

Sustainable Management of Petroleum Resources: An Examination of the Ghana Heritage Fund (GHF) of the Petroleum Revenue Management Act, 2010 (Act 815)

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ACKNOWLEDGEMENT

I would like to express my gratitude and appreciation to all those who gave me the possibility to complete this paper. A special thanks to the module instructor, Dr. Xiaoyi (Shawn) Mu whose help, stimulating suggestions and encouragement, helped me to undertake this project especially in writing this report. I would also like to acknowledge with much appreciation the crucial role of the staff of the Centre for Energy Petroleum and Mineral Law and Policy (CEPMLP), who gave the permission to use all required necessary material to the scenario and Simulation analysis A special thanks goes to my course mates, Stephen Balali and Insah Iddrisu, who helped me to assemble the parts and gave suggestion about the analysis

ABSTRACT

Ghana is the latest country in Africa to join the league of oil producing countries last year (2010) when she first pumped oil from her jubilee field. As a developing country, the oil revenue is expected to contribute to an increase in at least 23% of the Gross Domestic Product (GDP). Attention is now on Ghana as to how the country can manage its oil resources to be able to eradicate poverty among its people i.e. sustainable economic growth and human resource development; considering the fact that oil resources in Africa have rather brought about corruption, stagnation and economic decline. The aim of this paper is to examine the Ghana Heritage Fund (GHF). Primary and secondary sources such as legal documents, publications, articles, journals, books and internet sources were used to do quantitative, qualitative, comparative and scenario analysis. The paper found out that if all the tenets of the Ghana Heritage Fund are properly implemented and astutely managed as planned, the Fund will bring lasting use of the oil revenue in Ghana. The paper recommends that in order to implement and benefit from the Ghana Heritage Fund, it is important for the Government of Ghana to review the concept of 'excess petroleum revenue' as contained in the act. There are still many other issues about the Petroleum Revenue Management Act (Act 815) of 2010 that the paper could not analyze hence there is the need for further critical examination of the Petroleum Revenue Management Act (Act 815) of 2010.

Key words: Sustainable Management, Petroleum Resources/Revenue, Ghana Heritage Fund

LIST OF ABBREVIATIONS

ABFA	Annual Budget Funding Amount
AETC	African and Eastern Trade Corporation
BBLs	Billion of Barrels
BoG	Bank of Ghana
CIA	Central Intelligence Agency
EPA	Environmental Protection Agency
E&P	Exploration and Production
GGP	Ghana Gas Project
GHF	Ghana Heritage Fund
GNPC	Ghana National Petroleum Corporation
GOC	Gulf Oil Company

GoG	Government of Ghana
GPFs	Ghana Petroleum Funds
GRA	Ghana Revenue Authority
HF	Heritage Fund
IAC	Investment Advisory Committee
NOC	National Oil Company
PITL	Petroleum Income Tax Law
PNDC	Provisional National Defense Council
PRMA	Petroleum Revenue Management Act
SFP	Societe Francaise de Petrole
TOR	Tema Oil Refinery
WAOFCO	West African Oil and Fuel Company

1.0 INTRODUCTION

The recent discovery of oil in commercial quantities offshore the coast of Cape Three Points in the western region of Ghana takes the country to join the club of oil producing countries. Ghana's recent discovery of petroleum resources has raised the hopes of the citizenry that, with the huge revenues likely to be accrued from the oil windfalls, the country would be able to increase its Gross Domestic Product by about 23 per cent as oil production starts.¹ On the other hand, the discovery of oil has also caused anxiety about how Ghanaians are going to share the benefits of the oil resources.

In 2007, the petroleum geologists of Tullow have estimated the P90 reserve to be 600 million barrels, with upside potential of 1.8 billion barrels.² This is expected to increase to 5 billion barrels as more fields start production.³ The Central Intelligence Agency (CIA) in 2011 also estimated the Ghana oil reserves to stand at 660,000,000 (4.15 bbl). In Jubilee field, between January and August 2011, production has increased from 45,000 to 77,000 barrels per day respectively on average. The total crude oil production from January to September 2011 was about 16.7 million barrels, while there were 24 crude liftings from the field by all the partners. The country earned \$337,337,925 from the sale of the first three listings (2,980,720 Bbls crude oil). Ghana also achieved an industry record of 3.5 years (40 months) from the discovery of oil to first oil production. The question many Ghanaians are asking it's whether Ghana has the management capacity to manage its oil revenue astutely. Pessimists within the oil industry are of the view that the oil revenue would be mismanaged just like revenues from cocoa and other extractive minerals such as gold. These doomsayers make references to what over the years has characterized African oil producing countries. In 2001, African oil producing countries together produced an average of 3.8 million barrels of oil per day, representing about 5 per cent of world oil production.⁴ Their average production was projected to increase to 5 million barrels per day by 2006. Oil exports in Africa amounted to more than US\$25 billion per year between 1997 and 2001 and were estimated to increase to \$30 billion between 2002 and 2006. Yet in terms of infrastructural development, administrative capacity, human resources and living standards, these resources endowed countries (Nigeria, Angola, Gabon, Equatorial Guinea, Republic of Congo and Uganda in the case of Africa) grew less rapidly than resource poor countries during the last quarter of the twentieth century.⁵ In general, oil producing countries in Africa have not achieved better living standards. In 2001, out of 32 oil exporting countries worldwide, 6 of the 9 countries with the lowest human development indicators are in sub-Saharan Africa.⁶

¹ Bainomugisha, A. et al Escaping the oil curse and making poverty a history: A review of the oil and gas policy and legal framework for Uganda, ACODE Policy Research Series, No.20, 2006

² See, Dr Oteng-Adjei, Minister of Energy of the Republic of Ghana on 'meet-the-press series' Accra, Thursday, 06/10/2011

³ See CIA, Country Comparison: Oil proved Reserves at <https://www.cia.gov/library/publications/the-world-factbook/> (last time visited, January 21st, 2012)

⁴ Kats, M. et al, (2004) Lifting the Oil Curse: Improving Petroleum Revenue Management in Sub-Saharan Africa, International Monetary Fund, Washington DC

⁵ Humphreys, M, et al (2007), Escaping the Resource Curse, Colombia University Press, 2007, New York USA.

⁶ supra note 4

With the dramatic failure that have characterized African oil producing countries to better the lives of their people, it's Ghana any different from any of these countries? In Africa, oil benefited the few privileged elites, oil companies and the western industrialized countries at the expense of the owners of these natural resources (the masses). Is there anything basically cursed about oil in Africa? Things need not be so unpleasant for African oil producing countries. Norway has managed its oil resources to ensure sustainable development and a stable welfare society for its citizenry. Some Arab countries have done same though not good examples of democracy and accountability, they have been able to ensure a reasonable standard of living for their people. This research paper discusses the Ghana Heritage Fund of the Petroleum Revenue Management Act, 2010 (Act 815) in their quest to astutely manage the oil resources to the benefit of both present and future generations. The paper is organized into five parts: Part One is the introduction; Part Two is the background detailing Ghana's oil exploration. Part Three focuses on the Ghana Heritage Fund (GHF), it explores how the GHF would be implemented and managed. Primary and secondary sources such as legal documents, publications, articles, books and internet sources would be used to do quantitative, qualitative, hypothetical and comparative analysis. Part Four focuses on good resource management practices while Part Six concludes and recommends ways to improve on the GHF.

2.0 BACKGROUND TO THE STUDY

Ghana like any other oil producing country in Africa has high expectations of experiencing better living conditions amidst the production of oil. The first oil exploration in Ghana (the then Gold Coast) was done by West Africa Oil and Fuel Company (WAOFCO) in 1896. Most of WAOFCO's main exploration activities at that time were directed at the rich onshore Tano fields of the Western Region (WR), Ghana. Within seven years (1896-1903), WAOFCO drilled a total of five wells and only one (WAOFCO-2) resulted in the first documented oil discovery in Ghana. Sooner than later, between 1909-1913, a French Oil Company called Societe Francaise de Petrole (SFP) followed WAOFCO's pioneering lead. SFP's first well drilled (SFP-1) in Ghana could only produce seven barrels of oil per day.⁷

The African and Eastern Trade Corporation (AETC) (1923-1925) and Gulf Oil Company (GOC) (1956-1957) also came in. In the 1960's, a diverse group of Soviet and Romanian geo-scientists joined in the exploration for petroleum resources in the Volta and Accra Keta Basins. Their exploratory activities and their resultant geographical data however led to an operational shift; a shift from onshore to offshore shallow waters exploration.⁸ After the 1967, new expatriate companies came to Ghana and carried out further onshore drilling activities. It was during this period that discoveries of hydrocarbons were made for the first time in the Saltpond Basin in Ghana. Until late 1970's, the management of petroleum sector was under the umbrella of Petroleum Department of the Ministry of Fuel and Power.⁹

To accelerate the development of the petroleum sector in Ghana, the Ghana National Petroleum Corporation (GNPC) funded the acquisition, processing and interpretation of the first 3-Dimensional seismic data over the South Tano Field between 1989 and 1991. GNPC also drilled several wells that established the viability of three fields in the Tano area.¹⁰ The North Tano field was estimated to have reserves over 73 billion cubic feet of gas. The South Tano basin was also estimated to have reserves of both oil and gas of over 14 million barrels of oil and about 120 billion cubic feet of gas. Over 4.0 million barrels of oil i.e. heavy crude were estimated to exist in the Tano west field.¹¹ GNPC subsequently produced over 62,000 barrels of oil in the South Tano Fields (STF) in 1992 and was refined at Tema Oil Refinery (TOR).

In June 18, 2007, Kosmos Energy, a Dallas-based exploration company in a press release announced that the exploratory well offshore the Republic of Ghana in the West of Cape Three Points Block has discovered oil in commercial quantities based on the outcome of drilling and wire-line logs, and a sample of the reservoir fluid.¹² Ghana's oil discovery has come at a time when foreign aid to Africa from the North is dwindling. To chart a

⁷ D. Bonsu, Article 'A concise history of oil and gas exploration in Ghana' Monday, 20 June 2011

⁸ See GNPC website: www.gnpcghana.com (last time visited January 12, 2012)

⁹ supra note 7

¹⁰ see supra note 7 @ page 4

¹¹ see supra note 8 @ page 4

¹² see Kosmos Energy website: <http://www.kosmosenergy.com/ghana.html> (last visited January 21, 2012)

better course for development and economic growth, it is important for Ghana to make the best use of its oil revenues to avoid the negative effects that tend to be associated with the oil resources.

3.0 MAJOR PROVISIONS OF THE PETROLEUM REVENUE MANAGEMENT ACT, 2010, (ACT 815).

The government of Ghana (Parliament) passed into law the Petroleum Revenue Management Act, 2010 (PRMA). The Act, (Act 815) is to govern and guide how Ghana's petroleum resources would be used. The rationale behind the Act is to create a sustainable use of the petroleum resources so that both present and future generations of the Republic of Ghana (RG) can benefit from the oil find.

For petroleum resources, Ghana's first petroleum law was the GNPC Law, Provisional National Defense Council Law (PNDCL 64) which was passed in 1983 to provide the legal framework for exploration and production (E&P) activities of petroleum resources in Ghana. Other laws of general application do apply to the petroleum sector for example, the enactment of petroleum (E&P) Law in 1984 (PNDCL 84) and the enactment of Petroleum Income Tax Law (PITL) in 1987 (PNDCL 188) by the then PNDC government which provides a distinct tax regime for petroleum sector. The PRMA is established to set as a guiding principle for the collection, allocation and management of oil revenue to the benefit of the citizens of Ghana in accordance with Article 36 of the Constitution of the Republic of Ghana.¹³ By this Act (Act 815), any old provision mandating parliament to legislate on the collection, allocation and management of petroleum resources be it upstream, midstream and/or downstream holds but the later (PRMA, 2010) prevails.¹⁴ Section 2, clause 1 establishes a Petroleum Account (PA) situated at the Bank of Ghana (BOG) and enjoins the BOG to be responsible for receiving and disbursing the petroleum revenues that are due the Republic of Ghana in accordance with the provisions of this Act.

The Ghana Revenue Authority (GRA) according to this Act, shall be the agency to assess, collect and account for all the petroleum resources and these resources shall not be considered as part of the normal tax revenue collected and Act 791, 2009 of GRA shall not be applied to it.¹⁵ Section 2, (2) all the petroleum revenue accrued and due the Republic of Ghana shall be deposited into the Petroleum Account for subsequent transfers to the budget and the Ghana Petroleum Funds (GPFs). Ghana GPFs comprise of the Ghana Stabilization Fund (GSF) and Ghana Heritage Fund (GHF). The GSF and GHF receive from the Petroleum Account excess petroleum revenue as savings for the intended purposes provided by this Act. The study focuses on the Ghana Heritage Fund because it is the fund that has a direct link to the sustainable use of the oil resources in Ghana.

3.1. THE GHANA STABILIZATION FUND (GSF)

The Stabilization fund is established to ensure a sustainable public expenditure capacity in times of unexpected revenue shortfall whether as a result of petroleum price volatility or through adverse production pitfalls.¹⁶ Starting this year (2011) until the year when petroleum production ceases, the following rules shall apply: where petroleum revenue collected in each quarter of any financial year is more than one-quarter of the Annual Budget Funding Amount of that financial year, as determined in section 14, the United States Dollar equivalent of the excess oil revenue will be transferred from the Petroleum Account into the GPF's. By this provision, if no excess petroleum revenues accrue as determined by the minister of finance, no fund goes into the GPF. The purpose of the GSF by this provision will be defeated unless a certain threshold of petroleum resources is attained. Savings are dependent on residuals.¹⁷ The rationale for establishing GSF is to help stabilize the economy in case there is any budget deficit resulting from revenue shortfalls due to low prices or unforeseen events in the oil sector. Similarly, in Cameroon and Nigeria, revenue deposits in the Central Bank in essence serve as instruments to stabilize the budget.

3.2 THE GHANA HERITAGE FUND (GHF)

Petroleum resources like any other mineral resources are nonrenewable. Any country that discovers a non renewable resource has the option of either using it to benefit only the current generation or both the current and future generations. But how can future generations enjoy from a nonrenewable resource that will have been diminished before they are given birth to? It is against this background that the Petroleum Revenue Management

¹³ See Petroleum Revenue Management Act, 2010, (Act 815), Republic of Ghana

¹⁴ Ibid.

¹⁵ Ibid.

¹⁶ Ibid.

¹⁷ Ibid.

Act of 2010 (Act 815), section 11 established the Ghana Heritage Fund to provide an endowment to support the welfare of future generations after the petroleum resource has been depleted.¹⁸ This is achieved by setting aside and investing some portion of the petroleum revenue due the state in ways that increase the production capacity domestically or internationally that can raise the standard of living of both present and the future generations.¹⁹ GHF under Section 11 of this Act is to receive at least thirty percent (30%) of excess petroleum revenues from the Petroleum Account for investment abroad in financial instruments towards the welfare of future generation of Ghanaians.

Investment funds are not new to oil producing countries. Countries such as Norway, Kuwait, and United States of America (USA) had similar funds and it did work to some extent. Transfers out of the GHF can only be made solely for investment purposes as contain in the Act. The Act also stipulates that when petroleum revenue collected in each quarter falls below a certain threshold (one-quarter) of the Annual Budget Funding Amount (ABFA) withdrawals can be made from the GHF to make up the difference. However, the Heritage Fund ceases to exist once petroleum resources are completely depleted.

The management team of the Heritage Fund comprises of the Minister of Finance and Economic Planning, the Bank Of Ghana and an Investment Advisory Committee (IAC). The minister is entrusted with the responsibility to devise investment strategies in consultation with the IAC and the governor of Bank of Ghana on the investment portfolios that revenues of the Heritage Fund are to be invested. The minister manages the whole investment portfolio thereafter.

3.2.1 ANALYSIS OF THE GHANA HERITAGE FUND (HYPOTHETICALLY)

Assumptions:

- a) The present oil reserves are 4.15 Bbls as estimated by the Central Intelligence Agency, 2011
- b) The oil reserves will last for 25 years starting from 2011
- c) Oil prices are hedged for \$110/bbl for the next 25 years
- d) Starting from 2016, there will be 25% excess revenue of the Government of Ghana
- e) Thirty percent (30%) of the excess revenue will be set aside for the Ghana Heritage Fund
- f) A discount factor and an interest rate of 4.5% return
- g) All other factors remain the same (*ceteris paribus*)

Some hypothetical scenario is hereafter created for the Ghana Heritage Fund and analyzed with the oil resources lasting for the next twenty five years starting from 2011. Base on the 30% share of the excess revenue that is to be channeled towards the Ghana Heritage Fund and CIA (2011) total oil reserves (4.15 Bbls) of Ghana, the Ghana Heritage Fund receives its first deposit of \$166 million excess revenue in 2016; because the Government of Ghana in the next five years will have to put up the necessary infrastructure such as the Ghana Gas Project (GGP) and the human capital hence there would be no excess revenue for the next five years. The revenue to the Heritage Fund will increase as more oil resources are extracted and will finally start to increase at a decreasing rate beginning from 2024 (see table 1.0.). Drawing on the CIA estimates of 4.15 Bbls of Ghana's oil reserves and a hedged oil price of \$110/bbl., the table below shows the number of years the oil will last, total output and the revenue. According to the Production Sharing Agreement or Contract between the Government of Ghana (GoG) and Tullow Plc (the sole operator of the Jubilee Field), Government of Ghana is entitled to 10% of the oil output extracted. Then GoG apportions 30% of any excess revenues of the 10% to the GHF.²⁰ Excess petroleum revenue in this context means when GoG has enough revenue to fund its development projects.

¹⁸ Ibid.

¹⁹ Hannelson, R, (1998) Petroleum Economics: Issues and Strategies of Oil and Natural Gas Production, Greenwood Publishing Group Inc. Quorum Books, USA

²⁰ see supra note 13 at 6

TABLE 1.0 SHOWING THE PROJECTED OIL OUTPUT & REVENUE OF GHANA FROM 2011-2035

Year with \$110/bbl	Output (Million Bbls.)	Cum Output (Million Bbls)	Total Revenue \$M	GoG revenue @10% (\$M)	Assumed Excess Revenue of 25% of GoG (\$M)	30% of the Assumed Excess to GHF	Cum. GHF (\$M)
2011	29	29	3,212	321	0		
2012	44	73	4,818	482	0		
2013	91	164	10,038	1,004	0		
2014	110	274	12,045	1,205	0		
2015	183	456	20,075	2,008	0	-	-
2016	201	657	22,083	2,208	552	166	166
2017	360	1,017	39,600	3,960	990	297	463
2018	360	1,377	39,600	3,960	990	297	760
2019	360	1,737	39,600	3,960	990	297	1,057
2020	360	2,097	39,600	3,960	990	297	1,354
2021	360	2,457	39,600	3,960	990	297	1,651
2022	326	2,783	35,832	3,583	896	269	1,919
2023	283	3,066	31,150	3,115	779	234	2,153
2024	155	3,221	17,096	1,710	427	128	2,281
2025	138	3,359	15,163	1,516	379	114	2,395
2026	146	3,506	16,100	1,610	403	121	2,516
2027	108	3,614	11,927	1,193	298	89	2,605
2028	96	3,710	10,579	1,058	264	79	2,684
2029	85	3,795	9,382	938	235	70	2,755
2030	76	3,871	8,321	832	208	62	2,817
2031	67	3,938	7,380	738	185	55	2,873
2032	60	3,998	6,546	655	164	49	2,922
2033	60	4,058	6,598	660	165	49	2,971
2034	55	4,113	6,103	610	153	46	3,017
2035	37	4,150	4,052	405	101	30	3,047

Source: <https://www.cia.gov/library/publications/the-world-factbook/>

Source: <https://www.cia.gov/library/publications/the-world-facebook/> (last visited January 21, 2012)

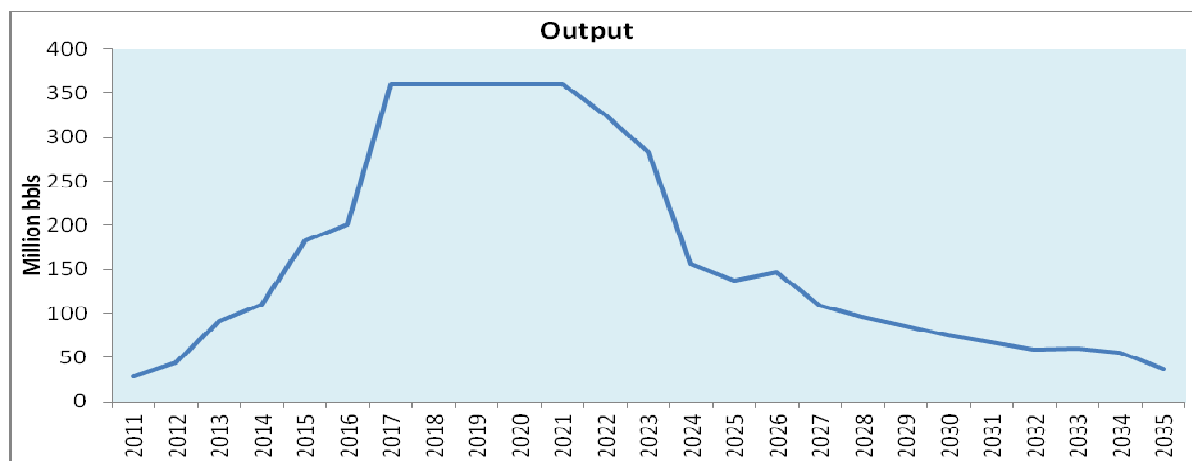


Figure 1.0 above represents the oil output of Ghana starting from 2011-2035. The oil is projected to peak for 5 years (2017-2021) and then starts falling until the petroleum resources are completely depleted in 2035. With a real return rate of 4.5%, the GHF appears to be doing well. As illustrated below, (see table 1.1) the fund at the beginning will be empty until Government of Ghana has enough revenue to fund its budget deficits. Assuming it is possible to get a real rate of return of 4.5% on investments made at the same discount rate; the present value of the Heritage Fund revenue stands at \$1,825.61 as shown in the table below. If the \$1,825.61 is further invested with 4.5% interest rate, it will bring \$82.15 per annum, administrative costs inclusive).

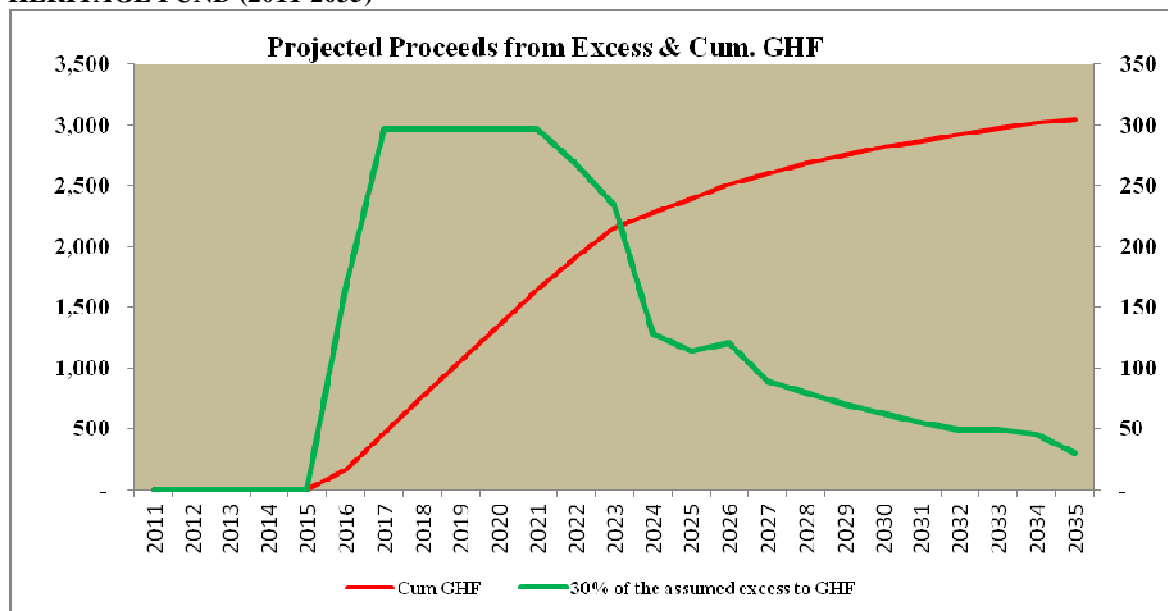
TABLE 1.1
 A HYPHTHICAL SCENARIO OF THE GHANA HERITAGE FUND (GHF), 2011-2035

Year	Revenue (\$M)	Discount factor	Present value
		Rate=4.5%	Of revenue
2011	0	0.9569	-
2012	0	0.9157	-
2013	0	0.8763	-
2014	0	0.8386	-
2015	0	0.8025	-
2016	166	0.7679	127
2017	297	0.7348	218
2018	297	0.7032	209
2019	297	0.6729	200
2020	297	0.6439	191
2021	297	0.6162	183
2022	269	0.5897	158
2023	234	0.5643	132
2024	128	0.5400	69
2025	114	0.5167	59
2026	121	0.4945	60
2027	89	0.4732	42
2028	79	0.4528	36
2029	70	0.4333	30
2030	62	0.4146	26
2031	55	0.3968	22
2032	49	0.3797	19
2033	49	0.3634	18
2034	46	0.3477	16
2035	30	0.3327	10
Present value of the revenue			1,825.61
Annual return of Value at 4.5%			82.15

It can be observed from the above table that with 4.5 percent annual return on the fund can be used without depleting the fund. A policy that can go on forever if the rate of return is increased or maintained. With this, the nonrenewable petroleum resource has been transformed into a renewable one by the device of an investment fund (Hannesson 1998).

One fundamental weakness of this calculation is the fact that Ghana has not hedged her oil prices and as it stands oil prices are not stable and can double, triple, or even fall drastically and this will change the amount that will be set aside for the Ghana Heritage Fund. Also, more oil discoveries are made, new agreements entered into which can again affect the amount. Figure 1.1 below shows the flow of the excess revenue and the cumulative growth of the Ghana Heritage Fund.

FIGURE 1.1 PROCEEDS OF THE EXCESS OIL REVENUES AND THE GROWTH OF THE GHANA HERITAGE FUND (2011-2035)



Source: <https://www.cia.gov/library/publications/the-world-factbook/> (last visited January 21, 2012)

4.0 GOOD RESOURCE MANAGEMENT PRACTICES

Despite the mixed blessing that come with oil production, the oil resources ideally are supposed to benefit the oil producing countries. Oil revenue can bring about increase in living standards when managed well.²¹ The oil revenue and borrowing made against the oil reserves can also finance human and infrastructural developments. To manage oil resources astutely, oil producing countries need to take a long term look at their national development strategy and invest more in the public sector instead of increasing individual consumption. This is because inadequate infrastructural development sometimes draws back investments the private sector would have made. The strategy is to use the oil revenue to fund public sector projects that will serve as an incentive for private sector investment. When oil revenues are invested in public sector goods, it has the trickle down effects to increase economic activity and subsequently private sector investment which would lead to higher incomes.²² Through the strategy of increase in economic activities, governments would be able to finance public expenditure even when the oil resources are completely exhausted.

The concept of dividing the oil income among the citizens with the aim of increasing their purchasing power as has been practiced in the US (Alaska) may not be the solution to oil problems in Africa, rather some targeted public expenditure: health care, basic infrastructure, farm inputs such as fertilizer, hybrid seeds, and microcredit facilities for peasant farmers could make a difference in the life of the citizenry especially the rural folks. In any case, it is ignorant to use a nonrenewable resource for the benefit of only the current generations, instead of extending the benefits across generations. Intergenerational allocation is best materialized by financial measures. Norway achieved this by investing their oil revenue in their social security system so that future generations could benefit from it.

One peculiar feature about the oil income is that more of the income stream and flow is natural resource rent rather than the returns on the factors of production.²³ Oil wealth coupled with good economic policies has the

²¹ see supra note 5 at page 2

²² Ibid.

²³ Ascher, W, (1999), Why Governments Waste Natural Resources: Policy Failures in Developing Countries, The Johns Hopkins University Press, 1999, Baltimore-Maryland USA

tendency of increasing economic growth and development. The advice often given to oil producing countries is to desist from expending much of the oil revenues; instead they should invest in financial assets in order to offset any currency appreciations so as to avert the infamous Dutch Disease.²⁴ The concept of the Dutch Disease is not automatic and its effects are well understood when a dichotomy is drawn between internationally traded goods and non-traded goods. Besides limiting spending in times of oil booms, governments can provide some incentives in a form of subsidies for the non oil sectors to prevent work force from switching from other sectors to the oil industry.

Information about the oil revenue should be made available to the public to ensure transparency, probity and accountability in line with the Extractive Industries Transparency Initiative.²⁵ In Norway for instance, there is a high level of transparency and accountability in their institutions and this helped gain public trust and confidence about how their oil resources are managed. The various revenue streams (royalties, production sharing, corporate taxation, bonuses) should be published with emphasis on the uncertainties associated with the oil revenues as well as forecasts. Unregulated borrowing against the oil has always been the bane of some oil exporting countries especially in Africa.

Finally, capacity building for government institutions such as the Ghana National Petroleum Corporation, Bank of Ghana, Ghana Revenue Authority and other stakeholders that are responsible for managing oil sector investments must be strengthened. Institutions such as Environmental Protection Agency (EPA) in the case of Ghana must have the necessary capacity and competence to monitor the activities of oil companies from the start of E&P stages.

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 CONCLUSION

Ghana's search for oil resources dated back as early as 1896 by WAOFCO. Until after 1967, no discoveries of hydrocarbons were made. To speed up exploratory activities in Ghana, GNPC purchased a 3-Dimensional seismic data machine in 1989 to support oil exploratory efforts in the country. Several exploratory activities prior to this took place but were not developed because the hydrocarbons discovered were not in commercial quantities given the per barrel price at that time.

GNPC first explored and developed effort was in 1992 when it had produced over 62,000 barrels of crude oil in the STF that was sent to TOR for processing. Then, in 2007, Kosmos Energy announced that they have found hydrocarbons in commercial quantities in the Cape Three Points Block, western region Ghana. Few years later (2010), the Government of Ghana, by an act of parliament passed into law the Petroleum Revenue Management Act, 2010, (Act, 815) to regulate the collection and management of oil resources in Ghana. The act established the two resource management funds i.e. the Ghana Stabilization Fund and Ghana Heritage Fund of which the paper focused on.

5.2 RECOMMENDATIONS

The paper recommends that in order to implement and benefit from the Ghana Heritage Fund, it is important for the Government of Ghana to review the concept of 'excess petroleum revenue' as contained in the act. The government could look at it in the direction of say, every year 10% of oil revenue collected shall be set aside for the fund. If this is not done, Ghana may not have excess petroleum revenue because about 50% of her budget is donor funded and the oil discovery has led to the withdrawal of donor support i.e. the government has to now fully fund its budget and development projects.

It is also worth recommending that the management activities of the Ghana Heritage Fund should be in the hands of an independent organization. This will give the organization the full autonomy to take independent and prudent investment decisions. The finance minister at the realm of affairs of the fund may want to satisfy the government of the day which might not be in the interest of the fund management.

Be as it is, transparency and accountability should be the hallmark of the management team of the Fund. The various stakeholders (the finance minister, Ghana Revenue Authority, Bank of Ghana and the Investment Advisory Committee) should regularly make available information about the Fund investment activities,

²⁴ Karl, T. M. (1997), *The Paradox of Plenty: Oil Booms and Petro-States*, University of California Press, 1997, California USA

²⁵ Mensah-Datsa, G. (Thesis, 2010), *Effective Management of Non-renewable Natural Resources; To What Extent are Appropriate Institutions the Key?*

performance and assets to the general public. This will not only help create public confidence but also a requirement by the Extractive Industries Transparency Initiative and as a principles of good management practices. Transparency is the only measure that can discourage corruption and embezzlement of the funds due the Heritage Fund.

There are still many other issues about the Petroleum Revenue Management Act (Act 815) of 2010 that the paper could not analyze hence there is the need for further research into the Petroleum Revenue Management Act (Act 815) of 2010

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