60226 | 54434 | 92,007 | 98631 | 98631 | na |
| Total Enrolment | 19158541 | 19263534 | 19861654 | 25765969 | 21575178 | 22099553 | 24422918 | 21632070 | 21294517 | 20080976 | 20663805 |
| Total Male Enrolment | 10745128 | 10805722 | 11070582 | 14430214 | 11925470 | 12182055 | 13302269 | 14421380 | 14196344 | 13387317 | 13775870 |
| Total Female Enrolment | 8413311 | 8457812 | 8791072 | 11335755 | 9649708 | 9917498 | 11120649 | 7210690 | 7098173 | 6693659 | 6887935 |
| Total Teachers | 446405 | 487303 | 491751 | 591041 | 599212 | 594816 | 534794 | 329082 | 255866 | 130040 | 576193 |
| Total Male Teachers | 227449 | 248699 | 248912 | 309806 | 295121 | 293637 | 283812 | 219388 | 170577 | 86693 | 384128 |
| Total Female Teachers | 218956 | 238604 | 242839 | 281235 | 304091 | 301179 | 250982 | 109694 | 85289 | 43347 | 192065 |
| Total Class Rooms | 116101 | 124229 | 116827 | 111257 | 254319 | 252585 | 254319 | 252345 | 254565 | 264824 | 265492 |
| Teacher Pupil Ratio | 1:43 | 1:40 | 1:40 | 1:44 | 1:36 | 1:37 | 1:46 | 1:65 | 1:83 | 1:154 | 1:36 |

Source: Federal Ministry of Education
National Bureau of Statistics
CBN Statistical Bulletin – Various Issues

| Year | Boys | Girls | National Average |
|------|-------|-------|------------------|
| 1991 | 60.1 | 58.7 | 59.7 |
| 1992 | 70.9 | 69.5 | 70.2 |
| 1993 | 71.5 | 69.5 | 73.0 |
| 1994 | 76.8 | 71.7 | 74.3 |
| 1995 | 68.2 | 70.6 | 69.4 |
| 2000 | 95.0 | 75.0 | 85.0 |
| 2001 | 88.0 | 71.0 | 80.07 |
| 2002 | 84.0 | 71.0 | 78.0 |
| 2003 | 102.0 | 85.0 | 94.0 |
| 2004 | 82.0 | 68.0 | 75.0 |
| 2005 | 85.0 | 70.0 | 78.0 |

Source: Mordi, Englang and Adebunsi, 2010

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 |
|------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Total Schools | 4472 | 5067 | 5317 | 5463 | 5826 | 5876 | 5730 | 6092 | 5991 | 5868 |
| Total Enrolment | 1877057 | 2473673 | 2880280 | 3334644 | 3402665 | 2995578 | 3094349 | 2934349 | 2941781 | 2723791 |
| Total Male Enrolment | 1251371 | 1649115 | 1920186 | 2223096 | 2268443 | 1997052 | 2062899 | 1956232 | 1729537 | 1581648 |
| Total Female Enrolment | 625686 | 824558 | 960094 | 1111548 | 1134222 | 998526 | 1031450 | 978117 | 1212244 | 1142143 |
| Total Teachers | 100155 | 120828 | 132572 | 152567 | 154687 | 145564 | 153814 | 145467 | 134400 | 136677 |
| Total Male Teachers | 66770 | 80552 | 88381 | 101711 | 103124 | 97042 | 102542 | 96978 | 92443 | 92976 |
| Total Female Teachers | 33385 | 40276 | 44191 | 50856 | 51563 | 48522 | 51272 | 48489 | 41957 | 43701 |
| Total Class Rooms | na |
| Teacher Pupil Ratio | 1:19 | 1:20 | 1:22 | 1:22 | 1:22 | 1:21 | 1:20 | 1:20 | 1:22 | 1:20 |

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|------------------------|---------|---------|---------|---------|---------|---------|---------|---------|----------|---------|
| Total Schools | 6002 | 5860 | 6009 | 5959 | 6074 | 6429 | 6387 | 6,141 | 6,026 | 6292 |
| Total Enrolment | 2901993 | 3123277 | 3600620 | 4032083 | 4451329 | 4448991 | 4201331 | 3921664 | 4003915 | 3844586 |
| Total Male Enrolment | 1661468 | 1821307 | 1979045 | 2182034 | 2419782 | 2354713 | 2229527 | 2083002 | 2235392 | 2046608 |
| Total Female Enrolment | 1240525 | 1301970 | 1621575 | 1850049 | 2031547 | 2094278 | 1971804 | 1838662 | 1,768523 | 1797977 |
| Total Teachers | 141377 | 141491 | 147530 | 151722 | 152596 | 158122 | 155879 | 144718 | 146,696 | 128153 |
| Total Male Teachers | 95,303 | 96555 | 98103 | 99359 | 97647 | 100956 | 100,610 | 92337 | 96,249 | 78594 |
| Total Female Teachers | 46074 | 44936 | 49427 | 52363 | 54949 | 57166 | 55,269 | 52381 | 50447 | 49559 |
| Total Class Rooms | na | 82930 | 90494 | 104693 | 100928 | 108905 | 106,764 | na | na | 102943 |
| Teacher Pupil Ratio | 1:21 | 1:22 | 1:25 | 1:27 | 1:29 | 1:28 | 1:27 | 1:27 | 1:27 | 1:29 |

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|------------------------|---------|---------|---------|---------|---------|---------|---------|---------|----------|---------|
| Total Schools | 6002 | 5860 | 6009 | 5959 | 6074 | 6429 | 6387 | 6,141 | 6,026 | 6292 |
| Total Enrolment | 2901993 | 3123277 | 3600620 | 4032083 | 445132 | 4448991 | 4201331 | 3921664 | 4003915 | 3844586 |
| Total Male Enrolment | 1661468 | 1821307 | 1979045 | 2182034 | 2419782 | 2354713 | 2229527 | 2083002 | 2235392 | 2046608 |
| Total Female Enrolment | 240525 | 1301970 | 1621575 | 1850049 | 2031547 | 2094278 | 1971804 | 1838662 | 1,768523 | 1797977 |
| Total Teachers | 141377 | 141491 | 147530 | 151722 | 152596 | 158122 | 155879 | 144718 | 146,696 | 128153 |
| Total Male Teachers | 95,303 | 96555 | 98103 | 99359 | 97647 | 100956 | 100,610 | 92337 | 96,249 | 78594 |
| Total Female Teachers | 46074 | 44936 | 49427 | 52363 | 54949 | 57166 | 55,269 | 52381 | 5044 | 49559 |
| Total Class Rooms | - | 82930 | 90494 | 104693 | 100928 | 108905 | 106,764 | na | na | 102943 |
| Teacher Pupil Ratio | 1:21 | 1:22 | 1:25 | 1:27 | 1:29 | 1:28 | 1:27 | 1:27 | 1:27 | 1:29 |

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|------------------------|---------|---------|---------|---------|---------|---------|---------|---------|--------|------|
| Total Schools | 6292 | 6292 | 6909 | 10570 | 10913 | 10830 | 18338 | 30648 | na | na |
| Total Enrolment | 4104345 | 4601105 | 4897048 | 6509772 | 6279562 | 6255522 | 6536038 | 6009869 | na | na |
| Total Male Enrolment | 2262130 | 2546993 | 2720906 | 3662451 | 3539648 | 3449007 | 3642871 | 4006579 | na | na |
| Total Female Enrolment | 1842215 | 2054112 | 2176143 | 2847321 | 2739914 | 2796515 | 2893167 | 2003290 | na | na |
| Total Teachers | 131621 | 143,315 | 133,682 | 180278 | 154594 | 155555 | 199163 | 153287 | 295540 | na |
| Total Male Teachers | 78732 | 84535 | 73,616 | 111008 | 99403 | 100341 | 122462 | 102191 | na | na |
| Total Female Teachers | 52889 | 58780 | 60066 | 69270 | 55191 | 55214 | 76701 | 51096 | na | na |
| Total Class Rooms | 116101 | 124229 | 140983 | 167378 | 98078 | 96634 | 98077 | 99287 | na | na |
| Teacher Pupil Ratio | 1:31 | 1:32 | 1:30 | 1:36 | 1:41 | 1:40 | 1:33 | 1:39 | na | na |

Source: Federal Ministry of Education
National Bureau of Statistics
CBN Statistical bulletin – various Issues

Table 4: National Summary of Tertiary Institutions Statistics

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 |
|-----------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|
| Total Schools | 13 | 16 | 19 | 24 | 27 | 24 | 24 | 28 | 104 | 118 |
| Total Enrolment | 57742 | 74607 | 87066 | 104683 | 116822 | 126285 | 135783 | 150613 | 219119 | 307702 |

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|-----------------|--------|--------|--------|--------|------|--------|--------|--------|--------|--------|
| Total Schools | 122 | 124 | 130 | 133 | 133 | 138 | 138 | 138 | 138 | 144 |
| Total Enrolment | 326557 | 368897 | 376122 | 383488 | na | 391035 | 689619 | 862023 | 941329 | 983689 |

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-----------------|---------|---------|---------|----------|----------|----------|---------|---------|---------|---------|---------|
| Total Schools | 144 | 142 | 142 | 144 | 146 | 148 | 402 | 413 | 431 | 453 | 459 |
| Total Enrolment | 1032873 | 1136160 | 1237162 | 13381537 | 14670170 | 14682180 | 2144175 | 1238094 | 1885147 | 1739658 | 1453237 |

Source: Federal Ministry of Education
National Universities Commission (NUC)

5. Analysis of Expenditure on Education

In spite of the remarkable progress achieved in the development of human capital as analysed in tables 1,3 and 4, government expenditure on education reveal a stagnant nature. This is shown on table 5. The expenditure on education as a percentage of total expenditure between 1980 and 2010 revealed that Nigeria has not attached any importance to education. The ratio is not impressive. This means that educational expenditure was not considered a matter of policy target otherwise it should have taken in an increasing proportion of the annual budgetary allocations. The share of education in the budget is largely on the downward trend. Though-out the period of study, the share is less than 10 percent except in the year 2000 and 2008. While the United State of America committed and appropriated 12.5 percent of its expenditure on education between 1985 and 1993, Nigeria allocated and spent 4.8 percent on education in 1985 and 0.7 percent in 1993 (Akpan, 2010). Korea spent 20.3 percent while Mexico spent 16.9 percent within the same period. Ram (1990) maintains that the Government of Kenya spent over 20 percent of its recurrent expenditure on education. The minimum standard of 26 percent as approved by the United Nations Educational Scientific and Cultural organization (UNESCO) became an illusion in Nigeria as the educational expenditure fell short of this declaration. This implies that the expenditure on education in Nigeria has been far from satisfactory and has not been able to meet the needs of the educational institutions whose enrolment increase from year to year. No wonder the educational sector in Nigeria is beclouded by uncertainty in all aspect. Most schools in Nigeria suffer from overcrowding, poor sanitation, poor management and poor intra-sectoral allocation.

Other features include abandoned capital projects, inadequate funding, poor condition of service etc. The attendant and composite effects of these myriads of problems are production of half baked graduates.

| Year | Allocation to Education | | | Total Budget | | | Share of Education in total budget (%) |
|------|-------------------------|---------|---------|--------------|----------|-----------|--|
| | Recurrent | Capital | Total | Recurrent | Capital | Total | |
| 1980 | 1597.2 | 952.6 | 1549.8 | 15661.0 | 10681.1 | 26342.1 | 5.88 |
| 1981 | 543.7 | 440.9 | 984.6 | 4846.7 | 6564.2 | 11410.9 | 8.62 |
| 1982 | 646.7 | 488.4 | 1135.1 | 4859.5 | 7998.0 | 12857.5 | 8.83 |
| 1983 | 620.8 | 346.6 | 967.4 | 5278.8 | 6807.3 | 12086.1 | 8.00 |
| 1984 | 716.3 | 144.9 | 861.2 | 11331.7 | 4634.6 | 15966.3 | 5.39 |
| 1985 | 669.5 | 180.7 | 850.2 | 11237.8 | 6516.4 | 17754.2 | 4.79 |
| 1986 | 652.8 | 442.0 | 1094.8 | 5635.9 | 5445.9 | 11081.8 | 9.88 |
| 1987 | 514.4 | 139.1 | 653.5 | 10749.2 | 4759.4 | 15508.6 | 4.21 |
| 1988 | 802.3 | 281.8 | 1084.1 | 13708.6 | 6582.2 | 20290.8 | 5.34 |
| 1989 | 1719.9 | 221.9 | 1941.8 | 20810.0 | 6309.4 | 27119.4 | 7.16 |
| 1990 | 1962.6 | 331.7 | 2294.3 | 27208.4 | 9055.6 | 36264 | 6.33 |
| 1991 | 1265.1 | 289.1 | 1554.2 | 25580.5 | 9591.1 | 35171.6 | 4.42 |
| 1992 | 1676.3 | 384.1 | 2060.4 | 36060.0 | 15975.9 | 52035.9 | 3.96 |
| 1993 | 6436.1 | 1563.0 | 799.1 | 93500.5 | 18600.0 | 112100.5 | 0.713 |
| 1994 | 7878.1 | 2405.7 | 10283.8 | 79200.0 | 31000.0 | 110200 | 9.33 |
| 1995 | 9421.3 | 3307.4 | 12728.7 | 108936.6 | 44559.0 | 153495.6 | 8.29 |
| 1996 | 12136.0 | 3215.8 | 15351.8 | 141000.0 | 48000.0 | 189000.0 | 8.12 |
| 1997 | 12136.0 | 3808.0 | 1594.4 | 160733.2 | 115990.0 | 276723.2 | 5.76 |
| 1998 | 13828.3 | 12793.0 | 26721.3 | 182,542.1 | 185375.0 | 367917.1 | 7.26 |
| 1999 | 23047.2 | 8516.6 | 31563.8 | 221,119.3 | 136984.2 | 358103.5 | 8.81 |
| 2000 | 44225.5 | 23342.6 | 67568.1 | 353,126.5 | 311608.8 | 664735.3 | 10.16 |
| 2001 | 39884.6 | 19860.0 | 59744.6 | 579329.1 | 438696.5 | 1018025.6 | 5.87 |

Table 5: Federal Government Expenditure on Education (1980-2010)

Source: Central Bank of Nigeria
Statistical Bulletin – various Issues

Constraint to Educational Development in Nigeria

Okuneye, Maku and Ayinla (2008) asserts that education is a critical component of human development. High quality and market driven education is capable of offering a genuine solution to most economic problems ranging from poverty, unemployment and population pressure. But unfortunately inspite of Nigeria's rich endowment in human and material resources, the performance of Nigerian economy in human capital development has been qualitatively pedestrian and unimpressive.

The quality of education has been unduly undermined by high teacher/pupil ratio at all levels of education, which is below the prescribed international standards. It is not because of high enrolment per se but because of inadequate supply of teaching staff in the education system. According to (Adenuga, 2002), he asserts that the reason for this is poor remuneration, poor conditions of service, lack of recognition of teachers and non-professionalization of teaching that not only discourages new entrants but also leads to high attrition rate of teachers.

Odia and Omofonmwan's (2007) had reported that the Nigerian education system was constrained by several challenges, which included poor funding, poor educational infrastructure, inadequate classrooms, lack of teaching aids (such as projectors, computers, laboratories and libraries), dearth of quality teachers and unconducive learning environment. Moreover, they pointed out that many social vices, such as examination malpractice, cultism, hooliganism, and corruption have emerged from the school system. These in addition, compound the problems that impede the nation's ability to cultivate the kinds of people that can serve as tools to facilitate economic development.

Furthermore, educational policies are formulated to show the direction of the national philosophy on education. However, the policy environment has been beset not only with frequent changes but also policy inconsistencies and lack of political will to implement accepted policies. Most policies are changed mid-stream without allowing them to run full cycle and carry out evaluations of their outcomes. This situation has inadvertently reduced the efficiency ratio of resources disbursed to the education sector.

Coli (2001) opine that one major concern in the Nigerian education system is the challenge of integrating new knowledge into academic courses and programmes. The system operates on obsolete knowledge thus finding it difficult to embrace new knowledge and discoveries. This leads to production of graduates who finds it difficult to fit into the labour market. This is because their acquired knowledge and skills are rarely relevant to the needs of employers of labour services. Another challenge confronting human capital development in Nigeria is lack of funding. And in the case where there is funding, it is not efficiently allocated. Research and Development (R & D) which facilitates the creation of knowledge to drive economic growth is poorly funded by the government.

Measures to Mitigate the Challenges in Human Capital Development

In their recommendation to mitigate the challenges of human capital development in Nigeria, Odi and Omofonmwan (2007) maintained that the government should be more responsible with funding. Besides, private educational investors, teachers, parents, guidance and students should be re-oriented. They further suggested that technical education and innovation adaptation centers should be encouraged and properly financed to produce the quality of human capital required to develop the service sector and become a knowledge economy. Furthermore, the World Bank (2010) recommends that recent initiatives such as the Nigerian University Network project, which aims at linking several Universities (Federal and Private) and developing shared infrastructure for cooperation and cost-reduction should be employed as a good start to address the challenges.

Conclusions

Human capital has been recognized globally as one major factor that is responsible for the wealth of nations. The differences in the level of socio-economic development across nations are attributed not so much to natural resource endowment and the stock of physical capital, but to the quality and quantity of human resources. In Nigeria, the importance government places on human resources development over the years has led to the establishment of educational institutions throughout the country.

In spite of the remarkable progress achieved in the development of human capital has witnessed in the expansionary trend in enrolment and number of schools, in primary, secondary and tertiary institutions, government expenditure on education reveals a stagnant nature. The implication is that the expenditure on education in Nigeria has been far from satisfactory and has not been able to meet the needs of the educational institutions whose enrolment increases from year to year. The government should show greater commitment to the development of the education sector through increased annual budgetary allocations to the sector to be able to tap from the potentials of education to achieve sustainable economic development.

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