



LEARNING LESSONS FROM OIL REVENUE INVESTMENTS IN GHANA;

AN EVIDENCE BASED IMPACT STUDY OF OIL FUNDED IRRIGATION PROJECTS, 2018

TONO IRRIGATION PROJECT IN THE UPPER EAST REGION
ZUEDEM IRRIGATION PROJECT
VEA COMMUNITY
WIAGA COMMUNITY



SUPPORTED BY:





EXECUTIVE SUMMARY

As Ghana seeks to achieve optimum utilization of extractive resources, it is imperative to take a reflection of how resource revenues have so far been invested so as to identify the gaps and lessons to inform future policy decisions. Oil revenues continue to play significant role in Ghana's economic development contributing in excess of \$4 billion in proceeds. Therefore, there is the need to learn lessons from Ghana's experience in oil revenues investment since the country begun receiving inflows from petroleum resources nearly ten years ago. This was basically the driving force that influenced ACEP with support from Oxfam in Ghana under the NORAD grant to conduct this impact study. It is worthy of noting that ACEP has over the

years been advocating for oil revenues to be invested in pro poor sectors such as education, agriculture and health which various governments have considered. The study was therefore set out to assess the impacts of oil revenue investment in selected agricultural projects and to assess the level of adoption of recommendations from the various value for money audits (VFM) by government by way of influencing spending policies.

The study employed an experimental research design by selecting a treatment and control groups. The treatment group in this case refers to the group of selected projects that received oil revenue funding while the control group did not benefit from oil

revenue funds but were selected for purposes of comparing against the treatment group. The Tono and Zuedem Irrigation dams were purposively selected from a list of projects that benefitted from oil revenues for dam rehabilitation and dam construction works respectively. Wiaga and Vea communities were also selected as control group because they share similar socio-economic characteristics with the treatment group but did not benefit from oil revenue investment.

The summary of findings point to the fact that access to irrigation infrastructure in Zuedem and Tono contributed to increased employment by about 30% of the community of which 60% were women and farm yield increased by approximately 70% to 100% per annum when compared to farmers without access to irrigation facility. Household incomes increased significantly

among the respondents as a result of increased quantity of farm produce sold by farmers mainly at the community markets.

The findings also indicate that significant part of ACEP's policy recommendations have been adopted by various governments especially the advice against thin spreading of oil revenues over numerous projects. Outcome of engagements with Ministry of Finance and the Ghana Irrigation Development Authority (GIDA) show that few projects were selected to be funded with oil money in future funding arrangements. This approach will improve efficiency in oil money spending by ensuring that projects are started and completed as scheduled thereby avoiding time and cost overruns. This reduces the overall cost of projects and maximizes the benefits of the projects to the people.

The Ministry of Finance also accepted policy recommendations made by ACEP and promised to make available projects that will be funded with oil money ahead of implementation which is consistent with ACEP's recommendations. This will enable CSOs to monitor implementation instead of the usual conduct of post mortem analysis of oil funded projects because the list of beneficiary projects funded with oil money is disclosed only in reports to parliament at the end of the financial year.

However, the study found that there were inadequate consultations in project selection. In most cases, the MMDAs were not involved in the contract award process. The community leadership was not aware of the oil funded projects and therefore could not tell the source of funding for the selected projects. This defeats the principles of transparency and accountability.

The quality of work on projects was identified to be poor. The team found cracks and dysfunctional valves in the irrigation dam that was constructed less than three years now.

There was no maintenance plan and the community members were not trained to conduct minor maintenance on the facilities. Based on the findings of the study, the following recommendations are made to improve efficiency in oil revenue investment:

1. The Ministry of Finance should make available the list of projects that have been selected to benefit from oil revenues and indicate the anticipated cost of each selected project.
2. Secondly, even though there has been an improvement in the thin spreading of the oil revenues over numerous projects, efforts should be made to further reduce the list to few to ensure that projects are

commenced and completed timeously.

3. The regional offices of the Irrigation Development Authority, the District Assembly and community leadership especially the Assembly members should be involved in the selection of projects, contract award process, certification of work done prior to payment to contractors so that they are able to monitor effectively, implementation of such projects

4. There should be sign posts at each project site indicating funding source of the project. This will enhance transparency and accountability in the management of oil revenues.

5. There is the need to develop project maintenance plan attached to future projects and ensure that the community members are trained to perform minor maintenance when the need arise.

6. Pseudo participation afforded women in the communities must be

reviewed to ensure effective participation of women in all aspects of decision making. Simply getting a women's representative in a committee is not enough. Regulations should be developed by the MoF that makes it mandatory for 40-50% of project management committees to be women and who must participate at all levels of project management decisions.

7. The study chanced on illegal mining operations in the Zuedem community. While observing the malfunctioning canals that lead to loss of water from the dam, the team run into a group of miners who were using the water from the dam canals to wash and process gold dust to be able to retrieve the pieces of gold particles. This practice should be checked immediately before it blows into full scale illegal mining activity.

8. Finally, payment of contractors who execute oil funded projects should be decentralized to the District levels. This will ensure that work done is certified before payments are made. Project management committees should be set up and made to participate in the certification process before payment is made to the contractor.

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ACRONYMS AND ABBREVIATIONS

Africa Center for Energy Policy.....	ACEP
Annual Budget Funding Amount.....	ABFA
Annual Reconciliation Reports.....	ARR
Capital Expenditure.....	CAPEX
Ghana Cedis.....	GHS
Ghana Education Trust Fund.....	GETFund
Ghana Irrigation Development Authority.....	GIDA
Government of Ghana.....	GoG
Gross Domestic Product.....	GDP
Highly Indebted Poor Country.....	HIPC
Internally Generated Fund.....	IGF
Irrigation Company of the Upper Region.....	ICOUR
Ministry of Finance.....	MOF
Multilateral Debt Relief Initiative.....	MDRI
Norwegian Agency for Development Cooperation	NORAD
Organization of Economic Cooperation and Development.....	OECD
Petroleum Holding Funds.....	PHF
Petroleum Revenue Management Act.....	PRMA
Right To Information Law.....	RTIL
Senior High School.....	SHS
Sustainable Development Goals.....	SDGs
Value for Money.....	VFM

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1.1 Introduction

This impact study was conducted by the Africa Centre for Energy Policy (ACEP) in collaboration with Oxfam in Ghana under the NORAD program as part of our collective efforts in ensuring that the country derives maximum benefits from its extractive resources through identifying and addressing gaps that militate against the achievement of this objective.

ACEP has over the years advocated for the inclusion of pro poor sectors such as Education, Health and Agriculture in the priority areas for oil revenues investment by the government. Investment in these sectors could have significant impact on poverty

reduction and improve the human capital of the nation. Extractive resources are finite and the revenues are volatile; it is only proper to invest in sectors that will contribute towards building human capital, ensure sustainability and promote socio-economic lives of the people.

The Centre, as part of its drive towards ensuring transparency and accountability in the management of oil revenues adopts strategies that monitor utilization of oil revenues. One strategy regularly used by ACEP is conduct of Value for Money (VFM) audit of oil funded projects. The essence of using this strategy is to influence policy to promote efficiency and sustainable use of oil

revenues in particular and extractive resources as a whole through evidence-based advocacy.

The questions that remain unanswered are whether it can be said that this approach has really made any impact in influencing government policies? And whether investing oil revenues in pro poor sectors is justifiable policy decision? These questions and others are answered by the findings of this report.

1.2 Background

The Annual Reconciliation Reports (ARR) on Petroleum Holding Funds (PHF) released by the Ministry of Finance (MOF) indicate that a total of one million, six hundred and eight thousand, five hundred and nineteen Ghana Cedis (GHS 1,608,519) was reported to have been disbursed for the rehabilitation of the Tono Irrigation dam in 2014. The Zuedem Tankese irrigation project was also part of a group of projects reported to have received

an amount of sixteen million and forty-three thousand, nine hundred and fifty-three Ghana Cedis, twenty pesewas (GHS 16,043,953.28) to cover payment for the provision of irrigation facilities across the country out of which it received GHS 2,566,554.40. ACEP in 2015 and 2017 conducted value for money analysis on these two selected projects in which some recommendations were made. Therefore, the objectives of this current impact study were to evaluate the extent to which these recommendations influenced policy decisions and assess the direct benefits of the investments in areas including employment, income, production levels and access to farm lands in the off rainy season.

1.3 Context

Ghana is blessed with substantial natural resource wealth and significantly it is the second largest gold producer in Africa with 3.1% of the world's gold reserves. It also has the 9th largest reserves of diamonds in the world ¹. The country's bauxite reserves are said to be enough to last for more than a century, with most of them not being exploited to their fullest potential ². Other minerals include manganese, limestone, iron ore etc. of which some are new discoveries.

Oil and gas production also started in 2010, joining the list of resources that Ghana is endowed with. The Jubilee Field, discovered in 2007, is the largest offshore oil discovery in West Africa over the last decade,

estimated to hold between 600 million and 1.5 billion barrels. On the whole, the Extractive Industry Transparency Initiative reports that, the extractive sector contributes about 60% of total exports, 10% to GDP, 18% to government revenue and 2% to total employment in the country ³.

The World Bank in its extractive industries review in 2004 confirmed that, the extractive industry can contribute to sustainable development if projects are implemented well, the lives and livelihoods of host communities are preserved, and benefits generated are well utilized ⁴.

¹ <https://eiti.org/ghana>

² <http://www.gepcghana.com/bauxite.php>

³ <https://eiti.org/ghana>

⁴ World Bank Group. 2004. World Bank Management Group Response: Striking a Better Balance – The World Bank Group and Extractive Industries: The Final Report of the Extractive Industries Review. Washington, DC: International Bank for Reconstruction and Development/The World

It is trite knowledge that resource extraction fuels the global economy, and that they are major players in the economic landscapes of many developing countries. Although there are varying circumstances based on country's context, proceeds from minerals, oil and gas contribute substantially to many emerging economies' national budgets. For example, Nigeria's extractive industry contributes about 20% of the country's GDP and 65% of its budget⁵.

While the extractive industries hold the promise of raising incomes, poverty can still persist. The wealth pouring into the country can cause corruption and raise inequalities⁶.

This has prompted the campaign for the investment of extractive revenues in

pro-poor sectors such as education, agriculture, and health. The argument according to Oxfam (2013) is that, many resource-rich countries especially in Africa stand to reap a public revenue windfall which has the potential to change the region's public financing context over the next few years⁷.

In Ghana, the oil revenue investment window is for three years, based on the Minister of Finance's discretion and the requirements of the Petroleum Revenue Management Law (Act 815). Since 2011 when the first investment window began, there have been calls for the Minister to heed to section 3 (21) of the law which states that, "Where the long-term national development plan approved by Parliament

⁵ The role of extractive sector in expanding economic opportunity https://sites.hks.harvard.edu/m-rcbg/CSRI/publications/report_18_EO%20Extractives%20Final.pdf

⁶ <http://www.undp.org/content/dam/undp/library/Poverty%20Reduction/Extractive%20Industries/Extractive-Industries-Brochure.pdf>

⁷ <https://politicsofpoverty.oxfamamerica.org/2013/11/what-are-pro-poor-public-investments/>

is not in place, the spending of petroleum revenue within the budget shall give priority to, but not limited to programmes or activities relating 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 utilisation and protection of natural resources;
- (h) Rural development;
- (l) Developing alternative energy sources;
- (j) 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.”

The above-mentioned areas in the Act depict spending of oil revenues in areas that propel the growth of Ghanaian economy and consideration for pro-poor expenditure.

Another argument is that, since the oil revenues are exhaustible, it will be prudent to invest the revenues in sectors that may bring more socio-economic returns while ensuring that, no citizen is left out of the benefits of the resources. There is also the issue of the pro-poor sectors budgets being funded by donors which means that if donor funds dwindle as Ghana’s status is changed to middle income, then the sectors are going to suffer.

1.4 Ghana's extractive resources and pro poor investment

Growth is said to be pro-poor if it raises the incomes of the poor. This implies that the overall economic condition of the poor needs to improve in order to achieve pro-poor growth⁸. In achieving this, the focus has been on reducing income and non-income poverty as set out in the SDGs. One of the strategies has therefore been on public investment in traditional interests like infrastructure, agriculture, health and education, which place the poor at the center of development⁹.

Apart from the social value that investing in these sectors bring, pro-poor sector investment has also been attributed to economic development.

For example, the agriculture sector contributes to about 25% of Ghana's GDP, and also has the potential to become one of the leading sectors for a more diversified economy in Ghana and as an engine of growth and job creation¹⁰. The OECD also reports that, if access to education increases, and society participation is maximized in lower middle-income countries, education has a potential in contributing to GDP¹¹. A report by Gunn (2017) has also indicated that, investment in the healthcare sector directly benefits the economic growth of countries, especially emerging economies. This is partly attributed to the improvement of productivity in the workforce of the country.

⁸ <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/825.pdf>

⁹ Page J.,(2005). Strategies for Pro-poor Growth: Pro-poor, pro-growth or both?

¹⁰ <https://www.worldbank.org/en/country/ghana/publication/ghana-economic-update-agriculture-ghana-s-engine-of-growth-for-jobs-creation>

¹¹ <http://www.oecd.org/education/innovation-education/1825455.pdf>

The saying “healthy populations make for more productive populations” therefore comes to play here ¹².

These facts and positive correlation between most pro-poor sectors and economic development have formed the basis for a lot of global efforts in ensuring that these sectors are invested in. There have been a number of declarations on meeting international financing targets for these sectors. For the agriculture sector, the 2003 Maputo declaration entreats signatory countries of which Ghana is part to commit at least 10% of their budget to the agriculture sector. However according to a 2017 Ghana Agriculture Policy note by the World Bank, Ghana’s public expenditure on agriculture is among the lowest in Africa,

and considerably below the 10% target in the Maputo declaration ¹³. A report by ACEP in 2018 also revealed that, Ghana did not meet the 10% target set for 2014-2017. The report showed that, allocation to agriculture sector as a percentage of total budget size reflected the following; 0.6% in 2014, 1.52% in 2015, 0.98% in 2016, and 1.64% in 2017.

For the education sector, the 2015 Incheon declaration binds signatory countries to commit at least 15-20% of budgetary allocation/ public expenditure to the sector. Ghana, according to the ACEP report met the target in 2014 by allocating 17% of total budget size to the sector, it did not however meet the minimum target in 2015 and 2016 when the country made budgetary allocations of 13% and 10.5% respectively.

¹² <https://blogs.iadb.org/salud/2015/11/02/health-investment/>

¹³ Page 6, Ghana: Agriculture Policy Note, <http://documents.worldbank.org/curated/en/336541505459269020/pdf/119753-PN-P133833-PUBLIC-Ghana-Policy-Note-Ag-Sector-Review.pdf>

In 2017, It met the target again with a budgetary allocation of 16.6% to the education sector.

With the health sector, the target set in the Abuja declaration of 2001 also entreats its signatories to commit at least 15-20% of budgetary allocation to the sector. The ACEP report mentions that, the percentage allocations to the health sector has been rising from 6% in 2014 to 14% in 2017¹⁴ but still not meeting the benchmark percentage investment expected.

Narrowing down to the investment of Ghana's oil revenues to pro-poor sectors, the above indicators on their correlation to economic development have set the precedence for this campaign and advocacy. This has also been due to the fact that,

the oil resources are finite and thus, there is the need to invest revenues in productive sectors, and also to ensure that all citizens enjoy the benefits of these resources (inclusive development).

1.4.1 Oil Revenue (ABFA) Investment in the Agriculture Sector

Per section 21(4&5) of Ghana's Petroleum Revenue Management Law (Act 815), the Minister of Finance has the discretion to select not more than four priority areas in which the budgetary component of the oil revenues, the Annual Budget Funding Amount (ABFA) will be invested. Since 2011 when oil revenue started flowing in, the agriculture sector has consistently been selected as one of the priority areas. Find below ABFA allocations to the agriculture sector from 2011-2017.

¹⁴ ACEP report on gender budgeting for women empowerment, Pg. 57-60

Table 1: Oil Revenue (ABFA) Investment in the Agriculture Sector

	ABFA DISBURSED	ABFA UTILIZED	ABFA FOR AGRIC	AGRICULTURE AS SHARE OF ABFA UTILIZED
YEAR 2011	261,539,420	261,539,420	12,532,652.00	4.79%
YEAR 2012	516,834,831	516,834,831	72,471,823.66	14.02%
YEAR 2013	543,782,682	543,782,682	13,604,328.65	2.50%
YEAR 2014	1,251,458,167	549,400,109.40	170,624,181	31.06%
YEAR 2015	1,124,200,214	1,124,200,214	59,544,174	5.30%
YEAR 2016	388,850,870	388,850,870	27,671,280.88	7.12%
YEAR 2017	546,310,000	263,938,735	21,156,840.43	8.02%
TOTAL	4,632,976,184	3,648,546,861	377,605,280.62	

Source: ACEP, 2017 based on various reconciliation reports on the petroleum funds by the Ministry of Finance, 2018 Ghana National Budget, and PIAC reports.

So far, a total of GHS 377,605,280.62 has been disbursed to the agriculture sector since 2011 to date. In 2016 alone, the oil revenue constituted about 52.3% of the sector’s budget. Despite all these, the growth rate of the sector declined from 3.8% in 2015 to 3.5% in 2016, the sector picked up in 2017 with a growth rate of 8.4% ¹⁵.

¹⁵ http://www.statsghana.gov.gh/docfiles/GDP/GDP2018/2017%20Quarter%204%20and%20annual%202017%20GDP%20publications/Annual_2017_GDP_April%202018%20Edition.pdf

1.4.2 Oil revenue (ABFA) Investment in the Education Sector

Although section 21 (3) of the PRMA specifically mentions physical infrastructure and service delivery in Education as one of the areas to be considered for oil revenue investment, the sector was not listed as part of the four priority areas for oil revenue investment (ABFA) from 2011-2016. The sector however benefited from the ABFA

through the priority areas of roads and other infrastructure, capacity building during this period. As mentioned, although not specifically listed as a priority area, the education sector received a total amount of GHS 225,625,802 from the ABFA from 2011-2015. This comprises GHS 0 in 2011, GHS 10,571,282 in 2012, GHS 9,113,628 in 2013, GHS 10,667,891 in 2014, and GHS 195,273,001 in 2015.

Table 2: Oil revenue (ABFA) Investment in the Education Sector

	GoG (GHS)	Donor (GHS)	IGF (GHS)	GETFund (GHS)	HIPC/MDRI (GHS)	ABFA (GHS)	TOTAL (GHS)
2011	2,563,391,576	127,255,813	354,288,649	518,486,027	2,288,506	0	3,565,710,571
2012	4,587,183,213	114,311,680	630,674,197	361,279,228	0	10,571,282	5,704,019,600
2013	4,503,777,590	268,872,043	718,265,642	196,649,413	0	9,113,628	5,696,678,316
2014	5,235,932,539	321,804,307	799,538,356	613,813,808	0	10,667,891	6,981,756,901
2015	5,911,248,108	362,480,036	1,468,389,272	759,225,644	0	195,273,001	8,696,616,061
TOTAL (GHS)	22,801,533,026	1,194,723,879	3,971,156,116	2,449,454,120	2,288,506	225,625,802	30,644,781,449

Source: Education Sector Performance Report, 2016

Finally, in 2017, the education sector was listed as one of the priority areas to receive ABFA funding from 2017-2019. The sector received an amount of GHS 211,717,458 the highest amount ever disbursed since 2011 to support the Government's free SHS policy. This constituted about 26.5% of total ABFA for that year.

1.4.3 Oil Revenue (ABFA) Investment in the Health sector.

Per the PRMA, the ABFA is to be used to fund among other things, physical infrastructure and service delivery in health in the absence of a national development plan.

From 2011-2014, the disbursement to the health sector represented only 0.02% of the total ABFA for those years. Also, in 2013, an allocation of GH29.9 million was made to the sector, however, it was not disbursed. There have been discrepancies between the amounts allocated and amounts disbursed ¹⁶.

ABFA contributed to capital expenditure in both 2015 and 2016. In 2016, GHS 33,000,000 was allocated from ABFA to fund capital expenditure in the health sector ¹⁷.

¹⁶ <https://www.modernghana.com/news/642207/imani-report-how-ghanas-oil-revenue-was-spent-on-pro-poor.html>

¹⁷ ACEP budget analysis (Agric, health, and education) 2016.

Table 3: Allocation to Health Sector, 2015 and 2016

	CAPEX 2015	CAPEX 2016	GOODS AND SERVICES	GOODS AND SERVICES
ABFA	43,550,000	33,000,000	0	0
GOG	1,000,000	0	35,293,320	3,646,660
DP	570,223,804	357,453,220	142,555,951	89,363,305
IGF	83,012,502	74,284,543	659,754,520	1,094,625,058

Source: ACEP Budget Analysis for Agric, health, and education (2016).

1.5 Ghana's Agriculture Sector Potential

The Ghanaian economy over the past decades has been largely supported by the agriculture sector employing about 60% of the population, and a significant contributor to foreign exchange earnings and often described as agrarian. This accolade is, to a large extent reflective of the prevailing condition because over 13,600,000 of the

total land area of 23,884,245 hectares is arable land which can be put into cultivation of food and cash crops and approximately 6,341,930 was under cultivation as of 2016¹⁸. In 2013, the sector was reported to have employed about 53.6% of the total labour force in Ghana¹⁹ with majority of them being smallholder farmers. Apart from its contribution to food security and foreign exchange, the sector contributes about 25% of Ghana's GDP on the average²⁰.

¹⁸ http://mofa.gov.gh/site/wp-content/uploads/2018/05/Agric%20in%20Ghana%20F&F%202016_Final.pdf

¹⁹ https://en.wikipedia.org/wiki/Agriculture_in_Ghana

²⁰ <https://www.stanbicbank.com.gh/Ghana/About-Us/news/Agricultural-sector-can-contribute-more-to-Ghana%E2%80%99s-GDP>

Generally, there are two rainy seasons in the southern sector of Ghana while the northern sector experiences one rainy season with a prolonged dry season of up to 6 months during which majority of these farmers remain unemployed. Crops produced in these areas include rice, millet, sorghum, yam, tomatoes, cattle, and cotton. The potential of this region is largely untapped due to climatic risk, low population, and poor soils. Extreme poverty, overdependence on rainfall, weak infrastructure limited social safety nets exacerbate climate risk and increased vulnerability²¹. This situation is especially difficult for smallholder farmers in the northern sector. This means that, for the rest of the year, they would have to feed on what

they have been able to store from the one rainy season, and also sell from that same stock to cater for their families.

According to a 2014 Africa Progress Panel Report, Sub-Saharan African Countries are mainly small holder farmers with countless challenges including: little or no fertilizer, no pesticides, lack of access to finance, dependence on rain-fed agriculture among others. Ghana is no different as smallholder agriculture is predominant in the country with majority of farmers owning less than 2 hectares of land²². Small holder farmers contribute about 80 per cent of total agricultural production in Ghana, and majority of them are women²³.

²¹ See Africa Progress Panel (2015) Power , People Planet , available online through http://www.africaprogresspanel.org/wp-content/uploads/2015/06/APP_REPORT_2015_FINAL_low1.pdf Accessed 8th December 2017.

²² http://www.statsghana.gov.gh/docfiles/GDP/GDP2017/April/Annual_2016_GDP_April%202017_Edition.pdf

²³ <http://www.ghana.gov.gh/index.php/media-center/features/1750-forincreased-food%20production-the-smallholder-farmer-deserves-attention>

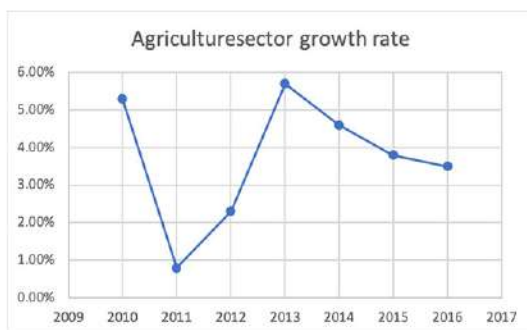
Table 4: Agriculture contribution to GDP (2010-2016)

SECTOR	2010 GDP	2011 GDP	2012 GDP	2013 GDP	2014 GDP	2015 GDP	2016 GDP
AGRICULTURE	29.9%	25.6%	22.66%	15.6%	16.8%	20.3%	19.1%

Source: Ghana Statistical Service, 2016

Despite the importance of the agriculture sector to the economy, the sector growth rate has not been the best. Decreasing from 5.3% in 2010 to about 3.5% in 2016 (Please see figure 1).

Figure 1: Agriculture growth rate in Ghana (2010-2016)



Source: Author's own construct with information from Ghana Statistical Service

This continuous decline in agriculture growth has been attributed to a number of factors among which include:

1. inadequate financing of the sector
2. climate change
3. poor pricing
4. marketing incentives
5. inadequate agricultural extension agents
6. pest and diseases and;
7. lack of access to fertilizers

1.6 Irrigation in Ghana

Agriculture in Ghana is mostly rain-fed, this makes the sector quite vulnerable in terms of having a roughly six-month prolonged dry season. This poses significant risk to the farmers especially during the dry season. Under these conditions, irrigation development seems to be the best solution in ensuring yearlong agricultural production and boosting food security in the country ²⁴. Irrigation development in Ghana has been justified especially in the three Northern regions to achieve;

1. Food security
2. Poverty reduction
3. Rural employment

Notwithstanding the justification for irrigation development in Ghana to support the agricultural sector productivity,

less than two percent of the total cultivable area in Ghana is irrigated. According to the 2016 Agricultural facts in Ghana by the Ministry of Food and Agriculture, the total area under irrigation as of 2015 was 221,000 hectares out of 6,421,450 hectares of land under cultivation in Ghana. Currently, Ghana's irrigation potential stands at about 1.9 million hectares.

This study acknowledged that one big challenge is inadequate reliable data on irrigation systems existing in the country as well as trends in its development. The story on the availability of data however changed in 2015, as some effects of the irrigation development were recorded.

²⁴ <https://reliefweb.int/report/ghana/irrigation-development-ghana-past-experiences-emerging-opportunities-and-future>

85% of hectares that were cropped in 2015 led to an increase of 179% in crop production. Vegetable production also increased by 196% while cereal increased by 129%²⁵. High cost of irrigation infrastructure in Sub-Saharan Africa for instance, averages US\$ 8,374 per hectare. Since 2011, the ABFA has consistently been allocated to several irrigation development and renovations across the country. In 2015 alone, GHS 16,043,953.28 was allocated for the construction and renovation of irrigation dams in the country.

Also, as of ending 2017, GHS 22,546,133.09 had been allocated for the rehabilitation of irrigation dams in the country while GHS 21,146,526.88 had been allocated for the construction of irrigation facilities.

These challenges outlined affirm the fact that, although Ghana has significant irrigation potential to boost agriculture productivity, this has not been optimally tapped. This has mainly been attributed to inadequate financing and policy commitments.

²⁵ http://mofa.gov.gh/site/?page_id=15138

2.1 Research design

The study employed the Mixed Method of research design, specifically the 2x2 factorial design which involves measuring the effect of two variables so as to draw the lessons to inform policy. This type of research involved the collection and analysis of both quantitative and qualitative data in a single study in which the data are collected concurrently. The 2x2 factorial research designs cover the types of designs and analyses involving more than one independent variable ²⁶.

2.2 Objective of the study

The study seeks to identify lessons from oil revenues investments especially in the agriculture sector to be able to inform future policy decisions as part of ongoing efforts to ensure efficiency and sustainable investment of oil revenues in Ghana.

In this study, we are interested in assessing the impact of oil revenue investment on irrigation projects at various levels, viz:

1. Impact of oil money used in constructing irrigation dams and
2. Impact of oil money used in rehabilitating irrigation dams.

²⁶ Creswel, 2003; Creswell, 2008

To be able to undertake this type of study, the team selected two projects in each group: one group involves project communities that benefited from oil money for construction while the other one involves project communities that did not benefit from oil money for irrigation dam construction. The project communities that benefitted from oil revenues were referred to as the treatment group while the other selected community that did not benefit from oil revenue were selected as the control group.

GROUP A (the treatment group)

1. Tono Irrigation dam
2. Zuedem irrigation dam at Zuedem
Zuedem community benefitted from construction of irrigation dam with oil money whiles Tono irrigation dam was rehabilitated using oil funds. The treatment in this case is the investment of oil revenues in these projects.

GROUP B (Controlled group)

1. Ve a irrigation dam at Bolgatanga
2. Wiaga community near Sandema
Wiaga is a nearby community to Zuedem that shares similar socio-economic and geographical characteristics with Zuedem but did not benefit from oil revenues. Ve a dam in Gowrie also shares similar characteristics with Tono in the upper east region that did not also benefit from oil revenues. Wiaga and Ve a were used as control group for purposes of comparison with the treatment group where oil revenues were spent.

2.3 Data collection tools and techniques

The study is basically an action-oriented field experimental research design in which field techniques such as in-depth interviews, observation, and desk reviews were employed. Budget figures were collected

from the Ministry of Finance and the Ghana Irrigation Development Authority.

2.4 Types of data

The study collected both primary and secondary data. The team undertook field visits to the project communities in Tono, Zuedem, Ve a and Wiaga where primary data was collected from farmers. The team also collected secondary data through literature reviews, financial reports, and interviewing officials at the MOF and GIDA.

2.5 Selection of projects and respondents

The research team employed purposive sampling technique in selecting the projects that benefitted from oil funds. A number of projects benefitted from oil funds but the emphasis was on irrigation projects which is part of pro poor investments. The study also selected respondents who were farmers at

the irrigation dam projects. The team ensured that 30% of all respondents were women who had knowledge and were involved in farming at the irrigation dams. Other respondents in the control group were randomly selected.

2.6 Data Analysis

The data analysis will involve comparing the findings from the treatment group to the control group and drawing conclusions. The first level of comparative analysis involved assessing the extent to which construction of irrigation dam for Zuedem community has impacted their lives considering the following variables: employment, level of production on the farm, farm size and women's access to farm lands. This was compared with Wiaga community that did not benefit from irrigation dam construction from oil funds but shares similar socio-economic characteristics.

The second level of comparative analysis will involve comparing Tono and VEA irrigation dams to assess whether the oil revenues spent on rehabilitation had any impact considering employment, farm size, quantity of farm produce and women's access to farm land.

Finally, the study assessed the extent to which recommendations made by ACEP in previous studies influenced policy changes. This was done by examining the current policy decisions on utilization of oil revenues to ascertain if government adopted and/or adapted some the recommendations of ACEP. The team also engaged officials of the MOF to gather information of adoption of the policy recommendations.

Conclusions were drawn based on the analysis and recommendations made on how to address the prevailing gaps that

inhibit efficient utilization of oil revenues, transparency and accountability in the management of oil revenues.

3.1 Situational Analysis

Zuedem and Wiaga are communities in the Builsa North District of the Upper East Region of Ghana whose major occupation is farming and agriculture related businesses and share common socio-economic characteristics. There are no major industries that offer employment to the people especially the youth which influences decisions to migrate to major cities in search of jobs. The Builsa North District has a total population of 56,477 with 98 communities. The major crops cultivated by the farmers include: Millet, maize, tomatoes, pepper and other vegetables. Few of the farmers cultivate rice but mainly done for commercial purposes. The Builsa North

District like others in the region experience one rainy season and a prolonged dry season which last almost 6 months of the year. The farming system is mainly rain fed even though a few residents make do with dugouts for dry season farming.

Wiaga community has a dugout that is used to support a modicum of dry season farming. However, it is unable to sustain full dry season farming because it dries up a few months into the season mainly caused by siltation which reduces the amount of water in the reservoir. The community is also predominantly known for a practice of backyard farming which is common to most residents.

Zuedem, until the construction of the irrigation dam was also dependent on rain fed farming. Commencement of the construction of the Zuedem irrigation dam was in early 2012 and completed in 2013. In response to calls from community stakeholders for an irrigation dam to primarily support agriculture ²⁷, an amount of two million, five hundred and sixty-six thousand, five hundred and fifty-four Ghana cedis and forty pesewas (Ghc 2, 566, 554.40)²⁸ of petroleum revenues was expended on two (2) irrigation projects through the ABFA, one of which is the Zuedem irrigation dam. The dam has a total dam wall length of 900m (metres) with an

estimated 900,000m² (square metre) of reservoir capacity. It serves an irrigable area of 75 acres of farmland. A later addition of a fence wall to protect farms was established. Crops produced include rice, cucumber, cabbage, tomatoes, and pepper. The dam is a multipurpose one which serves other needs of the people apart from dry season irrigation farming which includes, domestic uses, water for livestock, recreation and general drainage. Theft of livestock had reduced significantly because the animals do not have to travel far away in search of drinking water which was the main cause of theft of livestock especially cattle, sheep and goats.

²⁸ Quoted from Value for Money analysis of oil funded agriculture projects in Ghana report submitted to Oxfam

About 60% of the respondents in Zuedem indicated that farm yield had increased by about two folds compared to the yields from rainy season farming.

The dam provided opportunities for the youth to stay in the community to work instead of travelling to big cities in search of other jobs. The dam has attracted farmers from other parts to migrate to Zuedem to secure lands to farm. This is important for the growth of the local economy.

Fishing which hitherto was not a major activity has gained significant attraction by the people and play important role in the community providing jobs to fisher folks and contributing to household nutritional balance.

The team chanced on small scale mining activity near the dam where illegal miners

used the water in washing and processing mine debris. This must be checked immediately as it could threaten the sustainability of the dam.

It was observed that both men and women have equal opportunity to access farmlands at the site of the irrigation dam. On gender dynamics regarding management of the dam, the defunct Dam Committee had only one woman serving on it. Ownership of lands in the area is not different from other parts of the northern sector where it is mainly patrilineal disadvantaging women.

On the other hand, Veia irrigation dam in the Gowrie community of the Bongo district and Tono irrigation dam located at Tono in the Kasena -Nankani District of the Upper East Region were part of the study.

The study found that the Vea dam which covers an irrigable area of 1,600 hectares is bedeviled with serious challenges. The canals were heavily silted and water flow was blocked thereby depriving many farmers access to water for irrigation farming. Farmers and community leaders decried lack of maintenance of the dam and complete neglect of the farmers. The dam had never benefitted from oil revenues and the people therefore called for support from government to use the oil revenues to rehabilitate the dam and expand it to enable more farmers access the services of the dam. This dam also serves Gowrie, Nyariga, Yikene, Zaare and Sumbrungu communities. Farmers cultivate rice, tomatoes and other vegetables.

Consequently, the study found that about 30% of farmers in the catchment area of the dam depend on renting water pumping

machines to pull water from the dam in order to irrigate their farm lands. This they complained was making farming expensive. Some of the youth who cannot afford the cost of hiring water pumping machine migrate to the towns and cities in search of jobs.

Notwithstanding these challenges, the respondents underscored the relevance of the dam which supplies treated water to the Bolgatanga and Bongo townships. Ironically, the Gowrie township, the host community of the dam, is not adequately served with this service. The demand for potable water supply is augmented by wells and boreholes that have been developed in the community. It is also used to water livestock and for domestic purposes such as washing and bathing. It also supports fishing activities.

Gender dynamics play out in access to land for farming activities. Women usually have to go through their husbands or a male to be able to access land to farm. However, providing leadership in matters relating to farming on the irrigable area has both men and women participating equally. Out of a leadership team of fourteen (14) members, women constitute 50 percent (%).

The Tono irrigation dam, constructed in 1976, is fed with water from the Tono river. The dam supplies water to a number of smaller dams in communities such as Chuchuliga, Biu (in the Kasena Nankana District) and Korania with each having two (2), two (2) and one (1) of these dams respectively. The dam is managed by ICOUR (Irrigation Company of the Upper Region) and reportedly serves an irrigable area of 5000 hectares. Farmers cultivate rice, maize, soya beans, and tomatoes.

Tomato cultivation is on the decline, however, owing to client preference for imported tomatoes from Burkina Faso.

This dam has undergone series of rehabilitation since 2008 when a heavy downpour caused flooding and damaged its spillway, reservoirs and canals in the process. Petroleum revenues were applied at the 3rd phase of rehabilitation in 2012 which involved extension works to replace laterals and pipelines, rehabilitation of the canals and two (2) reservoirs, laying of pipes from the dam to the canals, changing of valves and fixing of pumps.

By way of benefits elicited by the rehabilitation of the dam, respondents opined that there has been little significant transformation. It appears production has increased marginally. Instinctively, this phenomenon is attributed to pipelines that

supply water from the canals to farms, being in bad condition. These pipelines are choked with silt as respondents pointed out and would need regular cleaning, desilting and general maintenance. In the dry season, some farmlands are denied water for irrigation owing to two main reasons: damaged canals and water levels in the dam.

Besides, access to farmlands is challenging due to the constant competition for already prepared scarce farmlands. This is compounded by the lack of regular supply of water from the dam to farmlands and consequently causes people to emigrate to the south in search of jobs. However, most of these persons return in the wet season when rain-fed farming thrives.

It is not all gloom however. Fishing activities through the use of canoes, fishing nets and other apparatuses are carried out on the

dam. Fishes such as tilapia, mudfish and catfish are common species that are often caught from the dam.

Farmlands in the irrigable area is dominated by women farmers. Out of a total of about 1140 out growers, 820 are women. Farmers have managed to source some farm inputs such as fertilizers and tractor services to aid with boosting productivity.

3.2 Comparative Analysis of Data

The application of petroleum revenues through the Annual Budget Funding Amount (ABFA) is with the objective of achieving some stated objectives which are:

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

c. to undertake even and balanced development of the regions ²⁹.

Contextually, the application of the ABFA in constructing and rehabilitating the Zuedem and Tono irrigation dams resonates more appropriately with the second objective of presenting economic opportunities to citizens to enhance their well-being.

3.2.1 Employment

Considering employment as an indicator of economic opportunity, it is observed that citizens in the catchment area of the dams that have received petroleum revenues have enjoyed continued employment all year round. Users of the Zuedem and Tono irrigation dams who were interviewed opined that, the trend of moving down south by the youth in search jobs has waned.

This phenomenon is attributed to the presence of the dams which allow for dry season irrigated farming. The spillover effect has been that, some members of the youth make economic gains that put them in better positions to self-finance their education.

The reverse is the case for the catchment areas of the dams that have not been rehabilitated. Respondents in the Gowrie and Wiaga communities opined that, there are low levels of employment opportunities in agriculture during the dry season. Resulting from a dearth in supply of water from these dams to farmlands are dwindled employment opportunities which end up forcing resident farmers to emigrate to the south for economic opportunities.

²⁹ These objectives are as captured under section 21 (2) of the Petroleum Revenue Management Act, 2011, Act 815

3.2.2 Farm yield

It is observed that farmers across both the experimental and control groups are commonly engaged in the cultivation of tomatoes and pepper albeit there are some variations regarding cultivation of rice, cucumber, maize and soya beans in some of the communities. Vegetable production increased by more than 100% while cereals grew by more than 75% compared to yields before the investment of oil revenues in providing and rehabilitating irrigation facilities.

Respondents across the experimental group underscored the continuity in farming activities in the dry season which translates into increased agricultural productivity annually. The resultant effect is that, income levels are sustained even in the dry season as farmers sell their produce at higher prices relative to prices during the glut in farm

produce occasioned by the wet season. Moreover, the phenomenon where livestock, particularly ruminants, get lost when in search of water to drink has been curbed. The presence of these rehabilitated dams means that livestock are easily watered. There is high economic value on ruminants and in some cases, it is an indicator of wealth in these areas. Consequently, losing them meant an economic loss to their owners and so a curtailment in the trend of losses suggest a retention of incomes by livestock keepers.

On the contrary, respondents in Wiaga underscored difficulties in regular water for livestock and the concomitant theft if animals stray into the forest in search of water to drink. The situation in Gowrie, is somewhat different. Here, livestock are adequately watered with water from the dam and so losses are inconsequential.

This could be because the dam is a large one and contains adequate water even in the dry season. In regards of farm produce in Gowrie and Wiaga, respondents opined that difficulties with farming in the dry season affected the levels of productivity. For instance, in Wiaga, farmers indicated that they had to draw water from wells to support backyard farming. In Gowrie, farmers who could afford to farm in the dry season incurred the extra cost of renting pumping machines and purchasing fuel to draw water from smaller pools to irrigate their farms. The net effect was that incomes had little transforming effects. These served as disincentives to boosting agricultural productivity in the dry season.



3.2.3 Gender dimension in access to land

The existing legislative landscape and international protocols, conventions and treaties recognize the need to create equal opportunities and support women rights. For instance, the Convention on the Elimination of all forms of Discrimination Against Women (CEDAW), 1979, International Covenant on Economic, Social and Cultural Rights (ICESCR) 1966, African Charter on Human and Peoples' Rights (ACHPR) complimented by provisions in the 1992 constitution of Ghana especially, Articles 17, 18 and 22 support nondiscrimination and promote equal access to property and productive resources. It must however be stated that the situation on the ground in many instances deviates from the

legal provisions as socio-cultural factors usually defeat the intentions of the legal provisions especially regarding access to land. Land right is often described as the inalienable ability of individuals to freely obtain, utilize and possess land at their discretion as long as their activities on the land does not impede on other individuals' rights.

Although land rights are fundamental in achieving higher standards of living, women are consistently left out of land ownership in Ghana and most developing countries even though they produce half of the food in the country.³⁰

³⁰ <http://www.statsghana.gov.gh>

Land accessibility in a predominantly patriarchal society such as northern Ghana (Northern and Upper regions) could potentially be difficult for women. However, the study did not find this phenomenon as influencing women's access to land in the distribution of irrigated farm lands in the catchment area of the irrigation dams assessed. For instance, at the Tono irrigation dam, out of a total of 1140 out grower farmers on the irrigable area of the dam, 71.92 percent representing 820 farmers were women. The Zuedem irrigation dam was not different as women were allowed access to farmlands with women represented on the defunct dam committee. The situation with the control groups was insignificantly different from the experimental group. Though women were allowed access to farmlands, they often had to be led by their husbands.

3.2.4 Migration of the youth

In search of economic opportunities, it was common practice in the control groups, for the youth to migrate to the big towns or southern Ghana during the dry season. In the experimental groups, however, the youth remained in the communities to continue to farm because of availability of water for irrigation farming. The study also established that some farmers from communities that did not have irrigation facilities migrated into Tono and Zuedem to benefit from the facility.

3.2.5 Local economy

The irrigation dams in the experimental group yielded other economic benefits that are not directly linked to crop cultivation. Fishing activities were observed in both the Zuedem and Tono irrigation dams mainly by using canoes and nets.

Besides, artisanal miners made use of the Zuedem irrigation dam to wash debris off the gold they mined. One respondent provided inputs and tractor services to the farmer cooperation in the catchment area of the Tono irrigation dam.

3.2.6 Maintenance of facilities

It was observed that, though the dams that received petroleum revenues were impactful, the absence of regular maintenance is likely to erode the gains made. Respondents in the catchment areas of both the Tono and Zuedem irrigation dams mentioned broken down pipes and canals that conveyed water from the dam to the farmlands. In Zuedem, for instance, there were patches of flooded farmlands owing to a broken-down canal. Moreover, activities of small-scale miners around the Zuedem irrigation dam could lead to encroachment on the irrigable lands if not checked.



3.3 VFM as a tool for influencing policy

The essence of the vfm as a tool is to improve efficiency by identifying systemic and practical gaps that impede achieving maximum impacts of oil revenues. It requires field visits to project locations and interacting with project managers and beneficiaries. The report of the vfm forms the basis of evidence-based advocacy for policy action.

Consequently, engagement with officials of the Ministry of Finance and the Ghana Irrigation Development Authority (GIDA) gives indication that some of the recommendations made by ACEP has to some extent influenced government's spending policy decisions. For instance, ACEP called for the MoF to publish the list of projects that will benefit from oil revenues (ABFA) before disbursements commence.

In the 2019 budget, the MoF has mentioned the list of projects as requested. This will enable CSOs to monitor implementation instead of the usual post mortem of already spent oil funds. This is significant in the quest for transparency and accountability of oil revenue utilization.

ACEP also advised against thin spreading of oil revenues covering funding of many projects. Interactions with officials of MoF and GIDA indicate that there has been significant reduction of number of projects funded under a given year. However, this could still be reduced to ensure that adequate budgetary allocations are made to completely fund project that will start and complete on time.

One area that requires serious attention is project management and prompt payment of contractors.

Improved project management would contribute towards avoiding time overruns and eventual cost overruns.

Recommendations made that are specific to these dams included:

3.4 Key issues at the Zuedem irrigation dam

1. The District Authorities in conjunction with the GIDA and Member of Parliament for the Builsa North Constituency should mediate with the Traditional Authorities of the area to address the dispute over ownership of the irrigation land between Zuedem and Kpalansa on one hand and Kadena on the other hand. This will pave the way for the people to derive maximum benefit from the project without any concerns. This recommendation was made in 2017 vfm report and is worth repeating because it affects effective utilization of the

facility.

2. The team observed an emerging practice of illegal alluvial mining in the Zuedem area. The emergence of illegal alluvial mining in the Zuedem area should receive optimum attention to ensure that it does not grow into a bigger venture that could pose threat to the environment, the lives of the people and a strain on government policy to address the practice.

3.5 Key issues at the Tono irrigation dam

1. In the case of the Tono irrigation dam, there is the need to invest oil revenues to increase the irrigated land so as to cover many potential farmers. This investment should be expanded to include agriculture machinery and essential inputs that will make farming more beneficial and could contribute towards poverty reduction in the area.

Besides, action should be taken to replace or fix broken down canals and pipelines to convey water to the irrigable area.

2. Channeling water from the Bagre dam to the Tono irrigation dam was one recommendation made by ACEP in its 2015 vfm on the dam but has not been considered yet. It is therefore reiterated for current management to consider redirecting the flow of excess water from the bagre dam into the Tono Irrigation dam.



Farmers leader at the Tono irrigation dam expressing his views on the impact of the irrigation dam.

3.6 Other Crosscutting issues

1. Projects funded by oil revenues should be properly labeled as such. This will deepen accountability and sensitize the people on the source of funds for the projects.
2. In selecting projects that should be funded with oil revenues, the community leadership should be involved. Participatory decision making is key in enhancing transparency and accountability.
3. Weak project steering committees was observed. The Ministry of Agriculture should provide capacity building support to project management committees to be able to provide alternative assessment of progress of work done before payment by the MoF.
4. Participation of women in the water users Association was encouraging.

The participation of women was however not better than pseudo in nature and this ought to be improved to ensure that not less than 40 to 50% of the committees should be women. The District Assembly can enshrine this in their bye laws while the MoF also include this in the regulations developed to guide execution of oil funded projects.

4.1 Key findings

The following are the key findings from the study of impacts of petroleum revenue investments in selected irrigation dam projects in the upper east region:

Investment of petroleum revenues in irrigation dam projects in the upper east region has contributed to employment creation. In the dry season when farming is not rain-fed, the dams supply water regularly to boost irrigation farming. This ensures that farmers who use the dam remain engaged with farming activities all year round, providing them with economic opportunities.

About 30% of the respondents who were hitherto mostly unemployed in the dry season gained employment all year round.

Production levels among 65% of respondent farmers who had access to land in both the dry and rainy seasons reportedly increased by 50% to 300% due mainly to the intervention of the irrigation dam.

Persistent loss of livestock in the community of Zuedem had substantially reduced. This is attributed to availability of water for the livestock who before the construction used to travel far distance in search of drinking water and mostly got stolen

Easy land accessibility by women for farming was not peculiar to dams that have received petroleum revenues. The difference between Gowrie and the rest of the communities relative to farmland accessibility by women was that, in Gowrie, 30% of the respondent women indicated that women had to be led by their husbands or a male relative to access land for farming. Regarding land ownership, it is the families and clans who own land and can decide who to allocate to or not.

Petroleum revenue utilization in rehabilitation and construction of the Tono and Zuedem irrigation dams respectively has occasioned retention of 20% of the youth interviewed in the host communities. The youth remain in these communities to engage in farming activities throughout the year because of the reliable supply of water for irrigation farming even in the dry season

and the boast of the livestock farming too.

The dams have contributed to diversifying the local economy. Fishing activities are carried out on both the Tono and Zuedem irrigation dams. Fishing in the Tono irrigation is somewhat on a larger scale relative to fishing in Zuedem. Besides, small scale miners in Zuedem use the dam in washing the minerals they extract further diversifying the local economy beyond agriculture. In regards of the Tono irrigation dam, allied services supplied to farmers using dam has created economic opportunities for the supplier.

Regular maintenance of the dam has not been encouraging. This is evidenced in broken-down canals and pipes which constrains regular supply of water to certain portions of the irrigable area.

The vfm as a strategy in influencing government policy is found to be effective especially if the engagement is backed evidence-based findings. ACEP in its previous vfm exercises advised against thin spreading of oil revenues covering funding of many projects and also requested for information on selected projects for oil funded in advance. Interactions with officials of MoF and GIDA indicate that there has been significant reduction of number of projects funded under a given year. However, this could still be reduced to ensure that adequate budgetary allocations are made to completely fund project that will start and complete on time. Effective 2019, government is committed to making available list of selected projects to benefit from oil revenue funding to promote accountability.

4.2 Recommendations

The following recommendations are made following findings from the field:

First and foremost, the Ministry of Finance should make available the list of projects that have been selected to benefit from oil revenues and indicate the anticipated cost of each selected project.

Secondly, even though there has been an improvement in the thin spreading of the oil revenues over numerous projects, efforts should be made to further reduce the list to few to ensure that projects are commenced and completed timeously.

The Regional offices of GIDA, the District Assembly and community leadership especially the Assembly members should be involved in the selection of projects, contract award process, and certification of work done prior to payment to contractors so that they are able to monitor effectively

implementation of such projects

There should be sign post at each project site indicating funding source of each project. This will enhance transparency and accountability in the management of oil revenues

There is the need to develop project maintenance plan attached to future projects and ensure that the community members are trained to perform minor maintenance when the need arise.

Pseudo participation afforded women in the communities must be reviewed to ensure effective participation of women in all aspects of decision making. Simply getting a women's representative in a committee is not enough. Regulations should be developed by the MoF that makes it mandatory for 40-50% of project management committees to be women and

who must participate at all levels of project management decisions.

The study chanced on illegal mining operations in the zuedem community. While observing the malfunctioning canals that lead to loss of water from the dam, the team run into a group of miners who were using the water from the dam canals to wash and process gold dust to be able to retrieve the pieces of gold particles. This practice should be checked immediately before it blows into full scale illegal mining activity.

Finally, payment of contractors who execute oil funded projects should be decentralized to the District levels. This will ensure that work done is certified before payments are made. Project management committees should be set up and made to participate in the certification process before payment is made to the contractor.

4.3 Limitations

The study encountered a number of challenges in the conduct of the study and wishes to acknowledge these.

Accessing official records especially on financial information and payments from the MoF and GIDA were difficult to access. The team however leverage its relationship with officials in those public institutions to be able to access the information. This experience underpins the need to pass the Right To Information Law (RTIL) as quickly as possible.

The date agreed to meet with the Zuedem community coincided with the sudden death of a prominent member of the community. This affected the number of respondents expected to be interviewed. However, with the assistance of the Assembly Member for the rea, the team managed to interview some of the farmers.

Finally, this report is being published with the field data collected complemented by the official information gathered by the team. The team could not verify some of the production figures from the Ministry of Agriculture and Ministry of Fishing. Those figures are purely data collected from farmers and those involved in fishing.

4.5 Conclusion

The objective of the study is achieved to a greater extent as the impact of oil revenues investment in agriculture has been established. The efficacy of the vfm as a strategy for advocacy to influence policy has also been established by the study and the recommendations made thereto will contribute to improving efficiency of oil revenue investment in pro poor sector of agriculture.



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