THE IMPACT OF PETROLEUM TECHNOLOGY DEVELOPMENT FUND (PTDF) ON SOCIO-ECONOMIC DEVELOPMENT IN RIVERS STATE.

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ABSTRACT
The impact of Petroleum Technology Development Fund (PTDF) is expected to provide certain service ranging from human capacity building, infrastructural development, providing scholarships and bursaries, developing experts and technicians and providing employment. The problem of the research is that Petroleum Technology Development Fund (PTDF) actually did not impact on socio-economic development of the community. The instrument of primary data includes: observation and questionnaires while secondary data utilized both published and unpublished text materials. The method of data analysis is table and simple percentages. The study revealed among others that government interferences, poor publicity, low coverage and concentration on engineering based course are recommended that government should not intervene in the activities of PTDF, adverts should be placed on print and electronic media to create awareness about PTDF activities.

INTRODUCTION
Government of every nation performs vital functions to promote the well being and enhance development of its domain, but the government itself cannot oversee and perform all these functions alone, it has to delegate these functions and responsibilities to its agencies and parasitical to perform on its behalf. Nigeria as a country whose major revenue comes from crude oil has set up a parastatals to use the excess revenue realized from crude oil to promote certain facets of the economy. These parastatals are known as the Petroleum Technology Development Fund (PTDF).

This research is therefore carried out to know the impact of Petroleum Technology Development Fund (PTDF) on the socio-economic development of Nigeria. It would reveal the areas in which the services of PTDF are required and the milestone that has been achieved. Nigeria being a vest nation with cultural and ethnic diversities through government effort conducive and environment was provided for the smooth operation of Petroleum Technology Development Fund (PTDF) without conflict of locating or citing project, it was done based preferences and priority on selfless and humanitarian grounds.

This research aim at studying how Petroleum Technology Development Fund (PTDF) has improved human capacity development, how it has contributed infrastructural development, how it has succeeded in providing scholarships and bursaries, how it has developed experts and technicians and how it provided employment. Above all, the study aims at revealing the milestone fund (PTDF). With these array of areas of operation, it is expected at the end of the research we should be able to see to what extent Petroleum Technology Development Fund (PTDF) as a productive parastatals has impacted on both the social and economic facets of the country and the overall development of the country as a whole.
STATEMENT OF PROBLEM
Petroleum is the life blood of every country including petroleum Technology Development and as such it is very vital to the existence of petroleum industry. Besides it is the propeller that keeps the engine of petroleum industry running. Under Petroleum Technology Development Fund (PTDF) is the major problem inhibiting the growth and emergency of petroleum industry and its performance, yet the growth of petroleum industry is critical to the nation's economic settings due to this problem of petroleum industry most of the fund under previous petroleum were finding it difficult to break even. The major problem of the research is therefore to find out the impact of the petroleum technology development fund (PTDF) on socio -economic development on the performance level of profit using River State as a case study.

THEORETICAL FRAMEWORK
The theoretical framework used in guiding this work is evaluation theory. Evaluation aimed at assessing the successful attainment of a valued objective. Therefore, in a study like this, the "Evaluation criteria" of Edward A. Suchman is found appropriate for depth understanding of the criteria, a brief explanation of the process involved in evaluation is however necessary. The Evaluation process circle is shown in the figure below:

1. Goal setting (objectives)
2. Value formation
3. Identifying goal activity (programme planning)
4. Assessing the effect of this goal operation
5. Goal measuring (Criteria)

Source: Edward A. Suchman, Evaluating Research

Principles and practice in public science and social action programmes, kussell.
According to Suchman (1963), the process of evaluation starts with "value formulation" value is any aspect of a situation, event or object that is invested with a preferential interest of being "good, bed and desirable, undesirable or the like". The value in our society could be that, it was imperative for government to establish Petroleum Technology Development Fund (PTDF) to promote certain activities in the country value for mutation is followed by "Goal Setting" i.e. objectives. Thus, our set goal here is that Petroleum Technology Development Fund (PTDF) was established to give scholarships to students to travel abroad to study petroleum technology, establish various infrastructures in Nigerian universities to be able to offer such courses and to enter inter - alliance with other agencies to help aid the achievement of their target. The third step in the process is “measuring goal attainment i.e criteria to measure our goal attainment, we have to get a means of discovering” the number of people who have to get a means of discovering” the number of people who have benefitted from its services, the schools that have benefitted from its services and the milestone the agency has achieved. Infact, measuring goal attainment cannnotes the entirety of the goal setting (objectives) of the programmes, in relation to achievement and attainment. In this respect, it is
worth noting that the nature of the evaluation will depend largely on the type of measure we have available to determine the attainment of our objectives.

The next step in the process is the identification of "goal-attaining activity". This involves the consideration of a programme that will detect how people can be empowered and how the country can advance in petrochemical technology with petrol being the major source of foreign exchange earning in the country. Finally, on the basis of the assessment, a judgment will be made as to whether the goal-directed is worthwhile. The evaluation will involve designing and redesigning of action programmes in a spherical process at the end of the evaluation process, a new value may be got or the old value readdressed or reaffirmed.

**Evaluation criteria**

According to Edward A. Suchman, Evaluation research is conducted in terms of:

a. Varying levels of objectives
b. Different categories of effect.

In the latter case, the categories represent various criteria of success of failure according to which a programme may be evaluated. This may be applied to any level of objective and serve to define the type of measure to be used in judging an activity.

To this, Suchman, proposed five categories of criteria, according to which the success or failure of a programme may be evaluated. These are:

1. Effort
2. Performance
3. Adequacy of performance
4. Efficiency
5. Process

**Effort:** Evaluation in the category has their criteria of success, the quantity and quality of activity that take place. This represents an assessment of inputs or energy regardless of outputs it is intended to answer the questions "what did you do" and "How well did you do it"?

Yardstick in this category is based either on the capacity for effort or the effort itself. Effort evaluation assumes that the specific activity is a valid means of reaching higher goals. Although, effort evaluation does not give key answers, it can be valuable. At least, it indicates that something is being done in an attempt to meet a problem.

**Performance:** Performance or effort criteria measure the results of effect rather than the effort itself. This requires a clear statement of ones objectives. How much is accomplished relative to an immediate goal? Did any change occur? Was the change the intended one? In administration, for example, Edward A. Suchman notes once again that the ultimate justification of a public services programme in public support must rest with the proof of its effectiveness alleviating the problem being attacked. This however, boils down to the issue of validity and reliability. Suchman noted that while not generally recognized, there are a number of key validity assumptions involved in most evaluations of performance.

**Adequacy of performance:** This criteria of success refers to the degree to which effective performance is adequate to the total amount of need. Adequate is therefore a relative measure depending upon how high one set one's goals. Moreover, a measure of adequacy tells us how effective a programme has been in terms of the denominator of total need. If a programme has a high potency; but low exposure, total impact may not be great. However, Edward Suchman notes that:

"The criterion of adequacy needs to be tempered by a realistic awareness of what is possibly in service programme to think in terms of total effectiveness. Much less ambitions ultimate goals must be set in genera" for judging adequacy the notion of increments of process towards the "idealized" objectives has to be built into the concept of adequacy, as is currently being advocated for social case work".

**Efficiency:** A positive answer to this question, "Does it work? Often gives rise to a follow up question; "is there any better way to attain the same results?" efficiency is concerned with the evaluation of alternative paths or methods in terms of cost in money, time, personnel and public conveniences. In a sense, it represent a ratio between effort and performance output divided by input. As defined in the "Glossary of Administrative Terms on Public Health. The capacity of an individual, organization, facility, operation or activity to produce results in proportion to the effort expanded.

**Process:** In the course of evaluating the success or failure of a policy or a programme, a great deal can be learned about how and why a programme works or does not work. An analysis of process can have both
administrative and scientific significance, particularly where the evaluation indicates that a programme is not as expected.

The analysis of process may be made according to four main dimensions with:

i. The attributes of programmes itself, ii. The population exposed to the programme, iii. The situational context within which the programme take place, iv. The different kind of effects produced by the programme.

Edward Suchman notes here that obviously the number and extent to which these specifications from these dimensions are included in an assessment study will depend upon the statement of objective the research source available and administrative support of all actors involved.

Theories are bound on socio-economic development but the one that fits or the most appropriate for this field of study with Petroleum Technology Development Fund (PTDF) as the area of concentration is Evaluation theory by Edward. A. Suchman with Petroleum Technology Development Fund (PTDF) rendered with the responsibility of provision of human capacity development, infrastructure! development and award of scholarships and bursaries to post graduate and special under graduate students in the oil and gas studies. This theory involves constant evaluation of the programme one is undergoing and measure the level of success recorded and milestone achieved, which would result to designing or redesigning of action programmes. A new value may be got or the old value readressed and reaffirmed. This would enable the organization to meet up with the pace and target it sets for itself, adjust itself towards the realization of its objectives.

A respondent that strongly disagreed (SD) scored 1 point. In order to reach a decision as to which of the attributes were significant sources of the insured dissatisfaction with insurance services, the researcher may adopt a cut off point of mean score. It could be 3.50. thus, any attribute with a mean score of 3.50 and below is rejected as a source of the insured dissatisfaction with insurance services while the attributes with the mean score above 3.50 are accepted as sources of insured dissatisfaction with insurance services.

Let us assume that out of the 90 respondents who responded to the question, the distribution.

<table>
<thead>
<tr>
<th>Respondents</th>
<th>F</th>
<th>%</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agreed</td>
<td>50</td>
<td>55.6</td>
<td>250</td>
</tr>
<tr>
<td>Agreed</td>
<td>40</td>
<td>44.4</td>
<td>160</td>
</tr>
<tr>
<td>Undecided</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Disagreed</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Strongly disagreed</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
<td>100</td>
<td>410</td>
</tr>
</tbody>
</table>

Source: field survey, 2012

To calculate the mean score for the attribute, we have

\[
\frac{\sum X}{\sum F} = \frac{410}{90} = 4.56
\]

For the attribute, the calculated mean score is 4.56. Since the calculated mean score is above the cut off point of 3.50, we accept the attribute as a source of insured dissatisfaction with insurance service. In the same manner, other attributes in the questionnaire are analyzed.

PETROLEUM TECHNOLOGY DEVELOPMENT FUND (PTDF) AND HUMAN CAPACITY DEVELOPMENT

Petroleum Technology Development Fund (PTDF) is expected to assist people in development of their various skills and capacities to make them useful to themselves and the society and have a means of livelihood.
The table below shows the respondents and their assertion on this.

<table>
<thead>
<tr>
<th></th>
<th>Strongly agreed</th>
<th>Agreed</th>
<th>Undecided</th>
<th>Disagreed</th>
<th>Strongly disagreed</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>90</td>
<td></td>
<td>100</td>
<td>450</td>
<td>100</td>
<td></td>
<td>430</td>
</tr>
</tbody>
</table>

Source: field survey, 2012

To calculate the mean score for the attribute, we have

\[
\frac{\sum X}{\sum X} = 5
\]

For the attribute, the calculated mean score is 5. Since the calculated mean score is above the cut-off point of 3.50, we accept the attribute as a source of insured dissatisfaction with insurance services. In the same manner, other attributes in the questionnaire are analyzed.

**PETROLEUM TECHNOLOGY DEVELOPMENT FUND (PTDF) AND PROVISION OF SCHOLARSHIPS AND BURSARIES**

Petroleum Technology Development Fund (PTDF) is expected to support student in tertiary institutions both at degree level and post graduate with scholarships and bursaries. The table below reveals the reaction of the respondent to this assertion.

**Petroleum Technology Development Fund (PTDF) and Provision of Scholarship and Bursaries.**

Do you agree that Petroleum Technology Development Fund (PTDF) succeeded in providing scholarship and bursaries?

For discussing this attribute, using linker's 5 points scale to rate the level of respondent's agreement or disagreement with each attribute. The point are assigned in the following manner:

- A respondent that strongly agreed to the point (S.A) scored 5 points.
- A respondent that agreed (A) scored 4 points
- A respondent who was undecided (UN) scored 3 points.
- A respondent that disagreed (D) scored 2 points.
- A respondent that strongly disagreed (SD) scored 1 point.

In order to reach a decision as to which of the attributes were significant sources of the insured dissatisfaction with insurance services, the researcher may adopt a cut-off point of mean score. It could be 3.50. Thus, any attribute with a mean score of 3.50 and below is rejected as a source of the insured dissatisfaction with insurance services while the attributes with the mean score above 3.50 are accepted as sources of insured dissatisfaction with insurance services.

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<table>
<thead>
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<th>F</th>
<th>%</th>
<th>X</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agreed</td>
<td>70</td>
<td>77.2</td>
<td>350</td>
<td>81.3</td>
</tr>
<tr>
<td>Agreed</td>
<td>20</td>
<td>22.2</td>
<td>80</td>
<td>18.60</td>
</tr>
<tr>
<td>Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Disagreed</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Total</td>
<td>90</td>
<td>100</td>
<td>430</td>
<td>100</td>
</tr>
</tbody>
</table>
Source: field survey, 2012
To calculate the mean score for the attribute, we have
\[
\frac{\sum X}{\sum F} = \frac{430}{90} = 4.78
\]
For the attribute, the calculated mean score is 4.78. Since the calculated mean score is above the cut-off point of 3.50, we accept the attribute as a source of insured dissatisfaction with insurance of sources. In the same manner, other attributes in the questionnaire are analyzed.

**PETROLEUM TECHNOLOGY DEVELOPMENT FUND (PTDF) AND ” DEVELOPMENT OF EXPERTS AND TECHNICIANS.”**

Petroleum Technology Development Fund (PTDF) is expected to developed experts and technicians such as welder and other artisans in various fields of endeavors. The table below shows the responses of people to that effect.

**Petroleum Technology Development Fund (PTDF) and Development of Experts and Technicians.**

Do you agree that Petroleum Technology Development Fund (PTDF) helped in developing expert and technicians?

For discussing this attribute, using linker's 5 points scale to rate the level of respondents' agreement or disagreement with each attribute. The points are assigned in the following manner:

- A respondent that strongly agreed to the point (SA) scored 5 points
- A respondent that agreed (A) scored 4 points
- A respondent who was undecided (UN) scored 3 points
- A respondent that disagreed (D) scored 2 points
- A respondent that strongly disagreed (SD) scored 1 point.

In order to reach a decision as to which of the attributes were significant sources of the insured dissatisfaction with insurance services, the researcher may adopt a cut-off point of mean score. It could be 3.50. Thus, any attribute with a mean score of 3.50 and below is rejected as a source of insured dissatisfaction with insurance services while the attributes with the mean score above 3.50 are accepted as sources of insured dissatisfaction with insurance services.

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<tbody>
<tr>
<td>Strongly agreed</td>
<td>50</td>
<td>55.6</td>
<td>250</td>
<td>60.97</td>
</tr>
<tr>
<td>Agreed</td>
<td>40</td>
<td>44.4</td>
<td>160</td>
<td>39.02</td>
</tr>
<tr>
<td>Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
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<td>90</td>
<td>100</td>
<td>410</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: field survey, 2012
To calculate the mean score for the attribute, we have
\[
\frac{\sum X}{\sum F} = \frac{40}{90} = 4.56
\]
For the attribute, the calculated mean score is 4.56. Since the calculated mean score is above the cut-off point of 3.50, we accept the attribute as a source of insured dissatisfaction with insurance service. In the same manner, other attributes in the questionnaire are analyzed.

**PETROLEUM TECHNOLOGY DEVELOPMENT FUND (PTDF) AND PROVISION OF EMPLOYMENT**

Petroleum Technology Development Fund (PTDF) is expected to provide employment to people within its confines, regions and cleavages of the country through building of schools and colleges. The table below
shows people's responses on this. Do you agree that Petroleum Technology Development Fund (PTDF) have relevance in providing employment?

For discussing this attribute, using linker's 5 points scale to rate the level of respondent's agreement or disagreement with each attribute. The points are assigned in the following manner:

- A respondent that strongly agreed (SA) scored 5 points.
- A respondent that agreed (A) scored 4 points.
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**PETROLEUM TECHNOLOGY DEVELOPMENT FUND (PTDF) AND ITS PERFORMANCE**

Having assessed the milestone achieved by petroleum technology development fund (PTDF), one should be able to rate its performance. On this basis, the table below provides people's responses and rating of organization.

Petroleum Technology Development Fund (PTDF) and its performance, While do you think are the factors that affect the performance of petroleum technology development fund (PTDF)?

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfactory</td>
<td>90</td>
<td>100</td>
</tr>
<tr>
<td>Fair</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Unsatisfactory</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Respondents**

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<td>100</td>
</tr>
</tbody>
</table>

To calculate the mean score for the attribute, we have

\[
\frac{\sum X}{\sum F} = \frac{410}{90} = 4.56
\]
Total 90 100

Source: field survey, 2012

RECOMMENDATIONS
Having gone through the analytical expressions from the data collected from the staff and beneficiaries of the services of petroleum technology development fund (PTDF), it is important to make some recommendations on the subject matter.

- Petroleum technology development fund (PTDF) should place adverts on print and electronic media to create awareness about its existence, its mission and main data.
- Petroleum technology development fund (PTDF) should diversify its concentration on engineering based courses to other field of study such as social sciences, administration, arts, medicine and humanities.
- Petroleum technology development fund (PTDF) should broaden its coverage to every state of the federation so that its services would be enjoyed at the grass roots level.
- Government should not intervene in the activities of the petroleum technology development fund (PTDF) as an autonomous body, which provides selfless services. It should be allowed to perform its activities accordingly without being influenced.

CONCLUSION
In the light of the research conducted and the findings therefore, the researcher conclude reliably that Petroleum Technology Development Fund (PTDF) has contributed immensely to socio-economic development having helped in human capacity building, infrastructural development, providing scholarships and bursaries, developing experts and technicians and providing employment opportunities.

To cap it up, Petroleum Technology Development Fund (PTDF) has achieved a milestone and its performance has been rated satisfactory.

References
http://www.ptdf.gov.ng