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Understanding the Lay of the Land:

An Institutional Analysis of Petro-Governance in Tanzania

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ABSTRACT

Tanzania has recently discovered large petroleum reserves, boosting its reserve natural resource stocks and potential future revenue flows. What is the likelihood that the country's petroleum resources will translate into economic development? The answer to this question will largely be determined by the quality of the institutions the government adopts to govern the petroleum sector, to include the legal institutions. This study reviews the most important provisions of the new legislative framework that the government has put into place to govern this newfound wealth. We examine the institutions and actors created by the legislation as well as the opportunities and challenges that may emerge in its future implementation. Specifically, we analyze the petro-sector institutions that the legislation creates and the types of authorities granted to them; the institutional constraints placed on authorities; the interaction between institutions; potential institutional overlaps, conflicts, and gaps; and transparency and accountability mechanisms.

INTRODUCTION

Tanzania is a country rich in extractive resources such as gold, copper, iron, coal, uranium, and nickel. In recent years, this wealth has grown tremendously with new discoveries of natural gas reserves, estimated recently at over 57 trillion cubic feet and potentially worth billions of dollars, a figure that is expected to rise.[1] While the country's petroleum industry is still in the infant stages and large-scale commercial extraction is not projected to start for several years, several large multinational petroleum companies have expressed interest in developing Tanzania's these resources.

To create the enabling conditions for translating the country's newfound resource wealth into economic development, the Government of Tanzania has put into place a new regulatory framework to govern the petroleum sector. This study provides a detailed overview of the most important provisions of this new framework, examining the institutions and actors created by the legislation as well as the opportunities and challenges that may emerge in its implementation.[2] The institutional landscape of Tanzania's petroleum sector will play a strong role in influencing whether Tanzanian citizens will benefit from the country's petroleum wealth – or if, instead, the country will experience the so-called "resource curse".

The paper proceeds as follows. In the next section, we motivate the paper through a brief review of the literature on institutional quality in natural resource management, demonstrating the important role of formal institutions for translating resource wealth into economic development. We then describe Tanzania's new petroleum discoveries and their potential consequences for the country's socio-economic development. We briefly overview the sector's legislative history, and then review the key provisions of Tanzania's new petroleum legislative framework. In conducting this review, we examine the institutional authorities, relationships, opportunities, and constraints established in the legislation; potential institutional interactions and potential conflicts; and transparency and accountability mechanisms. We conclude with observations on, and recommendations for how to address, the regulatory gaps and conflicts created by this new legislation.

We argue that while Tanzania has established a relatively solid legislative framework to govern the petroleum sector, the new regulations have at the same time created a number of gaps and ambiguities that must be resolved for authority to be exercised clearly and efficiently, and for petroleum resources to be turned into economic development. There is a strong risk that corruption and elite capture could threaten the translation of petroleum revenues into general welfare improvements. We recommend reducing – or least constraining to higher degree – government's high monopoly and discretionary power over the sector through effective transparency and accountability mechanisms. This is likely to help ensure the wider redistribution of petroleum revenues and more inclusive, equitable growth.

Our discussion is based on a desk review of existing and historical Tanzanian legislation, as well as of policy and academic sources regarding Tanzanian politics, history, society, and economy and the development of its petroleum sector. We also conducted a handful of semi-structured interviews with Tanzanian policy makers to shed greater light on the creation of the country's new legislative framework and the anticipated challenges of its implementation.

1 See http://blogs.wsj.com/frontiers/2015/06/08/tanzania-says-gas-reserves-rise-18-to-reach-55-trillion-cubic-feet/ and http://africasacountry.com/2015/05/the-oil-giants-are-coming-to-tanzania/

2 During the publication process for this paper, the Natural Resource Governance Institute (NRGI) published a detailed analysis of Tanzania's new institutional framework for the petroleum sector. See "Tanzania's 2015 Extractive Sector Legislation: Recommendations for Effective Implementation". NRGI Briefing, November 2016.

Institutional Quality and the Resource Curse

The existence of countries that are rich in natural resources like oil and diamonds but that are also paradoxically amongst the poorest nations in the world has generated an abundance of research to explain the causes and consequences of the so-called "resource curse". A now-large academic and policy literature examines the causes and consequences of this "paradox of plenty", the notion that countries with an abundance of natural resources – particularly oil – are more likely to be poor and to experience civil war and authoritarian government (c.f. Ross 2015).

Countries that are heavily reliant on high-value natural resources fail to grow rich for several reasons: the volatility of commodity prices on world markets, a failure to diversify economically, and a crowding out of markets key to growth like manufacturing, among other things (Frankel 2010; Collier 2007). In terms of political development, natural resource abundance can give rulers the means to repress dissent or to buy popular compliance, rather than seeking popular support through the ballot box (Ross 2001). Finally, large resource wealth can trigger armed conflict as populations take up arms against regimes for reasons of "greed" or "grievance" (Collier and Hoeffler 2005). That is, citizens may want to wrest control of resources and their rents away from the government either because they wish to benefit personally or because they are aggrieved over the government's mismanagement of resources.

More recently, scholars have begun to question whether there is, in fact, a "resource curse" or instead an "institutions curse" (Menaldo, forthcoming). Scholars falling into this camp argue that resources on their own do not produce good or bad societal outcomes; rather, the way that resources, and the benefits flowing from them, are managed does. Natural resource management occurs via institutions, which are the rules of the game that regulate recurrent behavior and delimit choices; they are manmade, exogenous constraints that shape human behavior (North 1990; Levi 1990). They entail both formal and informal rules, norms, and beliefs, as well as the means to enforce those rules (North, Wallis, and Weingast 2009). Natural resource management institutions, then, are the formal and informal systems of rules created by society that determine the conditions under which people use natural resources. This includes rules for how people can access resources, who can reap benefits from resource use and how, and who must bear and mitigate the costs of resource use.

The idea that institutions are critical for managing resource wealth has been gaining traction in the academic literature since the early 2000s. Atkinson and Hamilton (2003) argue that resource-rich countries with good quality institutions have achieved greater rates of investment and saving than resource-rich countries with poor quality institutions. The key institutions in question include the extent of the rule of law, bureaucratic quality, level of government corruption, and the risk of investment expropriation and contract repudiation. Heilbrunn (2014) also finds that the condition or quality of a country's economic and political institutions prior to the discovery of oil determines the socio-economic and political development path of a country once oil is discovered. He further finds that oil wealth has actually led to an improvement in the living standards of citizens of oil-rich states, even in non-democratic petro-states.

Mehlum, Moene, and Torvik (2006) also find that institutional quality determines whether a country will experience negative or positive effects from resource wealth. When institutions are more "grabber" than "producer" friendly, individuals have incentives to engage in rent-seeking behavior and patronage because natural resources can generate large revenues from extraction and production (see also Kolstad and Søreide 2009; O'Higgins 2006; Leite and Weidmann 1999). That is, individuals will focus their efforts on finding ways to access resource revenues in order to line their personal pockets or to buy political support in order to stay in power, rather than engaging in other more economically productive activities such as starting a business. Given that corruption is one of the biggest impediments to translating natural resource wealth into socio-economic gains in resource-rich countries (c.f. Kolstad and Søreide 2009), an important function of natural resource management institutions is the degree to which they constrain grabbing behavior among politicians and other relevant actors.

Haber and Menaldo (2011) and Menaldo (forthcoming) also find support for the importance of institutional quality for resource-based economic development. States with weak institutions are more likely to heavily rely on resource exploitation for revenue generation, since these states lack the institutional foundations that are critical for economic development, such as inclusive property rights, tax collection infrastructure, and enforcement of regulations. Resource-rich but weak states generally lack the institutional foundations for good resource management. Instead of institutions providing incentives for government agents to use resource revenues to ensure the welfare of citizens, weak resource management institutions create incentives for rent-seeking and expropriation. This is in line with recent work by Acemoglu and Robinson (2013), who argue that economic development depends on the existence of inclusive economic institutions – those that secure private property (and prevent expropriation), enforce law impartially, provide public services, and enable people to make best use of their talents in the labor market.

The legal framework is the most basic of institutions for managing natural resources. At a basic level, laws constrain or deter certain behaviors and incentivize others. Regulations establish government's authority over the resources on its territory and determine the rules for how those resources will be extracted and produced: who can extract or produce what, and under what conditions; who should bear the costs and reap the benefits of extraction and production; how property rights for resource exploitation will be guaranteed; how rule-breaking should be punished; and who has the authority to create, change, and enforce the rules. Regulations also create the formal institutions like bureaucratic agencies that are responsible for implementing and enforcing the rules for resource use. When examining the quality of a country's legal framework for resource governance, we must examine the degree to which regulations outline specific measures that create and enable a well-functioning bureaucracy, guarantee property rights security and clarity, create accountability mechanisms in the form of effective checks and balances on government authorities, and provide for government transparency to prevent corruption. In particular, natural resources are likely to lead to bad social outcomes when regulations governing resource management fail to both incentivize politicians to behave in ways that benefit society and to constrain politicians from maximizing their self-interest at the expense of society's collective welfare.

Despite the mounting evidence that institutional quality determines whether resource wealth is a blessing or a curse, politicians in poor but resource-rich states face few incentives to develop strong institutions that are conducive to economic growth, democratic development, and peaceful coexistence. This, of course, begs the question of why politicians adopt seemingly "good" institutions to manage resource wealth when they seemingly face few incentives to do so. Governments of resource-rich states face two sources of pressure for regulatory reform: domestic and international. First, particularly in semi- and fully-democratic states, citizens can threaten the political survival of politicians at the ballot box. Politicians may try to secure citizen support by pursuing "resource nationalism" and adopting regulations that aim to return greater levels of benefits to the country, for instance in the form of local content requirements or creating resource revenue redistribution mechanisms (Otto 2013). These type of targeted local benefit-sharing measures can appease key groups of supporters. Second, poor countries often lack the human capital to extract their own natural resources, and require foreign investors to do so on their behalf. In order to attract foreign investors to a particular geographical location, states must find a way to signal the quality and stability of their investment climate and to differentiate themselves from their economic competitors (Simmons and Elkins 2004; Perry 2000; Prakash and Potoski 2007).[3] One such signaling mechanism is the law: countries use a variety of legal mechanisms to attract FDI, such as constitutional provisions or domestic laws that guarantee investment protection (and guard against expropriation), as well as investment treaties, tax laws, and laws that govern the operation of markets, trade, and private enterprises (Odumosu-Ayanu 2012).

3 There is a large literature on the determinants of FDI, and the role that rule of law plays in attracting FDI across sectors and types of countries. See, for instance, Anyanwu (2012), who argues that rule of law is associated with higher FDI inflows to Africa.

The History of Tanzania's Petroleum Legislation

Petroleum and natural gas were first discovered in Tanzania in the 1950s and 1960s. During this period, Shell and BP engaged in oil exploration but abandoned these activities as only limited quantities of hydrocarbons were found.[4] Exploration started again in 1969 when the Tanzania Petroleum Development Corporation (TPDC) was formed explore for oil in partnership with AGIP, an Italian oil company, resulting in the discovery of oil and natural gas in Songo Songo in 1974 (Ledesma 2013). To regulate the emerging sector, particularly upstream activities, the Tanzanian government enacted the Petroleum Exploration and Production Act in 1980. The enactment of this legislation encouraged further exploration activities, leading to the discovery of petroleum and natural gas in Mnazi Bay in 1982.

Between the discovery of the Mnazi Bay gas fields and 2000, there was little extractive activity as the Tanzanian government finalized financial agreements for the Songo Songo fields. But in 2000, newly released exploration data for deep-sea exploration blocks prompted the TPDC to commence a licensing round for deep-sea petroleum and gas exploration. The first deep-sea exploration permits were auctioned in 2001 and multiple license auctions were conducted afterwards, with numerous licenses awarded to several international oil companies (Ledesma 2013). This large increase in exploration activities put pressure on the government to create additional regulations. As a result, in 2008, the Tanzanian government enacted a new Petroleum Act to regulate downstream activities. Continued discoveries of petroleum and gas encouraged the government to develop the Natural Gas Policy in 2012 and then both the National Petroleum Policy and the Local Content Policy in 2014. These policies affirmed Tanzania's commitment to ensuring that petroleum resources are properly managed for the benefit of the country.

Yet the legislation still contained gaps. Notably missing were regulations for midstream activities, which entails the transportation of extracted petroleum and gas before it is refined. To fill this gap and further improve existing upstream and downstream regulations, the Tanzanian government rushed to pass yet another Petroleum Act in 2015, replacing the previous Acts. In the same year, government also passed legislation to regulate the use of government revenues from the petroleum sector and to provide for transparency in the form of EITI membership. We analyze the contents of these new regulations in the sections below.

Anticipated Benefits and Potential Risks of Petroleum Extraction in Tanzania

Tanzania's emerging natural gas and petroleum sectors are likely to shape many dimensions of Tanzanian society. Positive impacts are anticipated in the form of increased exports, extra government revenues, more funding for development, and the ability to reduce dependence on foreign aid. But petroleum extraction is also risky, and threatens to create, or increase, land dispossession, environmental destruction, and government corruption. The costs and benefits that materialize from extraction will ultimately depend on how Tanzania's petroleum is managed. As petroleum resources are likely to have very complex and far-reaching effects, properly managing these resources will be challenging. This challenge is compounded by the fact that the regulatory structures that manage these resources are still underdeveloped and in their infancy.

POTENTIAL DEVELOPMENTAL BENEFITS

The *raison d'être* of Tanzania's new petroleum legislation is to increase economic growth via petroleum industry revenues through mechanisms such as increased revenues and employment. Given the projected revenues from petroleum extraction, the sector stands

4 See http://www.tpdc-tz.com/exploration_history.htm and https://www.mbendi.com/indy/oilg/ogus/af/ta/p0005.htm

to generate significant income for the country. While economists have in the past been skeptical of Tanzania's ability to supply domestic natural gas needs in addition to exporting gas to international markets, as of 2015, Tanzania has sufficient proven reserves and exporting these resources is now considered feasible (Demierre et al., 2014; Ledesma, 2013). Profits from these exports are likely to be large, and some economists have estimated that annual revenues could reach up to 7% of GDP (Ledesma, 2013). Proposals to export are very popular with the Tanzanian public, with one study showing that 66% of the population supports gas exports (Gaddis et al., 2014).

An additional benefit of the country's petroleum resources is that they may eventually create a reliable source of domestic energy and ultimately enable Tanzania to be energy independent. Tanzania's 2003 National Energy Policy aims to reduce the use of biomass and to replace it with hydropower and fossil fuels (Felix and Gheewala 2011). Currently, much of Tanzania's energy is derived from biomass, which can encourage deforestation and generally produces negative public health consequences. Hydropower is also a major energy source, generating 35% of Tanzania's electricity, but low rainfall has reduced hydropower's potential in the country and led to electricity blackouts.[5] And while fossil fuel usage is on the rise in Tanzania, currently this is entirely dependent on imports, which cost the country 30% of its foreign currency earnings (Adebayo et al., 2013).

Domestically-sourced natural gas could solve development problems in the health and environmental sectors. Substitution of fossil fuels such as natural gas for household energy needs could reduce the negative health consequences of pollutants released through the burning of biomass for cooking. Switching to natural gas can also help to curb deforestation, a key driver of climate change. Finally, petroleum and natural gas extraction projects can result in the construction of socially beneficial infrastructure like roads, schools, and water tanks in local areas. This has occurred in the mining sector, with populations in mining areas reporting that they have benefitted from increased infrastructure (Kitula, 2006).

POTENTIAL RISKS

Despite the potential benefits of the petroleum and natural gas resources, there are concerns that mismanagement of these resources could harm citizens, for instance through increased poverty, civil strife, land dispossession, and environmental destruction. Recent assessments of natural resource governance and key indicators of political governance in Tanzania have raised a number of red flags for petroleum-related social problems. Worryingly, the country is characterized by a number of weak institutions that could challenge the country's ability to turn its resources into a blessing.

International assessments rate governance in Tanzania as being of generally low quality. For instance, Tanzania currently receives a "weak" rating on the Natural Resource Governance Institute's Resource Governance Index, due to insufficient reporting requirements and the lack of a freedom of information law in the country. Tanzania further scores poorly on the Index's corruption, accountability, rule of law, and government effectiveness measures. The country also scores poorly on Transparency International's Corruption Perceptions Index. Concerns that government officials involved in petroleum regulation at various levels – federal, regional, and district levels – will engage in corrupt acts may be warranted given that the governance of other resources in Tanzania like timber, fisheries, and wildlife have been marred by accusations of rampant corruption and there have been widespread accusations of corruption within the government.[6] There have also been accusations in the past that government officials have colluded with foreign investors to engage in corrupt acts, a serious issue given the high level of foreign investment that will be needed to successfully extract Tanzania's petroleum resources.

Another potential problem that petroleum extraction may lead to is the creation of

5 See http://www.bbc.com/news/world-africa-34491984

6 For instance, see http://www.theguardian.com/global-development/2014/oct/13/uk-and-international-donors-suspend-tanzania-aid-after-corruption-claims

unrealistic popular expectations about the benefits of petroleum wealth. Currently, 64% of the Tanzanian population is aware of the discovery of large quantities of petroleum and natural gas. The majority of the population believes that the extraction of these resources will benefit their family, their country, and future generations, and just over one-third (36%) believe that gas companies are already profitably extracting natural gas (Gaddis et al., 2014). Unfortunately, these expectations run contrary to reality as large-scale production of gas is still expected to be least seven to ten years away. A strong sense of relative deprivation – the "discrepancy between people's 'value expectations' (the goods and services people feel entitled to) and the 'value capabilities' (the goods and services they believe they are capable of obtaining)" (Østby, Nordås, and Rød 2009, 307) – among citizens could trigger strong opposition and even violence.

Benefit distribution is an additional area of contention. 55% of the general population believes that some portion of petroleum revenues should be redistributed to the general public (Gaddis et al., 2014), but revenues will remain low for the time being. Localized benefit sharing is even more contentious, with expectations that communities living near to extraction sites will directly benefit from petroleum activities dangerously high. For instance, when the government announced that natural gas had been discovered in Mtwara and Lindi, the local population initially welcomed the opportunity to host extractive activities. Since these areas are impoverished and rely heavily on subsistence agriculture, the local community hoped that natural gas extraction would attract investment, create job opportunities, and provide them with a reliable electricity supply and educational opportunities. But the Tanzanian government ultimately decided to construct a gas pipeline that would transport the gas to Dar es Salaam for processing and electricity generation in other parts of the country, and pipeline construction displaced many people in the Mtwara and Lindi regions (Ndimbwa 2014). Displacement created tensions, as did the belief that natural gas supplies should go towards local energy production in local communities in producing areas before being transported to other parts of the country (Ledesma 2013). This tension resulted in protests and rioting in Mtwara in 2013, leading to a bloody crackdown by security forces.

Tanzania's New Petroleum Legislation

Recognition of the fact that the legislation governing Tanzania's petroleum sector was outdated led to the adoption of a set of new laws in 2015. The new regulatory framework consists of the following three key laws and policies: the 2015 Petroleum Act; the 2015 Oil and Gas Revenues Management Act; and the 2015 Extractive Industries Transparency and Accountability Act.

In this section, we examine these three pieces of legislation that outline the rules of the game for exercising formal, public authority over petroleum resources in Tanzania. Specifically, we answer the following questions: what institutional arrangements does each piece of legislation establish, and what types of authority are the various institutions endowed with? How are these powers constrained? How do petro institutions interact and relate to each other? Does the legislation create potential institutional overlaps, conflicts, and gaps that could be counter-productive in terms of resource governance? What mechanisms for transparency and accountability are included in each piece of legislation to help enable good governance over Tanzania's petroleum resources?

2015 PETROLEUM ACT

The 2015 Petroleum Act repeals two earlier pieces of legislation governing the petroleum sector: the 1980 Petroleum (Exploration and Production) Act for upstream activities (exploration, development, and production) and the 2008 Petroleum Act for mid- and downstream operations (processing, transforming, storing, transporting, and distributing and trading petroleum supplies). The 2015 Act provides a comprehensive regulatory framework to govern all up-, mid-, and downstream and petroleum activities, creating several new institutions and expanding the roles of existing ones.

The **Minister** charged with responsibility for petroleum resources is tasked with supervisory and policy-making authority over the sector, for granting licenses after consulting with the **Petroleum Upstream Regulatory Authority** (PURA – see below), and for ensuring transparency in the sector (Article 5). The Minister is further charged with ensuring that there is a balance between domestic petroleum supplies and those designated for export. Advice to policy makers – including the Minister – regarding management and development of the petroleum sector will come from two entities: the **Commissioner for Petroleum Affairs** and the **Oil and Gas Advisory Bureau**. The Commissioner is responsible for advising the Minister on both daily administrative and regulatory issues within the sector (Article 6), while the Bureau sits within the Office of the **President** and is responsible for advising the Cabinet "on strategic matters relating to the oil and gas economy" (Article 7). The Act does not provide further clarification on the difference between these types of policy advice.

Articles 8 through 11 label the **Tanzania Petroleum Development Corporation** (TPDC) as the country's national oil company. The TPDC, in which government has a 51% ownership stake, is the vehicle for government's commercial participation in petroleum projects, either directly or through subsidiary companies. The TPDC is further supposed to provide advice to government on petroleum sector matters, promote new petroleum projects, market the country's petroleum, and develop and promote expertise and investment in the petroleum sector (including local content policies). It owns the country's pipeline network for natural gas, holds land for petroleum projects, and stores and trades natural gas. A portion of petroleum revenues is retained by the TPDC to fund its activities (Article 10). Under Article 17 of the Oil and Gas Revenues Management Act (OGMRA – see below), this translates into channeling 0.1% of GDP into the **Oil and Gas Revenues Savings Fund** for use by the TPDC.

While Article 44 of the Act grants the Minister the authority to grant licenses (after taking into consideration advice from PURA), Article 45 grants petroleum operations rights to the TPDC and Article 52 grants the TPDC the exclusive ability to apply for exploration rights. The TPDC can enter into a Ministry- and PURA-approved partnership (joint venture) with a Tanzanian or foreign entity to exploit those rights, either through direct award or an open tender, with the TPDC required to maintain a minimum 25% participating interest in any such partnership (Article 45, section 4). However, Article 45 implies that the partnership requirement is more than a matter of choice with the requirement that the TPCD be involved in any private company efforts to carry out petroleum operations beyond reconnaissance activities. The TPDC's control over petroleum exploitation is further entrenched with Article 51's provision that the Minister can directly award the TPDC a certain block. This, however, circumvents Article 49's requirement that petroleum agreements go through a transparent and competitive public tendering process (Article 48). Where a public tender process is initiated but is not effective, the Minister has the power to enter into direct negotiations with a "qualified and eligible" company.

Article 12 of the Act creates the **Petroleum Upstream Regulatory Authority** (PURA), a new agency designed to regulate and monitor upstream activities in the petroleum sector. PURA has a wide range of functions, including advising the Minister on agreements and licenses as well as on development plans; processing and managing license applications and monitoring license holders; promoting local content; maintaining petroleum data; and overall monitoring and auditing of upstream operations and activities. Article 85 tasks PURA with establishing and maintaining a **Petroleum Registry**, which contains data on petroleum agreements, licenses, permit authorizations, and information about any changes to these.

Article 18 calls for a Board to oversee PURA's operations, consisting of five members including a Chairman who is appointed by the President and Board members identified by a Minister-established nomination committee (Article 28). The Board is, among other things, responsible for creating rules and procedures for appointment of PURA employees. Board functions can be delegated to committees, as the Board requires (Article 22). The Director General of PURA is also appointed by the President upon recommendation by the Minister, and is answerable to the Board (Articles 23 and 25). The Act requires PURA to coordinate and cooperate with other government institutions in carrying out its responsibilities, though exactly how this should be done is not specified.

Article 30 re-invents the pre-existing **Energy and Water Utilities Water Regulatory Authority** (EWURA) and grants it new authority to regulate the mid- and downstream petroleum and natural gas sectors. It grants operational and construction licenses; monitors petroleum quality, standards, and safety, including for workers in the industry; charges and collects revenues; promotes the access and affordability of petroleum products and services as well as the maximum participation of Tanzanians throughout the value chain; helps to ensure transparency in the sub-sector; and maintains data on all mid- and downstream activities and the general status of the gas industry in the **National Petroleum and Gas Information System** (Articles 31 and 125). EWURA is to report annually to the Minister on its activities (Article 32).

Finally, the Petroleum Act creates two new funds, the **Oil and Gas Revenues Fund** (Article 252) and the **Decommissioning Fund** (Article 148). We discuss the first fund in the next section. The Decommissioning Fund is designed to cover costs related to implementing a decommissioning plan for a given petroleum operation. Payments to this fund should begin when one of three conditions is satisfied: production has reached 50% of aggregate recoverable reserves, five years after commencement of production, or if rights are surrendered. If the fund for a given project is not sufficient for decommissioning activities, the license holder or facilities owner is responsible for the outstanding costs. A committee consisting of PURA representatives as well as the license holder, contractor, and/or facilities' owner is to manage the Fund, but the Act contains no further instructions for the Fund's management.

2015 OIL AND GAS REVENUES MANAGEMENT ACT (OGRMA)

Article 252 of the Petroleum Act calls on Government to establish an **Oil and Gas Revenue Fund**, consisting of revenues accruing to Government through royalties, profit shares, participation in operations, corporate income tax, and returns on Fund investment. According to the Act, this Fund is supposed to guarantee transparency and accountability in the collection, allocation, expenditure and management of petroleum revenues, as well as to ensure that these funds are used for sustainable development purposes and benefit present and future generations.

The 2015 Oil and Gas Revenues Management Act (OGRMA), a supplement to the Petroleum Act, provides further details for the creation and operation of the Oil and Gas Fund, outlining fiscal rules for management of the Fund as well as reporting and transparency requirements. Under the OGRMA, the **Tanzania Revenue Authority** (TRA) and the **TPDC** are given authority to collect various types of petroleum sector revenues, including royalties, taxes, dividends, and investment returns. Revenues are to be deposited into the Oil and Gas Fund at the **Bank of Tanzania** and used for socio-economic development, maintain fiscal and macroeconomic stability, and develop the petroleum sector (Article 8, OGRMA). However, no clear parameters are laid out to clearly define what types of activities should fall under each of these areas.

The Oil and Gas Fund is broken into a **Revenue Holding Account** and a **Revenue Saving Account**. All revenues are initially deposited in the Holding Account. Funds equal to 3% of GDP are transferred from the holding account to the government's Consolidated Fund for general budgetary use; 60% of this funding is to be used for socio-economic development purposes. If the Holding Account is deficient in a given year, the difference is to be transferred from the Savings Account or borrowed by Government. Funds in excess of 3% of GDP are transferred from the Holding to the Saving Account. Funds equivalent to 0.1% of GDP are to be set aside in the Saving Account for strategic investment by the TPDC. Revenues from the service levy are to be transferred to local government authorities in petroleum-producing areas, as approved by the National Assembly. Local government spending is to be guided by as-yet unwritten fiscal rules that should be laid out by the ministries of finance and local government.

The Fund is managed by the **Paymaster General** (the accounting officer), the **Bank of Tanzania** (the operational manager), and a **Portfolio Investment Advisory Board**. The Board is responsible for advising the **Minister of Finance** on investments using money from the Fund. This Board consists of a Chairman and four members, appointed by the **President**.

The Bank and Board are to report quarterly to the Minister of Finance on investment and account performance, while the Controller and Auditor General are responsible for auditing these quarterly reports. The Bank must publish an audited report of the operational performance of the Fund in the official Gazette and on the Bank's website.

2015 Extractive Industries Transparency and Accountability Act (EITAA)

Article 5 of the 2015 Petroleum Act states that one of the responsibilities of the Minister responsible for extractives activities is to "ensure and sustain transparency in the petroleum subsector". Mechanisms for transparent governance of the petroleum sector are provided at various points throughout both the Petroleum Act and the Oil and Gas Revenues Management Act, as shown in Table 1 below. Transparency is institutionalized in Tanzania through membership in the global Extractive Industries Transparency Initiative (EITI), the operational management of which in the Tanzanian context is outlined in the Extractive Industries Transparency and Accountability Act (EITAA).

The EITAA establishes new organizational entities to implement the EITI standards, and calls on several additional actors to play a role in ensuring transparency and accountability in the governance of Tanzania's petroleum resources. The primary implementing organization is the **Tanzania Extractive Industries (Transparency and Accountability) Committee** (TEIAC), an independent entity composed of 15 persons from civil society, extractive industry companies, and Government (one of whom must the be the Attorney General or his representative). An independent Nomination Committee is charged with submitting three candidates to the Minister for the Committee's Chairman (president) and three for the Executive Secretary position, both of which who are in addition to the 15 Committee members. Nominations are sent to the Ministry responsible for petroleum resources. A Secretariat, headed by the Executive Secretary and staffed by public servants, can be established if desired to carry out the day-to-day activities of the Committee. Finally, the Committee can engage an independent administrator to reconcile and verify payments made by extractive companies to government.

The functions of the TEIAC are to ensure that "benefits of extractive industry are verified, duly accounted for and prudently utilized for the benefit of the citizens of Tanzania" (Article 10). The Committee is tasked under Article 10 with powers of information gathering, analysis, and dissemination; investigation; and public interface and consultation. Specifically, it is supposed to develop a revenue reporting system, receive and publish information on revenues from companies and Government, identify and conduct investigations on payment discrepancies, and promote citizen participation and awareness of resource governance. The Committee reports to the Minister responsible for petroleum resources, and its accounts must be audited by the Controller and Auditor General. The Committee must submit an annual report on its activities to the National Assembly.

Finally, the EITAA outlines obligations for extraction companies. Qualifying extraction companies are required to submit to measures that the Committee implements in order to reconcile payments made to the government with government receipts. This will entail the submission of tax records and data regarding all fees paid to the government. Extractive companies are also required to submit information annually about local content, corporate social responsibility, capital expenditure data, and any information submitted to domestic or foreign stock exchanges. All concessions, contracts, and licenses related to extractive industry companies shall be published online and through other media, as well as names of shareholders and Environmental Management Plans.

TABLE 1

Transparency provisions in Tanzania's petroleum sector regulations

Legislation	Contents
Petroleum Act, 2015	**Article 5:** The Minister should ensure and sustain transparency in the petroleum sub-sector.
	Article 14: PURA shall ensure transparency in relation to activities of the petroleum sector.
	Article 31: EWURA shall ensure transparency in relation to activities of the petroleum sector.
	Article 32: EWURA shall discharge its duties and powers in a transparent manner that promotes fair competition. Must report annually to the Minister.
	Article 33: PURA shall make available to the public a reference map showing areas of possible petroleum accumulation, divided into blocks. This shall be available at PURA's offices and also on its website.
	Article 49: Petroleum agreements shall not be entered into unless a transparent and competitive public tendering process is completed. The Minister shall publish in the newspaper any invitation to tender or intention to engage in direct negotiations.
	Article 85: PURA shall establish and maintain a Petroleum Registry that contains petroleum agreements, licenses, permit authorizations, and information about any changes to these. This information shall be public and made available upon request.
	Article 92: PURA may, with written approval from the Minister, make information about agreements, licenses, permits, contracts, development plans, and operations in the oil and gas industry available to the public upon payment of a fee.
	Article 125: One of the purposes of the National Petroleum and Gas Information System (NPGIS) is to inform the public periodically about the status of the gas industry. All information contained in the NPGIS (except for information deemed to be confidential) shall be made available for inspection by the public.
	Article 159: Guidelines for charging of system users for gas imbalance shall be transparent.
	Article 252: An Oil and Gas Fund shall be established to ensure transparent and accountable in collection, allocation, expenditure, and management of petroleum and natural gas revenues.
Oil and Gas Revenues Management Act, 2015	**Article 16:** All concessions, contracts, and licenses related to extractive industry companies shall be published online and through other media, as well as names of shareholders and Environmental Management Plans.
	Article 18: Collection and deposit of petroleum revenues into the Oil and Gas Fund shall be done in a transparent and accountable manner. Disbursement of money from the Fund shall also be done in a transparent and accountable manner, and records regarding petroleum revenues shall be published by the Minister in the newspaper, as well as on the websites of the Government and Ministry of Finance.

Reflections on the Potential for Intra- and Inter-Organizational Conflicts and Gaps – Recommendations for Policy Makers

Tanzania's new petroleum regulatory framework represents a significant improvement over past legislation. While clarifying regulations are still required for a number a provisions in the various pieces of legislation, an inter-locking web of government entities now exists that make it more likely that governance over the sector will be streamlined and coherent. These entities will need to ensure that they cooperate in practice, share information, and maintain trust levels.

Despite these improvements, however, certain provisions in the new regulatory framework raise concerns for the future of petro-governance in Tanzania. First, the state has assumed a large role in the petroleum sector, from its exclusive authority to grant licenses and agreements to the requirement for joint ventures in petroleum projects. Checks and balances on government authority in the form of oversight by the National Assembly (Parliament) over petroleum institutions are somewhat limited, largely restricted to reviewing periodic reports from the government's various petroleum entities. Moreover, the President and the Minister responsible for petroleum resources have high amounts of monopoly and discretionary power over various aspects of petroleum governance, including awarding of licenses and agreements and making the final selection of individuals to lead PURA and TEIAC. Though the candidates for these positions are not supposed to be politicians, there are few mechanisms in place to prevent political interference and conflicts of interest in the nomination and appointment process, and there are no requirements for these processes to be transparent. While there are several examples of countries where heavy state involvement helped to translate petroleum resources into economic development – such as Norway and Chile – these countries had robust institutions in place prior to oil extraction and risks of corruption and poor governance were low.

Second, the functions and status of the TPDC raise a number of issues. There appears to be a conflict of interest between the TPDC's production activities and its mandate to both advise policy makers on petroleum sector issues and promote new investment in the sector. The new pieces of legislation do not clarify its political independence, and there is the risk of political interference in its operations. Third, there are unclear spending rules in place for the Decommissioning Fund and the Oil and Gas Fund, and local government spending rules are also lacking. Revenue management is easily manipulated, necessitating strong rules for spending.

Finally, there are conflicting requirements for transparency. On the one hand, PURA has the option to make contracts and licenses available to the public, information from the Petroleum Registry and the National Petroleum and Gas Information System are also supposed to be available to the public, and the TEITA makes revenue disclosures mandatory. On the other hand, Section 52 of the Model Production Sharing Agreement states that information provided by contractors to the TPDC is to remain confidential. This conflict could result in a lack of sufficient transparency to ensure that government is receiving the revenues it should and spending them in accountable and beneficial ways.

CONCLUSION

Good management of Tanzania's petroleum resources requires strong, high quality institutions. Tanzania has created a number of new government entities, and refreshed existing ones, to improve governance over the sector, setting a positive precedence. The legislative framework addresses key issues such as contract allocation and revenue collection, and it further puts in necessary transparency and accountability measures. But gaps, ambiguities, and conflicts remain, with as-yet unknown consequences for the sector. Even more important is the fact that Tanzania's petroleum governance framework will not operate in isolation from the country's larger institutional framework, which determines the implementation of petro laws and ensures that petroleum riches translates into economic development. Key institutions for democratic rule provide checks and balances on authority, including Parliament, the quality of the bureaucracy, electoral institutions, and the judiciary. Equally important are institutions vital for economic growth and social peace, such as property rights security and public goods provision. Future research and policy work must therefore examine not only the implementation and effects of Tanzania's new petroleum legislation, but also how this larger institutional framework interacts with petroleum institutions and influences petroleum governance in the country.

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Tanzania has recently discovered large petroleum reserves, boosting its reserve natural resource stocks and potential future revenue flows. What is the likelihood that the country's petroleum resources will translate into economic development? The answer to this question will largely be determined by the quality of the institutions the government adopts to govern the petroleum sector, to include the legal institutions. This study reviews the most important provisions of the new legislative framework that the government has put into place to govern this newfound wealth. We examine the institutions and actors created by the legislation as well as the opportunities and challenges that may emerge in its future implementation. Specifically, we analyze the petro-sector institutions that the legislation creates and the types of authorities granted to them; the institutional constraints placed on authorities; the interaction between institutions; potential institutional overlaps, conflicts, and gaps; and transparency and accountability mechanisms.

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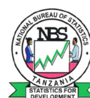

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