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THE IMPACTS OF INTERVENTION PARASTATALS ON THE QUALITY OF TERTIARY EDUCATION IN NIGERIA: THE ROLE OF ETF, PTDF AND STEP-B PROJECT

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ABDULSALAM MAS’UD

ABSTRACT

The study studies the impact of intervention parastatals on the quality of tertiary education in Nigeria. Three intervention parastatals were used as case studies. These are Educational Tax Fund (ETF), Petroleum Technology Development Fund (PTDF) and Science and Technology Education at the Post-Basic Level (STEP-B) Project. In each case, one programme was selected and its impact on the overall tertiary institutions in the country was analysed. The study uses secondary data, and quantitative method of data analysis was adopted. Based on the secondary data analysed, it was found that despite the billions of Naira granted to tertiary institutions annually by these intervention parastatals, it is yet difficult to assume a significant improvement in the quality of tertiary education in Nigeria. This can be attributed to many factors. One, the difficulty in understanding the overall national impact of intervention parastatals in the quality of education in short-run. This is due to the selective approach in the intervention process resulting from the limited resources at their disposal. Two, there is lack of correlation between the number of the beneficiary institutions and that of the intervention parastatals. Three, low or ineffective Public-Private Partnership (PPP) between the intervention parastatals and the private sector institution, though, some intervention parastatals generate their revenue from the private sector. Based on these findings appropriate recommendations were made.

INTRODUCTION

The existence of different educational intervention parastatals in Nigeria has made it mandatory to conduct a research on their impact on the quality of tertiary education in Nigeria. Though, billions of Naira has been granted by the intervention parastatals
such as Educational Tax Fund (ETF), Petroleum Technology Development Fund (PTDF) and Science and Technology Education at the Post-Basic Level (STEP-B) Project to tertiary institutions, yet it is difficult to assume a significant improvement in the overall quality of tertiary education in Nigeria.

Furthermore, considering the low number of intervention parastatals compared to the number of tertiary institutions and limited resources at the disposal of these intervention parastatals it can be said that their impact on the overall quality of education in Nigeria may be low. This is not surprising considering the assertion made by the ETF executive secretary in an interactive session with journalists recently where he made it clear that his intervention parastatal is only managing the 2 percent profit tax of companies, and that the revenue is just a drop in the ocean as far as proper funding for the education sector in Nigeria was concerned (Eze, 2011). Though, ETF cannot make it alone, the existence of other intervention parastatals and the expected Public-Private Partnership (PPP) between these parastatals and private sector institutions is expected to make a difference. Therefore, it is on the foregoing that this study studies the impact of these intervention parastatals on the quality of tertiary education in Nigeria.

**CONCEPTUAL FRAMEWORK**

NEEDS (2004), disclosed that there are acute shortages of educational infrastructure and facilities. Inwang and Akpan (2003) observed that another problem that leads to poor performance in Vocational and Technical Education (VTE) is inadequate facilities in VTE tertiary institutions. Igbuzor (2006) asserts that the greatest challenge facing education is inadequate funding by federal, states and local governments, to the extent that funding has been in response to conditionalities imposed by international financial institutions (IFIs). ActionAid (2003) found that there is low quality of schooling particularly with regards to poor physical infrastructures, lack of motivated staff, poor utilization of resources, which resulted in negative impacts on the quality of education in Nigeria. Igbuzor (2006) asserts that the federal government expenditure on education is continuously deteriorating to the extent that it is less than 10% of annual budget from 2000 to 2005 with is contrary to UNESCO recommendation of 26%. The graph 1 below depicts the federal government expenditure in education:
From the above it is evident that education system is in great difficult in Nigeria needing significant intervention from both Governmental and Non-Governmental Agencies either in individual or in partnership through Public-Private Partnership (PPP).

**Intervention Parastatals in Nigeria**

This part discusses the formation and the objectives of these three (3) intervention parastatals.

**Educational Tax Fund (ETF): Its Formation and Objectives**

ETF came into being in 1993 after the promulgation of Educational Tax Decree number 7 of 1993 (now decree number 40 of 1998) as educational intervention agency with project management to improve the quality of education in Nigeria. Section 1(2) of the act provides that “The tax, which shall be at the rate of 2 per cent, shall be charged on the assessable profit of a company registered in Nigeria.” Section 1(3) further states that “the assessable profit of a company shall be ascertained in the manner specified in the Companies Income Tax Act or the Petroleum Profits Tax Act as the case may be”. Though, the Federal Inland Revenue Service (FIRS) is empowered by the Act to assess and collect Education Tax, however, the Fund administers the tax by disbursing the amounts to educational institutions at Federal, State and Local Government levels.

The mandates of the Fund as provided in Section 5(1) (a) to (g) of the Act are as follows: (a) work centres and prototype development; (b) Staff development and conference attendance; (c) Library systems at the different levels of education;
(d) Research equipment procurement and maintenance; (e) Higher Education Book Development Fund; (f) Redressing any imbalance in enrolment mix as between the higher educational institutions; and (g) Execution of the 9-year compulsory education programme.

ETF ensures that funds generated from education tax are utilized to improve the quality of education in Nigeria in the following ways: (1) Providing funding for educational facilities and infrastructural development; (2) Promoting creative and innovative approaches to educational learning and services; (3) Stimulating, supporting and enhancing improvement activities in educational foundation areas like Teacher Education, Teaching Practice, Library Development, etc; and (4) Championing new literacy-enhancing areas such as scientific, information and technology literacy.

**Petroleum Technology Development Fund (PTDF): Its Formation and Objectives**

Though, there exists Gulf Oil Company Fund for the development of petroleum technology in Nigeria before the emergence of PTDF, PTDF came into being after the promulgation of Act No. 25 of 1973. Section 1 of the Act provides that, there should be paid into the account of the fund (i) the balance of monetary assets outstanding in the accounts of the Gulf Oil Company Training Fund at the commencement of the Act (ii) all further sum payable to or received by the minister of Mines, Power & Steel (Now minister of energy) in terms of any agreement made by the Government and any company in relation to Petroleum Oil Prospecting or mining concessions (called signature bonus); and (iii) any other sums from time to time freely donated or accruing to the Government or the Fund for the training of Nigerians in the oil and gas industry as the said minister may direct.

Furthermore, Section 2 states that the Fund shall be available for the purpose of training Nigerians to qualify as Graduates, Professionals, Technicians and Craftsmen, in the fields of engineering, geology, science and management in the oil and gas industry in Nigeria or abroad. Specifically, Section 2 states that the Fund should be used for the following purpose:

(a) To provide scholarships and bursaries, wholly or partially in the Universities, Colleges and Institution in Nigeria or abroad
(b) To maintain, supplement, or subsidise such training or education as mentioned above.
(c) To make suitable endowments to faculties in Nigerian Universities, Colleges or institutions as approved by the minister.
(d) To make available suitable books and training equipment in the institutions aforesaid.
(e) For sponsoring regular or as necessary visits to oil fields, refineries, petrochemical plants, and for arranging any necessary attachments of personnel to establishments connected with the development of the oil and gas industry; and

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For financing of and participation in seminars and conferences which are connected with oil and gas industry in Nigeria or Abroad.

Science and Technology Education at Post-Basic Level (Step-b): Its Formation and Objectives

STEP-B is a FGN/World Bank project with the total credit of $180 millions. The objective of the STEP-B project is to achieve two targets that relate to education and research in Nigeria: (1) for Nigerian education and research institutions and their partners to produce more and better qualified science and technology graduates at the post-basic level in Nigeria (2) and for these same institutions to produce higher quality and more relevant research for the development of the country. Broadly, STEP-B is designed to achieve the following objectives:

(1) Increases in the number of students trained in science and technology (S&T)-related areas;
(2) Improvements in quality (like more publications and collaborations between researchers in the public and private sector, and between institutions in education and in research, and between Nigerian institutions and their partners internationally);
(3) Improvements in teaching and learning of S&T (these could include opportunities for better teacher training or improvements to technical and vocational education and training, or perhaps better use of computers and the internet as tools in teaching and learning); and
(4) Improved relevance of S&T education and relevance to the needs of Nigeria.

MATERIALS AND METHODS

The study selects one special intervention programme from three (3) intervention parastatals that formed our case study as a proxy to assess the overall national impact of the programme on the quality of tertiary education. For Educational Tax Fund (ETF), special intervention programme for building central teaching and research laboratories in tertiary institution was used. For Petroleum Technology Development Fund (PTDF), ICT special intervention of 2004 for tertiary institutions was used. For Science and Technology Education at the Post-Basic Level (STEP-B) Project, component 1A1 was used (see STEP-B chart in page 151). Quantitative method of data analysis was employed through the use of simple percentage. The data used was secondary in nature; it is derived from the official websites of ETF, PTDF, STEP-B Project, NUC, NBTE and NCEC.
The Impacts of Intervention Parastatals in Improving the Overall Quality of Education in Nigeria

The ETF

In 2009 ETF has made a special intervention to tertiary institutions of about #41.4 billion for the construction of central teaching/research laboratories, programmes upgrading and improving teaching and learning environments. The breakdown is as follows:

Table 1: ETF 2009 Special Intervention

<table>
<thead>
<tr>
<th>Institutions</th>
<th>Total Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNIVERSITIES – 6Nos @ N5.5b to be utilized as follows:</td>
<td>33.0BILLIONS</td>
</tr>
<tr>
<td>• Central Zonal Teaching/Research Lab = N2.5b</td>
<td></td>
</tr>
<tr>
<td>• Programmes Upgrade = N1.0b</td>
<td></td>
</tr>
<tr>
<td>Improvement in the Teaching and Learning Environment = N2.0b</td>
<td></td>
</tr>
<tr>
<td>NDA - 1No @ N1.5b</td>
<td>1.5BILLIONS</td>
</tr>
<tr>
<td>POLYTECHNICS – 3Nos @ N1.2b</td>
<td>3.6BILLIONS</td>
</tr>
<tr>
<td>COEs – 3Nos @ N1.1b</td>
<td>3.3BILLIONS</td>
</tr>
<tr>
<td>Total Allocation</td>
<td>41.4BILLIONS</td>
</tr>
</tbody>
</table>

Source: ETF (2009)

From table 1 above it can be seen that about 41.4 billions were allocated to 13 tertiary institutions in Nigeria covering 6 universities, Nigerian Defence Academy (NDA), 3 Polytechnics and 3 Colleges of educations. Looking at the total sum allocated it can be seen that it is very significant intervention that would improve the quality of tertiary institutions in Nigeria.
Table 2: Analysed Impact (Coverage) of ETF 2009 Special Intervention on Tertiary Education in Nigeria

<table>
<thead>
<tr>
<th>INSTITUTION TYPE [A]</th>
<th>FEDERAL [B]</th>
<th>STATE [C]</th>
<th>TOTAL [D = B + C]</th>
<th>ETF SPECIAL INTERVENTION 2009 [E]</th>
<th>OVER 100% [F=E/D*100%]</th>
<th>400% [G=400%]</th>
<th>OVERALL IMPACT (COVERAGE) [H=F/G*100%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNIVERSITY</td>
<td>36</td>
<td>31</td>
<td>67</td>
<td>6</td>
<td>8.95%</td>
<td>100</td>
<td>-</td>
</tr>
<tr>
<td>NDA</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>100%</td>
<td>100</td>
<td>-</td>
</tr>
<tr>
<td>POLYTECHNICS</td>
<td>21</td>
<td>30</td>
<td>51</td>
<td>3</td>
<td>5.88%</td>
<td>100</td>
<td>-</td>
</tr>
<tr>
<td>COLLEGES OF EDUCATION</td>
<td>22</td>
<td>37</td>
<td>59</td>
<td>3</td>
<td>5.08%</td>
<td>100%</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL</td>
<td>119.91%</td>
<td>400%</td>
<td>29.97%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table: This work, data from NUC, NBTE, NCEC and ETF websites (Accessed: 14/08/2011).

Building central teaching/research laboratories would have the potential of improving the quality of tertiary education in Nigeria. This is consistent with the Fakae (2005) who maintained that poor state of laboratory, inadequate space for teaching and learning facilities definitely affect the output of Nigerian tertiary education. However, from the table two above, it can be seen that this special intervention programme OF building central teaching and research laboratory in tertiary institutions can have only 29.97% impacts (coverage) on the overall number of tertiary institutions in Nigeria. Therefore, it can be said that in this short-run analysis, the impact of the programme on the overall quality of tertiary institutions is not very significant. However, in the long-run as the programme extended to cover the uncovered tertiary institutions the programme would have a significant impact on the quality of tertiary education in Nigeria by having a standard central teaching/research laboratory in all the beneficiary tertiary institutions in the country.

THE PTDF

Due to lack of Information and Communication Technology (ICT) facilities in the tertiary institutions PTDF has since 2004 intervened in the construction of ICT centres in some selected tertiary institutions. It was estimated that over #12 billions was expended in the construction of 146 ICT centres of which 102 are for unity secondary schools, 24 for universities and 20 for Federal Colleges of Education and Polytechnics (Azahan, 2011; PTDF 2001). It was also estimated that #6 billions would be expended in furnishing and equipping the centres by the private sectors. The plan was that the project will be
Public Private Partnership (PPP); PTDF to build the centres and private sector institutions to equip the centres. However, it turned-out that only 1 out of 146 centres was furnished and equipped by the private sector (Daruma, 2011 as cited in Azahan, 2011). As a result, PTDF has already commenced the project of furnishing and equipping the centres nationwide (Azahan, 2011). Looking at the billions involved; over #12 billions for construction and 6 billion for furnishing and equipping, it can be seen that this intervention is very significant. However, analysing the overall national impact (coverage) of the intervention on all the tertiary institutions in the country in table 3 below gives a different result:

Table 3: Analysis of the Overall National Impact (Coverage) of the PTDF ICT Intervention in Tertiary Institutions in Nigeria

<table>
<thead>
<tr>
<th>INSTITUTION TYPE</th>
<th>FEDERAL [B]</th>
<th>STATE [C]</th>
<th>TOTAL [D = B+C]</th>
<th>ETF SPECIAL INTERVENTION 2009 [E]</th>
<th>OVER 100% [F=E/D*100%]</th>
<th>400% [G=400%]</th>
<th>OVERALL IMPACT (COVERAGE) [H=F/G*100%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNIVERSITY</td>
<td>36</td>
<td>31</td>
<td>67</td>
<td>24</td>
<td>35.82%</td>
<td>100</td>
<td>-</td>
</tr>
<tr>
<td>NDA</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>POLYTEHNICS</td>
<td>21</td>
<td>30</td>
<td>51</td>
<td>10</td>
<td>19.61%</td>
<td>100</td>
<td>-</td>
</tr>
<tr>
<td>COLLEGES OF EDUCATION</td>
<td>22</td>
<td>37</td>
<td>59</td>
<td>10</td>
<td>16.95%</td>
<td>100%</td>
<td>-</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>72.38%</strong></td>
<td><strong>300%</strong></td>
<td><strong>24.13%</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table: This work, data from NUC, NBTE, NCEC and PTDF websites (Accessed: 14/08/2011).

Building ICT centres in tertiary institutions has the effect of improving the quality of education in the country. This is consistent with assertion of Adegbola (2007) that education of China and India was significantly improved through the deployment of ICT into these countries in 80s and 90s respectively. However, the challenge is that to what extent this intervention programme of building ICT centres in Nigerian tertiary institutions by PTDF impacted (covered) the tertiary institutions in the country so that overall national quality of tertiary institutions can be enhanced. From the table three above, it can be seen that the PTDF 2004 ICT intervention may only have 24.13% impacts (coverage) on the overall number of tertiary institutions in Nigeria. Therefore, it can be said that in this short-run analysis, the impact of the programme on the overall quality of tertiary education is not very significant.

However, in the long-run as the programme extended to cover the uncovered tertiary institutions the programme would have a significant impact on the quality of overall tertiary education in Nigeria by having a standard ICT centre in all the public
tertiary institutions in the country. This is consistent with Kehinde (2007), who maintained that when ICT is fully embraced in tertiary institutions, it provides the definite competitive edge to the Nigerian tertiary institutions.

THE STEP-B Project

STEP-B project has three (3) components and each of these three components also has sub-component. Currently, the project focuses on component one (1) together with its relevant sub-components. This can be elaborated through the chart below:

CHART 1: STEP-B CHART

Chart: This work, data from STEP-B Nigeria website (Accessed: 14/08/2011)

The chart above elaborates step-by-step components of STEP-B Project. The work uses component 1A1. That is Institutional grant for supporting research and development in Post-Basic Educational Institutions (PBEIs) and Federal Science and Technology (S&T) Agencies. It is assumed that all Nigerian Universities, Polytechnics and Colleges of Education have one or more courses of either science or technology or both. Therefore, they all have the eligibility of accessing the grant. Furthermore, Federal S&T agencies under Federal Ministry of Science and Technology were also included in the analysis, since they have equal chance of accessing the grant together with PBEIs as provided in the STEP-P criteria.
Table 4: Analysis of the Overall National Impact (Coverage) of Step-b Research and Development Intervention Grant in Tertiary Institutions

<table>
<thead>
<tr>
<th>INSTITUTION TYPE(A)</th>
<th>FEDERAL [B]</th>
<th>STATE [C]</th>
<th>TOTAL [D=B+C]</th>
<th>STEP-B INSTITUTIONAL GRANT @ US$250,000 PER PBEI COMPONENT 1A1 [E=D*250,000]</th>
<th>STEP-B COMPONENTAL ALLOCATION (F)</th>
<th>OVERALL IMPACT [G=E/F*100%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNIVERSITY</td>
<td>36</td>
<td>31</td>
<td>67</td>
<td>16.75 millions</td>
<td></td>
<td>US$16.75 millions</td>
</tr>
<tr>
<td>NDA</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0.25 million</td>
<td></td>
<td>US$0.25 million</td>
</tr>
<tr>
<td>POLYTEHNICS</td>
<td>21</td>
<td>30</td>
<td>51</td>
<td>12.75 millions</td>
<td></td>
<td>US$12.75 millions</td>
</tr>
<tr>
<td>COLLEGES OF EDUCATION</td>
<td>22</td>
<td>37</td>
<td>59</td>
<td>14.75 million</td>
<td></td>
<td>US$14.75 millions</td>
</tr>
<tr>
<td>FEDERAL S&amp;T AGENCIES</td>
<td>19</td>
<td>-</td>
<td>19</td>
<td>4.75 million</td>
<td></td>
<td>US$4.75 million</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td>193</td>
<td>US$52.25</td>
<td>US$32M</td>
<td>61.24%</td>
</tr>
</tbody>
</table>

Table: this work, data from NUC, NBTE, NCEC and STEP-B NIGERIA websites (Accessed: 14/08/2011).

Nigerian tertiary institutions need funding for research and development so as to improve the quality of tertiary education in the country. This is consistent with Mfon (2007) who suggests that federal government should inject more funds in to tertiary institutions if it is serious about turning the socio-economic and technological fortune of the nation. However, the question is does this special intervention programme of research and development grant has the capability of covering all the PBEIs in the country? From the table four above, it can be seen that if the STEP-B institutional research and development intervention grant (component 1A1) would be fully accessed by the PBEIs and Federal S&T agencies it would have 61.24% impacts (coverage) on the overall number of tertiary institutions in Nigeria. Therefore, it can be said that even in this short-run, the impact of the programme on the overall quality of tertiary institutions is significant.

However, this conclusion is based on the expectation that US$250,000 is sufficient for PBEIs for short-term research and development. Nevertheless, as the programme continues it will cover the uncovered PBEIs of about 38.76%. By covering all the PBEIs the quality of education would be enhanced, since funding of research activities is very vital to the quality of education.
CONCLUDING REMARKS

The paper studied the impact of intervention parastatals on the quality of tertiary education in Nigeria using three (3) intervention parastatals as a case study. In each of the three parastatals, one special intervention programme is used as proxy. The special intervention programmes used are: building teaching/research laboratory by ETF through 2009 special intervention programme, building and equipping ICT centres by PTDF through 2004 special intervention programme and awarding research and development grant by STEP-B project through component 1A1 2009. We assumed that each of the above programmes has the potentiality of improving the quality of education in Nigeria.

Overall, it was found that, it is difficult to assume a significant impact (coverage) of the above programmes on all tertiary institution in Nigeria leading to low improvement in the overall quality of tertiary education in the country. This can be attributed to many factors. One, the difficulty in understanding the overall national impact of intervention parastatals in the quality of education in short-run, this is due to the selective approach in the intervention process resulting from the limited resources at their disposal. Two, there is lack of correlation between the number of the beneficiary institutions and that of the intervention parastatals. Three, low or ineffective Public-Private Partnership between the intervention parastatals and the private sector institutions, though, some intervention parastatals generate their revenue from the private sector.

Based on the findings above, the paper recommends:

1. The need for increased allocation or revenue sources for the intervention parastatals.
2. The need to strengthen the Public-Private Partnership between the intervention parastatals and the private sector institutions
3. The need for increased efficiency by the beneficiary institutions in the application or utilisation of the fund allocated by the intervention parastatals.
4. Finally, there is the need for efficient usage of the installed resources by the users (mostly students) to ensure the intergenerational benefit of the installed resources by both the present and future generations.

REFERENCES


