



**Africa
Centre for
Energy Policy**

*Public Interest Report
No. 2*



**THREE YEARS OF PETROLEUM REVENUE
MANAGEMENT IN GHANA**
Transparency without Accountability

Mohammed Amin Adam (PhD)

July 2014

Edited by Kirsty Wissing

Avenue D, Hse. No. 119 D, North Legon,
P. O. Box CT2121 Cantonment, Accra
Tel. : 0302 900 730
www.acepghana.com



PUBLIC INTEREST REPORT

No. 2

THREE YEARS OF PETROLEUM REVENUE MANAGEMENT IN GHANA

Transparency without Accountability

Mohammed Amin Adam (PhD)

July 2014

Edited by Kirsty Wissing

Supported by:



TABLE OF CONTENTS

List of Tables	ii
EXECUTIVE SUMMARY	iii
INTRODUCTION	1
Section 1.....	4
ANALYSIS OF PETROLEUM RECEIPTS	4
1.1. Introduction.....	4
i. Petroleum Receipts and Capital Gains Tax.....	5
ii. Petroleum Revenues and Corporate Taxes	6
iii. Surface Rentals	8
iv. Expected Gas Revenues	9
v. Redetermination and Petroleum Revenues	10
1.2. Key Observations from Analysis of the Revenue Side.....	11
Section 2.....	13
ANALYSIS OF EXPENDITURE FROM PETROLEUM REVENUES.....	13
2.1. Introduction.....	13
2.2. How Much to Spend	13
2.3. Where to Spend?	16
2.3.1. Spending by GNPC	16
2.3.2. Spending of the Annual Budget Funding Amount (ABFA)	21
2.4. How Efficient to Spend?	26
2.4.1. Spreading too thin?	27
Section 3.....	31
PERFORMANCE OF THE GHANA PETROLEUM FUNDS.....	31
3.1. Introduction.....	31
3.2. Effect of ABFA on the Ghana Petroleum Funds – the role of selective interpretation of the law	33
Section 4.....	38
CASE STUDY	38
RECONCILIATION OF CRUDE OIL LIFTING BY THE GHANA/GNPC GROUP.....	38
4.1. Introduction.....	38
4.2. What is Ghana’s Entitlement from the Jubilee Field?	39

4.3. Reconciliation of Crude oil Lifting.....	40
i. Unaccounted Barrels.....	42
ii. Spill-over Barrels.....	42
4.4. Reconciliation of Petroleum Data between Government of Ghana and Accountability Institutions	43
Section 5.....	46
MAIN FINDINGS AND RECOMMENDATIONS	46

List of Tables

Table 1: Petroleum Receipts (US\$)	4
Table 2. Share of Petroleum by Jubilee Partners (%).....	11
Table 3: Amount of Petroleum Revenues allocated for Spending (US\$).....	15
Table 4. Spending by GNPC (US\$)	17
Table 5. Commitment of Cash to Projects by GNPC (US\$).....	19
Table 6. GNPC Costs Apportionment (US\$ million)	20
Table 7. Spending of ABFA by Priority Area	22
Table 8: Road Infrastructure Investment from ABFA	24
Table 9. Investment in Agriculture from ABFA	25
Table 10. Allocation of ABFA by Ministries, Departments and Agencies	26
Table 11: Road Investment from ABFA and Completion Stages.....	28
Table 12. Allocation of ABFA by Ministries, Departments and Agencies (GH¢).....	30
Table 13. Reconciliation of Data on the Ghana Petroleum Funds.....	31
Table 14. Distribution of Petroleum Receipts (US\$)	34
Table 15: 2012 Variance Analysis of ABFA.....	35
Table 16. Ghana/GNPC Group Entitlement in the Jubilee Unit Agreement	39
Table 17. Ghana/GNPC Group Entitlement after Redetermination in October 2011	40
Table 18. Reconciliation of Crude Oil Lifting by Government Agencies	41
Table 19. Data reconciliation between Government of Ghana and Accountability Institutions.....	44

EXECUTIVE SUMMARY

Three years of Ghana's oil production has been very eventful. With more than 100 million barrels of crude oil already exported, oil has overtaken cocoa as the second largest export commodity of Ghana. Oil contributed to unprecedented growth in Ghana's GDP in 2011; whilst from 2011 – 2013 Ghana was the third largest recipient of Foreign Direct Investment (FDI) in Africa largely on account of oil investment. Ghana has so far received over US\$2 billion from its share of crude oil.

But with production expected to increase as a result of new developments and new discoveries, experts and citizens are already looking back to how early oil revenues have been managed so far. On this journey of reflection, the Africa Centre for Energy Policy (ACEP) in a new report titled “Three Years of Petroleum Revenue Management in Ghana – Transparency without Accountability”, has explored a number of questions on how Ghana managed its oil money over the last three years. Whether Ghana so far received what is due it from oil? Whether the government has invested the oil money efficiently? And whether the Government complied with the strict restrictions on the utilization of oil money?

The Report also covered key issues about petroleum revenue management highlighted in the 2011 and 2012 Reports of the Public Interest and Accountability Committee (PIAC); the 2010/2011 Ghana Extractive Industries Transparency Initiative (GHEITI) Reconciliation Report and the 2013 ACEP Report on Value for money of Projects Funded with Oil Revenues.

The report concludes that Ghana's management of petroleum revenues has been characterized by greater transparency, but accountability remains very low. Specifically, this report found that:

- i. Ghana could have earned more from oil than it has done so far as a result of factors such as non-collection of capital gains tax on acquisitions in the Jubilee field projects, non-collection of corporate taxes, non-reporting of surface rental fees, non-realization of expected Gas receipts and redetermination of the Original Hydro Carbon in Place in the Jubilee Unit Operating Area.

- ii. The Ghana National Petroleum Corporation (GNPC) has weak spending capacity and some of the uses to which the corporation applied revenues ceded to it requires more explanation. These uses include its repayment of a facility from PNB Paribas for which there is no public information on the terms and use of the facility; the sponsorship of Ghana's Black Stars participation at the World Cup; and the large amount of un-spent cash of about US\$141.70 million over the last three years in spite of parliamentary approval of the programmes which the money was meant for.
- iii. GNPC has been demanding to have control over its revenues from the carried and participating interest, to give it the leverage to raise its own capital to finance operations, but its current weak spending capacity does not support this demand.
- iv. There is demonstrated evidence of inefficiency in the use of petroleum revenues. Limited revenues have been thinly distributed over projects which has led to over-run timeframes and over-run costs. This has undermined value for money in projects funded with petroleum revenues.
- v. The Government of Ghana (GOG) has exploited weaknesses in the Petroleum Revenue Management Act (PRMA), 2011 (Act 815) to increase its spending of petroleum revenues meant for savings in the Stabilization Fund. The Minister of Finance capriciously exercised the provision that allows him the discretion to cap the Stabilization Fund in order to use excess revenue for debt repayment. The cap of US\$250 million was without any basis except to deny the Fund money.
- vi. Government reporting on petroleum revenues is not adequate as data on annual stocks and spill-over barrels do not affect the determination of the benchmark revenue, nor is it considered in crude oil accounting. This has created room for potential under-declaration of crude oil produced in the previous year but lifted in the current year, and thereby undermines accountability.
- vii. There are discrepancies between Government reports on petroleum receipts and those of the accountability institutions such as PIAC and (GHEITI). These institutions should develop reporting structures that allow them to validate Government reported data through independent research/investigation.

To address the above issues, major recommendations on how Ghana could improve on crude oil and revenue accountability include but not limited to the following:

- i. Ghana should apply both the Petroleum Income Tax Law, 1987 (PNDC Law 188) and the Internal Revenue Act, 2000 (Act 592) in the oil industry. This calls for urgent harmonization of the tax laws to ensure Ghana maximizes revenues from the oil industry.
- ii. In approving the corporation's annual programme of activities, Parliament must seek evidence of efficient spending of previous allocations of petroleum revenues as a condition. Similarly, the allocation of revenues to the Ghana National Gas Company (GNGC, also known as Ghana Gas) should reverse from the Annual Budget Funding Amount (ABFA) to ceded revenues for the use of Ghana's national oil companies as prescribed in Act 815. However, like GNPC, Parliament must amend the Act to include a provision that requires GNGC to also submit its annual programmes to Parliament.
- iii. The use of petroleum revenues should be guided by development priorities, whilst project selection should be determined by the size of expected petroleum revenues and the extent to which those projects can add value to the economy. Government is encouraged to expedite the submission of the proposed Public Investment Management Bill to Parliament to pass into law, as it has great potential to address problems associated with project selection, timely delivery of projects and quality assurance.
- iv. The determination of the maximum cap on the Ghana Stabilization Fund should not be arbitrary. It should be based on benchmarks that help maintain strong liquidity of the Fund to enable it address the volatility effects of petroleum crude oil prices. This requires an amendment to Act 815. Also, any excess revenue over the cap should be applied to repaying debts that are specific and which have been evaluated to have greatly impacted on development of the country.
- v. Government must include reporting on annual stocks and spill-over barrels to enable citizens and accountability institutions to track revenues from the sale of crude oil. This also helps accountability institutions to reconcile Government data with other independent sources.

INTRODUCTION

The discovery of oil and gas in the Jubilee Field in 2007 ended Ghana's long search for commercially viable discovery. With proven reserves of about 1.8 billion barrels of crude oil, Ghana was on its way to joining the league of oil producing countries. Commercial production of oil commenced in November 2010 and to date more than 100 million of crude oil has been exported from the Jubilee Field. Ghana has subsequently become a net producer of oil since 2013.

Petroleum revenues have since 2011 become a feature of Ghana's annual Budget. The revenues have increased from US\$444 million in 2011 to US\$846 million in 2013. Thus by the end of 2013, Ghana earned a cumulative amount of US\$1.8 billion.

Following the commercial production of oil, Parliament passed the Petroleum Revenue Management Act 2011 (Act 815) to govern the management of petroleum revenues. The Act defines the framework for accounting for crude oil production, petroleum receipts and expenditure from petroleum revenues. It also provides investment and savings rules. In particular, the Act made provisions for financing the National Oil Company (NOC), for transfers to the Budget annually and for savings. The Savings Fund, called the Ghana Petroleum Funds (GPFs) consists of the Ghana Stabilization Fund (GSF) and the Ghana Heritage Fund (GHF), which are used respectively for the purpose of cushioning the Budget against oil price and production volatilities and for intergenerational equity objective.

Since the commencement of the Act, the GPFs have been invested in "qualifying instruments" mostly in Euroclear Bank bonds. By the end of 2013, the total balance of the GPFs stood at US\$609.9 million.

Like every law, the implementation of the Act 815 has faced some challenges. These range from forecasting problems, interpretation of sections of the law, compensating errors, conflict of provisions and financing of the Public Interest and Accountability Committee (PIAC) a citizens based group providing independent oversight on the management of petroleum revenues.

The Government of Ghana announced its intention to review the Act three years into its implementation to address some of the challenges encountered over the period. A revised Bill is expected in Parliament for consideration of the proposed amendments later in the year 2014. Civil Society has doubted the good intentions of the Government by expressing fear the amendments would only loosen up the restrictions in the Act and create more room for Government to spend most of the revenues.

It is in this spirit that a review of how the Government implemented the Act over the last three years has become more appropriate. This report which highlights the key issues that have affected the management of petroleum revenues will therefore bring to the fore the challenges as well as the opportunities for improving on the management of the revenues. Civil society groups and citizens generally could find this report very relevant in their advocacy for improved governance of petroleum revenues. Similarly, the Government of Ghana as well as other agencies of State that have mandate under the Act will appreciate independent perspectives of their stewardship so far and to apply the lessons in improving on their statutory roles.

The report synthesizes different reports issued by the Government, the Bank of Ghana, the PIAC, the Ghana EITI and ACEP's Value for Money Report. In particular, the report covers the following:

- i. Analysis of data on crude oil production, petroleum receipts, expenditure from petroleum and the performance of the Ghana Petroleum Funds;
- ii. A review of findings from the reports outlined above and an assessment of the extent to which those findings have affected the management of petroleum revenues over the period 2011-2013;
- iii. A review of the extent to which Government complied with the provisions of the Act 815;
- iv. There is also a case study on crude oil accounting.

The Methodology used for this report was largely based on desktop analysis of various reports, analysis of the Government annual Budget and Policy Statements, and independent research. The report is largely qualitative with minor quantitative analysis. This was intended to make the report less technical for the understanding and use by civil society groups and citizens for advocacy.

Generally, the report found that Government has progressively improved on its management of petroleum revenues year after year; and has largely complied with provisions of the Act. There is evidence therefore of the application of the transparency principles in the Act which has ensured the timely publication of relevant data and information especially in 2013.

However, there remain operational challenges that have undermined accountability of petroleum revenues, including for instance discrepancies in data published by the Government and the Accountability institutions, approval of Government's budget on petroleum revenues by Parliament without effective due diligence; poor resourcing of PIAC, lateness of the Ghana EITI Report of 2012 and 2013, misalignment between Petroleum Agreements and the Act 815 in terms of the revenue streams; and inefficiency in the spending of petroleum revenues; among others.

Section 1

ANALYSIS OF PETROLEUM RECEIPTS

1.1. Introduction

Petroleum receipts in Ghana follow petroleum fiscal terms negotiated in the Petroleum Agreements between the Republic of Ghana and the International Oil Companies (IOCs). The fiscal terms which determine petroleum streams are defined in Section 6 of the Act 815 as follows:

- a. Royalties, additional oil entitlements, surface rentals, other receipts from any petroleum operations and from the sale or export of petroleum;*
- b. Any amount from direct or indirect participation of government in petroleum operations;*
- c. Corporate income taxes in cash from upstream and midstream petroleum companies;*
- d. Any amount payable by the national oil company as corporate income tax, royalty, dividends, or any other amount due in accordance with the laws of Ghana; and*
- e. Any amount received by government directly or indirectly from petroleum resources not covered by paragraphs (a) to (d) including where applicable, capital gains tax derived from the sale of ownership of exploration, development and production rights.*

Table 1: Petroleum Receipts (US\$)

Item	2011	2012	2013
Royalties – Jubilee	122,941,144	150,642,450	175,006,213
Royalties – Saltpond	0	104,193	403,276
Carried and Participating Interest	321,183,580	390,428,872	453,573,866
Corporate Income Tax	0	0	216,985,498
Surface Rentals	0	448,225	798,332
Gas Receipts	0	0	0
Total	444,124,724	541,623,740	846,767,184

Source: Various: Petroleum Annual Report, 2012, 2013; Reconciliation Report on Ghana Petroleum Funds, 2013.

From 2011 to 2013, the Government received a cumulative amount of US\$1,832,515,649 being proceeds from its share of petroleum over the period. The following Table shows the contributions of the various revenues streams over the period.

From the Table, there have been a number of gaps in revenue accounting which have affected the size of expected petroleum revenues. To date, Government's forecast of petroleum revenues have either exceeded or fallen short. Some of the factors that have accounted for these gaps are:

- i. Non-collection of capital gains tax on acquisitions in the Jubilee field projects
- ii. Non-collection of corporate taxes
- iii. Non-reporting on surface rental fees
- iv. Non-realization of expected Gas receipts
- v. Redetermination of the Original Hydro Carbon in Place in the Jubilee Unit Operating Area

These factors have been explored in the following paragraphs:

i. Petroleum Receipts and Capital Gains Tax

An analysis of petroleum revenue streams for the period covering 2011-2013 shows that the revenue streams recognised have wider scope than what is contained in the Petroleum Agreements signed with the oil companies before the commencement of oil production. For example, Section 6(v) of Act 815 recognizes capital gains tax derived from the sale of ownership of exploration, development and production rights. This however contradicts the negotiated terms in the currently producing Jubilee contracts which prohibit capital gain tax. Article 12.2(f) of the Petroleum Agreement on both the West Cape Three Points and Deep Water Tano Blocks provides that:

“Contractors shall be subject to taxes, duties, fees or other imports of a minor nature and amount in so far as they do not relate to the stamping and registration of this (1) Agreement, (2) any assignment of interest in this agreement or (3) any contract in respect of petroleum operations between contractor and any subcontractors”.

Accordingly, petroleum revenues declared by Government in 2011 and 2012 did not cover taxes on capital gained from the two main acquisitions over the period. On 26th May, 2011, Tullow announced that it entered into a conditional agreement to acquire the interests of EO Group Limited for a combined share and cash consideration of US\$305 million. The acquisition which was completed on 25th July 2011, increased Tullow's interest in the West

Cape Three Points license offshore Ghana by 3.5% to 26.4% and increased the Group's interest in the Jubilee field by 1.7% to 36.5%¹. Similarly, the acquisition of Sabre Oil and Gas Holdings Ltd. received approvals by the Governments of Ghana and South Africa in February 2012².

The prohibition of capital gains tax in the Petroleum Agreement is consistent with the Petroleum Income Tax Law, 1987 (PNDC Law 188) but inconsistent with Section 95 (1) of the Internal Revenue Act, 2000 (Act 592) which fixes capital gains tax at 10% of capital gains accruing to or derived by that person from the realization of a chargeable asset owned by that person.

Although the Act 815 provides in Section 1(2) that “*where there is any conflict between the provisions of this law and (a) any other enactment, or (b) the terms, conditions and stipulations in a petroleum authorization, on the collection, allocation and management of petroleum revenue, the provisions of this Act shall prevail*”; both Government and industry have argued that negotiations of the producing Jubilee Agreements from which the acquisitions were made were governed by the Petroleum Income Tax Law (the industry specific tax law) and that these Agreements are protected by stability clauses.

It is important to note that civil society actors drew attention to the conflict over capital gains tax between the Internal Revenue Act and the Jubilee Petroleum Agreements citing revenue losses of about \$70 million³. This sustained advocacy paid off as Government has now included it in recently negotiated Petroleum Agreements between the Government of Ghana and AMNI International and CAMAC Energy. This followed announcements by the Government that the capital gains tax as provided for in the Internal Revenue Act would apply to the petroleum industry⁴.

ii. Petroleum Revenues and Corporate Taxes

Corporate taxes are charged on the profits of oil companies and are governed by PNDC Law 188. Profitability is determined by the difference between revenue oil and cost oil. Ghana's fiscal regime is a royalty/tax-based regime hence the corporate tax component appears to be a major source of petroleum revenues to the Government. In PNDC Law 188, the corporate tax

¹ Tullow Oil Trading Statement and Operational Updates, 2011 (cited at www.tullowoil.com).

² PetroSA “PetroSA acquires stake in Jubilee oil field” Cape Town, 9/20/2012 (cited at petrosa.co.za)

³ Public Agenda Newspaper, Friday 6th August 2011.

⁴ Budget and Policy Statement of the Government of Ghana, 2014, paragraph 991 which states that “Mr. Speaker, it is proposed that provisions relating to the capital gains tax in the Internal Revenue Act, 2000 (Act 592) should now be applied to petroleum operations”.

rate could go as high as 50% on profit oil. However, the Government has negotiated a rate of 35% in all Petroleum Agreements.

Cost oil which reduces the tax base is also governed by PNDC Law 188 and requires an annual cost recovery of 20% of total cost oil for a period not exceeding 5 years.

The major cause of revenue shortfalls over the last three years has been attributed to shortfalls in corporate taxes by oil companies. For the most part, Government did not meet its projections of corporate taxes. Only the projections in 2013 of US\$55 million were exceeded and taxes totalling US\$172,216,932 were collected as at September 2013. For 2011 and 2012, projected corporate taxes amounted to US\$402.5 million and US\$239.7 million respectively. However, only US\$40 million was actually collected as taxes in respect of the 2012 fiscal year. The shortfall was blamed on carry-forward losses and lower than expected production volume.

As already indicated, one of the causes of the losses carried forward to 2011 was the non-realization of revenues in 2010, the year of commencement of crude oil production from the Jubilee Field. The Government of Ghana declared in its 2012 Petroleum Annual Report, a requirement by law, that crude oil lifting in 2011 was more than total production for the year because the lifting included two months of oil produced in November and December 2010⁵. Thus the losses could be attributed to non-realization of revenues for 2010 in spite that it is the year of commencement of production. PNDC Law 188 provides that capital recovery starts from the year of commencement of production; hence the Jubilee partners were entitled to capital allowance of 20% of the total cost oil which was legitimately carried forward once revenues were not realized until 2011.

The other reason for the losses was production decline. For example in 2012, the average daily production rate in 2012 was 71,998 barrels per day against the projected 90,000 barrels per day for the year due to the pre-mature decline experienced from November 2011⁶.

It is important to state that the Government of Ghana exposed its desperation for early revenues as was demonstrated in the 2011 Budget and Policy Statement of the Government. Government included corporate taxes in expected revenues for the 2011 fiscal year. This was

⁵ Crude oil production in 2011 was 24,195,895 barrels whilst oil lifting for the year was 24,451,452 barrels. Thus lifting was more than production for the year by 255,557 barrels. Revenues from the sale of the difference was realized in 2011. This accounted for the losses in 2010 which were carried forward to 2011.

⁶ Ministry of Finance and Economic Planning, Petroleum Annual Report, 2012.

curious because at the time the 2011 Budget was presented, Government knew the implications of commencing production in November 2010 without realizing revenues, the result being declaration of losses and the legal requirement to carry the losses forward. Why it went ahead to project corporate taxes for 2011 remains a mystery. This had potential implications for the corporate image of the oil companies as there was the possibility of the companies being accused of not meeting their tax obligations to the State, a situation that could create mistrust between the citizens of Ghana and the oil companies.

The incident also exposed the inexperience of the Government of Ghana in petroleum revenue accounting, a situation that mostly applies to frontier oil states. The bitter lessons learnt by Government translated into Government's adoption of a conservative approach to forecasting petroleum revenues as was exhibited in the significantly lower estimate of US\$55 million in corporate taxes in 2013 against actual collection of US\$172 million in the first 9 months of the year. Either way, forecasting of petroleum revenues remains and could significantly affect budgetary planning particularly when crude oil production increases in future.

There have been arguments for the use of an independent state agency such as the Statistical Service of Ghana or a Committee appointed by Parliament to conduct crude oil price forecasting and introduce credibility into the forecasting process. Government has responded to this instead by inviting independent bodies like PIAC and the Bank of Ghana to participate in the forecasting process.

iii. Surface Rentals

Surface rentals do not form a significant share of petroleum revenues. However, Section 6 of Act 815 considers it as part of oil receipts. Except in 2011, the Government reported on surface rental fees paid by oil companies. By the end of 2013, a total of US\$1,246,002 was received by Government as surface rentals. Government did not report on surface rentals in 2011 for two main reasons:

First, the IOCs paid their rental fees for 2011 before Act 815 was passed. There was therefore no legal framework for accounting for rentals as petroleum receipts.

Second, the Petroleum Holding Fund Account had not been opened before the IOCs were invoiced. Surface rentals received before the coming into force of Act 815 were paid into Government of Ghana's Non-Tax Revenue Account. The payment procedure was that the oil

companies were directed to make payment into a designated account at the time of invoicing. Prior to Act 815, GNPC invoiced the IOCs but the beneficiary account details on the Commercial Invoices stood in the name of the Government of Ghana.

The PIAC first brought this issue to the attention of Government. PIAC for instance cited rentals from Salt-pond operations which were not reported⁷. Consequently, Government started reporting on rentals paid by all oil companies in active operation.

iv. Expected Gas Revenues

In the 2013 projections for petroleum revenues, Government included gas revenues of US\$9,760,000. However, this was contingent on the completion of the Ghana Gas Infrastructure Project at Atuabo in the Western Region. The project includes: the installation of offshore pipeline, onshore pipeline, a gas processing plant, a Natural Gas Liquids export system for the export of Liquefied Petroleum Gas (LPG); and an office complex.

The project, which is being executed by SINOPEC, has failed to meet several completion dates. Indeed, the project has been delayed for four years as a result of funding challenges. Delays in disbursing a loan facility of US\$3 billion sourced by the Government of Ghana from the China Development Bank to finance the project have largely been blamed for the non-completion of the project as scheduled. The project costing US\$1 billion is funded with US\$850 million from the US\$3 billion facility. As of December 2013, about US\$600 million was disbursed to SINOPEC from CDB.

The loan facility has however become more costly than anticipated. In spite of the slow disbursement, the Government of Ghana has continued to pay a commitment fee of 1% of the undrawn and un-cancelled balance which has been reported to have claimed US\$54 million already. Ghana also has an off-taker agreement signed between GNPC and UNIPPEC to sell Ghana's share of crude oil to the Chinese and to use the proceeds to repay the facility. The agreement involved a cumulative supply of 750 million barrels of crude oil to China over 15 years. That is about 13,000 barrels a day.

Frustrated by the delays in disbursements and the refusal by the Chinese to renegotiate the terms, the Government of Ghana announced its decision not to source US\$1.5 billion of the original amount of the facility. Particularly, the Chinese insisted on paying for the crude oil at US\$85 per barrel even though crude prices have remained a little above US\$100 per barrel. If

⁷ Public Interest and Accountability Committee, Report on the management of petroleum revenues for the period 2011.

the Government of Ghana granted this, it would mean that at US\$100 per barrel, Ghana would lose about US\$25 on each barrel of oil totalling US\$18 billion over the entire period.

The delay in the completion of the gas infrastructure project has had two effects on petroleum revenue accounting. First, gas revenues have been delayed in spite of its inclusion in revenue projections for 2013. Second, delayed gas revenue as well as revenue losses from sale of processed gas have ensured that the Petroleum Holding Fund received relatively less revenues in the year under consideration.

v. Redetermination and Petroleum Revenues

Redetermination is a process by which owners in a unit agreement commit that at one or more dates in the future, they will revisit the unit interest due to information received from new wells or production data, and where appropriate, adjust the Tract Participations to reflect the proportion of the reservoir and associated hydrocarbons that underlies their participation arising from the new data.⁸

The exercise of redetermination is provided for in the Jubilee Field Unitization and Unit Operating Agreement (UUOA). In October 2011, the Jubilee partners completed the first equity redetermination in the contract area effective from 1st December 2011. Thus, tract participation of the Jubilee Field's Original Hydrocarbon in Place (OHIP) was realigned from a ratio of 50% each from the Deep Water Tano and West Cape Three Point Blocks, to a ratio of 45.63340% for the Deep Water Tano Block to 54.6660% for the West Cape Three Point Block.

Article 5.5C of the Unitization and Unit Operating Agreement provides that “*Unit Interests and Paying Interest shall be automatically revisedupon a Redetermination of Tract Participants*”. Accordingly, this affected the interests of all the partners including the Government of Ghana's interest which reduced marginally from 13.75% to 13.64%. The downward shift in Ghana's interest was due to reduction in the tract participation of the Deep Water Tano in which Ghana has a relatively higher interest from 50% to 45.63340%. In this case, crude oil lifting by Ghana for the 2012 reporting year declined and this had implications for the size of petroleum revenues to the Government.

In spite of the relevance of the redetermination exercise, it was not until in 2013 that the Government of Ghana announced the marginal decline in Ghana's interest in the Jubilee Unit

⁸ Memory Bank (2010) Unitization and Redetermination: Winning the end Game.

from 13.75% to 13.64%⁹. However, Government failed to provide explanation to Ghanaians about the circumstances that led to the decline in its interest. This should not be encouraged since information lag on petroleum revenue reporting could undermine accountability.

The Table below shows the interests of all partners before and after redetermination.

Table 2. Share of Petroleum by Jubilee Partners (%)

Company	Share before Redetermination	Company	Share after Redetermination
GNPC	13.7500%	GNPC	13.64084%
Tullow	34.7047%	Tullow	35.47954%
Kosmos	23.4913%	Kosmos	24.07710%
Anadarko	23.4913%	Anadarko	24.07710%
Sabre	2.8127%	PetroSA ¹⁰	2.72544%
EO¹¹	1.7500%	-	-
Total	100%		100%

Source: GNPC

1.2. Key Observations from Analysis of the Revenue Side

From the analysis of petroleum receipts, a number of observations which highlights some of the challenges in petroleum revenue accounting have been provided as follows.

- a. Petroleum revenue streams include capital gain tax by law. However, petroleum revenues declared by Government in 2011 and 2012 did not cover taxes on capital gained from the acquisitions of EO Group limited by Tullow Oil and Sabre Oil and Gas Holding by PetroSA because the taxes are not allowed under the Petroleum Agreements. There is therefore a conflict on the scope of revenue streams between the Petroleum Agreements and Act 815. Thus it is likely that when many more blocks are bought on stream, the scope of revenue streams may differ by contract as a result of differences in negotiated fiscal terms.
- b. The major cause of revenue shortfall from 2011 to 2013 was corporate taxes as a result of carry-forward losses and production decline. The inclusion of corporate taxes in the Government's budget for 2011 and 2012 when the oil companies were not in tax paying positions did not only expose Government's desperation for early revenues

⁹ Republic of Ghana, 2013 Annual Report on the Petroleum Funds, pg 11.

¹⁰ PetroSA acquired the interest of Sabre Oil and Gas Limited.

¹¹ Tullow Ghana acquired the interest of the EO Group.

from oil but also showed Government's weaknesses in forecasting and budgetary planning.

- c. Since the commencement of the Act 815, gas receipts have not yet formed part of petroleum revenues. This is due to delay in the completion of the Ghana Gas Infrastructure Project. Government's projections of gas receipts of US\$9,760,000 for the 2013 reporting year was therefore not realized which again showed serious disconnection between budget and project planning.
- d. In October 2011 the Jubilee partners completed a redetermination of their interests in the Jubilee Operating Unit. This led to Ghana's carried and participating interest being reduced from 13.75% to 13.64%. However, although the redetermination took effect in December 2011, it was not until in 2013 that the Government announced the decline in its interest and this was without any explanation. Such information lag does not promote accountability.

Section 2

ANALYSIS OF EXPENDITURE FROM PETROLEUM REVENUES

2.1. Introduction

Resource rich countries which are receiving resource revenues often seek to address three fundamental issues relating to the use and management of revenues. These are:

- a. How much to spend and save?
- b. Where to spend or invest?
- c. How efficient to spend or invest?

Ghana's Petroleum Revenue Management Act 815 has important provisions that seek to address these fundamental issues. In this section, the report analyzes the size of spending as well as spending choices.

2.2. How Much to Spend

The spending objectives of petroleum revenues as defined in Section 21(2) of Act 815 are to:

- a. maximize the rate of economic development;
- b. promote equality of economic opportunity with a view to ensure the well-being of citizens;
- c. undertake even and balanced development of the regions and

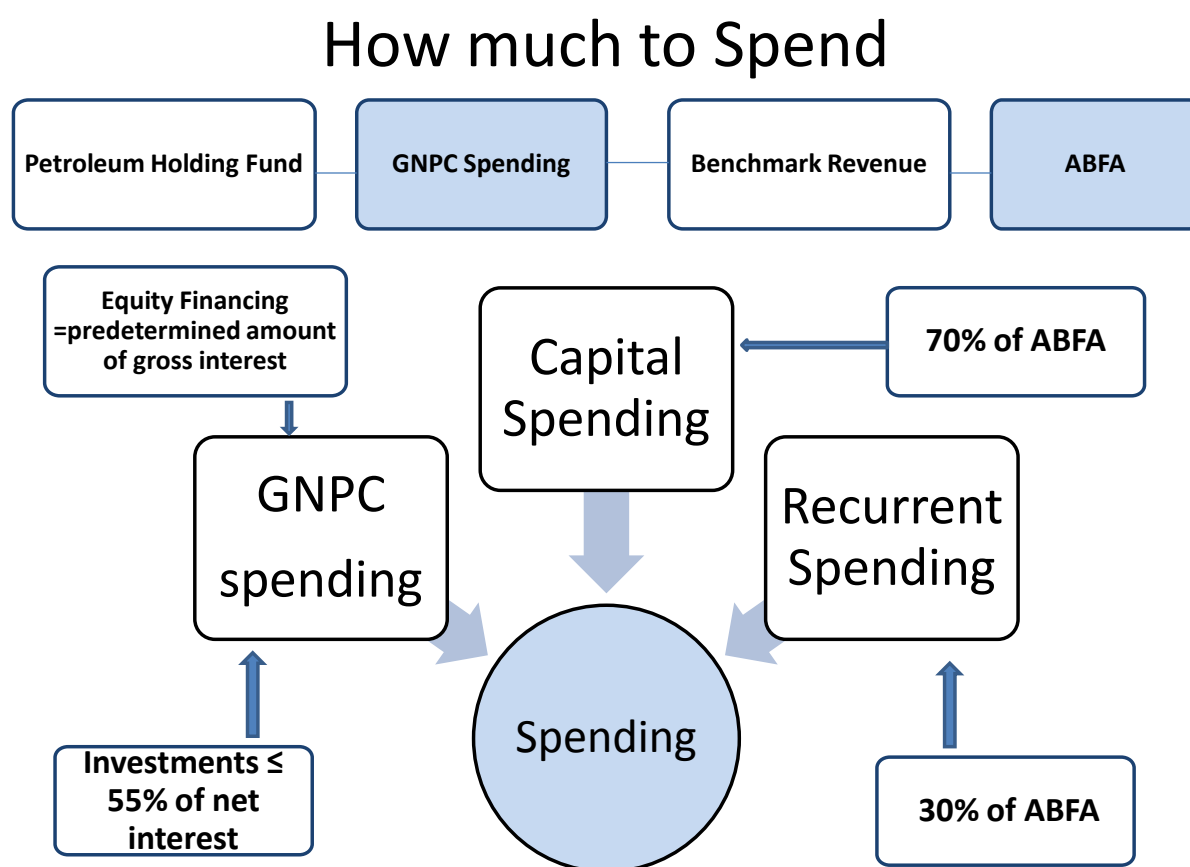
The law further requires that decision on the size of spending shall be guided by a medium-term expenditure framework aligned with a long-term national development plan approved by Parliament.

The law prescribes two types of spend from petroleum revenues through the budget process. These are:

- i. Spending by the National Oil Company (NOC)
- ii. Spending by Central Government (Annual Budget Funding Amount (ABFA))

The following diagram illustrates the spending types and by how much spending is required under the law.

Figure 1. A Schematic Presentation of Spending Windows in the Petroleum Revenue Management Act 815



From the diagram above, we can deduce the following:

- i. Spending by the NOC is charged on the Ghana Petroleum Holding Fund whilst the Annual Budget Funding Amount (ABFA) is charged on the Benchmark Revenue.
- ii. The size of the NOCs spending is dictated by the size of its equity financing requirement in producing blocks plus a proportion not exceeding 55% of the net carried and participating Interest (i.e total carried and participating interest less equity financing cost).
- iii. The size of ABFA is determined by an amount not exceeding 70% of the Benchmark revenue¹². Benchmark revenue is the estimated revenue from

¹² The exact amount of ABFA as provided by Section 18(2) of Act 815 shall be “guided by a medium term development strategy aligned with a long term national development plan, absorptive capacity of the economy

petroleum operations expected by the Government for the corresponding financial year. It does not include the share of petroleum revenues ceded to the NOC.

- iv. The ABFA can be used for capital spending (a minimum of 70%) and the balance for recurrent spending.

Over the period 2011-2013, the total amount of petroleum revenues allocated for spending are presented in the following Table:

Table 3: Amount of Petroleum Revenues allocated for Spending (US\$)

Spending Type	2011	2012	2013	Total	%
Transfer to GNPC					
GNPC Equity Financing Cost	132,484,814	124,630,628	68,319,783	325,435,225	23%
GNPC share of Net Carried and Participating	75,479,488	106,319,298	154,101,633	335,900,419	24%
ABFA	166,955,067	286,554,461	273,197,567	726,707,095	52%
Total	374,919,369	517,504,387	495,618,983	1,388,042,739	100%
%	27%	37%	36%	100%	

Source: Various – 2012 and 2013 Annual Reports on the Petroleum Funds published by Ministry of Finance; and 2013 Reconciliation Report on the Ghana Petroleum Holding Fund.

From the Table above we deduce the following:

- a. Total allocation to GNPC for the period 2011-2013 for equity financing amount to US\$325,435,225, about 23% of total spending allocation for the period.-
- b. Total allocation for the period 2011-2012 for GNPC's investments in non-Jubilee projects amount to US\$335,900,419, being 24% of total allocation for spending.
- c. A total of US\$726,707,095 being 52% of total allocation for spending over the period 2011-2013 was allocated as ABFA. Thus, more than half of total allocation for spending for the period was committed to spending on development projects through the annual budget process.
- d. Even though 2013 had the highest petroleum receipts (See Table 1), the highest share of revenues allocated for spending was recorded in 2012 (See Table 2). This means that a substantial amount of petroleum receipts in 2013 was saved in the Petroleum Funds. This was also based on projections of petroleum revenues. Government's projections of petroleum revenues in 2013 were grossly understated, resulting in a

and the need for prudent macroeconomic management". This shall be reviewed every three years (Section 18(4) and the review shall take into account development needs, absorptive capacity of the economy and the need to maintain macroeconomic stability (Section 18(5)); and any changes resulting from the review shall be ratified by a resolution of Parliament supported by not less than two-third majority in Parliament (Section 18(6)).

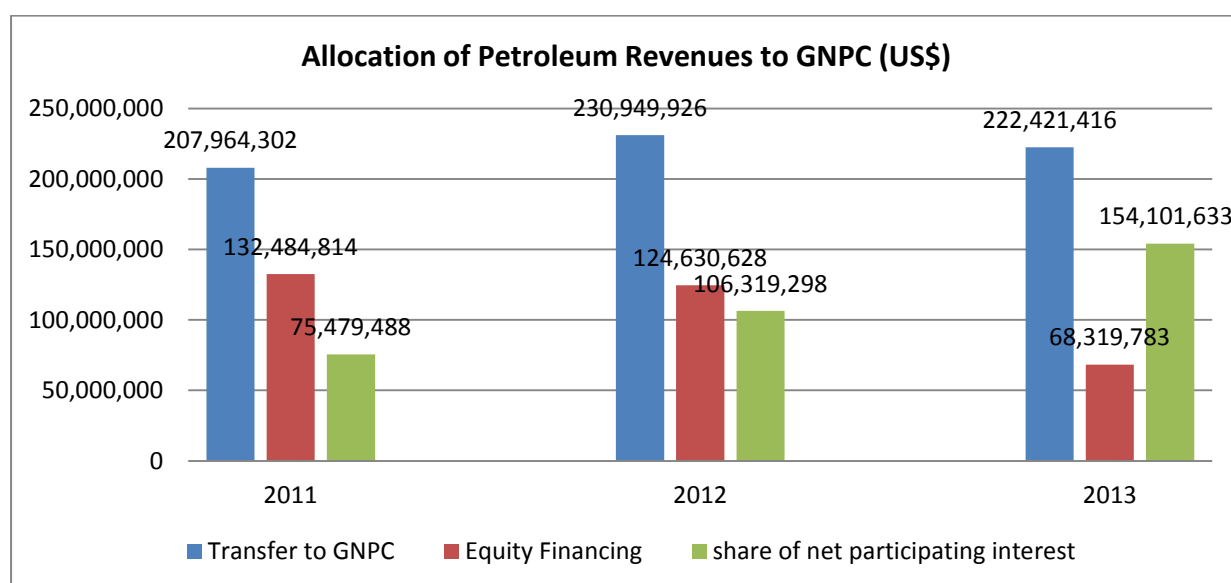
significant amount of excess revenues over the projected ABFA. Thus transfers to the Ghana Petroleum Funds in 2013 were US\$351,048,145, much more than ABFA for the year at US\$273,197,567. Therefore in line with Government's obsession for spending, the Minister of Finance has commenced action to amend the Petroleum Revenue Management Act 815 in its three years of experimentation to create room to increase the spending space. This defeats the purpose of the restrictions in the law and as a result, the potential for fiscal indiscretion is very high with serious implications for fiscal discipline.

2.3. Where to Spend?

2.3.1. Spending by GNPC

The Figure below shows the allocation of petroleum revenues to GNPC.

Figure 2. Allocation of Petroleum Revenues to GNPC



Source: Various – 2012 and 2013 Annual Reports on the Petroleum Funds published by Ministry of Finance; and 2013 Reconciliation Report on the Ghana Petroleum Holding Fund.

GNPC's share of petroleum revenues over the period 2011-2013 totalled US\$661,335,644 of which US\$325,435,225 was for equity financing in the Jubilee project and US\$335,900,419 was the corporation's share of net carried and participating interest which is applied to investments in non-Jubilee projects and for administrative and operational expenditure.

The trend in the allocation of petroleum revenues to GNPC shows that whilst its share of equity financing is declining, it has received more for non-Jubilee investments as a result of higher net participating interest. Thus, unless new investments are required in the Jubilee

contract area, the corporation is near retiring its equity financing requirement and as a result, it will have more revenues for other investments. This raises the concern about the corporation's capacity to spend as it has not demonstrated such capacity yet. As at 31st December, 2013 the corporation's cash balance (cash yet to be spent) stood at US\$141.70 million.

Table 4. Spending by GNPC (US\$)

RECEIPTS FROM JUBILEE PROCEEDS	2011	2012	2013
Equity Financing	132,484,815	124,630,628	68,319,783.18
40% of Net Carried and Participating Interest	75,479,488	106,319,298	154,101,633.02
Total Amount Received	207,964,303	230,949,926	222,421,416.20
Expenditure			
Jubilee Equity Financing Cost	132,484,815	125,824,747	76,268,194.80
Acquisition & Processing of 2,612sq km of 3D plus other related G&G studies	30,315,185		
Reservoir Characterization; Voltaian Basin project expenses; ICT Upgrade & Organizational Development		10,784,028	
Commitments for Projects other than Jubilee		61,674,215	9,922,975.26
TEN Project Cost			3,027,153.21
Gas Project-Related Costs	28,119,624	5,587,779	
Staff Cost	7,661,475	9,013,162	9,695,076.70
General Operational & Admin. Capital expenditure	9,383,204	16,269,839	9,819,888.5
PNB Paribas			31,337,309.53
Amount Appropriated by Bank of Ghana as charges		1,796,156	2,323,269.07
Total Expenditure and Commitments	207,964,303	230,949,926	142,393,867.06
Cash yet to spent			80,027,549.14
Cash brought forward (01.01.2013)			61,674,215
Total Cash Available			141,701,764.14

Source: Reconciliation Report, 2013

From the above table, three important issues deserve attention.

- i. An amount of US\$31 million was spent out of the 2013 allocation for GNPC for repayment of a facility from PNB Paribas. However, there is no publicly available information on the terms of the facility and what it was used for.
- ii. GNPC has not yet provided detailed information on the utilization of US\$8,921,473 reserved since 2012 for corporate investment projects. It is suspected part of this money went into the sponsorship of the Ghana Black Stars' preparation and participation in the 2014 World Cup in Brazil. The sponsorship also allegedly covered some 40 staff workers of GNPC and their families who were sent to Brazil to watch the tournament. GNPC in a statement has denied this and argued that the 40 staff workers travelled on a charter plane without their families; and that the families of their workers joined them on a commercial flight which was not sponsored¹³. The statement also states that the workers were in Brazil to promote its brand. Whilst it is ostentatious for the corporation to sponsor 40 workers abroad to promote its brand, the transparency and accountability concerns relating to the sponsorship is even more serious. The corporation is yet to provide information on the cost of the chartered plane used by its workers, the cost of hotel accommodation and living expenses for each worker. Much more, information on the total package of the sponsorship is yet to be revealed.
- iii. The amount of unspent cash from the allocation to GNPC is quite large and demonstrates GNPC's lack of spending capacity. Such practice has often led to NOCs becoming slush funds for Governments and this could happen in Ghana. The case of unspent cash further confirms the argument by the World Bank that GNPC was given more money than it required. To illustrate this further, the Table 4 below provides the projects to which the unspent cash was to be applied. For instance, about US\$61.8 million was committed to various projects listed below other than Jubilee projects in 2012 whilst another US\$9,922,975.26 was committed to the same projects in 2013. It is curious why the US\$61.8 million committed to projects was not disbursed as at end of 2013 since no explanations have been provided by the corporation. There is also no budget for the unspent US\$80 million allocated to the corporation in spite of the fact that Parliament approved the corporation's annual programme to warrant the allocation of the unspent cash.

¹³ MyjoyOnline.com "GNPC denies sponsoring staff and families to Brazil", 7th July 2014 (cited at <http://www.myjoyonline.com/news/2014/july-7th/gnpc-denies-sponsoring-staff-and-families-to-brazil.php>)

Table 5. Commitment of Cash to Projects by GNPC (US\$)

No	Project	2012	2013
1	North & South Tano Petroleum Projects	17,817,385	1,267,581
2	Tweneboa-Enyenra-Ntomme (TEN) project	16,736,362	
3	Voltaian Basin Petroleum Projects	3,090,224	1,305,036
4	South Deepwater Tano Petroleum Projects	7,227,672	1,894,356
5	Reservoir Characterisation	687,506	294,728
6	ICT Upgrade & Expansion	2,591,094	154,006
7	Data Centre Upgrade	1,000,000	
8	R&D Laboratory Upgrade	1,500,000	39,994
9	Organisational Development Project	2,102,500	44,189
10	Reserves towards Corporate Investment Projects	8,921,473	
11	Hess Block		3,024,781
12	Ultra Deep Water Keta		411,948
13	Petroleum Project Consultancy		332,220
14	Maritime Boundary Special Project		1,154,134
15	Total Commitment to Projects	61,674,215	9,922,975

Source: Reconciliation Report, 2013

The Petroleum Revenue Management Act 815 requires the corporation to submit its annual programme to Parliament, which is expected to inform allocation of the petroleum revenues from the net carried and participating interest to the corporation. The basis for allocating 40% of the net carried and participating interest (the equivalent of US\$154,101,633.02) by the Minister of Finance and approved by Parliament remains a mystery.

iv. GNPC applied part of its share of petroleum revenues to repay debts in respect of advances made to it by the Jubilee partners to finance its paid-interest. This followed the

decision of the Government to exercise its option of taking additional interest upon declaration of commerciality by the Jubilee partners.

The repayment of the debts from advances is governed by both the Petroleum Agreements and Act 815.

The Petroleum Agreements (West Cape Three Points and Deepwater Tano Blocks) prescribe that in the event that GNPC defaults in its cash calls, the contractors are expected to pre-finance GNPC's costs, which will be reimbursed at a later date. However, if the corporation defaults in paying back, the contractor would recover the default amount from GNPC's future share of crude oil with interest. Under this circumstance, GNPC will receive oil to reimburse its production cost whilst the contractor receives the remaining oil until the default amount is fully reimbursed with interest.

The prescription by the Petroleum Agreements is supported by Section 7(2)a of Act 815, which specifies that:

“The payment into the Petroleum Holding Fund shall be net of the equity financing cost, including advances and interest of the carried and participating interests of the Republic”

In this case, the advances are considered as debts on GNPC and collateralized on GNPC's share of oil and therefore are required to be serviced from the proceeds of Ghana's share of oil. In 2011, GNPC commenced repayment of the debt once petroleum revenues started flowing in. The following Table 5 presents the break-down of cost in respect of the advances to GNPC.

Table 6. GNPC Costs Apportionment (US\$ million)

Jubilee Cost	Balance End of 2010	Additions 2011	Total Cost	Interest	Int. (%)	Total Cost & Int.	GNPC Payment	Closing Balance 2011
Production Cost	4.64	15.85	20.49	0.59	3%	21.08	21.08	
Development Cost	99.09	44.78	143.87	14.58	10%	158.45	111.41	
Total	103.73	60.63	164.36	15.17	9%	179.53	132.48	47.05
FPSO Cost								(13.74)
Jubilee Partners								33.31

*The figures are approximated to decimal points

*FPSO purchase cost relating to 2012 was captured in 2012

*GNPC owed Jubilee Partners US\$33.31 as at the end of 2011

Source: GNPC

The point of interest in this transaction relates to the interest cost. An interest cost of 9% on average appears very high. Why Ghana did not go to the capital market to raise capital to finance its stake has been contested by the Africa Centre for Energy Policy.¹⁴ However, GNPC has explained that it could not raise its own capital at the time because it did not have security.¹⁵ Despite this explanation, the high rate on interest paid on the advances somehow exposes weaknesses in Ghana's negotiation capacity.

2.3.2. Spending of the Annual Budget Funding Amount (ABFA)

The Annual Budget Funding Amount is the proportion of petroleum revenues that is allocated to the annual budget of the Government to support development financing. The Act 815 provides that a larger share of ABFA, a minimum of 70% should be devoted to capital spending. To ensure that ABFA is productively invested, Section 21(2)d of the Act further requires its use to be "*guided by a medium-term expenditure framework aligned with a long term national development plan*". Ghana does not have a long-term national development plan and this weakness has been addressed in Section 21 (3) of the Act.

"Where the long-term national development plan approved by Parliament is not in place, the spending of petroleum revenue within the budget shall give priority to, but not be limited to programmes or activities related to:

- a. agriculture and industry;*
- b. physical infrastructure and service delivery in education, science and technology;*
- c. potable water delivery and sanitation;*
- d. infrastructure development in telecommunication, road, rail and port;*
- e. physical infrastructure and service delivery in health;*
- f. housing delivery;*
- g. environmental protection, sustainable utilization and protection of natural resources;*
- h. rural development;*
- i. developing alternative energy sources;*
- j. the strengthening of institutions of government concerned with governance and the maintenance of law and order;*
- k. public safety and security; and*
- l. provision of social welfare and the protection of the physically handicapped and disadvantaged citizens."*

¹⁴ Business and Financial Times, "GNPC needs security to raise money" Friday, August 16, 2013 (cited at: <http://www.thebftonline.com/content/gnpc-needs-security-raise-money>)

¹⁵ *Ibid*

It was certain during the formulation of the Act 815 that allocating petroleum revenue to all these areas would undermine the efficient use of the resources. To address this, the Act provides in sections 21(5&6) respectively as follows:

“In order to maximize the impact of the use of the petroleum revenue, the Minister shall prioritize not more than four areas specified in subsection (3) when submitting a programme of activities for the use of the petroleum revenue”

“The programme shall be reviewed every three years after the initial prioritization, except that in the event of a national disaster, the Minister may make a special request to Parliament for a release of revenue”.

The spending of ABFA over the three year period under consideration (2011-2013) has focused on the following four priority areas:

- a. Expenditure & Amortization of Loans for Oil and Gas Infrastructure
- b. Road and Other Infrastructure
- c. Agriculture Modernization
- d. Capacity Building (Including Oil and Gas)

The following Table 6 presents allocation of ABFA to the priority areas over the period.

Table 7. Spending of ABFA by Priority Area

Item	2011 (GH ₵)	2012 (GH ₵)	2013 (GH ₵)
Expenditure & Amortization of Loans for Oil and Gas Infrastructure	20,000,000	100,000,000	119,878,695
Road and Other Infrastructure	227,641,768	232,403,269	142,344,388
Agriculture Modernization	13,147,652	72,471,824	4,599,688
Capacity Building (Including Oil and Gas)	750,000	111,959,738	32,583,053
Total	261,539,420	516,834,831	299,405,824

Source: Various – 2012 and 2013 Annual Reports on the Petroleum Funds published by Ministry of Finance; and 2013 Reconciliation Report on the Ghana Petroleum Holding Fund.

The broad allocations above were further distributed across various projects. Some of the specific projects funded from ABFA have been analyzed here.

i. Expenditure & Amortization of Loans for Oil and Gas Infrastructure

This component was allocated to the Ghana National Gas Company (GNGC) for the capitalization of the new company. The Government explained that between 2011 and 2012,

a total amount of GH¢69 million was allocated to GNGC as an initial set up capital to “pay compensations to Project Affected Persons, acquire lands, carry out project enabling works, set up offices and project camps, pay salaries and prepare for commercial operations, among others. So far, a total amount of GH¢40 million has been released to GNGC for this purpose”.¹⁶ This was funded from ABFA.

In addition to this, Government as at September 30, 2013, disbursed US\$89.8 million as part of the US\$150 million counterpart funding for the China Development Bank (CDB) loan of US\$3 billion for the finance of the Ghana Gas Infrastructure Project at Atuabo in the Western Region of Ghana.¹⁷

Whilst the objective of this expenditure is in line with diversifying the Ghanaian economy through industrialization, the use of ABFA for this purpose is not consistent with the Act 815 that governs its utilization. The capitalization of Ghana’s NOCs is to be funded from petroleum revenues earmarked for equity financing and investments and not from ABFA. This is provided for in Section 7(2) of Act 815.

“The payment into the Petroleum Holding Fund shall be net of (a) the equity financing cost, including advances and interest of the carried and participating interests of the Republic; and (b) the cash or the equivalent of barrels of oil that shall be ceded to the national oil company out of the carried and participating interest interests recommended by the Minister and approved by Parliament”

For the period 2011-2013, the allocation of these funds have been made by the Minister to GNPC which was the only national oil company at the time the law was passed and had responsibility for both oil and gas production as well as gas commercialization. With the ceding of GNPC’s gas commercialization role to the new GNGC, it was expected that part of the revenue allocated to GNPC would be ceded to GNGC. It is therefore not surprising that GNPC has not been able to spend US\$141,701,764.14 of the total cash allocated to it in 2012 and 2013.

Furthermore, the use of the term “national oil company” should not be misconstrued to mean only GNPC as the law anticipated the establishment of other national oil companies such as GNGC. The law defines “national oil company” as:

¹⁶ Ministry of Finance, 2013 Annual Report On Petroleum Funds Submitted By Hon. Seth Terkper (Minister For Finance) to Parliament in consonance with Section 48 of the Petroleum Revenue Management Act, 2011 (Act 815).

¹⁷ *Ibid*

“Ghana National Petroleum Corporation and any other national oil or gas company that may be established by the government to participate directly in petroleum activities”

Such irregular application of ABFA is not appropriate and must not be encouraged.

ii. Roads and other Infrastructure

In 2011, the component on roads and other infrastructure was allocated to various road infrastructure projects. The specific projects and the amount allocated to them are presented as follows:

Table 8: Road Infrastructure Investment from ABFA

Name of Project	Amount (GH ₵)
Upgrading of Sefwi Bekai-Eshiem-Asankragwa Road	11,530,624.76
Reconstruction of Asankragua-Enchi Road	5,416,022.34
Emergency Rehabilitation works on Dansoman main road	3,320,581.31
Rehabilitation of Anyinam-Konongo Road, Nkawkaw by-pass (Adden No.2)	24,133,425.39
Partial Reconstruction of Bomfa Junction-Asiwa and Bewai-Ampaha Asiwa Road (36.2km)	5,387,778.17
Upgrading of Tainso-Badu-Adentia Road	8,553,812.88
Reconstruction of Berekum-Sampa Road (Km32-88)	9,664,568.64
Construction of Kpando-Worawara Dambai Road Phase III (70km)	5,094,442.01
Emergency works on the upgrading of Ho – Adidome and Adaklu Xelekpe-Aduadi Road	3,271,079.63
Construction of Twifo Praso-Dunkwa Road	1,500,000.00
Construction of steel bridge over River Amunam and over River Kakum on Kwaprow-Ankaful Road	1,053,931.83
Reconstruction of Navrongo-Tumu Road	1,650,000.00
Construction of Wa-Han Road (30km)	2,012,082.59
Construction of Bamboi-Bole Road (Bamboi-Tinga Section)	5,099,412.00
Accra-Kumasi Highway Dualisation Project: Kwafokrom – Apedwa Section	34,300,601.28
Reconstruction of Sunyani Road in Kumasi (Sofoline Interchange)	12,114,004.37
Total	134,102,367.20

Source: Government of Ghana, Budget and Policy Statement, 2012.

iii. Agriculture Modernization

The agriculture projects funded with ABFA in 2011 are also presented as follows:

Table 9. Investment in Agriculture from ABFA

No	Project	Amount (GH₵)	%
1	Fertiliser Subsidy	8,240,000.00	62.7
2	Agricultural Mechanisation	236,100.00	1.8
3	Tsetse Project	1,207,635.00	9.2
4	Youth in Agriculture Project	2,000,000.00	15.2
5	Counterpart Funds for Afram Plains Area Development Project	615,000.00	4.7
6	Inland Valley Rice Development Project	346,060.00	2.6
7	Root Tuber Improvement Programme	260,975.00	2.0
8	Northern Rural Growth Programme	241,882.00	1.8
Total		13,147,652.00	100

Source: Government of Ghana - Budget and Policy Statement, 2012

iv. Capacity Building

This component was allocated to the Kwame Nkrumah University of Science and Technology to build the Petroleum Engineering Laboratory.

v. Allocation of ABFA in 2012 and 2013

In 2012 and 2013, the Government allocated the ABFA to various projects executed by Ministries, Departments and Agencies.

Table 10. Allocation of ABFA by Ministries, Departments and Agencies

SECTORS	ABFA 2012	ABFA 2013
Office of the President	65,000,000	20,000,000
Parliament of Ghana	5,000,000	
Ministry of Finance and Economic Planning	9,000,000	28,850,000
Ministry of Local government	15,000,000	5,000,000
Ministry of Food & Agriculture	53,000,000	20,000,000
Ministry of Lands & Natural Resources	33,840,000	
Ministry of Trade & Industry	13,040,610	5,000,000
Ministry of Environment, Science & Technology	25,000,000	300,000
Ministry of Tourism and Culture		5,000,000
Ministry of Energy	130,000,000	130,000,000
Ministry of Water Resources, Works & Housing	21,000,000	59517043
Ministry of Roads and Highways	40,000,000	100,000,000
Ministry of Transport	70,000,000	4 0,000,000
Ministry of Education	20,000,000	1 0,000,000
Ministry of Health		2 9,900,000
Ministry of Employment & Social Welfare	10,000,000	300,000
Ministry of Youth & Sports	22,000,000	
Ministry of Interior	25,000,000	2 3,000,000
MDAs Total	576,008,674	476867043

Government of Ghana, Budget and Policy Statement, 2012 and 2013

2.4. How Efficient to Spend?

As indicated already, the Act 815 addresses issues of how much to spend and save; and where to spend and invest petroleum revenue. However, it does not address the issues of spending efficiency. As non-renewable resources, petroleum revenues must be managed through a comprehensive framework which not only defines how much and where to spend revenues but also how the revenues can be transformed to development outcomes before and after the resources are depleted. Thus, efficient investment of petroleum revenues is at the centre of the resource curse debate. The Act 815 in Ghana has a comprehensive mechanism

for enhancing transparency and accountability of petroleum revenues. But transparency on its own cannot make petroleum resources transformative if revenues generated from the resources are not efficiently spent.

Projects funded with petroleum revenues must carefully selected based on cost-benefit analysis. They must be selected based on a long term development vision. The execution of public investment projects with petroleum revenues must also be guided by a public investment management plan which addresses problems associated with procurement, timely delivery of projects and value for money.

These principles however have not formed part of Ghana's plan for investing petroleum revenues. Selection of projects for the application of ABFA have been ad-hoc, speculative and in most cases politically motivated by the high expectations built among Ghanaians following the announcement of the discovery of oil in commercial quantities.

In this analysis, the extent to which the Government of Ghana efficiently spent the ABFA has been explored.

2.4.1. Spreading too thin?

The ABFA has been distributed thinly over many projects with projects allocated revenues that are not significant to complete the projects. Also, the political motivation for spreading petroleum revenues thinly is based on the belief that the more projects that are funded, the more likelihood that the government would draw more political support. However, due to the thin distribution of ABFA, most of the projects have experienced irregular disbursement of revenues. They have therefore consequently suffered time-over-runs and cost over-runs. The completion periods have been extended for most projects and these no doubt have financial cost implications derived from variation in the original project cost due to increasing inflation and interest rates; and the fast depreciating local currency against major currencies. The following examples of uncompleted roads that were allocated ABFA in 2011 will amply illustrate this argument.

Table 11: Road Investment from ABFA and Completion Stages

Name of Project	2011	2012	2013
Upgrading of Sefwi Bekai-Eshiem-Asankragwa Road	54%	67.9%	
Reconstruction of Asankragua-Enchi Road	91%	78%	94%
Emergency Rehabilitation works on Dansoman main road	97%	100%	100%
Rehabilitation of Anyinam-Konongo Road, Nkawkaw by-pass (Adden No.2)	97%	99%	100%
Partial Reconstruction of Bomfa Junction-Asiwa and Bewai-Ampaha Asiwa Road (36.2km)	64%	68.8%	
Upgrading of Tainso-Badu-Adentia Road	90%		
Reconstruction of Berekum-Sampa Road (Km32-88)	84%	78.3%	
Construction of Kpando-Worawara Dambai Road Phase III (70km)	65%	71.1%	
Emergency works on the upgrading of Ho – Adidome and Adaklu Xelekpe-Aduadi Road	44%	55%	
Construction of Twifo Praso-Dunkwa Road	4%	14%	
Construction of steel bridge over river Amunam and over River Kakum on Kwaprow-Ankaful Road	100%	100%	100%
Reconstruction of Navrongo-Tumu Road	38%	60%	
Construction of Wa-Han Road (30km)	18%	15.2%	
Construction of Bamboi-Bole road (Bamboi-Tinga Section)	100%	100	100%
Accra-Kumasi Highway Dualisation Project: Kwafokrom – Apedwa Section	45%	54%	68%
Reconstruction of Sunyani Road in Kumasi (Sofoline Interchange)	72%	70%	80%

Source: Government of Ghana, Budget and Policy Statement, 2012, 2013 and 2014.

Most of these projects were awarded before the onset of petroleum revenues. It was expected that the ABFA would be used to complete a few of them to enable society begin to feel the development benefits that come with efficient investment of petroleum revenues. Contrarily, these projects have been delayed and progress of work for the majority of the projects has stalled. The resulting overrun costs increases the burden on ABFA as it is unable to deliver development to the people at the right time (if at all).

The practice of thin distribution of ABFA continued into 2012 and 2013. This can be confirmed by the following evidence:

- i. In 2013, the Ghana cedi equivalent of US\$24 million was allocated to the Ghana Highways Authority. The money was spread over 63 road infrastructure projects covering 2135 kms. This translated to US\$11,000 per km of asphalt road, far lower than the official cost.
- ii. In 2013, US\$96 million allocated to the Department of Urban Roads was used to pay arrears to road contractors.

In a report published by the Africa Centre for Energy Policy¹⁸, the authors concluded that “Ghana is not deriving value for money from the infrastructure projects funded with oil and gas revenues as most of the projects have been delayed, operating under costly extensions and leading to cost over-runs”.

To address the efficiency question, the Minister of Finance announced in Parliament during his presentation of the Government’s Budget and Policy Statement for the 2013 fiscal year that the use of ABFA will not be inefficient if it was focused on a few projects and completed them in time. He said in Paragraph 171:

“The 2014 ABFA expenditure will be devoted to only a few capital projects to increase efficiency and effectiveness. To this end, Government has decided to deploy the ABFA for the development of six projects in the medium term and, to clear pipeline infrastructure projects”

Consequently, the Minister has departed from the previous regime of allocating ABFA to all Ministries and Departments. The following Table shows the shift in ABFA allocation from 16 Ministries, Departments and Agencies in 2012 to 15 in 2013 and now to 6 in 2014 (See Table 11 below).

¹⁸ Africa Centre for Energy Policy, “The Two Sides of Ghana – How a good law does not prevent oil money from going down the drain”, July 2013.

Table 12. Allocation of ABFA by Ministries, Departments and Agencies (GH¢)

SECTORS	ABFA 2012 (16)	ABFA 2013 (15)	ABFA 2014 (6)
Office of the President	65,000,000	20,000,000	
Parliament of Ghana	5,000,000		
Finance and Economic Planning	9,000,000	28,850,000	
local government	15,000,000	5,000,000	
Food & Agriculture	53,000,000	20,000,000	136,420,759
Lands & Natural Resources	33,840,000		
Trade & Industry	13,040,610	5,000,000	59,574,431
Envir, Science & Technology	25,000,000	300,000	
Tourism and Culture		5,000,000	
Energy	130,000,000	130,000,000	430,951,887
Water Resources, Works & Housing	21,000,000	59517043	
Roads and Highways	40,000,000	100,000,000	139,413,241
Transport	70,000,000	4 0,000,000	30,089,468
Education	20,000,000	1 0,000,000	103,510,325
Health		2 9,900,000	
Employment & Social Welfare	10,000,000	300,000	
Youth & Sports	22,000,000		
Interior	25,000,000	2 3,000,000	
MDAs Total	576,008,674	476867043	899,960,111

Source: Government of Ghana, Budget and Policy Statements, 2012, 2013 & 2014

Section 3

PERFORMANCE OF THE GHANA PETROLEUM FUNDS

3.1. Introduction

The Ghana Petroleum Funds (GPFs) consist of the Ghana Stabilization Fund (GSF) and the Ghana Heritage Fund (GHF). The GSF is used to cushion the budget on the use of petroleum revenues against revenue shortfalls arising from price and production volatilities. The GHF on the other hand is an endowment fund used only when the oil and gas resources are depleted. It is an instrument used to achieve intergenerational equity. This section seeks a reconciliation of the GSF, GHF and the GPFs. It also assesses the performance of the Fund over the last three years (2011-2013). The Table 12 below summarizes the inflows to the GPFs as reported by the Government of Ghana compared to the author's estimates.

Table 13. Reconciliation of Data on the Ghana Petroleum Funds

Item	Government Report (GPFs)				ACEP Reconciliation (2011-2013)			
	2011	2012	2013	Total	GSF	GHF	GPF	Deviat
Opening Balance (US\$mil)		69.2	93.6	62.8	126.7	36.1	162.8	0.000
Receipt in the year (US\$mil)	69.2	24.1	351.0	444.4	317.4	126.9	444.4	0.000
Transfers to Funds (%)					71%	29%	100%	
GSF (%)	79%	70%	70%	71%				
GHF (%)	21%	30%	30%	29%				
Management fees (US\$mil)		0.012	0.021	0.033	0.021	0.012	0.033	0.000
Management fees (% of Receipts)					0.01%	0.01%	0.01%	
Income from Investments (US\$mil)	0.059	0.27	2.54	2.82	1.63	1.19	2.82	0.000
Closing balance (US\$mil)	69.2	93.6	447.2	609.9	445.7	164.2	609.9	0.000

Source: Source: Various – 2012 and 2013 Annual Reports on the Petroleum Funds published by Ministry of Finance; 2013 Reconciliation Report on the Ghana Petroleum Holding Fund & Author's computations.

The reconciliation exercise produced accuracy and balance in reporting on the performance of the GPFs between the Government and the author's estimates (See Table 12). However, a number of observations were made from the reconciliation table.

i. In 2011, transfers to the GHF fell short of the statutory requirements by 9%. Section 23(1)b of Act 815 provides that:

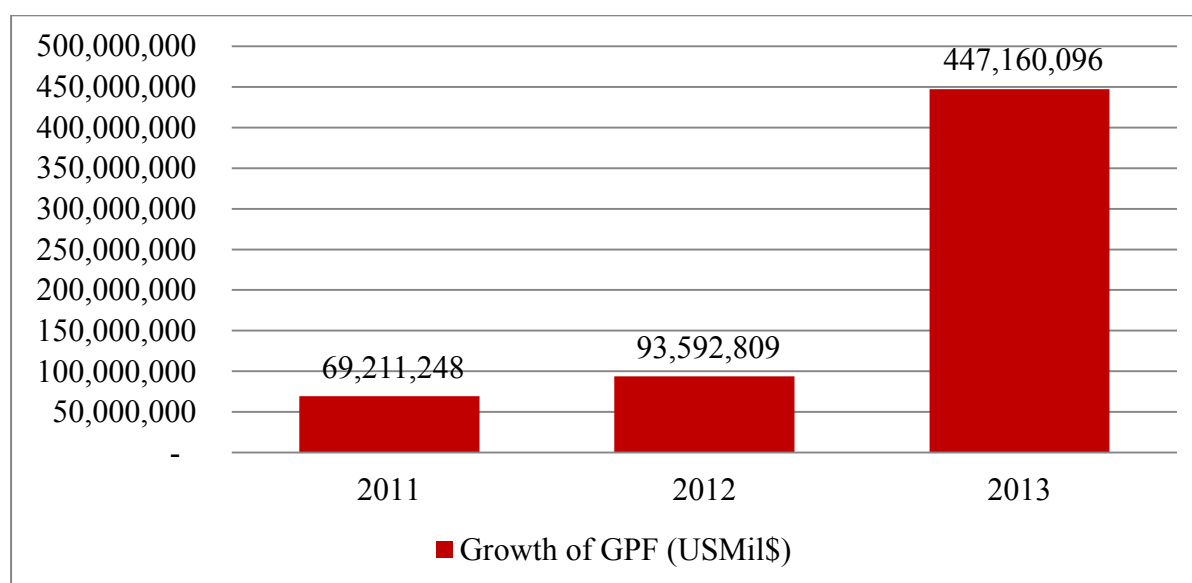
‘A minimum of thirty percent of the excess revenue determined in subsection (1) (a) shall be transferred into the Ghana Heritage Fund and the balance shall be transferred into the Ghana Stabilisation Fund each quarter’.

Notwithstanding this provision, only 21% lower than the minimum benchmark of 30% was transferred to the GHF. This anomaly has been described by PIAC as a compensating error.

ii. Overall, management fees paid to the Bank of Ghana was 0.01% of total receipts in the GSF and the GHF over the three year period. Thus the size of the management fees reflected the size of revenue transfers to the Funds.

iii. The GPFs have shown consistent growth over the period 2011-2013, growing by 35% in 2012 and by 378% in 2013, due to increasing petroleum receipts and increasing investment incomes (see Figure 3).

Figure 3: Growth of Ghana Petroleum Funds (US\$)

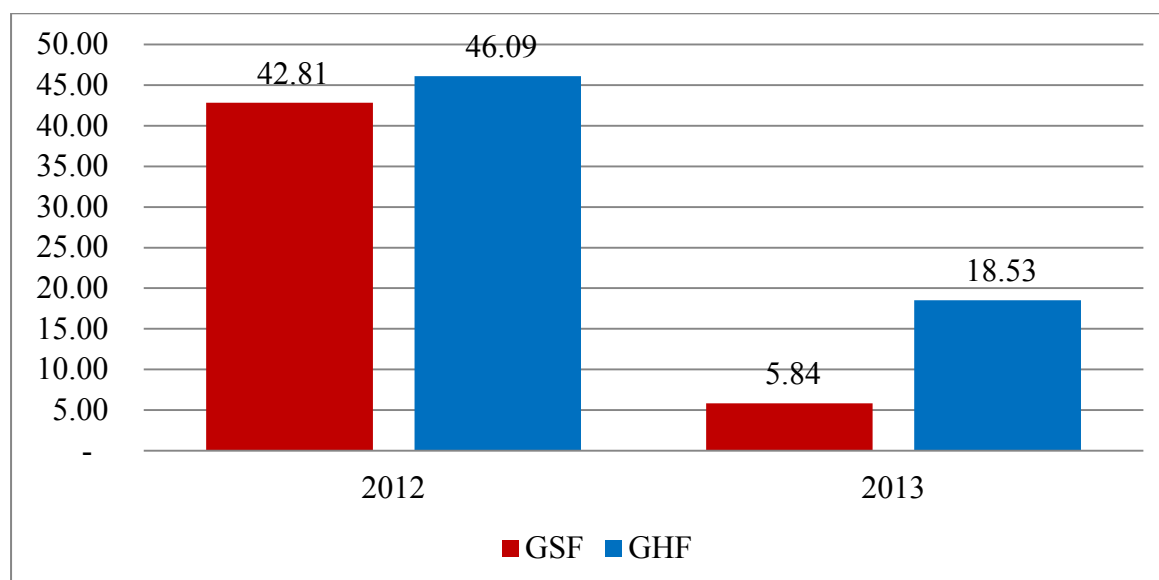


Source: Various – 2012 and 2013 Annual Reports on the Petroleum Funds published by Ministry of Finance; and 2013 Reconciliation Report on the Ghana Petroleum Holding Fund.

However, between the two Funds, the GSF showed a higher balance on account of the relatively higher proportion of the savings that are transferred to the Fund. This has also ensured that the net returns in absolute terms have been very high. In terms of the rate of growth in net returns however, returns on the GHF showed a relatively higher growth of about 46% and 19% in 2012 and 2013 respectively compared to the GSF return growth of

about 43% and 6% (see Figure 4). This is due to the fact that the GHF is invested in long-term financial instruments (6 months) whilst the GSF is invested in short term instruments (3 months) in line with the provisions of the Act 815.

Figure 4: Rate of Growth in Net Returns on Ghana Petroleum Funds (%)



Source: Various – 2012 and 2013 Annual Reports on the Petroleum Funds published by Ministry of Finance; and 2013 Reconciliation Report on the Ghana Petroleum Holding Fund.

However, it is important to note that whilst the investments of the Petroleum Funds showed positive returns in nominal and time weighted average terms, measuring the performance of the investments has been difficult as a result of the lack of benchmark returns (desired returns) on both the GSF and GHF as required by Act 815. Benchmark returns as well as the associated risk exposure are required by law to be developed by the Investment Advisory Committee as part of the investment guidelines for the Minister of Finance (Section 30(1)c). The fact that such desired returns on the Funds have not been provided three years into the operation of the GPFs does not only expose the investments of the Funds to higher risks but is also in contravention with the law.

3.2. Effect of ABFA on the Ghana Petroleum Funds – the role of selective interpretation of the law

One of the major challenges of effectively implementing a law is the type of interpretation given to major provisions in the law. During the period 2011-2013, the Act 815 faced the problem of interpretation in respect of two provisions relating to the computation of ABFA and its effects on transfers to the GPFs.

In national income accounting, what is saved is the excess over consumption, and this appeared to be the basis for the interpretation of Section 18(1) of the Act 815:

“The Annual Budget Funding Amount from petroleum revenue shall not be more than seventy percent of the Benchmark Revenue”.

Therefore in 2011, Government allocated exactly 70% of the benchmark revenue to the annual Budget and the balance of 30% being savings for the year was transferred to the GPFs. This was approved by Parliament (see column 3 on Table 13).

Table 14. Distribution of Petroleum Receipts (US\$)

Allocations	2011	% B. Rev	2012	% B. Rev	2013	% B. Rev
Total Allocation of Petroleum Receipts	444,124,724		541,623,740		846,767,184	
Transfer to GNPC	207,964,302		230,949,926		222,421,416	
Benchmark Revenue	236,160,421		310,673,815		624,345,768	
o/w ABFA	166,955,067	70%	286,554,461	92%	273,197,567	44%
o/w Transfers to GPFs	69,205,354	30%	24,119,354	8%	351,048,145	56%

Source: Annual Petroleum Report, 2012; 2013 Reconciliation Report on the Petroleum Holding Fund.

However, in 2012 and 2013 the Minister of Finance changed the interpretation. In 2012 for instance, an application of the same 70:30 interpretation meant that only US\$217,471,670.50 would be available for spending in the year instead of the US\$286,554,461 which was spent. Thus, to increase spending in the year, the Minister resorted to Section 23(1)a, which provides as follows:

“Where petroleum revenue collected in each quarter of any financial year exceeds one-quarter of the Annual Budget Funding Amount of the financial year ... the United States Dollar equivalent of the excess revenue collected shall be transferred from the Petroleum Holding Funding to the Ghana Petroleum Funds”

The Minister therefore departed from the allocation of 30% of Benchmark Revenue to the GPFs to an allocation subject to the realization of the projected ABFA. In this case, it is only when there is excess revenue collected over ABFA that the GPFs will receive funds. Consequently as could be seen from the Table 14 below, none of the quarterly collections of petroleum revenue in US Dollar terms exceeded the projected ABFA. All the collections were in deficit totalling US\$96,961,800. The deficit was due to low crude oil production and

the non-realization of corporate income tax¹⁹. However, in terms of the Ghana Cedi equivalent of the variance, only the second quarter collection exceeded the projected ABFA due to exchange rate differences. Under this circumstance, transfers to the GPFs would be limited to GHC17.5 million.

Table 15: 2012 Variance Analysis of ABFA

Quarter	GHC			US\$		
	Budget	Actual	Deviation	Budget	Actual	Deviation
Quarter 1	153,636,614	100,467,640	(53,168,974)	95,879,065	59,823,532	(36,055,533)
Quarter 2	153,636,614	171,136,680	17,500,066	95,879,065	95,879,065	0
Quarter 3	153,636,614	121,581,541	(32,055,073)	95,879,065	64,909,263	(30,969,802)
Quarter 4	153,636,614	123,648,970	(29,987,644)	95,879,065	65,942,600	(29,936,465)
Total	614,546,457	516,834,831	(97,711,626)	383,516,261	286,554,461	(96,961,800)

Government of Ghana; Budget and Policy Statement 2013

However, aware of the political implications of not transferring petroleum revenue to the GPFs, the Minister in violation of Section 23(1)a made a transfer of US\$24 million to the Funds. Thus, in 2012, if the interpretation used in 2011 was applied, a total of about US\$93 million would have been transferred to the Funds instead of US\$24 million which was actually transferred.

Although Parliament approved these allocations as part of the 2012 Budget and Policy Statement, such selective interpretation of the law subjects the application of the law to the discretion of the Minister of Finance. In this case, the interpretation of the law by the discretion of the Minister was more favourable to the Government as it had more money than expected to spend in the year (i.e. 92% of Benchmark Revenue).

Surprisingly, the application of the same interpretation for the 2013 allocations of petroleum revenue was not favourable to the Government. The projected ABFA was put at US\$273 million, which was lower than actual revenue collected. Thus the excess revenue amounting to US\$351 was transferred to the GPFs. This made available only US\$273 million for

¹⁹ 2013 Reconciliation Report on the Petroleum Holding Fund. pp. 8, para 30. However, this could be blamed on over-estimation as Government was fully aware that the oil companies were not in a significant tax paying position. Therefore projecting corporate taxes of US\$ 239,709,791 in the Budget against the reality was misleading.

spending in 2013. If the Minister decided to apply the 2011 interpretation (i.e. 70:30), the equivalent of US\$437 million would have been spent. This was problematic for the Government. The Minister of Finance complained about this in the 2014 Budget and Policy Statement:

*"Mr. Speaker, the Annual Budget Funding Amount (ABFA), which is 70 percent of the net GOG petroleum receipts, amounted to US\$204.90 million (GH¢392.94 million) with the Ghana Heritage Fund (GHF) and the Ghana Stabilization Fund (GSF), which constitute the Ghana Petroleum Funds (GPFs), receiving US\$316.09 million. This is due mainly to the interpretation given to "excess" in the PRMA. Thus, by end-September 2013, the GPFs had received more revenue than the ABFA, which is the direct opposite of what obtained in 2012 and 2011. This resulted from the receipt of revenues over and above the quarterly ABFA which in turn resulted from the realization of petroleum corporate income tax and increased Jubilee production"*²⁰.

"It is instructive to note that by end-September 2013, the GSF alone had received more inflows than the ABFA".²¹

In response to its determination to increase spending from petroleum revenues, the Government of Ghana initiated action to disable the provision that ensured the transfer of more revenue to the GPFs. The Minister accordingly invoked Section 23(3) and (4) of the Act 815, which gives the Minister power to set a maximum cap on the GSF and to use any excess revenues over the cap for debt repayment or set up the Contingency Fund. The Minister therefore capped the Stabilization Fund at US\$250 million which was far lower than the US\$426 million standing as balance in the GSF at the end of 2013. This provided the room to spend the excess of about US\$176 million, of which US\$50 million was used to set up the Contingency Fund and the balance US\$126 million transferred to the debt service accounts for use in debt repayment.

Curiously, the justification of the cap on the GSF was based on preventing extra revenues from going to the GSF. The Minister in explaining the basis for capping the GSF at US\$250 million in the 2014 Budget and Policy Statement showed his support for the 70:30 formula for allocating petroleum revenue to the Budget and the GPFs used in 2011:

"Mr. Speaker, the proposed cap on the GSF is informed mainly by the following: (i). The spirit of the PRMA was to transfer 70 percent, 21 percent and 9 percent of the net petroleum receipts to the ABFA, GSF and GHF, respectively. However, as already indicated, the transfers to the GSF alone exceed that of the ABFA in 2013. (ii). Return on the GSF: The investment income on the GSF has been low, compared with our borrowing costs for

²⁰ Government of Ghana, 2014 Budget and Policy Statement. Pp.37. Para.115.

²¹ *Ibid*, Pp.37. Para. 116.

infrastructure projects. In order to ensure value for money, the excess transfers to the GSF will be used for loan repayment in order to free capital for infrastructure development”²²

It was therefore not surprising any more that the Minister tried to cover up Government’s desperate moves to undermine the GPFs in favour of expanding its fiscal space as was stated in the 2014 Budget Statement as follows.

“Mr. Speaker, the decision to cap the GSF is not to deny it of funds. Indeed, we could have made withdrawals from the GSF in 2012 due to shortfalls in allocations to ABFA, as provided in the PRMA. However, Government opted against making any withdrawals from the GSF in 2012”²³.

There is no doubt that the Petroleum Revenue Management Act 2011 (Act 815) in its first three years of implementation has faced challenges, but the greatest challenge lies in subjecting it to excessive experimentation and to the whims of the Minister of Finance. This practice should not be allowed by Parliament as it has the tendency to weaken the law and derail the progress Ghana has already made through the law as a model of a country determined to break away from the “curse” of oil.

²² *Ibid*, Pp.193, Para. 972.

²³ Government of Ghana, 2014 Budget and Policy Statement. Pp.193, Para. 972.

Section 4

CASE STUDY

RECONCILIATION OF CRUDE OIL LIFTING BY THE GHANA/GNPC GROUP

4.1. Introduction

In most oil producing countries that are faced with serious governance challenges, one of the major challenges is accuracy of reporting on crude oil production and lifting. As a new oil producing country, Ghana is likely to face the same problem. This case study seeks to assess:

- i. The accuracy of crude oil lifting data relative to Ghana's share of petroleum in the Jubilee Unitized Agreement as published by Government and other state institutions;
- ii. The extent of discrepancies or irregularities (unaccounted barrels) in crude oil data published by different state institutions;
- iii. The impact on crude oil accounting of crude oil produced in the previous year but accounted for in the current year (spill-over barrels).

The case study examined data from three key institutions that report on crude oil production, crude oil lifting and petroleum revenues. These are:

- a. The Ministry of Finance (MOF): The Ministry is required by the Petroleum Revenue Management Act 2011 (Act 815) to publish quarterly and annually data on crude oil production volume, crude oil lifting, petroleum receipts and distribution of petroleum receipts, among others. It is also required to publish a reconciliation report.
- b. Ghana National Petroleum Corporation (GNPC): The Corporation is the first national oil company and holds the State's interest in all petroleum operations. It has developed an open data portal on which it publishes data on crude oil lifting.
- c. Bank of Ghana (BOG): The Bank is required by Act 815 to publish semi-annual reports on the management of Ghana's Petroleum Funds. It also receives and takes custody of petroleum receipts and ensures that the receipts are distributed to their respective accounts.

The data sets on crude oil production and lifting published by the three public institutions have been analyzed in line with the objectives of this case study. The institutions have a central role to play in enhancing transparency and accountability in the oil and gas industry. It is also important to state that the significance of the reports/data published by these institutions rests on the extent to which data provided by them are accurate, unambiguous, and are clear of any discrepancies or irregularities. The data from each institution must corroborate each other's information if they are to enhance public confidence in the reports and thereby become useful tools for public accountability in Ghana's oil and gas industry.

4.2. What is Ghana's Entitlement from the Jubilee Field?

The fiscal terms in the Jubilee Unitization and Operating Agreement provides the entitlement of the partners to crude oil produced from the Jubilee fields. The original terms in the Agreement that constitute Ghana's entitlement are specified as:

- i. Royalties 5%
- ii. Carried Interest 10%
- iii. Participating Interest 3.75%

Thus the Ghana Group entitlement based on the original terms of the Unit Agreement is computed in the following Table. The computations are in absolute terms. Royalty is a percentage of gross production (100%). Thus, carried and participating interests are a percentage of net production (95%) after deducting royalty. These computations do not include corporate taxes, rental fees and additional oil entitlement.

Table 16. Ghana/GNPC Group Entitlement in the Jubilee Unit Agreement

Original Terms: Royalty (5%), carried interest (10%) and additional participating interest (3.75%)			
Royalty	5% of gross production		5%
Carried and Participating Interest	Carried Interest	10% of net production	13.0625%
	Participating Interest	3.75% of net production	
	Total:	13.75 of net production (13.75*0.95)	
Ghana Group entitlement			18.0625%

Following the exercise of redetermination in October 2011 which took effect in December 2011, the original terms of the Unit Agreement changed marginally. However, the computed entitlement of the Ghana Group remains 18% in absolute terms (see Table 16 below).

Table 17. Ghana/GNPC Group Entitlement after Redetermination in October 2011

Terms after Redetermination: Royalty (5%), carried interest (10%) and additional interest (3.64%)			
Royalty	5% of gross production		5%
Carried and Participating Interest	Carried Interest	10% of net production	12.9688%
	Participating Interest	3.64% of net production	
	Total:	13.64 of net production (13.64*0.95)	
Ghana Group entitlement			17.9588%

4.3. Reconciliation of Crude oil Lifting

A review of the various data published shows that the data provided by the Government of Ghana (GOG) and GNPC are consistent. Although crude oil lifting fluctuated away from Ghana's benchmark share of petroleum at 18% (see blue column), the differences were neutralized over the three successive years (2011 – 2013).

Table 18. Reconciliation of Crude Oil Lifting by Government Agencies

Year	Data Source	Total Prod (bbl)	Total Lift (bbl)	Ghana Lift (bbl)	Ghana Lift (%)	Ghana Share (%)	Surplus (%)	Spill-over (bbl)
2011		24,195,895	24,450,155					
	GOG			3,930,189	16%	18%	-2%	254,260
	GNPC			3,930,189	16%	18%	-2%	
	BOG			3,930,189	16%	18%	-2%	
2012		26,351,278	26,430,934					
	GOG			4,931,034	19%	18%	1%	79,656
	GNPC			4,931,034	19%	18%	1%	
	BOG			4,931,034	19%	18%	1%	
2013		35,587,558	36,048,290					
	GOG			6,793,449	19%	18%	1%	460,732
	GNPC			6,793,449	19%	18%	1%	
	BOG			5,924,623	16%	18%	-2%	
Total		86,134,731	86,929,379					
	GOG			15,654,672	18%	18%	0%	794,648
	GNPC			15,654,672	18%	18%	0%	
	BOG			14,785,846	17%	18%	-1%	
Unaccounted barrels								
	GOG			0.0000				
	GNPC			0.0000				
	BOG			868,826				

Sources: Ministry of Finance, Reconciliation Report on the Ghana Petroleum Funds; GNPC Open data portal, Bank of Ghana Semi-Annual Reports; & Author's Computations.

The analysis however, shows that Ghana's crude oil lifting based on Bank of Ghana's data fell short of Ghana's entitlement by 868,826 barrels. This is described as "unaccounted barrels".

Also, in this analysis, each of the three years covered in the report benefited from spill-over crude oil produced in the previous year. For instance, crude oil lifting in 2011 included about 254,260 barrels, lifting in 2012 included 79,656 barrels produced in 2011 and lifting in 2013 included 794,648 barrels from 2012. The total spill-over barrels stood at 794,648 by December 2013.

The analysis produces two important conclusions:

i. Unaccounted Barrels

a. There are discrepancies in crude oil lifting data between reports published by the Government and GNPC on one hand and the Bank of Ghana on the other to the tune of about 868,826 barrels. Such discrepancies raise concerns in the accuracy of data published by State institutions and could well undermine the spirit behind the strong transparency and accountability mechanisms provided in the Petroleum Revenue Management Act.

b. The Bank of Ghana accounts for revenues from the sale of Ghana's crude oil entitlement and must therefore publish figures that are not at variance with the Government's report. Discrepancies have often resulted from non-recording of late crude oil lifting when the report which is statutory has already been published. However, considering that the Bank's second half of the year report is required by law to be published not later than 15th February, it is not possible such discrepancies as recorded in the data could be attributed to late crude oil lifting.

ii. Spill-over Barrels

a. Since there is no reporting on stock levels (crude oil not lifted at the end of the production year), the size of spill-over production can only be ascertained by the public from the difference between crude oil lifting and production in the current year. For instance, from the Government of Ghana data in the Table above, spill-over barrels in 2011 was 254,260 barrels supposed to have been produced in 2010 (EITI Report puts the spill-over barrels at 255,287 barrels indicating once again data variation). However, the spill-over barrel as computed was far lower than stock levels from 2010 which was 1,181,088 barrels and stored in the FPSO²⁴. The impression created by spill-over barrels in 2010 is that it is the quantity of crude oil carried forward to 2011. However, the total quantity of crude oil which is supposed to have been carried forward is 1,181,088 barrels.

²⁴ Ghana Extractive Industries Transparency Initiative (GHEITI), Final Draft Report on the Aggregation/Reconciliation of oil and gas sector payments and receipts: 2010-2011, (February, 2013)

This also means that about 926,828 barrels (i.e. 1,181,088 less 254,260) spilled-over from 2010 production was not lifted by the end of 2011 and was therefore expected to be lifted in 2012. However, the data on 2012 spill-over barrels from 2011 showed a much lower quantity of 79,656 barrels. Thus about 847,172 barrels produced in 2010 was yet to be lifted as at the end of 2012, and was therefore expected to be lifted in 2013. This trend does not show clearly the difference between stocks from previous year and current year production, a situation that creates room for concealing material information in crude oil accounting.

The practice also provides room for under-declaring revenues in respect of spill-over barrels; and thereby causes significant reconciliation problems, which undermines transparency and accountability. The Government of Ghana must therefore include reporting on spill-over barrels in order to account for accurate stocks of oil that is not lifted in a particular year.

b. Revenues from spill-over production are not taken into consideration in the estimation of benchmark revenue and ABFA for the current year, which is approved by Parliament.²⁵ Thus, accounting for it as current year revenue and spending it without parliamentary approval raises accountability questions.

Also, the non-inclusion of revenues from spill-over production in the estimation of the benchmark revenue could likely inflate revenues for the current year creating the impression that government has collected more revenues. If such inflation leads to collection in excess of the ABFA, then the excess by law must be transferred to the Ghana Petroleum Funds. However, given that the Stabilization Fund has exceeded its maximum cap already at US\$250 million, any future spill-over barrels will likely return revenues used for debt repayments in line with the Act 815 even if such debts have not been efficiently invested.

4.4. Reconciliation of Petroleum Data between Government of Ghana and Accountability Institutions

The second analysis focuses on the responsiveness of Government reports to accountability tests. This was done by comparing petroleum data in the Government of Ghana Annual Report on Petroleum Funds and data from reports of two accountability institutions – The Ghana Extractive Industries and Transparency Initiative (GHETI) and the Public Interest and Accountability Committee (PIAC). The comparative data is presented in the following Table

²⁵ Public Interest and Accountability Committee, Report on Management of Petroleum Revenues for the Period 1st January 2013 to 30th June 2013

18. This analysis was limited to 2011 data as this was the only year reports by all three institutions in the analysis were available.

Table 19. Data reconciliation between Government of Ghana and Accountability Institutions

Item	Ministry of Finance 2011	EITI 2010/2011	PIAC 2011
Total Crude oil Production (bbl)	24,195,895	24,195,895	
Total Crude oil Lifting (bbl)	24,451,452	24,451,182	24,451,452
Ghana lifting (bbl)	3,930,189	3,930,189	3,930,189
Total revenues (US\$)	690,264,761	666,187,085.52	666,187,085.6
Corporate taxes (US\$)	0	0	0
Surface rentals (US\$)	0	0	0
Royalties – Jubilee (US\$)	191,076,823	184,411,649.97	184.4
Royalties – Salt pond (US\$)	0	132,982.40	0
Carried & participating interest (US\$)	499,187,938	481,775,435.55	481.8
ABFA (US\$)	261,539,420	250,432,600.3	250,432,600.30
GNPC	323,471,980	315,390,698	315,390,698
Ghana Stabilization Fund (US\$)	83,345,244	82,008,345	82,008,345.0
Ghana Heritage Fund (US\$)	21,908,117	21,799,687	21,799,687.0

Sources: Ghana Extractive Industries Transparency Initiative (GHEITI), Final Draft Report on the Aggregation/Reconciliation of oil and gas sector payments and receipts: 2010-2011, (February, 2013); Ministry of Finance, 2012 Annual Report On Petroleum Funds Submitted By Hon. Seth Terkper (Minister For Finance) To Parliament As Part Of The Presentation Of The 2013 Budget Statement And Economic Policy And In Consonance With Section 48 Of The Petroleum Revenue Management Act, 2011 (Act 815) 5th March 2013 & Public Interest and Accountability Committee, Report on Management of Petroleum Revenues for 2011, Annual Report.

From Table 18 above, some observations have been made as follows.

- i. Except the GHEITI, neither Government nor PIAC reported on royalties paid by the Saltpond Offshore Producing Company Limited, a small oil producing company operating in the Saltpond basin.
- ii. Most of the data published by GHEITI and PIAC is consistent but they differ from data published by the Government in the following areas:
 - a. Total crude oil lifting
 - b. Royalties – Jubilee
 - c. Carried and participating interest
 - d. ABFA
 - e. GNPC
 - f. Ghana Stabilization Fund

g. Ghana Heritage Fund

In all these cases, the Government's data appeared higher than those of the accountability institutions (see highlighted columns). These have been attributed to the timeliness of the various reports. Also, the Government report is usually the first to be published before those of the accountability institutions. Therefore, forecasting and compensating errors in the Government report are likely to be corrected in the reports of the accountability institutions.

It is important to state however that most of the data published by the accountability institutions take their source from the Government. This shows that the accountability institutions do not conduct truly independent assessments of the data provided by Government, contrary to their terms of reference. For instance, Section 51 of the Petroleum Revenue Management Act mandates PIAC to “provide an independent assessment on the management and use of revenues”. Therefore it is important for accountability institutions to develop their capacity to independently monitor and investigate all information provided to them by Government. This is what genuine accountability means.

Section 5

MAIN FINDINGS AND RECOMMENDATIONS

From the analysis in this report, a number of important conclusions on how the Government of Ghana managed petroleum revenues over the period 2011-2013 have been drawn as follows:

- a. Ghana could have earned more from oil that it has done so far as a result of factors such as non-collection of capital gains tax on acquisitions in the Jubilee field projects, non-collection of corporate taxes, non-reporting on surface rental fees, non-realization of expected Gas receipts and redetermination of the Original Hydro Carbon in Place in the Jubilee Unit Operating Area.
- b. The GNPC has weak spending capacity and some of the uses to which the corporation applied revenues ceded to it requires more explanation. These uses include its repayment of a facility from PNB Paribas for which there is no public information on the terms and use of the facility; the sponsorship of Ghana's Black Stars' participation at the World Cup; and the large amount of un-spent cash of about US\$141.70 million over the last three years.
- c. There is demonstrated evidence of inefficiency in the use of petroleum revenues. Limited revenues have been thinly distributed over projects leading to over-run times and over-run cost. This has undermined value for money in projects funded with petroleum revenues.
- d. Furthermore, the Government of Ghana has exploited weaknesses in the Petroleum Revenue Management Act to increase its spending of petroleum revenues meant for savings in the Stabilization Fund. The provision that allows the Minister of Finance the discretion to cap the Stabilization Fund and to use any excess revenues for debt repayment or contingency fund has been exercised capriciously.
- e. Government reporting on petroleum revenues is not adequate as data on annual stocks and spill-over barrels do not affect the determination of the benchmark revenue, nor is it considered in crude oil accounting. This creates room for

potential under-declaration of crude oil produced in the previous year but lifted in the current year, and thereby undermines accountability.

- f. Furthermore, there are discrepancies between Government reports and those of the accountability institutions such as PIAC and Ghana EITI. These institutions should develop reporting structures that allow them to validate Government reported data through independent research/investigation.

Major recommendations on how Ghana could improve accountability in crude oil and revenue accountability and management include but not limited to the following:

- a. Ghana should apply both the Petroleum Income Tax Law, 1987 (PNDC Law 188) and the Internal Revenue Act, 2000 (Act 592) in the oil industry. This calls for urgent harmonization of the tax laws to ensure Ghana maximizes revenues from the oil industry.
- b. The GNPC has been demanding to have control over its revenues from the carried and participating interest, to raise its capital, but its current weak spending capacity does not support this demand. In approving the corporation's annual programme of activities, Parliament must seek evidence of efficient spending of previous allocations as a condition. Similarly, the allocation of revenues to the Ghana National Gas Company should reverse from the Annual Budget Funding Amount to ceded revenues for the use of Ghana's national oil companies as prescribed in the law. However, like GNPC, Parliament must amend Act 815 to include a provision that requires GNGC to also submit its annual programmes to Parliament.
- c. The use of petroleum revenues should be guided by development priorities, whilst project selection should be determined by the size of expected petroleum revenues and the extent to which those projects can add value to the economy. Government is encouraged to expedite the submission of the proposed Public Investment Management Bill to Parliament to pass into law, as it has great potential to address problems associated with project selection, timely delivery of projects and quality assurance.
- d. The determination of the maximum cap on the Ghana Stabilization Fund should not be arbitrary. It should be based on benchmarks that help maintain strong liquidity of the Fund to enable it address the volatility effects of petroleum crude oil prices. This requires an amendment to Act 815. Also, any excess revenue over

the cap should be applied to repaying debts that are specific and which have been evaluated to have greatly impacted on development.

- e. Government must include reporting on annual stocks and spill-over barrels to enable citizens and accountability institutions to track revenues from the sale of crude oil. This also helps accountability institutions to reconcile Government data with other independent sources.