

THE UNIVERSITY of EDINBURGH

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From Refining to Smuggling: The Everyday Politics of Petrol in Ghana

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PhD in African Studies
University of Edinburgh
2017

Declaration

I declare that the thesis has been composed by myself and that the work has not been submitted for any other degree or professional qualification. I confirm that the work submitted is my own. My contribution and those of the other authors to this work have been explicitly indicated below.

Monica Skaten March 2017 Edinburgh, UK

Abstract

From Refining to Smuggling: The Everyday Politics of Petrol in Ghana

This thesis presents an ethnographic study of the downstream petroleum industry in Ghana focusing on trade, infrastructure, flow, politics and social relationships. In 2010, the West African Republic of Ghana started pumping crude oil from the offshore Jubilee-field. The rapid development from discovery to extraction, along with economic expectations generated by the development of the new upstream industry, led to exponential growth in the downstream industry. A liberalisation reform of the downstream industry was initiated in 2005 and the state started to redefine its role in the petroleum industry, allowing a range of private entrepreneurs to participate in the downstream sector. On the back of these key transformations of the industry, this thesis demonstrates the continuous politicisation of petroleum products on a national level and the significance of this politicisation on infrastructure, networks and social relationships throughout the industry.

This thesis argues that the trade, distribution and price of petroleum products in Ghana facilitates and shapes political and economic reciprocity between the government, the publics and profitable economic networks. Even though there was adequate infrastructure such as refinery, pipelines and petroleum storage depots, petroleum products in Ghana were distributed in a way that allowed the most number of people to come into contact with petroleum, by having access to the actual product, but also through enabling job creation and profitable economic activities. The petroleum infrastructure would obstruct profitable networks and informal markets. I propose the term 'Politics of Petrol' to emphasise how the industry and the commodities were part and parcel of the political and social fabric in Ghana. Reflecting the negotiable nature of politics and reform alongside the changeable practices and networks in the industry - Politics of Petrol - demonstrates the productive purpose of petroleum in Ghana's democracy.

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List of Acronyms

Automatic Petroleum Product Price Formula (APPPF)

Bulk Distributing Company (BDC)

Bulk Oil Storage and Transportation Company (BOST)

Floating Production and Storage Operator (FPSO)

Ghana National Petroleum Corporation (GNPC)

Ghana Oil Company (Goil)

Health Safety and Environment (HSE)

Letter of Credit (LC)

Liquefied Petroleum Gas (LPG)

National Democratic Congress (NDC)

National Patriotic Party (NPP)

National Petroleum Authority (NPA)

Oil Marketing Company (OMC)

Oil Trading Company (OTC)

Petroleum Product Marketing Scheme (PPMS)

Residual Fuel Catalytic Cracker (RFCC)

Tema Heavy Industrial Area (THIA)

Tema Oil Refinery (TOR)

Tweneboa, Enyenra and Ntomma (TEN)

Unified Petroleum Price Fund (UPPF)

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Introduction

Rush to 'First Oil'

In 2007, a small American oil exploration company, Kosmos Energy, discovered commercial quantities of sweet light crude oil offshore of Ghana's western region. The discovery was one of the largest discoveries of oil in the world in 2007, and the largest discovery in the decade for the West African region. Ghana's petroleum history dates back to the beginning of the eighteenth century, but Ghana had remained a small producer compared to its African counterparts in Nigeria and Angola. However, the discovery of the Jubilee Field in 2007 and the Tweneboa, Enyenra and Ntomma (TEN) Field in 2010 marked a new era for Ghana's petroleum industry. For the first time, large commercial quantities of oil and gas were found in Ghana. Drawing on the 'Africa Rising' discourse, Ghana's President at the time of discovery, John Kufour, stated: "Even without oil, we are doing so well... With oil as a shot in the arm, we're going to fly" (BBC 2007).

After the initial discovery came a phase of appraisal and development, and the negotiation of Product Sharing Agreements. Tullow Oil, a London-based oil company active in several sub-Saharan African countries, led the consortium of oil companies operating the Jubilee Field. The Jubilee Field began production in December 2010, only three and a half years after the discovery. The way to 'First Oil' – the industry term used to describe the initial oil pumped from a newly commercialised well – had been produced at a record speed for the petroleum industry.

Table 0.1 below illustrates the rapid speed at which First Oil was reached for Ghana's Jubilee Field. The Jubilee-project is number five from the bottom, and as table illustrates, only two projects from Angola had similar timelines. The Angolan projects have been developed from active basins, from which seismic data have been

¹ Jubilee-consortium extracting from Mahogany-1 and Hyedua-1 wells in the Jubilee-Unit: Tullow Oil (operator) 35.48%, Kosmos Energy 24.08%, Anadarko 24.08%, Ghana National Petroleum Corporation 13.64%, Petro SA 2.73% (Tullow Oil, 2017).

available over a longer period of exploration. The Angolan projects further benefit from an already established industry, with a stable regulatory system, available infrastructure and multinational companies with a long track record in the country. This table showcases the remarkable speed at which the deep-water Jubilee Field, Ghana's first large-scale commercial oil field, was developed.

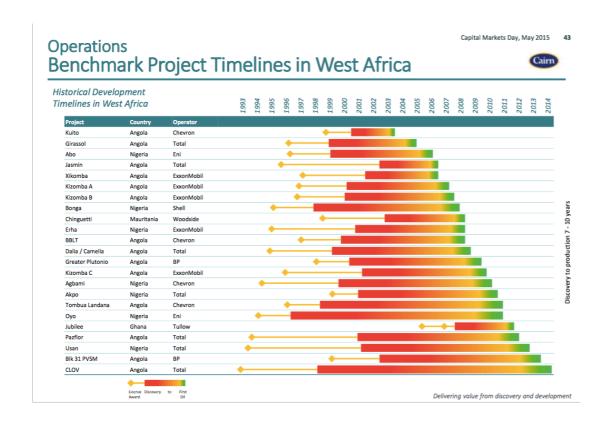


Table 0.1: Benchmark Project Timelines in West Africa. Cairn Energy (2015)

The table has been borrowed from Cairn Energy, an Edinburgh-based oil exploration company specialising in high-risk areas like the Artic. They were one of the companies that turned to West Africa after the discovery of the Jubilee Field. In the chase for "the next Jubilee Field", Cairn discovered commercial quantities in Senegal, but went with a different strategy for the development of the field. Commenting on the rapid speed of the Jubilee Field's development, one of the Cairn executives explained that such rapid development always comes with a certain risk. He explained that one should expect to finance the costs at a later stage, and that it was a

gamble to follow the strategy that Tullow Oil had in Ghana. He believed that the Jubilee Field was developed in a rush in order to avoid challenges with what later became a maritime border dispute between Ghana and the Ivory Coast.² Ivory Coast has claimed that the offshore exploration and discoveries in Ghana included hydrocarbons from Ivory Coast's territorial zone. Ivory Coast therefore requested operations in Ghana to stop, and arbitration has been initiated at the International Tribunal for the Law of the Sea. The tribunal gave Ghana permission to operate in the interim, while awaiting the final decision in 2017. The fact that the industry was already established, and the difficulty in proving the reach of deep-water basins, have given Ghana the advantage in the maritime border dispute. The picture below shows Jubilee Field developments close to the maritime border of Ivory Coast.

In contrast to Ghana, as Gisa Weszkalnys (2015) has discussed, Sao Tome and Principe has been rather less fortunate, with a prolonged path to 'First Oil'. Weszkalnys argues that the people of the Island State in West Africa have been victims of 'First Oil's' dramatic suspense. She notes that the achievement of 'First Oil' is a highly uneven phenomenon, forged from the contingent associations of state, capital, science and nature – materialising as absent potential and promising future gains. Weszkalnys demonstrates how everyday life in Sao Tome and Principe engages with the promises of potential and the contrasting deception - following the industry's specific temporal regime (Weszkalnys 2008; 2014; 2015). In Ghana, 'First Oil' did not produce a prolonged period of heightened, but unmet expectations; but it did initiate new sorts of expectation, stimulating businesses and individuals alike to reorient themselves towards the new oil and gas industry.

² Conversation with Richard Heaton, Cairn Energy, 06/9/2016. At the Scottish Oil Club.



Image 0.2: Ghana's Offshore Oil Fields. Ghana Oil Watch (2015).

The urgency of developing the Jubilee Field in Ghana has also been understood as part of the National Patriotic Party (NPP) strategy to secure its political legacy (Gary, 2009, p. 24; Hickey et al., 2015, p. 9). The NPP came to power in 2001 and provided foreign companies with exploration licences. It further restructured Ghana's National Petroleum Corporation (GNPC) to take a more active role in upstream operations. The NPP manifesto (2008) reflects the role that the party actively played in oil and gas discoveries and the self-representation of such efforts:

The recent oil discovery in our deep waters off-shore is not by accident. We have struck oil because of the sound policies of the NPP government. The oil has always been there but the 19 years of (P) NDC rule could neither create the conducive investment climate nor the managerial direction for the oil to be found. In the short period between 2001 and 2005, the NPP government restructured and refocused the work of the GNPC and provided the conducive business environment to attract committed investors to our off-shore oil fields. The result was the discoveries announced in June 2005, June 2007 and February 2008. We expect more discoveries in the coming years and, as the party who enabled these new finds, we are best placed to manage these new resources responsibly (NPP, 2008, p. 10).

The NPP government was overthrown in the December 2008 elections, which stirred change in the new oil industry. A few contracts were reassigned, and investigations into claims about President Kufour's involvement in one of the consortium's oil companies were launched. But after this reshuffling, the incoming National Democratic Congress (NDC) administration, led by President John Atta Mills, facilitated the continued development of the Jubilee Field. A combination of a willing government and an eager consortium operator brought the Ghanaian oil and gas industry on-stream in the record time of 3.5 years.

My informants in Ghana described December 2010 and early 2011 as the time of Jubilee euphoria. Newspapers and radio shows were discussing the successful oil industry; buildings and industrial workshops were erected in Accra, the capital, and in Sekondi-Takoradi, the oil city. A Floating Production and Storage Offloading (FPSO) ship had been constructed in Singapore, with part of the steel fabricated in Takoradi by the Ghanaian oil service company, Seaweld. The Petroleum Commission was set up to regulate the new industry, and a gas processing plant was under construction in the Western region. The government of Ghana had negotiated with the Jubilee consortium to provide the gas from the Jubilee Field without charges; they just had to construct the pipeline. The pipeline and gas processing projects started a cooperation with the Chinese state-owned company Sinopec. The new oil and gas industry was developing quickly. But Ghana's new 'black gold' did not just facilitate the expansion of a new productive sector; the excitement and expectations it created also facilitated a boom in Ghana's already-established petroleum industry.

My own interest and many of my informants reasoning for participating in the downstream petroleum industry were the discovery of commercial quantities of oil and gas. As the empirical chapters will demonstrate, the jubilee crude oil was not refined in Ghana. There was however an increase in importation of petroleum products post-oil and gas discoveries. As such, there was a disconnect between the petroleum industry in Ghana and the Jubilee-Field when it came to the crude oil, while there were several material and symbolic links that connected upstream and downstream sectors. This thesis predominantly focuses on Ghana's downstream petroleum industry – the petrol market – without suggesting that the two sectors are completely separated.

Downstream Boom

While mainstream media and scholarly attention alike has focused on the development of the Jubilee Field, significant changes have also occurred in Ghana's downstream petroleum industry following the discoveries of oil and gas. The downstream petroleum industry experienced an expansive growth in the number of companies operating, market consumption and the number of filling stations being built. The Government of Ghana was quick to announce that Ghanaians interested in reaping the benefits from oil and gas discoveries should get involved in activities in the downstream petroleum industry. This encouragement, mixed with expectations raised by the oil and gas discoveries, facilitated a boom in Ghana's downstream industry.

For decades, international companies GNPC have searched for crude oil in Ghana's geological landscape without success. However, Ghana's downstream petroleum industry, the petrol market, has developed consistently from the mid-1990s, with the addition of decentralised petroleum storage depots and pipelines connecting refining operations in the South to depots in the North. The early 2000s saw an expansion of the oil refinery with an additional plant and technological updates. In 2005, the government initiated a liberalisation reform through the establishment of the National Petroleum Authority (NPA). Importation of crude oil and petroleum products was assigned to private companies, a change from the previous practice of state imports. These developments led to a more stable flow of imported petroleum products, in larger amounts, to Ghana.

Ghana has the second largest domestic market for petroleum products in West Africa, after Nigeria. Government statistics for 2014 showed that the Ghanaian domestic market consumed close to three million metric tons of petroleum products that year. Preliminary statistics for 2015 showed two and a half million metric tons consumed between January and September – restating the trend from 2010 onwards, of yearly increases in consumption despite a steady increase in petroleum product prices since the early 2000s. This increase might point to a growing Ghanaian economy, but it also reflects other factors, including an increase in smuggling to neighbouring states. The downstream petroleum industry currently represents ten per cent of Ghana's Gross Domestic Product (GDP), and West and Central Africa has been forecasted as

the regions with fastest growing demand for petroleum products in the world (44 per cent) (CITAC, 2013).

Petroleum trade and businesses in Ghana have been growing rapidly. The growth in demand for petroleum products and liberalisation has provided an entry point for private entrepreneurs. At the same time that multinational oil companies (like British Petroleum, Shell and Chevron) were withdrawing from sub-Saharan Africa's downstream industries – from the mid-2000s to 2010 – a number of policies were enacted in Ghana to promote 'indigenisation' of the industry. Ghana's downstream petroleum industry has had a history of politicisation through state-owned corporations and a generous disposition towards petroleum product subsidies. The reform aimed to phase out these subsidies and give room for Ghanaian petroleum companies to operate, with a helping hand from the state in the form of various credit schemes.

Ghana's downstream petroleum industry had only a handful of actors in 2005, mostly multinational oil companies and state-owned corporations. By 2012, there were 93 Oil Marketing Companies (OMCs) and 16 oil-importing companies called Bulk Distributing Companies (BDCs). At the time of my fieldwork in 2014, these numbers had increased further, to 132 OMCs and 29 BDCs. New filling stations were erected, mostly in southern cities, but also in the capital in the North, Tamale. Many traditional outlets across Ghana for petroleum products were replaced with brand new filling stations, made cheaper to build with imported material and equipment from Guangzhou in China. Due to a credit scheme for the new companies, underground tanks were filled with petroleum products, and fuel shortages became almost completely a thing of the past.

The oil discovery and the changes in the petrol industry is what led me to Ghana the first time, for an internship with the NPA in 2012, as part of my Master's research. I wanted to understand whether and how the discovery of oil and gas, and the development of the new industry, had impacted the downstream petroleum industry. I conducted an ethnographic study of the NPA, examining the relationships and practices of bureaucracy and networks in an expanding industry. Ghanaian entrepreneurs were inspired by hope, promises and a sense of urgency to take part in

the petroleum industry. There was expansive growth in the downstream industry, increased competition, and a new set of Ghanaian actors. And this environment increased bureaucratic corruption as the stakes for the industry were amplified.

The findings from my preliminary research with the NPA, and forecasted growth in African downstream industries, fuelled further questions about the industry, about the state, and about oil. How did this exponential growth play out on the ground? Who were all these new Ghanaian companies, and how did they feature in the petroleum industry? In formulating this research project, I sought to follow the growth, the new companies and the petroleum products, as well as examining the transformation that the industry was experiencing. I wanted to understand how petroleum products circulated from the point of refining in the south to smuggling in the north, and whether all of these new actors were changing the landscape substantially. I wanted to examine established practices of petroleum trade and circulation, building a robust understanding of the role of petroleum in Ghana's social, economic and political environment. It would provide a more nuanced understanding of how petroleum in old and new forms gives meaning to the Ghanaian people and the Ghanaian political landscape. The study was particularly interesting during a time of oil and gas discovery, and of neoliberal reform of the downstream petroleum industry.

Industry Topography: Why focus on the downstream industry?

In 1859, Edwin Drake and William A. Smith drilled an oil well along the banks of Oil Creek, Pennsylvania, in the United States. People had been digging manually for rock oil for some time in the area, but when the Chinese technique of salt boring was first applied to drilling an oil well, the very first oil boom in America materialised. The town of Titusville doubled its population overnight, as people came searching for the riches of rock oil, the cheap illuminator. Most of Oil Creek, including Titusville, had convenient access to the river Allegheny. Downstream was a small town called Cornplater, to which the liquid oil could be transported by canoe. Refineries were built in the 1860s, and the town expanded and was renamed Oil City (Yergin, 1991, pp. 29-30). According to Professor John Underhill (2016, per. com.), the current classifications of upstream and downstream industry stems from this

initial petroleum history, where the drilling of oil was taking place upstream on the Allegheny, and the refining and marketing was conducted downstream. The midstream was the river itself, facilitating transport between the two parts of the industry, extracting and processing.

Initially, the petroleum trade involved many different business actors, from those drilling on farms in Oil Creek, to those facilitating transport, constructing and operating refineries, undertaking export via railways or the sea, and marketing the flammable liquid throughout the world. The cost and risk of transportation triggered the innovation of pipelines, and the drilling farms in Oil Creek were rapidly connected to the refineries in the south by a pipeline system. It was when John D. Rockefeller established Standard Oil in 1870 that order was first brought to the boom and bust chaos that characterised the first years of oil activity in Pennsylvania (Yergin, 1991, p. 35) and the upstream-downstream classification became systematically exported to oil producing states worldwide.

The end of the civil war gave access to new markets and a massive economic expansion in the United States. The emergence of Standard Oil signalled the beginning of the modern oil industry, and Rockefeller sought total dominance over the world oil trade, growing into a complex global enterprise that brought cheap illumination to all corners of the world. Daniel Yergin (1991, p. 35) writes, "The company operated according to merciless methods and unbridled lust of latenineteenth-century capitalism; yet it also opened a new era, for it developed into one of the world's first and biggest multinational corporations". Standard Oil was part of the Seven Sisters, a cartel of European and American Oil Companies that controlled 80 per cent of the world's extraction and trade of petroleum.

The business model that Standard Oil developed has been copied by firms operating in sub-Saharan Africa (Heilbrunn, 2014, p. 19). Standard Oil first started with a horizontal integration in the refining sector, acquiring large parts of the refining capacity of the market. In later years, Standard Oil acquired logistics and marketing assets in the petroleum industry, as well as upstream operations, which made it a vertically integrated oil company. The dominance over the value chain that Rockefeller had managed to create enabled him to streamline production and

logistics, lower costs and hence undercut competitors. Aggressive pricing destroyed many competitors, and the US Supreme Court ruled that Standard Oil was an illegal monopoly in 1911. The company was subsequently dissolved, while its business model remained central in the oil and gas industries. The different entities that came out of the break-up of Standard Oil remain some of the largest multinational oil corporations to date (for example Exxon, Chevron and ConocoPhillips).

The classifications from the river in Pennsylvania have remained, and the industry and academics alike use them for explanatory purposes. Textbooks separate the upstream and downstream sectors in educating people on how the industry works: upstream industry takes care of exploration and extraction, while downstream industry conducts refining and marketing. Industry professionals would say that a career in upstream petroleum is significantly different than a career in downstream petroleum. Moreover, the classifications have manifested in language in practice and chart important political and economic dynamics. As this thesis will demonstrate, while there are continuous links between the upstream and the downstream industries, the classification legitimises a certain hierarchical ordering of upstream as more valuable than downstream. This ordering translated into political discourse and everyday working life for my informants.

While the organisation of the oil industry has changed since the time of the Seven Sisters, with the creation of The Organisation for Petroleum Exporting Companies (OPEC) and National Oil Companies dominating world reserves, these industry classifications have remained important. As National Oil Companies have grown, they have ventured into downstream operations in neighbouring countries in order to diversify their assets. In 2010 PetroChina acquired shares in the UK refining industry and in 2011 Shell sold UK's second largest refinery to an Indian oil and gas company (Bridge and Billion, 2012, p.52). There has been a general trend of multinational oil companies withdrawing from downstream industries in the 2000s as they become more specialised as contractors to National Oil Companies, which now have larger ownership of the world's oil reserves. The departure of multinationals from downstream industries can also be seen in the context of increased focus on profit, and in relation to risk and reputation. Shell's operations in Nigeria demonstrate this trend well. Scholars, civil society organisations and popular media have shed light on

explosions and exploitation in Shell operations (and others) in the Niger Delta (Frynas 2001, Watts 2007, Obi 2010). Critics claim that Shell has had a negative social and environmental impact on their operational areas in Nigeria, and WikiLeaks-released documents have shown how the Dutch company has infiltrated Nigeria's petroleum ministry to gain access to politicians in the oil-rich Niger Delta (Smith, 2010). The damage to Shell's reputation among European and American consumers can be seen as part of the reason why multinationals are divesting from downstream industries. One Shell executive³ explained: "If a Shell filling station explodes in an African village, we pay damages to the people who get hurt. We have to replace our equipment and we take a blow to our reputation. It simply is not worth it." While the actors who control upstream and downstream industry have been changing, over the relatively short history of the modern oil industry, the upstream-downstream classification has manifested in the language and practice of the international oil industry.

The discovery of the Jubilee Field created a new upstream petroleum industry in Ghana. Until then, all petroleum related activity – from extraction to petroleum product subsidies – was covered by the undifferentiated umbrella phrase, 'petroleum industry'. The Salt Pond Field had been producing crude oil in Ghana since its discovery in 1970, but with relatively few companies involved. The term "downstream industry" began emerging in public use after the NPA was established in 2005. The new regulator was set to oversee and monitor the actors that operated within the sphere that the global oil industry referred to as "downstream". According to most of my informants, however, it was only when the Jubilee Field was first discovered – two years later – that the upstream-downstream dichotomy materialised, and people began referring to two separate industries.

The sector called the "upstream petroleum industry" entails exploration, drilling and the extraction of crude oil and gas. These activities rely on geoscientists, and a range of people from other petroleum related sciences, to provide accurate geological data, technologically suitable equipment, and financial analysis on the risk and profit potential of wells. Offshore rigs and underwater technology attract an especially

³ At Scottish Oil Club meeting, November 2016.

highly skilled international workforce, and a regime of regulations and technical knowhow makes it an industry inaccessible to the public (Barry, 2006). The level of education and the risk involved, especially in offshore work, amount to a significant salary divide between upstream and downstream workers. Rigs are often staffed with expatriate workers experienced in 'rig-work' throughout the world (Appel, 2012). In Ghana, as many other places, these people live in secluded "oil estates" when they are not offshore, with access to everything from European-imported sandwiches to private health care schemes set up to cater for their needs.

The downstream petroleum industry employs a much greater number of people than the upstream industry. These workers tend to be Ghanaian nationals, including engineers, technicians, laboratory personnel, marketers and service personnel, drivers, filling station attendants and so on. These people refine petroleum products, load them on to trucks or into pipelines, distribute the petroleum products to the market, and provide the end service to customers at filling stations. This industry is labour intensive, and while it is highly profitable, low-wage positions are overrepresented in the downstream. There has been an increased focus on safety in downstream industries in some sub-Saharan African countries, aligning with global standards; but the implementation and enforcement of such regulations is often weak. In sub-Saharan Africa, a few multinational companies such as Shell and Total have dominated downstream markets. In some places, local entrepreneurs, National Oil Companies and Swiss commodity trading companies have responded to the divestment made by these companies.

Generally, the divide between upstream and downstream in Ghana reflects a divide between foreign (mostly western) workers with high salaries in the upstream, and Ghanaian workers with low salaries in the downstream. While upstream companies boast of high rates of local employment, such local staffs are often hired for secretarial positions or the equivalent. Their salary reflects the type of work they conduct, and not the industry in which they have managed to acquire work. Higher positions in the downstream industry would often be paid relatively poorly, a tendency legitimised by referring to the industry's position in relation to upstream.

Hannah Appel (2012) and James Ferguson (2005) have argued that offshore industries in Equatorial Guinea and Angola are operating as enclaves, and that oil money only reaches the coffers of the state. According to them, multinational oil companies work actively to disentangle themselves from onshore political, economic and social environments. I would add that these disentanglements are made possible through the received wisdom that upstream and downstream are separate spheres of operation. Not only does this separation ensure a beneficial position for those already privileged by the oil industry – multinational foreign oil companies – but it reiterates inequality and institutionalises discriminatory practices within the petroleum industry.

More importantly, my research shows how these industries are interlinked in Ghana, in spite of persistent effort to insist of their distinction. This introduction started off by showing the main link: the rush to 'First Oil' fostered a boom in the downstream petroleum industry. Exponential growth in Ghana's downstream industry was enabled by the reform, but fuelled by the hopes and promises of hydrocarbon discoveries. Vertically integrated multinational oil companies (such as Shell) divested from Ghana's downstream industry in the 2000s, making room for Ghanaian entrepreneurs to enter the petrol market. Hence, we can confirm that operations upstream do influence operations downstream.

And, of course, upstream and downstream are connected by the commodity itself: oil. The clear separation of the two spheres has a very productive purpose. On the surface, the upstream-downstream classification suggests the organisation of economic flow, or an explanatory model for various operations included in transforming crude oil into petroleum products. The separation of the two sectors justified for example that oil extracted from the Jubilee Field were transported to Europe for refining, rather than Ghanaian domestic crude oil being refined at the Ghanaian domestic refinery. The upstream-downstream classification embodies political dynamics that enforce structures of inequality in trade and industry and between workers in upstream and downstream industries, reflecting and reproducing inequality in global capitalism more broadly.

With these linkages in mind, this thesis focuses predominantly on the downstream petroleum industry. The downstream industry is more than just the less profitable end

of the production chain of hydrocarbon extraction. The downstream industry produces and circulates petroleum products, and engages with large and small-scale economies worldwide. Hydrocarbon fuel is the current lifeblood of economies in Ghana, and stretches to impact political and social livelihoods and relationships throughout towns and villages. The downstream industry creates employment, allows for entrepreneurial activity, and fuels further socioeconomic activity. In this sense, petroleum products, and petrol in particular, can be used as a window into more general social processes (Guyer, 2004, p. 103). The downstream industry provide a good lens to understand the effects of the oil industry on sociality in Ghana, and ethnographic attention to the sector shows the ways in which the petroleum products are entrenched in Ghanaian social life.

Managing Scope and Analytical Categories

The downstream industry included the institutions, regulations, companies, infrastructure, political strategies and public debates which were involved in everything from refining crude oil to the sale of petroleum products at filling stations. The first challenge that arose in studying Ghana's downstream industry was how to approach the scope of it. Scoping the industry has been a gradual process, which its constantly changing nature made very challenging. I aim therefore to work within a critical topography, "understood not solely as an assemblage of corporate forms but also as expansive and porous networks of labourers and technologies, representation and expertise, and the way of life oil and gas produce at points of extraction, production, marketing, consumption and combustion" (Appel et al., 2015, p.17). The industry is formed as part of a system, an amalgam of political, social, technical, administrative and financial techniques (see Larkin, 2015, pp. 330-332).

My research aimed to understand the industry from the vantage point of everyday life, and spanning Ghana's regional borders. Therefore, I chose to focus on state workers, private entrepreneurs, truck drivers, smugglers and others involved in the everyday circulation of petroleum products throughout Ghana. This circulation started in Tema, in the south, and in various ways made its way to most corners of the country. I chose to focus on the distribution of petroleum products from the south to Paga, a

small town in the north. This focus gave me a particular route, and crossed some important junctions, which became my field sites. More than just researching the flow of petroleum products from the south to the north, I have investigated the regulatory system for the sector, oil companies and their methods of payment, and political and public discussions that emerged around norms of exchange.

After defining the scope of my research, the question remained: how would the downstream petroleum industry work as an analytical category? With the industry embodying an assembly of various regulations, companies and individuals, it did not come with a clear structure. Bureaucrats had clear guidelines, but informal institutional norms and social pressures – such as familial expectations – caused regular deviations. The people in control of testing and patrolling the petroleum product market found themselves instruments of politically charged practices. The pipeline and decentralised storage depots, which were supposed to facilitate flow, remained dormant. Entrepreneurs operating oil companies were concerned with profit, but were also bound by networks of personal relationships, kinship and place-based obligations. The set-up of the industry and the actual everyday operations were immersed in contradictions. These contradictions reflected the political importance of the industry for the government and for Ghanaian citizens, its historical significance and its continued social and economic importance for the fabric of everyday life in Ghana.

Such contradictions were intensified by the reform, which sought to transfer state tasks to the private market. People who were previously public officials became CEOs of import companies. Private entrepreneurs with various degrees of personal relations with people in control of state contracts were starting companies. And members of parliament started purchasing trucks to take part in the haulage of petroleum products, a state-subsidised practice. These dynamics convoluted the way in which lines could be drawn between state and industry, formal and informal practice, demand and obligations. The industry was evolving through dynamic and fluid groups of actors who took part in multiple practices with various motivations – influencing the outcome of the downstream industry.

Apart from adopting the assemblage strategy to understand industry dynamics, I found it most productive to view the industry as an on-going political project. The project itself, the industry, was the sphere in which petroleum products were traded, and while the products themselves remained somewhat constant, the actors working on the project changed over time. With new governments came new bureaucrats, committees, state projects, contracts, regulations and reforms. Companies went bankrupt, often in close connection these new modes of governance. Major shifts in the project in recent times have included the reform initiated in 2005, and the withdrawal of multinational oil companies in the 2000s. Viewing the industry as a project allows for continuous change to be part of our understanding of the industry, emphasising the extent to which it is a process rather than a structure. The project, and the industry, was not evolving or changing towards a particular goal or stage. Its movement does not represent a linear development path, nor do I think such a path exists for the industry. The project was on-going and fluid, as it responded to domestic political and economic circumstances, as well as international pressures and standards. The state, in charge of the industry, responded to immediate exigencies. These requirements could be lower petrol prices during elections or cap spending on the domestic refinery as an IMF-condition for financial support to the state. The combination of major shifts and immediate, political and economic, exigencies makes the lens of a political project applicable to the industry.

Traditionally, the Ghanaian state was behind the wheel of this political project. State-owned corporations were in charge of refining and distributing petroleum products. The largest Ghanaian marketing company (filling stations) was also state-owned. As this thesis will demonstrate, while the state remained dominant in a post-liberal reform period, private entrepreneurs have been changing the petroleum landscape over the last decade. Flows and blockages in the distribution, access and price of petroleum products were under constantly negotiation among Ghanaian politicians, the industry entrepreneurs, the IMF and different publics. As the industry was growing, relationships cultivated in building business gained importance for the flow of petroleum products. In other words, the politics of the project I describe does not refer to the state or a partisan political system exclusively. I take a more traditional anthropological approach to 'politics' to refer to ways in which people use categories

or narratives to pursue a certain goal or achieving power. I found there are various levels of 'politics' in Ghana's downstream industry which, taken together, constitute what I have called the politics of petrol.

The politics of petrol describes the way that petroleum products are distributed, traded and given meaning and significance in Ghana. It represents the way that downstream processes and markets work, and seeks to explain why flows or disruptions occur. The politics of petrol encapsulate various levels of political action, from providing subsidies at state level to ensuring security for smuggling operations at the border in Paga. It is an explanatory framework for understanding why the downstream industry in Ghana operates the way it does. It seeks to go beyond the closed doors of large infrastructural projects and informal markets, past assumptions of corruption and inefficiency, to see what specific political norms and practices play in the flow of petroleum products. People, institutions and debates are at heart of the politics of petrol; some victimised by it, others negotiating it, and all shaping it through their labour. A detailed discussion of the politics of petrol continues in the next chapter.

By looking at the industry as a project shaped by the specific Ghanaian politics of petrol, I arrive at a rather unconventional argument about oil. Following oil throughout the industry in Ghana, I experienced dynamics that suggested that petroleum products enable wider political participation. Petroleum products did not flow through the pipelines, the most efficient and cheapest way of transport, but were more often transported by trucks, trickling into various networks and markets on their way to the filling station. The people benefitting from these practices were truck-owning members of parliament that were able to access petroleum through their direct political influence. But also more diffuse communities depending on an informal petrol market that had political leverage through their role as petrol consumers and the impact that had on socioeconomic life. People acquired various forms of political influence through petroleum.

The thesis is an ethnographic examination of the people who make the wheels turn in the downstream petroleum industry. Throughout my empirical chapters, I demonstrate how petroleum products become and remain political. I demonstrate how the political project of oil has significance for the state, for state workers, for entrepreneurs and for the public. While immersed in hierarchies, the downstream petroleum industry offers various avenues of political participation – making the politics of petrol a broad concept applicable and useful for many Ghanaians.

Tracking Oil: Field Sites and Methodology

Field sites

I selected a set of field sites before commencing research in Ghana. I identified these field sites in order to see how petroleum products would flow from the oil refinery in the south, through state distribution chains (or otherwise), to markets in the north of Ghana. As table 0.3 shows, I started out in the capital of Ghana, Accra. Here I conducted my initial interviews with various oil companies, secured access to field sites in Tema and the North, and did some crucial networking with Ghanaian petrol entrepreneurs. On a day-to-day basis, I spent time in Naagamni's head office, where I learned the trade of oil-marketing through participant observation. This period was further used for interviews with the NPA in Accra, and fieldtrips with the NPA in Kumasi. The table below roughly explains field sites, time spent in those sites, and the main topics/type of research in which I was engaged.

Place	Time	Type of fieldwork
Accra	August-September 2013	Naagamni Office; Interviews; Networking.
Tema	September-December 2013	Tema Oil Refinery; OMCs offices.
Bolgatanga and Paga	January-April 2014	Yikene South Filling station; Smuggling
Buipe	April-July 2014	Petroleum storage depot; pipeline; Naagamni Buipe Office
Takoradi	October-December 2014	Interviews; trucks

Table 0.3: Fieldwork Timeline 2013-2014. Author (2014).

In 2011, prior to my first trip to Ghana, a fellow student at The University of Edinburgh introduced me to Sumaila, a Ghanaian petrol entrepreneur. Since then, I have worked closely with him and the staff of his company, Naagamni Oil Limited (hereafter Naagamni), to understand the workings of Ghana's downstream petroleum industry. Naagamni was one of the new OMCs that started operating after the reform, and Naagamni was particularly interesting due to its main large base of filling stations in the North of Ghana. Sumaila became one of my key informants, and I worked closely with him throughout my research. Sumaila introduced me to a handful of petrol-entrepreneurs that were very similar to himself. I draw on my interviews and participant observation with these entrepreneurs throughout my thesis, but keep their names and companies anonymous. Sumaila has given me the permission to use his name and company for my research, but at times I chose to anonymise his statements and operations as they can be regarded as politically sensitive.

My role at Naagamni, and the mentorship that I received from Sumaila, was crucial for my field research. First of all, it facilitated learning about industry structures, operations, allowing me to gather information and attend events with a company. These everyday business practices would have gone unnoticed if I had conducted this research without such a close affiliation with Naagamni. Secondly, being part of Naagamni gave me a much needed "in" to the industry, as I was often granted access and interviews to people and places through Sumaila's network. I was learning and collecting data at work, and therefore sought permission to work in the various field sites that I visited, mostly facilitated by Sumaila and his contacts. Throughout the thesis I therefore refer to situations 'at work', and while my productive purpose at these various workplaces in the industry was questionable, I aimed at becoming productive and learning some of the trade. The places where I was able to gain permission to 'work' was Tema Oil Refinery, Buipe petroleum storage depot, with NPA in Kumasi and Naagamni's various offices as well as Naagamni's filling station in Bolgatanga. For the remaining industry sites that are mentioned I collected data through traditional participant observation (i.e. at filling stations) and interviews.

Sumaila and I sought to maintain a reciprocal relationship, in which we both benefitted from the collaboration. Although I did not share my research findings –

and these were never demanded from Naagamni – I did regularly fulfil the function of a personal assistant. For example, in meeting with foreign contractors, my presence as an expatriate was considered advantageous. I would carry out small errands for him when I was in the northern region, or organise events in the office for which he did not have time. In many ways, I worked as an intern and was paid in contacts. He would introduce me to depot managers, public officials, political candidates and other petrol entrepreneurs. While I acknowledge that my collaboration with Sumaila and Naagamni may have influenced my research, however, I believe that this type of research would not have been possible without the connections they supplied.

From my initial fieldwork in Accra, I moved to Tema, where I spent time at Tema Oil Refinery and later at the office complex of OMCs and BDCs. Tema Oil Refinery was Ghana's only crude oil refinery, and the starting point for petroleum products distributed to Ghanaian filling stations. I worked mainly in the administrative building, but at times I was allowed to shadow the engineers and technicians during their daily routines. I looked at how people played their roles in keeping the machinery running, and in transferring petroleum products from the refinery to customers. I looked at the relationships between workers, officials and truck drivers, and I interviewed workers more closely about the legacy of the refinery, the discovery of oil and the politicisation of petroleum products.

I went on to spend time in the Naagamni office in Tema. Just across the road from the refinery was a large, multi-storey building with representatives from all of the OMCs and BDCs, as well as the NPA. This building was where administrative work was carried out for all the initial distribution of petroleum products — where purchases, invoices, receipts and loading papers were prepared and signed. More than that, it was the place where deals were made. In this building, the BDCs would scramble to sell their petroleum products to reliable OMCs; or in times of shortage, OMCs would reach out to the BDCs to buy.

While working in the Naagamni office in Tema, helping administer trucks for loading, I moved frequently between the office, the refinery and the private storage depots. This movement gave me a good overview of the Tema Heavy Industrial Area

(THIA), and a good sense of how things worked there. Because of the ongoing reform of the downstream industry, people were willing to talk about changes and practices that had undergone recent transformation. There was a lot of waiting: at the refinery, for the processing of paperwork, and in queues for the loading of petroleum products. The waiting provided a good environment to strike up conversations, or just listen to discussions and sometimes heated arguments. One of the most frequent topics of discussion, especially at the refinery, was the ability of Ghanaians to refine Jubilee oil. Chapter Two and Three examines Tema Oil Refinery and THIA respectively.

Following my fieldwork in Tema, I moved to Bolgatanga. Bolgatanga is the capital of the Upper East Region in Ghana, and I chose it for three reasons. Bolgtanga is home to Bolgatanga Storage Depot, the state-owned, decentralised storage depot located furthest to the north. Naagamni had a filling station in Bolgatanga. And finally, Bolgatanga is located close to the border town of Paga, where I did research on the smuggling of petrol from Ghana to Burkina Faso. My time in Bolgatanga was mostly spent hanging out and working as a filling station attendant at Naagamni's filling station. I persistently tried to gain access to the storage depot, without much success. Two days a week I would drive with my research assistant to Paga, where I would interview smugglers, border officials, local people and filling station managers. A couple of hours after arriving in Paga, my research assistant, who was mainly helping me with translations, left town, and I would hang out at a filling station or at the border area. The research in Bolgatanga greatly contributed to Chapter Six's examination of petrol price in Ghana.

Thereafter, I packed my motorbike and mattress on one of Naagamni's tanker trucks, and swapped the bustling town of Bolgatanga for the quiet town of Buipe. My foremost mode of transportation in Ghana was by truck. During the time I spent in Tema, I got to know many truck drivers. These friendships enabled comfortable rides from field site to field site, and when I needed to go somewhere (mostly Accra) for interviews. They also provided a great opportunity to conduct interviews with truck drivers, who are often made scapegoats in the industry, and accused of stealing petroleum products while transporting.

In Buipe, I finally got access to a state-owned petroleum storage depot. I was able to study the actual operation of the pipeline system, which had been obscured in convoluted rumours and guesswork thus far. I worked at the depot for most of my time in Buipe, but also spent time in the Naagamni office – then closed – interviewing informants in the town. From Buipe, I did further research on a pump station in Savelugu, as well as on the petroleum barges supposed to operate on Lake Volta. Towards the end of my time in Buipe, I fell sick and spent one month in the hospital. During my illness, a national petroleum shortage unfolded, and I had to collect data from newspapers, visitors and informant's diaries. Chapter Four examines the petroleum infrastructure, with data mainly collected in Buipe. Chapter Seven examines the national petroleum shortage.

The map below illustrates my different field sites and their geographical locations. Petroleum products and crude oil arrived at Tema. Both truck transport and pipeline systems were available to transport the product to the north. By conducting fieldwork at these various sites, I was able to understand the flows, disruptions, practices and relationships central to the politics of petrol.

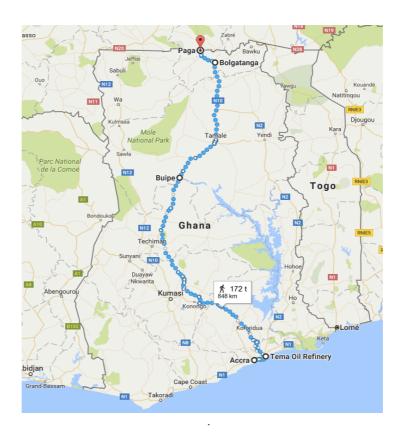


Image 0.4: Field Site Locations. Google Maps (2016).

After my main fieldwork was completed, and after my illness had been treated, I returned to Ghana's oil city, Takoradi. During my final three months, I mostly conducted interviews with oil companies – upstream and downstream. I spent some additional time at filling stations and did follow up interviews from my previous work. In the end, I conducted 15 months of fieldwork between August 2013 and December 2014.

Ethnography and Ethics

While I learned a lot from Naagamni and my cooperation with Sumaila, the core data upon which my argument is based draws on multi-sited fieldwork throughout the industry. Multi-sited ethnography is most often discussed in relation to George Marcus (1995), who argues that single-site intensive investigation is no longer sufficient for the study of certain social phenomena. He proposes a mobile

ethnography, which follows unexpected trajectories in order to "trace a cultural formation across and within multiple sites of activity" (Marcus, 1995, p. 96). Multisited and mobile ethnography may involve a spatially dispersed field through which the ethnographer moves, via sojourns in two or more places; or it may involve conceptual mobility, deploying techniques in the juxtaposition of data (Falzon, 2009, p. 2). This multisided and mobile approach enables the 'field' of research to be adjusted into the realities of our informants' lives (Hannerz, 2003, p. 212). Multisited ethnography have become productive in exploring not just the movement of informants, but also the movement of things or commodities (Appadurai, 1996). This allows scholars to address the making and maintenance of global commodity markets, and challenge the neoclassical hegemony that insists that markets operate according to mechanisms of universal economic rationality (Caliscan, 2010, p. xi).

However, there seems to be some disagreement among anthropologists about the usefulness of methodological strategies and research projects that hinge on several field sites. Ghassan Hage (2005, p. 466) argues that multi-sited ethnography leads to a tacit and assumed holism that fails to cover social relationships in-depth; and Matei Candea (2007, p. 168) argues that multi-sited fieldwork presents "limitless narrative possibilities," where the subjective researcher is more in charge of what and who "makes the cut". These critiques are indeed valid. I therefore do not seek to make an argument applicable to all actors in the downstream petroleum industry. I tell a particular story based in time and space, which considers my informant's realities. My relationship with Naagamni enabled a more in-depth perspective on social relations, and my mobile ethnography allowed me to track flows and processes that single-sited fieldwork might have left implicit.

My pool of informants was diverse. However, most of my informants were male, in their early thirties to late forties, and had basic education and/or technical certificates. I met most of my informants at work, either at the Naagamni office, at Tema oil refinery, at Buipe Storage depot, or at filling stations. I spent a significant amount of time building relationships, through everyday conversations, sharing meals, and providing information about myself as well as my aims for being in Ghana. These strategies helped me achieve good relationships with my key informants, but also opened new pools of informants; their friends, families, acquaintances and networks.

I found myself being taught lessons constantly, usually by older men who assumed that my understanding of industry and politics in Ghana was naïve. Many of their assumptions were rightly placed, but their paternalism also gave me a comfortable space as a curious researcher in an often secretive and contentious environment. This role further gave me access to the social relations that made up many important connections and practices in the industry. Placing a focus on mentorship often helped me downplay more difficult gender dynamics. Sites throughout the industry were male dominated, and masculinity was heavily emphasised in workplaces through conversations and jokes. While this masculine atmosphere at many sites provided challenges in terms of levels of comfort and safety, being a female researcher in this setting also had its advantages in terms of access to places and information. I was not perceived as a threat to my informants – which some stated explicitly, and others more subtly. Some people viewed me with suspicion at first, and negotiating my access was sometimes a long and tiresome process. However, in most cases, I was often successful in arguing that my presence would not harm anyone. Doing research in my field sites reflected not only my ambiguous status as a woman in a highly masculine field, but the general precariousness of women in the industry (with some exceptions – featured in Chapter Seven). Power relationships were gendered, and women were often hired only at the lower end of the pay scale, carrying out tasks that were not seen as crucial to the profit-generating machinery of the downstream industry.

The conditions of access to my field sites were also precarious aspect of the field experience. As I could not offer much productive benefit in my working environment, on the whole, and given that I was there through connections and favours from people with whom I had very short histories, I was constantly aware of my movements, behaviour and interactions. I have to assume that this was the same for my informants. After revealing to one of my informants in Paga – a filling station attendant – that I had started to understand how networks of smugglers and the political elite were connected, I received a young man on my doorstep in Bolgatanga threatening to feed me to the crocodiles (Chapter Six). My persistent attempts to get into Bolgatanga Storage depot were also relatively unfruitful, and I was there under false pretences for a short visit only (explained in Chapter Four). At the refinery, I

was frequently reminded by Sumaila not to 'screw up', as he was not overly confident in his position among the people he had asked for favours in order for me to be there. The precariousness of my access was an experience that very much impacted my day-to-day experience in the field, but also reflects the precarious nature of the systems and networks at play.

I wore the Naagamni hat when it was beneficial, such as in interactions with downstream industry business operators; and I took it off when communicating with agents of the state, international corporations or industry experts. I utilised my Norwegian nationality quite frequently in the field, often to gain access – sometimes directly through recommendations from the Norwegian ambassador, other times indirectly with companies that had received development assistance from Norway. This kind of help was not always productive, as some people were extremely careful with their wording, and my presence created a fraught environment. I normally cut these events short, took peoples' phone numbers, and contacted them after a while to meet them on our own terms out of the office. Other times, when I was not held to an official Norwegian status, it helped me engage in conversations, as people would be willing to talk about the Ghanaian industry in comparison to the Norwegian industry. Moreover, because some Norwegians – myself included – have a very pragmatic view of oil and oil extraction, this attitude helped me socialise with entrepreneurs and companies that did not want to talk about issues of environmental degradation or corruption caused by the oil industry.

Apart from with my main informants, where mentorships were developed, the use of a tape recorder was not possible. I would therefore keep my field diary in my motorbike, and as soon as I returned from an event or interview I would sketch out the main points, and write up more extensive field notes in the evenings. Conversations at certain field sites, or in separate meetings, tended to start out slowly, with me asking some awkward questions and my informants replying with an answer that they thought I wanted to hear. Only after I had indicated that I was "an insider", by sharing a piece of information about the industry, would the conversation flow easily and productively.

Given the ethnographic nature of my project, my foremost methodological tool was to build trust, relationships and networks over time. While having different field sites kept me mobile, it also allowed me to trace and understand my informants' movements, while demonstrating my willingness to follow the oil. In order to facilitate a continued relationship building process, I kept in touch with key informants on a weekly basis via phone-calls and social media applications.

Interviews and conversations in Ghana were conducted in English. I adapted different versions of Pidgin English when speaking (and texting) with some of my informants, and emphasised a formal accent when this was deemed necessary, such as with government officials in formal interviews. I worked up a basic knowledge of Twi, including everyday greetings, words to navigate the marketplace, and other basic necessities. The language lessons were useful as some of my informants viewed my efforts in learning the language as positive, which provided a springboard for connections and friendships. None of my interviews were carried out in Twi, however. In Buipe, I had language lessons in Gonja four times a week. The Gonja lessons provided me with the basics and helped me in the same fashion as my knowledge of Twi did. During my stay in the Upper West region, and while at the border between Ghana and Burkina Faso, I utilised a research assistant for language assistance and security. I undertook lessons in Frafra, but my fluency never reached a useful level, partly also because of the variety of languages that were used in this area.

While I tend to refer to the different towns and villages that I studied in Ghana, the multi-sitedness of this project expands beyond my mobility in-country. Since I started the PhD project in 2012, I have immersed myself in all oil-related activities that were available to me. I have taken a particular interest in my Norwegian friends and family who work on offshore rigs in the North Sea, I have attended oil and gas seminars in Norway and the UK, and I have gone to meetings of the Scottish Oil Club in Edinburgh. After fieldwork, I also started consulting as an expert on Ghana's oil and gas industry for a London-based consultancy firm. These roles and activities have been crucial in helping me to understand and reflect on the workings of this massive industry, and have helped me put my Ghanaian experience into perspective.

Chapter One The Politics of Petrol in Ghana

Introduction

This chapter lays out the building blocks of the thesis. First, I will explain what constitutes the politics of petrol in Ghana, before discussing the politicisation of petroleum products as it has developed alongside Ghana's political history and government policy. Many claims about the importance of the petroleum industry can only be understood within this historical and political framework, and the ways people ascribe meaning to industry and state based on past experiences. At the same time, the politicisation of petroleum products in Ghana is not just a phenomenon of the past but a continuous process. This chapter will go on to examine how petroleum products have been further politicised in Ghana's fourth republic, since its return to multi-party democracy in 1992 and until present day. Competition for state power has increased with the advent of democracy, and some scholars argue that the discovery of oil and gas have increased it even further – with the price of petroleum products becoming a key issue on which parties can collect votes. However, in the midst of the neoliberal reform of the downstream petroleum sector, these dynamics are not so straightforward. The politics of petrol examine various relationships and practices that enable political participation through petroleum products.

The Politics of Petrol

In its form, petrol is a product processed from crude oil, used as fuel for internal combustion engines. Its chemical composition varies on the blend stocks utilised at the refinery, as well as any other additives that have been added between leaving the refinery and entering the engine. However, petrol appropriates meaning beyond its technical capabilities. Petrol represents the energy that is crucial for movement and economic activity. It is the catalyst for a way of life that enables circulation of goods and people, and its absence usually indicates a lack of freedom or development. Throughout this thesis, I usually refer to petroleum products – which includes Petrol, Diesel, Kerosene and Liquefied Petroleum Gas (LPG), all obtainable from Ghanaian filling stations. In some instances, I refer to other petroleum products such as Premix,

the fuel for fishing boats; but I do not discuss marine oil, aviation fuel or gas oil for rigs and mines. These products were not prominent in my field sites, though they do account for a considerable portion of the national consumption of petroleum products in Ghana due to industrial activity (NPA, 2015).

In this sense, the 'politics of petrol' could as well be dubbed the politics of petroleum products. However, naming it the politics of petrol refers to the concept of petrol and signals the type of products that I mainly refer to; the most commonly-used, everyday products that facilitate flow, movement and productivity for the ordinary Ghanaian. These products include petrol and diesel for private and public transport, fuel for work-related purposes (agriculture, fishing, service-industry etc.), or gas for cooking. The politics of petrol refers to this category of products, on which most people rely for everyday movement and activity. These are also the products in which most Ghanaian oil companies trade, as other more specialised products operate on a contract basis and are served by one or a few specialised companies.

Politics, in relation to petroleum products, is an empirically complex and often fragmented term. I therefore spend some time in the next section elaborating on the ways that politics were constituted in my field sites, and specifically the ways that petroleum products were tied to notions of reciprocity. And it is through practices of reciprocity that the flow and pricing of petroleum products comes to facilitate political participation. Petroleum products are part and parcel of Ghanaian democracy, and this thesis sheds light on the relationships that materialise industry networks and practices.

"It's Political"

During my fieldwork in Ghana's downstream petroleum industry, I was frequently met with the same short answer to many of my questions: "it is political". If I asked, "Why is the refinery not refining?" or "why is there not an increase in petrol price this month?," from taxi drivers to oil professionals the same answer echoed: "it is political". My immediate response would be to enquire further; "how is it political?" or "who makes it political?" While some answers were more detailed than others, most people emphasised the way that certain processes or practices *worked*. The way

that petroleum products were traded or distributed were processes that resulted from obligations and hierarchies of which details were often invisible. The 'political' became an umbrella term for how and why practices were carried in the petroleum industry, that were not necessary obvious or logical to everyone, but that nevertheless made sense within the political frame of reference in Ghana.

My informants explained the way petrol was distributed or priced in terms of what they described as a "political relationship" between the government and the public. They further talked about relationships between political leaders and profitable networks in the industry. "Mahama [the President of Ghana] cannot afford to increase the price," was a common answer to questions about petrol price. "MPs [Members of Parliament] are into trucks now," one informant told me, explaining why the pipeline was not operating. These were statements that implied that the industry worked according to certain political dynamics. On one hand, the political leadership had to take into account the prices that ordinary Ghanaians had to pay for transport and food; and on the other hand, people suggested that politicians benefited from making sure the pipeline did not operate. Truck transport for petroleum products was subsidized in Ghana, which effectively subsidised petroleum products for the public, while enabling truck-owning politicians to take advantage of the broader subsidy policy for personal gain. People referred to these processes equally as 'political'.

The pricing of petroleum products in Ghana was supposed to follow an Automatic Pricing Formula, adopted as part of a larger petroleum sector reform. The pricing formula was implemented to enable adjustments in price according to fluctuations in international markets for crude oil and petroleum products. The rationale behind the notion of automatism was to insulate price determinations from political factors, relying on technical mechanisms to determine the price. However, the pricing was only loosely applied, and prices often responded instead to internal 'political' dynamics in Ghana – such as price increases in electricity and water, or national elections. These internal dynamics were crucial to the politics of petrol. However, Ghana's relationships with the International Monetary Fund (IMF) and the World Bank (WB) have interfered with these dynamics consistently since the 1980s. Financial institutions have promoted the removal of subsidies in Ghana's

downstream petroleum industry, and have experienced varied degrees of success.

Something being 'political' could mean that something was working particularly well, or in someone's advantage; but equally, calling something 'political' could serve as an explanation for something that was not working at all. The history of Ghanaian state involvement in the downstream industry, through subsidies and state-owned corporations, profoundly shaped markets and the opportunities they offered for private actors. The pressure to liberalise the industry and cap state spending on subsidies and infrastructure, emerging from the IMF and the WB, threatened to unsettle the mutual dependencies created by state interventions. The introduction of the financial institutions made the industry as a political project more sharply evident.

The political aspect of the downstream petroleum industry was discussed at every field site, in almost all interviews, and featured in all of my moments of wonderment recounting conversations, connections, places and people. I followed the routes of petroleum products and political connections throughout the intersections of the industry – and tried to account for the empirical use and understanding of the 'political'. The range of flows and blockages throughout the downstream petroleum industry, benefiting some and frustrating others, were useful intersections through which to discuss the 'political'.

'Politics' was not utilized solely to describe practices or events that fell within the realm of the state, politicians or institutions. 'Politics' was also used to describe relationships among individuals in the industry, and to account for business strategies that involved social obligations. Building a petrol business often included utilizing social ties and networks that expanded beyond the people who could provide licenses and construction permits from within the realm of formal institutions. Entrepreneurs had to rely on extended family relations for land purchases, extended networks for patronage at their filling stations, and still other relationships to secure reliable manpower. For successful entrepreneurs, these were important considerations, and the management of these social relations and networks were part of 'politics'.

'Politics' was also used when the reason for something was unknown, such as the sudden arrival of petroleum products or a petroleum shortage. If someone suspected that a dodgy deal had been made, maybe even theft or large-scale corruption, but

could not account for the specifics, they would describe it as 'politics'. Other times, people just did not have an explanation at all; and likewise, the anomaly was ascribed to 'politics'.

To account for this type of 'politics', I find it useful to revisit the legacy of classic political anthropology and the writings of the Manchester School. They viewed politics in terms of political structures such as political parties, local and regional assemblies, government and administrations; but they also included people's practices beyond such institutions. In his 1964 examination of how the Tonga utilized their manifold kinship links for political maneuvering. Jaap Van Velsen (1964, p. 3) adopts an understanding of politics that includes activities that fall outside of structures formally recognized as political. As a response to earlier anthropologists in the School (i.e., Gluckman, 1954, Bailey, 1960) - who wrote about politics and political relationships with reference to territorial groups and/or the integration of social units into forms of government to describe non-Western society – Van Velsen argued that political strategies and tactics could be found in mundane context of kinship relationships. Analyzing politics should include the way that people talk about politics, including deploying political strategies that may not have the ultimate goal of achieving power, but might have smaller goals depending on the context. Van Velsen (1964, p. 11) argued that understanding the apparent coexistence of order and chaos (in the absence of violence, which confused anthropologists and missionaries visiting the Tonga people at the time) required understanding the flexibility of relationships and continually shifting alignments between individuals and groups.

The Tonga political scene had a large number of pressure groups, geared towards influencing each other rather than a structural authority. Localized kinship units were part of the political system, and only by expanding the current understanding of 'politics' to go beyond the traditional realm of political relations did the order and chaos acquire meaning. My study of the politics of petrol in Ghana diverges substantially from traditional studies of societies in early anthropological work, as I do deal with centralized political institutions, nevertheless the significance that micro-politics took on in works like Van Velsen's still resonates with my approach. The politics of petrol includes the state, politicians, national and international

institutions, but exceeds this traditional notion of political life, to include traditional authorities, families, and a range of other social relationships and obligations tied into networks of reciprocity.

Christian Lund (2008, pp. 6-7) suggests a fruitful relationship between the Manchester school writers and poststructuralist views on the dynamics on the state (in particular post-colonial societies, i.e., Abrams, 1988; Ferguson, 1990; Comaroff, 2002; Das and Poole, 2004). His study of land and authority in Northern Ghana requires this extended understanding of local politics, drawing in public and private authority. Lund's (2008, 6) framework suggests four important points of departure. First, it is nonteleological, but nevertheless focused on history and the process of reproduction and change. Secondly, it is nonnormative, but *concerned* with people's norms, ideas and agendas. Thirdly, the approach does not privilege the state as a site of politics but nonetheless exhibits a keen interest in how the state, both as a set of institutions and ideas, conditions local politics in a broader field. Finally, a framework of investigation should pay attention to a particular issue or concern that is important, but the analysis should not be preordered according to specific theoretical concepts such as class, law or discourse. Instead, it is open to dynamic relationships between different processes, allowing for the contingency and complexity of sociopolitical processes.

The politics of petrol aims to take up such an approach. It aims to tap into the diversity of the national and local political scene. It recognizes the plurality, complexities and blurred boundaries of the state (Gupta, 1995; Aretxaga, 2003), and sees the state not as a coherent institution but rather a form of public authority that amalgamates the power of a variety of institutions and external impositions (Lund 2008, 8). The state becomes important in the politics of petrol as an idea (Abrams 1988), but also through everyday practices (Bierschenk and Oliver De Sardan, 1997; 2003) – on both a national level (through, i.e., the control of petrol price) and a local level (through the control or absence thereof in regulating filling stations). While the state and institutional actions can be seen as mitigated, erratic and even futile (Lund 2008, p. 5), local politics does not exclude the very important role that state and party politics have in Ghana.

Similarly, Paul Nugent (2010) has called for a reinvestigation of social contracts in Africa. He argues that anthropological work on the state has demonstrated that despite everyday corruption and chronic inefficiency, there is a deep-seated attachment to bureaucratic rule and behavior in some African states. Institutions in Africa are not elaborate fictions or a cover for something else; rather, they inform the behavior of state actors and non-state actors alike in fundamental ways (Nugent, 2010, p. 37). Nugent argues that structural adjustment programmes in the 1980s and 1990s put a strain on the social contract in Ghana, and that it made politics more about personalities than policies. However, Ghanaian leaders - and Jerry John Rawlings in particular – managed to mitigate this strain (Nugent, 2010, p. 58). Nugent highlight three types of social contracts: coercive, productive and permissive. The permissive social contract is useful to draw upon in regards to Ghana's downstream petroleum industry. The permissive social contract is characterized as governing authority claiming its sovereign right, while choosing not to exercise all of them, in return for de facto compliance. This strategy does not undermine state power but is considered as a deal that the governing authority could renege upon at any point. The strength of permissive social contracts is that it cut both ways, rulers can be less accountable in return for not harassing the population (Nugent, 2010, p.44). Subsidies on petroleum products, operation of infrastructure and distribution networks throughout the industry will provide empirical evidence for how this type of social contract materializes.

While not downplaying the role of the state and institutions in Ghana, I seek to include other types of political manifestations to make sense of the industry. Jonathan Spencer (1997) advocated for a radically empirical approach to post-colonial politics that acknowledges the diversity of post-colonial experience and the unpredictable contours of what different people take politics to be. He (Spencer, 1997, p. 5) critiques the development of political anthropology for its focus on "the primordial" and its reluctance to account for the complexities of existing politics. He claims the sub-discipline died of boredom around 1970 as it was reduced to microstudies of instrumental behavior, with a disciplinary divide between "action theorists" and "thought structuralists". Subsequently, there has been an enthusiasm in political anthropology for an analytical focus on "power". This work has derived from the

later work of Michel Foucault, but Spencer (1997, p. 13) argues that "[...] 'power' is at once a new source of premature analytical certainty, easily as impressive and encompassing as those earlier certainties from the 1940s, 1950s and 1960s [...], and a term of such theoretical looseness as to admit everything – and nothing" (see also Sahlins, 1993).

The study of the politics of petrol in Ghana takes this empirical approach to 'politics' and delves into the multiplicity of encounters, claims and relationships that were made significant in the industry. I explain how 'politics' was empirically unpredictable, and how this unpredictability could be productive in its own right. To examine this possibility, I attend the areas and spaces of everyday life that people referred to as 'political'. I examine the relationships that people claimed to have with the state as well other non-state political relationships. With this method I examine how petroleum products have become productive in giving people a way to participate in Ghana's democracy. Pricing, distribution, trading and smuggling petroleum products tie people together in productive ways. 'Politics' has become the expression of these dynamics, and the demand for petroleum products facilitates multiple levels of participation in the Ghanaian political landscape.

The Politicisation of Petroleum Products in Ghana

Legacies: Affordable Petrol and State Control

The Republic of Ghana gained its independence from Britain on 6 March, 1957. The first Prime Minister and President of Ghana, Kwame Nkrumah, a hugely influential pan-Africanist and socialist leader, undertook a massive state-led development programme. One of the projects he realized was the construction of Tema Oil Refinery. Building the refinery was part of a larger industrial expansion in Nkrumah's developmental vision for Ghana. According to Nkrumah, building an oil refinery mitigated one of the major problems that newly independent developing nations faced: that of energy imperialism. Being able to refine crude oil was a step towards energy security and independence, being able to supply Ghanaians and the Ghanaian economy with fuel "made in Ghana".

Nkrumah and the Convention People's Party (CPP) saw socialism as a superior method of decolonising, industrialising and modernising the newly independent state. State-owned enterprises became dominant in most productive economic sectors. Development projects were undertaken with the state as the main actor, with the aim of capturing economies of scale, improving techniques of production and creating activity in less profitable and high-risk sectors. These projects were regionally spread, to create employment on a large scale and to benefit Ghanaian consumers through lower commodity prices (Killick 1978, pp. 216-217). Nkrumah was on a quest for broad political support, and received it. He was elevated to the position of a national hero, endowed with semi-mythical charismatic powers (Pellow and Chazan, 1986, p. 29). Nkrumah's continued significance as a national symbol was made relevant at Tema Oil Refinery, examined in Chapter Two.

The economic policies inaugurated by the CPP have been referred to in Ghanaian studies as "the big push" (Rimmer, 1992, p. 91), terminology derived from development economics language at the time. The general scholarly consensus is that there was an urgency in which Nkrumah had to materialise his vision, based on promises to the Ghanaian people and his loyal party members (Killick, 1978, p. 217; Frimpong-Ansah, 1991, p. 75; Tangri, 1991, p. 526). By 1966, when Nkrumah was overthrown in a military coup d'état, he had established 53 state-owned enterprises, 12 public-private enterprises, and 23 public boards (Tangri, 1991, p. 524). After 1960, around 50 per cent of the formal Ghanaian labour force were employed by the state (Herbst, 1993, p. 96), in enterprises that enjoyed a favourable market monopoly (Killick, 1978, p. 221). AGIP Ghana Limited was established in 1960 for retail of petroleum products. The Ghanaian-Italian partnership constructed filling station across the country. This extended the reach of petroleum products that had previously only been in retail by multinational companies. Although Nkrumah's popularity faded by 1961/62, Nkrumah's legacy lingered in the political atmosphere for decades after his removal, as successive military and civilian governments met stark opposition among the Ghanaian people when attempting to privatise state enterprises that Nkrumah had established (Tangri, 1999, p. 88).

The grandiose scale of the CPP's industrialisation plans for Ghana meant that some projects had to be carried out with foreign direct investment and partnerships. While

Nkrumah claimed to be "deeply suspicious of foreign capital" (Nkrumah 1963b, p. 167), some projects were out of reach for the newly independent country. The Volta River Project has attracted considerably scholarly attention as one of the modernisation projects that Nkrumah facilitated with foreign partnerships. It included a hydroelectric dam across the Volta River, an aluminium smelter, electrical transmission lines, the resettlement of 78 000 people, and the creation of a model city: Akosombo Township. The project was built on promises of rapid industrialisation and electrification. However, in the end, Akosombo Dam served mainly as a cheap power source for a multinational aluminium industry (Miescher, 2012, p. 367).

Paul Kuruk (1991, p. 43) argues that the urgency of bringing electricity to Ghana led to the signing of an investment agreement that gave American companies extremely generous concessions. Bauxite found in Ghana was complicated to transform and Valco feared prospects of future expropriation. Therefore, bauxite reserves in Ghana were not developed for processing at the aluminium smelter. Instead, bauxite was transported from Jamaica through private shipping companies. Even the construction and operation materials for Valco, the aluminium smelter, were sourced from abroad, though local substitutes were available (Kuruk, 1991, p. 51). The aluminium venture became an enclave industry with access to cheap electricity, reflecting current trends of aluminium production in developing countries at the time (Graham, 1982).

In the same vein, the oil refinery needed capital and partnerships in order to materialise. The primary beneficiary of the oil refinery was the Italian oil company that constructed and operated it, and the multinational oil companies and Goil marketing petroleum products throughout Ghana. This arrangement provided a cheaper option than importing petroleum products, and Shell in particular was able to capture profits by importing from their own extraction operations in the Niger Delta.

The consensus in the literature is that Nkrumah's grand economic policies, with and without foreign partnerships, were capitalistically unsuccessful, leaving permanent scars on the country's economic and political institutions. However, his vision of industrialisation and development for Ghana, along with his grandiose employment strategy in the public sector, makes him a popular figure in the Ghanaian public discourse today. Tony Killick's (1978) careful analysis of the economics of

Nkrumah's development plan downplays the role of corruption. Others have emphasised it greatly. Henry Bretton (1967, p. 66) argues that Nkrumah and his political machinery used state funds for private purposes. Victor Levine (1975, p. 50) refers to a "culture of corruption" penetrating the political environment of the time, and argues that state ventures were set up to cater for corruption among the political elite.

The main critiques of state ventures focused on over-staffing and poor planning. Projects were chosen based on their grandiose nature, and many factories failed due to geographical and market miscalculations. In 1968, the State Fishing Corporation had 435 seagoing personnel on the payroll, but no vessel. The human resource department of the State Fishing Corporation had 53 employees while the accounting department had 37 employees. The mining sector had similar problems. Gold mines that were prepared for closure by private companies were bought by the state. Subsequently, 15 000 miners were hired to mine (Killick, 1978, p. 237).

Nkrumah was overthrown in a military coup d'état in 1966. The new National Liberation Council dissolved parliament and all political parties. In 1969, civilian rule returned with the election of President Kofi Busia and the Progress Party. Nkrumah's successors emphasised the importance of the private sector and attempted to sell several state enterprises. Their efforts were met with public outcry and demonstrations (Tangri 1991, p. 528), resulting in a reverse strategy: creating new public enterprises with the aim of safeguarding consumer interests (Danso, 1992, p. 342; Frimpong-Ansah 1999, pp. 101-102). Busia was overthrown in a new military coup d'état in 1972. General Achempong, his successor, turned against Busia's failed privatisation attempts and emphasised a return to the old model, not for the sake of socialism, but in the name of self-reliance. As such, Nkrumah's strategy for popular support influenced successive governments, and provided well-paid employment and lucrative deals for the political elite through heavily subsidised state employment (Rimmer, 1992, p. 222).

As with many of the state enterprises, the oil refinery did not live up to the vision set out by Nkrumah. When the Government of Ghana took over the refinery in 1977 (and Goil in 1974), the economic and political climate in Ghana was unstable.

Frequent coup d'états reversed on-going economic strategies (Pellow and Chazan, 1986, p. 36), ramped up corruption and mismanagement in the state apparatus (Killick, 1978), and led to a proliferation of the black market and parallel economies (Smilie, 1986) including petroleum products. Nkrumah's legacy led successive governments to target short-term economic improvement above all, and they failed to adopt long-term plans for restructuring the economy (Jeong, 1998).

While there have been a number of military coup d'états in Ghana's political history, the military leader with the largest impact was Flight Lieutenant Jerry John Rawlings. Rawlings carried out his first coup d'état in 1979, but handed over to a civilian government shortly after. He returned with his second coup d'état in 1981, and stayed in power for the next 19 years, first as the military leader of the Provisional National Defence Council (PNDC), and later as the leader of the elected National Democratic Congress (NDC). Nugent (1995) argues that the failure of Big Men in Ghanaian politics to fulfil their part of the social contract – evident in years of general misery and poverty – ultimately led to the welcomed revolution of President Rawlings and the PNDC. Rawlings and the PNDC were seen as anti-capitalist, and prosecuted and terrorised business owners as enemies of the state (Tangri 1992, p. 99). Eboe Hutchful (2002) and Peter Arthur (2002) have argued that the political elite of the PNDC were not in favour of private capitalism, but ideologically inclined toward state-led economic development. Others scholars have emphasised the ability of a strong private sector to lead a counter coup d'état (Tangri, 1992), and the PNDC's preference to join forces with foreign capital at the expense of domestic capitalists have been linked to attempts to exclude the accumulative ability of political rivals (Whitfield 2011, p. 18).

Both military and civilian governments throughout these turbulent decades saw the oil refinery specifically as an important asset. The refinery could provide the state apparatus with fuel, and help control the price of fuel for Ghanaian consumers. Rawlings kept a close eye on spending at the refinery, and was of the opinion that if the refinery were not in full operation, there was no need to pay the workers. The history of engineers' strikes at the plant made Rawlings station soldiers there, to make sure they could not disrupt the efficiency of the PNDC government (McGough 1999, p. 20). The workers' union at the refinery had remained strong, and the

workers' technical ability to produce petroleum products had given leverage against lack of payment and other challenges that had kept them in conflict with the government at times of downscaling or financial strain.

As the Ghanaian economy was on the verge of collapse in the early 1980s, Rawlings accepted a bailout in the form of Structural Adjustment Programmes (SAPs) from the Bretton Woods institutions. These financial arrangements have shaped economic development since, and shaped policies in the petroleum industry in particular. The IMF has specifically targeted Tema Oil Refinery by requiring caps in spending as well as urging the Ghanaian government to privatise the refinery. While the IMF has been successful in many of their policy recommendations in Ghana, calls to privatise Tema Oil Refinery have gone unheeded. Avoiding privatisation suggests a high importance of the refinery for the government, something that workers drew upon during my fieldwork there. The petroleum industry as a whole has experienced several attempts at reform, and the IMF has continued to advocate for a removal of subsidies on petroleum products.

The Economic Recovery Programme was launched in 1983, followed by an ambitious State-Owned Enterprise Reform Programme in 1988. The latter focused on the improvement of state enterprises with the aim of privatising them either in part or in their entirety (Adei, 2011, p. 17). The first year of the reform yielded diminutive results, because only a few, less attractive state enterprises were put up for privatisation (Tangri, 1991, p. 526). The privatisation of state assets met public resistance in Ghana due to the large-scale layoffs in public sector. Privatisation became associated with assets sold cheaply to political patrons or foreign companies. The oil refinery, along with its energy counterparts in the Volta River Authority, the Electricity Corporation of Ghana, Ghana's National Petroleum Corporation and Goil, were marked as strategic enterprises by the Ghanaian government. Structural Adjustment Programmes did not affect these strategic enterprises because they were important for the operation of the state in terms of providing basic public services. In the early 1990s, the state initiated new projects in the petroleum sector. Bulk Oil Storage and Transportation Company Limited (BOST) was established in 1993 as the state company mandated to distribute petroleum products. Corporations and loans were provided from South Korea and construction projects such as pipelines and decentralised petroleum storage depots were commenced.

William Adda (1994), the former Chairman of the State Enterprise Commission, explains that the privatisation of state enterprises has been challenging in Ghana. He explains that they have become a major strain on the government budget, and that they hardly contribute anything through taxation. But while most of them incur financial losses, they are viewed as critical for the main economic infrastructure of the state. He (1994, p. 24) notes that the major problem with privatisation had been the public hostility to it. The public hostility can be seen as responses to privatisation that had been undertaking without yielding very good results for the public, leading to well-connected individuals benefitting.

The Bretton Woods institutions demanded reform: macroeconomic policies promoting fiscal discipline, changes to taxation, competitive exchange rates, more efficient public spending, privatisation and deregulation (Crisp and Kelly, 1999). The adjustment programmes were expected to catapult economies into a higher growth trajectory, and Ghana has been touted as one of the success stories of this approach. Kwadwo Konadu-Agyemang (2000, p. 474) has argued that SAPs rescued Ghana's economy from "complete collapse". Ghana's economy experienced a rapid growth after initiating SAPs, mainly from the privatisation of export industries such as timber, gold, diamonds and bauxite (Ayree, 2001; Hutchful 2002, p. 79).

While Ghana has been promoted as a success story by the financial institutions, scholars have shed light on the hardship that Ghanaians experienced during the SAPs, and the impact SAPs had on markets, economic livelihoods and socio-cultural dynamics. There were massive lay-offs in the public sector, but private sector employees also lost their jobs as a result of import liberalisation (Weissman 1990, p. 1626). Farmers experienced strong competition from an increasing number of private firms (Chalfin, 2004), and the rural wage economy deteriorated with inflation (Puplampu, 1999). Ragnhild Overå (2007) points out that Ghanaian industrialisation employed mostly men in the state industries, and when these men were laid off, they ventured into traditional female spaces such as the urban informal economy. Gavin

Hilson and Clive Potter (2005) have demonstrated how artisanal gold miners, while paying taxes, have become marginalised by the government's adherence to SAPs.

As such, there is no lack of evidence regarding the hardship and dismay that SAPs have caused many Ghanaians. The way that SAPs were carried out, according to Nugent (2007, p. 270) – with the political elite taking up positions in newly privatised companies and reformed industries – furthered a widespread sense of inequality among Ghanaian citizens, as the political elite enjoyed unforeseen possibilities for private accumulation. During the Rawlings regime, the price of petrol remained subsidised, and was only adjusted once a year. The hardship experienced by the Ghanaian public did not leave room for increased prices of petroleum products that would lead to increased prices in transport and food.

The years from Nkrumah to Rawlings left influential legacies in what constitutes the contemporary politics of petrol. It institutionalised the idea that petrol should be affordable for Ghanaians, measured against other socio-economic realities particularly during the structural adjustment period. It further institutionalised state control of the petrol industry, which against an international oil industry could hamper the cost of petroleum products for Ghanaians. Petroleum corporations like other public sector entities, generated substantial employment and when the petroleum sector corporations was protected against structural adjustment reform, it reinforced the sense of political importance. These are legacies that remain important, implicit dimensions in the 'political' in Ghana's downstream petroleum industry.

The Fourth Republic: Competition, Elections and Reform

Ten years after he seized power over the state by military force, Rawlings began the process of returning it to multi-party elections and democracy. He established the National Democratic Congress (NDC), and won elections both in 1992 and 1996. The first change in government for two decades came with the election of John Kufour of the National Patriotic Party (NPP) in 2000. Kufour stayed in power for eight years, before John Atta Mills for the NDC won the 2008 election. Atta Mills' death in 2012 transferred power to NDCs vice president John Dramani Mahama, who proceeded to win the subsequent election in 2012. The presidential election in 2016

saw yet another transfer of power with the third time contesting NPP leader Nana Akuffo Addo.

Voting patterns in Ghana confirm the unpredictability of support for Ghana's political elite. While some regions are seen as strongholds for a specific party, most regions can be classified as swing-states (particularly the southern ones). The NDC is known to embody an ideology of social inclusion, and is populist and left wing, while the NPP have a more liberal democratic right-wing affiliation, and are seen as elitist and ethnically exclusive. While the NDC traditionally have a stronghold in the three Northern regions, as well as among the Ewes in the Volta Region (Rawlings is Ewe), the NPP traditionally has a stronghold in Ashanti and the eastern region (Jockers et al., 2009, p. 95). However, these strongholds are being challenged, and an increasing number of regions in Ghana are shifting allegiances, increasing the competition and cost of political campaigning (Whitfield, 2009, pp. 628-632). According to Whitfield (2009, p. 636), NPP lost its stronghold in the central region – amongst others – in the 2008 elections, due to increased prices of premix fuel for fishermen as well as difficulties controlling foreign fishing vessels off the coast, which severely affected coastal livelihoods. While NPP reduced fuel prices across the board before the election, the knock-on effect of earlier increases on food, transport and utilities were not reduced. The NDC campaigned on these developments, and presidential candidate Atta Mills promised to reduce fuel prices if elected. He was elected as president in 2008. Chapter Six examines the details of petroleum prices throughout the 2000s, as they continued to be impacted by elections.

Much of the literature produced on Ghana's fourth republic has been aligned with political settlement theory. Khan (2010) defines political settlement as the distribution of power in a society, and its embeddedness in institutional arrangements that sustain it. This framework has been used to look at Ghana's contemporary and historical coalitions as well as the characteristics of domestic productive entrepreneurs – together viewed as a "political settlement" that motivates the state to support the development of the domestic productive sector (Whitfield 2011, p. 9). I draw on these studies here as they help show important dynamics in Ghana's contemporary political landscape and industrial policies, as well as speaking to the continued politicisation of petroleum products.

The type of political settlement described in Ghana is widely accepted to be one of "competitive clientlism" (Whitfield, 2011, p. 10): a two-party system and growing political polarization with institutions that are shaped and sustained by patronage (Oduro et al., 2014). Although Ghana has been hailed for its democratic progression, and passed Samuel Huntington's (1993) two-turnover test, scholars looking at the political settlement in Ghana argue that the multi-party system has become increasingly dependent on patron-client networks, and that the increasingly competitive electoral process has led governing parties and elites to promise to satisfy short term socio-economic needs for voters – which coincides with the parties' short-term need for political survival (Carbone, 2012; Whitfield, 2011; Oduro et al., 2014). It is further argued that the discovery of oil is fuelling this system, as the stakes of the state continue to grow alongside the development of the domestic oil industry (Whitfield 2011, p. 39).

The political settlement of Ghana's fourth republic is seen in the literature as not conductive to structural changes for the purpose of improving the productive capacity of the economy. Lindsay Whitfield (2011, p. 10) argues that the PDNC under Rawlings had the ability to undertake economic reforms, which preceding and later governments have been unwilling or unable to take. The PNDC relied on a broad political settlement, according to Whitfield, with authority centralised and concentrated around Rawlings. Resistance to economic reform within the ruling coalition was weakened, and a political strategy to use PNDC patrons in new privatised industries through cooperation with foreign capital limited the political opposition more broadly (including domestic entrepreneurs). The highly competitive nature of Ghana's democracy limited the political settlement and made the political elite more extractive according to political settlement scholars.

Hickey et al., (2015) has examined the impact of the competitive clientlistism of Ghana's political settlement regarding the discovery of oil. They suggest that the NPP had a "quick and dirty" approach to the development of the Jubilee Field, due to the need for cash in the party structures. Allowing a foreign oil company to search for oil and gas provided some much needed capital for a party looking to stay in power, and fund an expensive electoral campaign. This liberal attitude was supported by a report from the World Bank (2010) and interviews in Accra with senior oil

bureaucrats, who claimed that supportive institutions to deal with the oil industry were barely operating at the time of 'first oil' in 2010 (Hickey et al., 2015, p. 9). Further allegations have been made against the EO group that initially had a stake in the Jubilee-Field as it was seen as a front for President Kufour.

Hickey et al., (2015, pp. 17-19) also point out how competition between the PNDC/the NDC and the NPP has affected the operations of GNPC. From the early 1980s, the GNPC was operated directly by the PNDC, who made the GNPC an industry regulator as well as a commercial entity under the 1983 GNPC law. This arrangement made the GNPC the most powerful organisation in upstream and downstream operations, justified through an ideological lens of resource nationalism and state-led development. Tsatsu Tsikata, a close friend and ally of President Rawlings, ran the GNPC. At the time, no commercially viable oil deposits had been discovered, and Tsikata diversified the GNPCs capital to invest in telecommunications and farms. Darko Opoku (2010) argues that Tsikata and Rawlings were using the GNPC as a personal vehicle for accumulating wealth through various projects. Moreover, according to Hickey et al. (2015, p. 17), the GNPC and the PNDC had developed close ties in terms of operation style, producing what was very much a state-led nationalist oil industry, and hiring an extensive workforce.

The close ties between GNPC and the Rawlings government increased incentives for the NPP to restructure the GNPC when they came to power. A downsizing exercise saw 9 out of 10 GNPC employees removed (Hickey et al., 2015, p. 18). Private capital was injected, and the GNPC was transformed into an upstream operator in 2002, removing its regulatory powers for both upstream and downstream sectors. These changes in operational focus and willingness to cooperate with foreign oil exploring companies, some argue, led to the discovery of the Jubilee Field. However, when the NDC came to power again in 2008, the GNPC saw heavy investment in recruitment and capacity-building projects, with Tsikata returning as an advisor for President John Atta Mills.

Scholars have commented on the importance of taking part in political life in Ghana through party politics, as it is seen as a source of economic empowerment on an

individual level. Among both the NPP and the NDC, a rentier system of mutual expectations exists, in which patrons distribute resources in return for political support (Oduro et al., 2014, p. 10). Further rent seeking is prevalent between Ghana's ruling and bureaucratic elite, and patronage in the public sector and among state-owned enterprises is common (Gyimah-Boadi, 2010). While there is a lot of secrecy connected to the funding of political parties in Ghana (Ayee et al., 2007), as elsewhere, the competitiveness of the elections makes parties dependent on powerful business actors to fund electoral campaigns. In return, these business actors have been awarded with state contracts (Oduro et al., 2014, p. 15).

Political settlement scholars argue that such patron-client networks and personalised political strategies undermine state institutions and ministries, creating bureaucracies and institutions without much power. They claim that this have resulted in a practice were the work conducted by bureaucrats – such as, for example, implementing policies – has been replaced by politically feasible alternatives for fear of losing political power. To demonstrate this argument, they provide evidence from the downstream petroleum industry – pointing out that the NPA is supposed to be an independent institution, but that the price of petroleum products is regulated according to the political climate (Oduro et al., 2014, p. 18).

Political settlement scholars (Whitfield 2009; 2011; Hickey et al., 2015; Oduro et al., 2014) agree that the discovery of oil and gas has increased the stakes and competition in Ghana's 'all or nothing' democracy. They argue that oil money is likely to facilitate a clientilistic, short-term political strategy. Hickey et al. (2015, p. 25) comment on how international oil companies have become aware of these trends, and therefore seek out political powerhouses directly while circumventing what they see as bureaucratic roadblocks – the institutions set up to run the oil and gas industry. The political settlement scholar's claim regarding Ghana's oil industry, however, does not have sufficient empirical evidence in the studies produced so far, and I would hesitate to agree with such an argument. Petroleum institutions in Ghana do have the mandate and power to regulate and monitor their sectors, and while some evidence might suggest that some arrangements have been made in alternative ways, it does not delegitimise these institutions completely. An ethnographic approach to understanding state institutions beyond a political settlement perspective will account

for Ghanaian sociality and political processes, as well as social contracts that extend beyond political parties to be accounted for. This in turn will provide a more nuanced understanding of Ghana's petroleum industry.

Scholars of the political settlement make certain easy conclusions without sufficient evidence, and therefore fall short in explaining the dynamics of Ghana's political institutions. While their observations are useful, they tend to dismiss the authority of Ghanaian state institutions exercise in their realm as well as public influence on such state institutions. Regarding the petroleum industry, political settlement scholars make two main contributions: first, that the discovery of oil and gas has increased the stakes for the state and lowered the prospects of long-term development due to party-political competition; and secondly, that institutions such as the NPA lack the political independence to carry out policies in a coherent manner, as populist measures have been prioritised to avoid public scrutiny and to hold on to power. I would argue that the discovery of oil and gas adds to the complexities of Ghana's petroleum industry and that popular priorities overriding state policies can embody important relationships and practices that also can generate development. Political independent institutions do not automatically bring about prosperity.

While the politicisation of petroleum products has been a key issue in Ghanaian elections in the fourth republic, this reality does not dismiss the role of institutions such as the NPA. The politics of petrol has to be seen in relation to a longer political history of price and access to petroleum products, state involvement in the petroleum industry, the reforms through the international financial institutions, the current competitive electoral system, and the Ghanaian social contract. There is no clear-cut answer to how petroleum products become political in contemporary Ghana; but it helps us understand how and why political claims are made, and why petroleum products have become important in multifaceted ways in Ghana's democracy.

Oil, State and Society

Thus far, I have written about petroleum products and the 'political', and suggested that politicization of petrol facilitates forms of political participation. The thesis will explore these practices and relationships in greater detail; but first, it is necessary to

place this study within the field of research on oil and oil-states in sub-Saharan Africa. In this section, I will argue against the influential legacy of the Resource Curse thesis, which suggests a correlation between oil reserves and autocratic regimes, civil conflict and regressive economic development (e.g. Collier, 2007; Ross, 2012). In fact, when looking at petroleum products and the politics of petrol in Ghana, I suggest that petroleum can be an important part of the social and political fabric, something that constitutes the state or the political system, rather than destroying it. I argue that the politics of petrol provide a far more nuanced and empirical way of understanding the impact of hydrocarbons. Petroleum products are part of the social contract in Ghana. This perspective places my work closer to ethnographies that incorporate an historical and broad political analysis of oil and development.

In African studies, few topics have generated more scholarship and debate than the state in Africa. Functionalist theories of postcolonial African states have dominated debates. This framework has left a legacy of scholarship focused on explaining the logic of weak, corrupt and predatory political systems, failing to preform core Weberian state functions. The most notable analyses produced out of these debates include descriptions of 'failed states' (Helman and Ratner, 1993; Chabal and Daloz, 1999; Rotberg, 2002; 2004), 'collapsed states' (Zartman, 1995), 'criminalised states' (Bayart, 1993), and 'shadow states' (Reno, 1995). A core tenet in these theories has looked at the emergence of (neo)patrimonial and clientilistic politics (Mkandawire, 2015), while mostly neglecting political process, and assuming a predatory or distributional aim in appropriation of power rather than a developmental one (DiJohn, 2011).

The same can be said for studies on oil in sub-Saharan Africa, which use a strikingly similar analytical lens to studies influenced by the failed states thesis. The African state has been the main subject of analysis in the study of oil extraction, theorising how politicians feed on the riches of oil resources, leaving their populations to starve. The most-discussed strand of scholarship in reference to oil and its impacts on the state falls under the 'resource curse' debate (Auty, 1993) also analysed as the 'paradox of plenty' (Karl 1997; 1999). These debates discuss natural resource rents' relationship and influence on the economy in general (for Dutch Disease, see Cordan

and Neary, 1982; Larsen, 2006; Humpreys et al., 2007). But more specifically, these debates are preoccupied with the presence of rents in relation to corruption, authoritarian government, conflict, reversed development, and weak or fragile states. The core tenet of the 'resource curse' argument is that, despite large revenue earnings from an abundance of natural resources, profits have not translated into economic growth and stable political institutions (Auty, 1993; Ross, 1999; Rosser, 2006; Collier, 2007; Ross 2012). Rather, natural resource-dependent countries have lower development rates than countries without natural resources, often in relation to non-democratic leadership and rent-seeking behaviour (Sachs and Warner 1995, 1997, 2001; Collier and Hoeffler 2004; Auty 2004; Ross 2012).

The 'resource curse' or the 'oil curse' (Ross, 2012) suggests a form of commodity determinism. The focus has been primarily on the various ways in which oil resources, turned into oil money, diminish chances for a positive economic and democratic development in sub-Saharan African states. Michael Watts (2012, p. 438) points out that in the world of 'resource curse' scholars, the focus is overwhelmingly on states which obscures the role of multinational companies like Shell and Exxon in setting the terms of the industry. Several scholars, including Watts, have contributed to our understanding of the role of multinational oil companies and their impact and advantage in sub-Saharan African industries (i.e. Frynas, 1999; Ferguson, 2005; Obi, 2010; Appel, 2012).

While accounting for multinational oil companies – often referred to as Big Oil – and their impact on sub-Saharan African industries is important, it can generate another form of determinism: a tendency to represent African states as weak and without agency. A range of scholars have been concerned with the "scramble for African oil," reflecting African states' weaknesses in the petroleum industry (i.e. Yates, 1996; 2012; Saxon, 2007; Southall and Melber, 2009). This body of work often builds on the argument represented in James Ferguson's (2006) study of Africa's place in the neoliberal world, and the increased presence of new global consumers such as India and China (Klare and Volman, 2006; Ghazvinan, 2007; Clark, 2008; Southall, 2009). The rising global demand for natural resources, and oil in particular, has left scholars to argue that Africa has become subject to a new phase of imperialism (Southall and Melber 2009, p. 2), with colonial patterns of investment (Yates, 2012, p. 13).

Threads of the resource curse thesis and the Scramble for African oil discourse have led to important contributions and understandings of petroleum resources, power relations, rents and states. They have, however, also left legacies that seem to be hard to shake for new studies on oil and gas in sub-Saharan Africa. They focus primarily on oil as money, and thereby leave out the infrastructure and people required to turn oil into money or petroleum products. As much as this is a shortfall in the literature, it is doubtless related to the fact that there is an infamous culture of secrecy and information sequestration in the industry (Yergin, 1991; Bowker, 1994; Rosenblum and Maples, 2009).

The most productive critiques of the 'resource curse' seek new methods of studying oil and gas, such as Michael Watts' (2012) "oil assemblages", Gavin Bridge's (2008) "Global Production Networks", and Timothy Mitchell's (2011) "Carbon Democracy". These studies account for and analyse important realities that have been missing in discussions of the impact of oil on states and societies. They pay attention to the way that oil is extracted, distributed, refined and traded. They adapt an analytical strategy that includes accounting for oil itself, but moreover for the vast assemblage of corporations, institutions, infrastructure and practices involved in its extraction, movement and trade. While collecting empirical data in these spaces remains difficult, it does not discount the value of this welcomed analytical shift in oil-research.

Watts' (2012) concept of the 'oil assemblage', developed from his earlier concept of the 'oil complex' (Watts, 2005), seeks to draw together the full multiplicity of actors involved in oil and gas industries. Watts proposes a framework that accounts for the prosaic workings of the oil apparatus on a localised level (Watts, 2012, p.439). He views the global production network as a regime of accumulation and a mode of regulation, where properties of the wider oil assemblage are in some sense generic and normalised, while modular pieces of infrastructure, capital systems and technology travel globally. Oil and gas are always discovered in a specific space and time, and subsequently inserted into a very localised political economy. It is a vast governable, and occasionally very ungovernable, field. It is always temporary and geographically contingent, and the actors are not just there as pieces of a puzzle: each

has agency, and is situated in relations between infrastructures, industrial interests, local interests, political interests, and so forth.

Similarly, Gavin Bridge (2008) deploys a Global Production Network framework to analyse the organisation of inter-firm relations in the industry. He argues that there has been a swing away from Big Oil towards resource holding states (See also Bridge and LeBillion, 2013), and that this shift constitutes new regimes in the industry. States have become key actors in upstream and downstream phases of oil production networks, and can assert their power due to the fact that they are the primary resource holder: they now have major operating companies, they exert a significant regulatory function, and they play a prominent role in the consumption of fuel, through distribution and taxation (Bridge, 2008, p. 400). Bridge calls scholars to pay attention to the way dependency and domination is manifested along and across the oil production networks (from extraction to consumption), with obvious differences in time and space.

Timothy Mitchell's (2011) extensive account of what he has termed "carbon democracy" provides an important contribution to our understanding of why infrastructure is key to understanding oil's impact on societies and states, particularly in the case of participatory democracy. Mitchell explores how coal mining and the transportation of coal via railways fuelled a participatory industrialisation, reflective of the type of political power that was typical of the time. The coal era had vulnerable and accessible infrastructure, labour-intensive mines and railways; and it was common to see strikes and demonstrations that could cut energy supplies quickly, and increase the negotiation power of citizens in relation to the state (Mitchell, 2011, p. 85).

The twenty-first century has seen an increased reliance on energy from oil over coal. Due to the different physical and chemical form of the carbon it contains, the infrastructure through which oil is extracted, transported, and turned into profit relies on a network of smaller workforces and transportation with properties like a grid (Mitchell, 2011, p. 38). Pipelines and seaborne transportation have become the main modes of energy networks, being inaccessible and often heavily securitised. Offshore production and processing have been more and more utilised, giving the state more

direct access to the profits accrued; and, according to Mitchell, oil has altered the "mechanics of democracy" (Mitchell, 2011, p. 42).

Mitchell's argument implies that today's energy infrastructures centralise power, and limit the degree of citizen participation in a democracy or a state. States have become less vulnerable to the political claims of workers. New infrastructures have been used to create political systems that centralises profit, and power, for states and for oil companies alike. Mitchell's focus on the flow of oil demonstrates a relationship between politics and materiality (see also Barry, 2013), and lends itself to the analysis of the politics of petrol in Ghana.

While there was an infrastructural network available to transport petroleum products from Tema in the south, through pipeline systems and lake-transport barges, to Bolgatanga in the North, these energy infrastructures went unused. The pipeline implied a removal of petroleum products from social life, from transport routes and various small- and large-scale economic networks. Using the pipeline meant that truck transport would not supply informal markets on its way to the intended destination. The available petroleum infrastructure to transport petroleum products in Ghana was therefore problematic, because transportation along the road served specific purposes: it facilitated economic activity and provided productive networks that made sense within the framework of Ghanaian markets and politics.

Many infrastructural projects in sub-Saharan Africa have been initiated as a way of accessing government contracts and feeding patron-clients networks, resulting in factories that have been built but never operated, roads that disappeared and bridges to nowhere (Larkin, 2015, p. 334). While diversion of funds has been the case for some infrastructural projects in Ghana, there is more to the story of non-operating petroleum infrastructure. If we follow oil from the point of refining to the point it is smuggled out of Ghana, alternative infrastructures emerge, giving a more nuanced explanation of why a pipeline could be considered matter out of place in Ghana's downstream petroleum industry. Therefore, Mitchell argument about petroleum infrastructure creating exclusion and centralised power applies to the case of Ghana, where participatory infrastructures are utilised and pipelines are left dormant.

Pipelines and lake transport would make the flow of petroleum products efficient and circumvent profitable transportation networks. But these alternatives were unpopular for reasons beyond the potentially lost profit. Transportation by trucks benefitted truck-owners, truck-drivers, people buying from trucks along the road and policemen and women demanding bribes from truck drivers at checkpoints. The connections continue throughout markets and families, and show how these informal economies produced a trickle-down effect from the distribution of petroleum products. The argument could be made that pipelines do not operate due to the number of politicians operating truck transport companies or owning trucks. But, by making the rationale so simple, we undermine Ghanaian forms of democracy and the importance of popular support, and reproduce a simplified understanding of the state as built solely on patrimonial ties of profit extraction. With this thesis, I intend to show that in terms of both petrol infrastructure, and also petrol prices, the processes that characterise Ghana's political landscape and democracy require a much more flexible framework.

The dormancy of the petroleum infrastructure available in Ghana suggests, in line with Mitchell's description of carbon democracy, that the political leadership in Ghana was not relying on the profits – or in this case the savings – that this infrastructure could facilitate. Not only does Ghana not resemble the carbon democracy described by Mitchell, but, I argue, it actively uses petroleum products in a participatory manner *for* its democracy. By allowing the flow of petroleum products to be easily accessible, the Ghanaian state makes possibilities of participation available, shaping the politics of petrol to respond to its need for political support.

The studies of Watts, Bridge and Mitchell pay attention to infrastructure, companies, states, communities and the relationships between them. They seek to configure their impact on each other, and not simply to assess which one is the strongest. In order to pursue such lines of understanding for oil ventures, studies of global and local petroleum industries need to be empirically grounded, and not just theoretically imagined. While this work is highly important and represents a shift, its focus on the agency of so many actors does not allow for detailed empirical exploration. My study of Ghana's downstream petroleum industry tries to fill this gap in the literature,

providing an empirical account of the local petroleum industry. It seeks to follow oil from the point of refining to the point of smuggling – not by excluding extraction, politics, state and institutional dynamics, but rather by seeing them as they impact on my informants' everyday lives. A few anthropological studies are worth reviewing due to their conceptual inspiration on this front, combining history, culture and oil.

Anthropology, Oil and Neoliberalism

Roger Douglas (2015) sets out to boil down the topics on which anthropologists concerned with oil have made analytical contributions. While he recognises that oil and indigenous communities (i.e. Sawyer, 2004; Reed, 2007) represents the most developed area, which is certainly also the case for Ghana (i.e. Boohene and Peprah, 2011; Acka-Baidoo, 2013; Obeng-Odoom, 2014; Adusah-Karikari, 2015), Douglas asserts that there are two cross-cutting analytical issues that emerge from the scholarship in Anthropology: the temporalities and the materialities of oil. Douglas (2015, p. 366) argues that anthropologists have taken an interest in time and temporality in order to show how the volatile resource frames pasts, presents and futures in certain ways.

Fernando Coronil's (1997) book on "The Magical State: Nature, Money and Modernity in Venezuela" stands as a giant among studies on oil-rich states. What distinguishes Coronil's work from others is his comprehensive analysis of how oil has been entangled with Venezuela's modern history and state making. He builds on Karl Marx's (1967) value theory and Henri Lefebvre's (1991) work on space and nature, to theorize the relationship between nature's significance in social constructions, building on the connection between labour, capital and nature. He states that:

In bringing attention to production as a holistic process the aim is to examine the ensemble of social relations and understandings formed through the mutual commodification of labour power and of natural resources rather than to study natural resources as discrete commodities (as in neoclassical economics) or to focus exclusively on the transfer of value (as in unequal exchange theory). (Coronil, 1997, p. 32)

Coronil's analysis of oil's effect on the Venezuelan state includes a historical analysis of political fetishism of oil: "State representatives, the visible embodiments of the invisible powers of oil money, appear on the state's stage as powerful magicians who pull social reality, from public institutions to cosmogonies, out of the hat". Coronil argues that Venezuela has two bodies – one political, of citizens, and one natural, of rich subsoil – which became unified by the magical power of the state, creating a nation of oil wealth. By manufacturing dazzling development projects that engender collective fantasies of progress, the oil-state casts a "spell" over its audience and performers alike. The state becomes a "sorcerer", and draws its subjects into an illusion (Coronil, 1997, pp. 3 -5). The level of complexity in Coronil's analysis distinguishes his study from later work on oil-rich states. He focuses on the understanding of nature, historical development and cultural development, and binds them together to account for the role of oil in Venezuelan politics. The idea of 'magic' plays an important role, and Coronil argues that:

Just as history refers ambiguously to the past in its completeness and to the selective remembering of stories about the past, magic alludes to an extraordinary reality as well as to the selective representation of the elements that creates the illusion of its existence through invisible tricks that exploit distraction and diversion. Like history, magic hangs suspended between fiction and fact, trick and truth. (Coronil, 1997, p. 3)

Coronil's study shows most of all the importance of the historical legacy that binds the state and oil, which is specific to Venezuela. He demonstrates how the different components of history and culture produce a specific interpretation of oil, and influence its role in connecting the citizens and the state. It is clear from his later writing that this fundamental understanding of how the Venezuelan state managed to "sow" the oil, in order to create a strong social contract, became important in further legitimising state ventures in the oil industry during the neoliberal period (Coronil, 2011).

While Venezuela's resource nationalism is frequently portrayed as the anti-trade and anti-private sector example, Coronil (2011) argues that the second wave of nationalisation (2006-2012) — which was saturated in secrecy — was far from achieving the oil-sovereignty that it aimed to portray. Venezuela was in a paradox of needing the oil out of the ground, to continue the illusion of state magic, while

having to sell it to multinational oil corporations for the technology required. The compromise resulted in a set of joint ventures between the national oil company and foreign multinational oil companies. These deals, Coronil argues, were not as nationalist as the political elite claimed them to be. However their claims speaks to the continued importance of 'oil-magic' in portraying the strength of the state.

Similarly, Andrew Apter (2005) writes about nationhood and citizenship in the cultural production of a marriage between oil and the centralised Nigerian state. Apter (2005) uses FESTAC 77, a cultural festival, as a mirror for the broader political economy of oil in the nexus of class, ethnicity, and the state in Nigeria. Nigeria was perceived to be "reborn into wealth" in the 1970s following its oil discoveries (Apter, 2005, p. 9), and ethnic and political divides became mended in the "blessings" of oil, which circulated like blood through the national body (Apter, 2005, p. 23). When oil, the substance or fetish of original value, mutated from lifeblood to bad blood, Nigeria's nation grew weak and lost its shine. The state privatized the oil industry – first by diverting revenues into private accounts, and then by auctioning off block allocations to private concessions. The public sector virtually collapsed into a mimetic representation of itself, without any new investment or exploration (Apter, 2005, p. 252). According to Apter, the emergence of the 419s scams marked not just "a culture of fraud and corruption", but was embedded forms of meaning and historical consciousness. The scams were symbolic transformations whereby the value forms that emerged during the boom years were detached from the value of oil itself to become separate forms of value and sources of illicit profit. Apter (2005, p. 278) summarises in his conclusion:

The Nigerian truism that "no condition is permanent" (Berry, 1993) perfectly captures the trials and tribulations of the nation's postcolonial experience. Failed elections, military coups, windfall profits, petrol shortages, even tragic pipeline explosions are now familiar features of a nation that seems to be in endless transition. Oil, the precious commodity that initially centralized the state, is now the catalyst of devolution and division as new states and coalitions compete for shares of allocated revenues.

Both Coronil and Apter focus on the magic of oil, to demonstrate how oil and the state come together in the context of specific histories and political visions. In

Nigeria, oil meant money and modernity; it was revitalizing and glamorous. Money facilitated a type of Nigerian culture – one that came from within, from natural Nigerian resources (Apter 2005, p. 25). Coronil highlights a similar illusion in Venezuela:

The State is a magnanimous sorcerer... Oil is fantastic and induces fantasies. The announcement that Venezuela was an oil country created the illusion of a miracle; it created, in practice, a culture of miracles. (Jose Ignacio Cabrujas in Coronil, 1997, p. 1)

These studies demonstrate how, in two very different places, oil resources have become important for state building – in both the use of oil money and their capacity to fuel imaginaries. Both studies show how the paths of oil and political development merge, and how they become important analytical frameworks in the study of national oil industries. While Coronil and Apter do make reference to petrol shortages, or to cheap petroleum products as a national right, their focus is mainly on the upstream petroleum industry and the way that oil has impacted state and culture. In Nigeria and Venezuela, oil extraction and the marketing of petroleum products have coexisted for decades, during which time the link between state and culture has been forged. In Ghana, this link is more tenuous. Ghana's oil and gas discoveries came at the time of neoliberal reform in the petroleum industry, painting a rather different picture for Ghana. I therefore draw upon Elena Shever's work on neoliberal reform of the oil industry in Argentina as well as Brenda Chalfin's work on reform in Ghana.

Elena Shever's (2012) book on "Resources for Reform" is an ethnography of oil and neoliberalism in Argentina. Argentina, like Ghana, is not a major producer of petroleum, but has a history of "petroleum nationalism" (Solberg, 1979) fuelled by General Enrique Mosconi – who provided the vision and operational framework for the state-owned oil company YPF. Between 1922 and 1930, YPF developed a capacity to extract oil, and to transport, refine and commercialise petroleum products. Mosconi asserted that the state-owned oil company would produce equally important "material and moral benefits" for the Argentinian people, and such benefits included the creation of state revenues, middle-class jobs, and a fair fuel market across the country (Shever, 2012, p. 42). Moreover, because the state oil workers were labouring for the well-being of the nation, in exchange the state had to take care of

their kin. Families built their lives around YPF paternalism (housing and secure employment), and Shever argues that kinship sentiments in turn facilitated the production of oil (Shever, 2012, pp. 52-54).

Shever examines Argentina's oil industry since the 1990s, with a particular focus on the altering effects of neoliberal reform – the privatisation of the state oil company. Faced with few alternatives, the YPF workers in Argentina had to reorganise themselves into smaller units, and work as sub-contractors in the privatised oil industry. The 43 000 workers that were laid off were expected to do the same type of work, but without the security and benefits previously provided by the state, and with a much higher level of risk. Some succeeded, and others did not.

Shever has examined how state representatives deploy affective ties of kinship to promote and discourage certain purchases and contracts in the petroleum industry. This use of kinship invoked a sense of filial obligation to the domestic economy, in the double sense of national market and household finance. Apart from these affective connections, and the resistance and solidarity demonstrated by oil-workers, Shever extends her analysis to include the making of consumer citizenship through affordable petroleum prices. The vertical integration of Argentina's oil industry linked oil with both petroleum products and national belonging. In 2005, the Argentinian president called for a brand boycott of petrol from Shell and Exxon, after an increase in price, and people followed suit. The boycott captured the widespread anti-neoliberal sentiment at the time of Shever's fieldwork.

Building on Shever's work, I focus on the changing dynamics of social relationships and business networks at a time of neoliberal reform. While Shevers' focus was on the state oil company and affective kin networks, I look at the familial obligation involved in shaping business strategies for petrol entrepreneurs in the private market. Because Ghana State Oil Company is an upstream company, it does not feature in my analysis extensively; but the state-owned downstream corporations and infrastructure do. It is however Shever investigation of relationships in the petroleum industry, tied to history and continued social obligation that lays at the heart of the analysis. This gives room to analyse changes within reform and its impact on economic and social realities. Moreover, the idea of a consumer citizenship through

affordable petroleum prices resonates with the findings in Ghana. At the time of neoliberal reform, increase in fuel prices was highly contested among Ghanaian citizens.

Brenda Chalfin's contribution to our understanding of contemporary neoliberal influences on the bureaucratic apparatus in Ghana has also informed the framing of this thesis. Through ethnographic inquiry among the Customs Service in Ghana (port, airport and borders), Chalfin (2010a) has illustrated how the state gains changing significance in its encounter with a neoliberal political economy. Chalfin (2010a, p. 48) argues that it is essential to recognise neoliberal imperatives as part and parcel of the wider genealogy of intervention and reform. In the case of Ghana, neoliberalism is built upon the fragments of colonial and developmental state building. Thus, neoliberal efforts battle with already-established institutional practices and paradigms. There is therefore no new or pure starting point, as Ghanaian state legacies (colonial, socialist, nationalist, military and populist) give birth to various neoliberal solutions and undermine their totalising realisation.

It is specifically Chalfin's (2010b) work on the neo-developmental state and the port of Tema that resonates strongly with my own research. Chalfin describes an environment at Tema Habour where the state performs a strong presence in control and regulation, through various measures, while private interests – in this case, international shipping companies – operate the various services that are offered at the port. Building on Ong (2006) and Sassen (1996), Chalfin (2010b, p. 575) argues that neoliberal restructuring at the Tema Habour does not threaten state bodies and agendas, but rather relies on and strengthens select sectors of the state apparatus. Tema Harbour stands as a national symbol for prosperity and promise, while the practicalities of its operations depend largely on its international links with the global economy through a regional integration of ports. Tema Harbour benefitted from a growth in seaborne trade, and advantageous regional geo-political influences, with the addition of a distinctive nationalist legacy (Chalfin, 2010b, p. 575). Instead of being overshadowed by multinational firms – a characteristic result of neoliberal economic policy - the redevelopment of the port in Tema revitalised historicallyinduced state agendas while engaging with globalised entities and objectives (Chalfin, 2010b, p.580). Chalfin argues that the port zone and governmental arrangements emerge in tandem, and between them create a reproduction of the state apparatus.

Similarly, I argue that the reform of Ghana's downstream petroleum industry does not represent a drawing back of the state from the trade of petroleum products. This thesis adds to a growing literature on the everyday pragmatics and realities of reform. It seeks to critically examine the impact of neoliberal market reforms and the commodification of governance. Privatisation reform is often presented as a tool to depoliticise commodities and markets. But this thesis reveals first of all that deregulation is a weak tool to depoliticise commodities like petroleum products in Ghana. Secondly, I argue that politicisation of petroleum products in Ghana can be productive in producing important political relationships. Perhaps commodities have been politicised for development purposes in the first place. Petroleum products embody a politicisation that has had important significance in the development of democracy in Ghana, quite different from the "magical" qualities of crude oil.

Conclusion

In this chapter I have explained the politics of petrol, and underscored my empirical understanding of 'politics'. The following chapters will develop these concepts further as they came to acquire meaning for my informants in the petroleum industry. Moreover, this chapter have produced a necessary background to understand the importance of the state for petroleum industry, but moreover the development of state economic policies and the political strategies in Ghana's short independent history. Finally, I have critically reviewed the literature on oil and development in African Studies, and argued for a more empirical, non-magical, approach to social science inquiries into petroleum industries.

The politics of petrol depart substantially from the traditional study of the politics of oil. The politics of oil most often refer to the relationships between national governments, (multinational) oil companies, geopolitical interests, local interests and other influential actors in the phase of oil and gas extraction, as well as in the distribution of oil-money. As the introduction of this thesis showed, the discovery of oil and gas in Ghana contributed to a knock-on effect in Ghana's petrol industry.

While most studies on oil ignore this link completely, I take it as my point of departure. My main focus is on the everyday politics of petrol and petroleum products; the politics of oil takes a back seat, and a more tangible type of politics – one that has a larger impact on and deeper roots in Ghanaian history and democracy – becomes the centre of empirical investigation.

Chapter Two 'Politics' at Tema Oil Refinery

Introduction

The Tema Oil Refinery (TOR) is Ghana's only crude oil refinery. This is an apt point of departure for an analysis of the politics of petrol, as this is where petroleum products are produced or imported. The oil refinery is located in Tema, Ghana's industrial capital, 25 kilometers east of Accra. Apart from the refinery, Tema is home to a range of factories, plants and multinational corporations, but it is most famous for the deep-water harbour built in 1962. Tema Harbour receives most of Ghana's imports including crude oil and petroleum products, and is the key export point for Ghana's largest export commodity, cocoa. Tema Harbour is connected to TOR and surrounding storage depots through pipelines.

The oil refinery was built in 1963, as part of Kwame Nkrumah's development plan for Ghana. The plant was elevated to the status of a symbolic infrastructural object, embodying much more than its technical capabilities to produce petroleum products. This chapter examines the political ritual of the opening of the oil refinery; its recent, short-lived but crucial history and relationship with the International Monetary Fund (IMF); and then arrives at the second awakening of the refinery, when the Jubilee Field was discovered in 2007. The refinery has become a contentious state-owned enterprise, discussed frequently in the media, political debates, throughout the industry and elsewhere. It has a history of mismanagement, which has left it in a considerable amount of financial debt, and faces new uncertainty as the Jubilee partners has claimed that the refinery cannot refine the type of crude oil extracted from the Jubilee Field.

My argument in this chapter is two-fold. First, I argue that the TOR became a unifying and sublime representation (Larkin, 2008) of Kwame Nkrumah's independent Ghana, signifying the future and promise, and the limitless possibilities of independence. While Nkrumah was overthrown in 1966, his vision and legacy lingers in Ghana's political landscape and public environment, intensified by the stark contrast with the uncertainty and economic decline that followed. The refinery has continued to embody the intentions and vision that animated its construction, and

thus represents a form of infrastructure with especially far-reaching socio-political significance. The discovery of oil and gas in Ghana has only served to elevate the TOR's significance for Ghanaian economic development.

Secondly, I argue that the refinery plays an important role in the politicization of petroleum products in Ghana. By examining the engineers' claims about the refinery in an historical and contemporary framework, I unpack important constitutive dynamics of the politics of petrol. The engineers at the refinery referred to various types of 'politics', in somewhat contradictory terms of both demoralization and empowerment. These claims are what lie at the center of the politics of petrol at TOR and elsewhere: its ability to be inclusive and exclusive all at once. The current situation at the TOR reflects the way that petrol is traded and distributed, and as such, the contemporary operation of the refinery is a reflection of continuous processes of politicization. Political leaders do not want to show that they do not care about the refinery, and it is therefore difficult to obtain an explanation for the current state of limbo at the refinery. On the other hand, import companies have provided new opportunities of enrichment for the economic and political elite, and my informants suggest that these two interests, keeping the refinery alive and accumulating profit from importing petroleum products are not easily aligned. This tension is what was referred to as 'politics', keeping the refinery dormant while also recognizing its role as a state enterprise with symbolic capacity for economic and political independence.

Refining the Nation: Petrol made in Ghana

The refinery was first mentioned in Parliament on March 4th, 1959. It was part of the Convention's Peoples Party (CPP's) second five-year development plan, which had the essential aim of increasing living standards for Ghanaians through industrialisation. The oil refinery was part of creating an industrial base to drive development, increase agricultural output and eventually alleviate poverty. To facilitate this industrial expansion, Nkrumah communicated to parliament that domestic savings and foreign direct investment had to be utilised to build an oil refinery (Biney, 2011, p. 100).

The establishment of the refinery was seen as a major achievement towards Ghana's industrial development. The refinery, like other major industrial undertakings of this sort, was conducted through collaboration with external financial and technical assistance – what Nkrumah himself referred to as "a common sense and practical approach to industrial development" (Parliamentary debate 1957, referenced in Biney, 2011, p. 100). Jean Allman (2014, p. 230) writes that the nation building and modernisation projects of Nkrumah's newly independent Ghana were often undertaken with expatriate expertise from all over the world (e.g., Miescher, 2012). The expatriate expertise in the petroleum industry was with the Italians.

Two senior ministers from the CPP were sent to Italy to negotiate the construction and operation of an oil refinery in Tema. The Ghanaian Italian Petroleum Corporation (GHAIP), as the refinery was originally known, was commissioned in 1961 and started refining in 1963. At the time, the establishment of the oil refinery was seen as a major achievement, resonating with James Scott's (1998, p. 88) interpretation of high modernism – a continued linear progress with technical and scientific development, usually through the state, with prescriptions for a new society. This development path was reflected in Nkrumah's (1963a, pp. 1-2) speech at the refinery's opening:

The opening of this oil refinery in Ghana is significant in that, it marks an important stage in our investment and development programme. Since the attainment of our political independence, there has been no doubt in our minds as to the direction in which our duty lay, namely, to develop Ghana into a modern industrial state. It is only in this way that we can survive as an independent country.

To achieve this objective, we have to rid ourselves of the economic patterns and institutions of imperialism left behind by colonialism. It was necessary to instil confidence in ourselves and to share that confidence with our people. We were convinced that we could meet and surpass all the challenges which our independence had imposed on us...

Nkrumah justified the cooperation with the Italians as a stepping stone to the nationalist and pan-Africanist vision of breaking with imperialism and supporting the importance of a national petroleum industry. Nkrumah (1963a, pp. 1-2) commented on the significance of the specificities of this foreign corporation in the same speech:

The Ghanaian-Italian Petroleum Company is an inter-state enterprise of a special kind. And here I must pay tribute to a friend. It is interesting to note that AGIP MINERARIA itself, which has given birth to Ghana-Italian Petroleum Company, owes its origin and growth to the vision and foresight of a politician and entrepreneur who harnessed his commercial genius with state enterprises in his own country. This is indeed an example of how the genius and skill of patriotic citizens can be put at the disposal of the State and not for the exploitation of the many by the few.

By making Italy the largest importer of Russian oil in the West and by combining state enterprise with private capital, Signor Mattei broke the foreign oil monopolies which battered on Italy's industries and created conditions for the Italian oil Industry which make it an acceptable partner for the development of our own oil industries.

Enrico Mattei, named in Nkrumah's speech, was known for challenging the powerful international oil cartel of the 1950s, in fact he coined the term Seven Sisters (Bridge and Billion, 2013, p. 49). Italy had gone from importing petroleum products from multi-national oil companies, to refining crude oil at domestic refineries in corporation with Iran. This shift saved Italy money and created employment (Frankel, 1996). Italy's experience fed into Nkrumah's vision and goals of nation building, anti-imperialism and energy independence. Enrico Mattei's death in a plane accident just before the opening of the refinery in Ghana, further fuelled conspiracy claims that plagued the mafia-like oil industry in the 1950s and 1960s.

The oil refinery was seen as being crucial to the industrialisation program and national development. Like other state projects, it was built to impress as physical structure, tangibly demonstrating its importance in spearheading Ghana's economic, industrial and developmental goals (Killick, 1978, p. 167). The refinery was a modern creation, technologically equipped for industrialisation. This accomplishment was further addressed in Nkrumah's (1963a, p. 1) opening speech:

The factory building, which we all see here, is of the most modern design and constructions: the machinery is of the most modern in its class. Within these factory buildings, we shall be producing for the first time in Ghana liquid petroleum gas, normal gasoline, premium gasoline and diesel oil, kerosene, gas oil and fuel oil – all of which will stimulate industrial activity. These "made in Ghana" petroleum products will make for a substantial reduction in our dependence on imported sources of energy. This refinery will help us acquire new skills and contribute greatly to our national development.

The pictures from the opening of the refinery demonstrated what a spectacle of achievement the refinery and the commencement of "made in Ghana" petroleum products was. The technologically modern infrastructure and equipment signalled the way forward, substantiating the expectations and hope of the early 1960s. The refinery was set to become part of the backbone of the Ghanaian economy, pumping fuel to industries and agriculture, securing freedom from energy imperialists and materialising the socialist dreams of Nkrumah's independent Ghana.



Image 2.0: Kwame Nkrumah and Italian Visitors. (TOR, 2017).



Image 2.1: Opening Ceremony. (TOR, 2017).

The opening of the refinery can be seen as political ritual. Ghanaian ministers, chiefs and other important people were present. There was a ceremonial programme with various speeches and the infrastructure was decorated lavishly. The technology that was presented was visible evidence of progress. Similarly, Brian Larkin (2008) has demonstrated how the arrival of electricity in Kano in 1932 in colonial Nigeria provided an opportunity for a public display of authority. He argues that infrastructural projects can become sublime as we judge them in relation to other objects, dividing what is great from what is worthless. Infrastructural projects, according to Larkin, were the necessary sublime gestures for entrenching colonial rule and authority in Nigeria. Technology is mighty, while at the same time vulnerable and short-lived. However, the will that goes into the construction of such impressive infrastructure does not easily disappear. Larkin (2008, p. 47) argues that the conceptual horizons of what people expect the technology to do will haunt the infrastructure over time.

Nkrumah sought a similar effect, and the oil refinery was one of many grandiose infrastructural projects that he built, including monumentally impressive factories and plants with lavish opening ceremonies. They created large-scale employment and

legitimised his rule. The refinery demonstrated the potential of an independent Ghana, but also Nkrumah's personal vision and leadership. Moreover, the refinery was set up to deal with a particular political evil: energy imperialism, overseen by an oil cartel, which Nkrumah believed was part of the reason that why developing countries were poor in the first place. This energy focus was reflected in Nkrumah's opening speech, which emphasised imperialism and contrasted it with the partnership of the Italian corporation. Building a refinery could stop dependence on an oil cartel that kept imported petroleum products at an artificially high price; and in this sense, the refinery embodied a far more than the production of petroleum products. The refinery had a political vision of achieving development in Ghana, but moreover angling for a more just and fair economic foundation for international trade and development. Energy independence was not an easy target, and Nkrumah (1963a, p. 1) recognized as much in his speech, stating: "Oil is the lifeblood of industry. It is as important for industry as water is for human existence. The politics of it is even more complicated."

While official records were not available to me, my informants Emmanuel and Kwame said that the majority of crude oil refined over the last two decades at the refinery was procured from Nigeria and Libya, and to some extent Equatorial Guinea. The refining machinery was most effective on sweet and light crude oil with a low sulphur levels. This type of crude oil had been available in abundance since Shell-BP made discoveries in Nigeria in the 1950s. The original agreement between Ghana and Agip Mineraria stated that crude oil could be procured freely on the international market, with the exemption of the discovery of oil in Ghana. Agreement B, Close 9 (1) states:

Should any crude oil be produced in Ghana during the lifetime of GHAIP, GHAIP shall be bound to purchase this crude oil for processing in the refinery, provided that this crude oil is of such quality as be technically and economically processed in the refinery, and is suitable for the requirement of the Ghana market, and provided further that, such crude oil can be purchased by GHAIP at a price not exceeding that at which similar crude oil can be imported by GHAIP into Ghana (Prempeh, 2010, p. 1).

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Retired workers from the refinery claimed in interviews that Nkrumah attended to this specific part of the agreement himself. While the agreement gives considerable leeway for the Italian corporation, it shows Nkrumah's vision for an integrated petroleum industry, right from the inception of the refinery. However, this contract was terminated in 1977 when the Government of Ghana became the sole shareholder of the refinery. As it stands today, there are no legal obligations for oil and gas producers in Ghana to utilise the TOR for the processing of domestic crude oil.

The initial contract between the Government of Ghana and the Italian oil company, Agip Mineraria, set the rules for the operations of the refinery for its first two years. The refinery was used as a hydroskimming tolling refinery⁴, refining crude oil for multinational oil companies and Goil. Agip Mineraria refined petroleum products for a processing fee, and paid taxes to the Ghanaian government. The government imposed a monopoly on petroleum products, making the refinery the only option for the oil companies operating in Ghana at the time. In 1965, the Ghana Supply Commission was put in charge of purchasing crude oil for the refinery. The refinery was still operated by Agip Mineraria, but oil companies wishing to market petroleum production in Ghana now had to purchase them from the refinery without importing the crude oil themselves. The procurement and marketing conducted by the Ghana Supply Commission meant that the Government of Ghana was taking command of a larger part of the petroleum value chain. However, the only Ghanaian oil company operating in Ghana was Goil, which at the time had Italian shareholders. The remaining market share was covered by a handful of multinational oil companies.

Like many of Nkrumah's infrastructural projects, the oil refinery did not live up to the expectations set out for it during its opening ceremony. As it happened with other projects built with foreign assistance, the Italian operators and multinational oil companies became the refinery's greatest beneficiaries. This unfortunate development did not, however, diminish the importance of the vision and political will that went into building the refinery. The infrastructure was held up as a symbol of patriotism, political independence and freedom. It was touted as a catalyst for

⁴ Hydroskimming refineries are some of the simplest refineries used in the petroleum industry, second to topping refineries. A hydroskimming refinery can refine most types of crude oil, but has low levels of recovery. A hydroskimming refinery processes crude oil through distillation, naphtha reforming and cooking (Gary et al., 2007, p.17).

economic growth and development, and as such, it was elevated to a high political status – infused by the vision and popularity of Nkrumah. This symbolic resonance persists today in political debates, media articles and in conversations and claims among the engineers at the refinery.

Nationalisation of the Refinery: Years of Trouble

My main informants at the refinery, Emmanuel and Kwame downplayed the time after Nkrumah's rule until the end of Rawlings' military regime (1966-1992) when speaking about the refinery's past. However, it still plays a crucial role in the way that the public perceive the refinery today. The fact that my informants did not want to talk about this period of the refinery's history might stem from the fact that there were not many qualified informants available; most senior engineers I interviewed had only been at the TOR for a decade. It might also suggest a problematic period, which detracts from the case my informants were often trying to build. By emphasising the refinery's vision, rather than the vision's aftermath, they were able to make a stronger case, politically or otherwise, for continuing domestic refining.

The refinery continued as a tolling refinery until Ghana became the sole shareholder in 1977, purchasing the refinery from the Italians. The Ghana Supply Commission continued to procure crude oil, until a restructuring of the industry put Ghana's National Petroleum Corporation (GNPC) in charge in 1985. The name was changed to Tema Oil Refinery in 1990. The decades following Nkrumah's demise were characterised by Emmanuel and Kwame as insecure and unstable. Frequent changes of government translated in new sets of policies, though few of them were actually implemented. The economic hardship in Ghana and the insecurity regarding wages also meant that people were most concerned about fending for themselves.

Interviews with retired workers suggest that during the time the Italians operated the refinery, the problem of overstaffing and large-scale corruption was not an issue. It was when the Ghanaian Government became the owner of the refinery that these challenges became prevalent. This overstaffing also goes to show that while Nkrumah had initiated a large scale expansion of the public sector, ten years after he was overthrown – in 1977 when the refinery became fully state-owned – the same

employment strategies of were still in vogue. The refinery was still widely considered to suffer from over-staffing at the time of my fieldwork, in spite of having gone through several rounds of lay-offs in previous years. Emmanuel and Kwame were two of a handful of engineers that were in charge of operating the main refining plant. They were both complaining that there were people at the refinery that were employed due their connections, and had their doubt whether the layoffs that had been announced and reported on had actually materialised.

When the Ghana Supply Commission was in charge of importing crude oil to the refinery, they utilised their "crude oil account" to incur high debts with The Bank of Ghana. When the GNPC took over the import of crude oil in 1985, they moved the "crude oil account" to the Ghana Commercial Bank. Both banks have been on the verge of collapse several times due to the enormity of the debt at the refinery. Bailouts have come from various Ghanaian governments, and the TOR debt has provided a major challenge to national budgets since the refinery became state-owned.

According to Emmanuel and Kwame, Rawlings kept a close eye on the refinery during his years in power. The refinery played a key role in keeping the state apparatus functional, as ambulances, fire trucks and other public institution vehicles could access fuel on government credit. This credit was rarely paid. Emmanuel and Kwame claimed that the transition to democracy in 1992 increased consumption of fuel to the government. They attributed the increased fuel consumption to the number of vehicles that needed fuel as widespread election campaigning became more and more crucial.

While Rawlings introduced stricter controls at the refinery, the years of instability had created an environment wherein refinery workers had become resourceful in their methods of stealing and/or making dubious deals with their customers. One of these deals was the 'double-load', using one set of paper work to load a tanker truck twice, getting away with 45 000 litres of petroleum products without paying for it. Another way of stealing was to facilitate small explosions on the pipeline network running between the refinery and the port, and taking money from surrounding

communities as they caught the product that spilled from the broken pipelines in buckets.

The period between Nkrumah's and Rawlings' administrations had particularly detrimental effects on the management of the refinery. Military and civilian governments resorted to short-term economic and political survival strategies, and the Ghanaian economy suffered from decline, inflation and commodity shortages. A prolific informal economy developed, and the oil refinery became a crucial part of it. The theft of petroleum products by engineers and technicians was common, and more orchestrated large scale scams happened from time to time. Different governments used the refinery as their personal filling station, and the debt kept increasing and challenging the survival of Ghanaian banks. These practices at the refinery impacted the way that the public viewed the refinery, as it gradually became a marker of corruption and inefficiency, benefitting the elite who had preferential access to the state.

In 1996, however, the IMF reported that the government had agreed to prepare TOR for sale (IMF, 2000, p. 8). Subsequently, every press statement and IMF report mentions the refinery. Caps on spending and the prospect of privatisation were proposed to address accumulated debts, and the strain they put on the national budget (IMF, 1999, p. 48, IMF, 2008, p. 32). In the early 2000s, the refinery's debt was reported as high as Ghc 2.1 trillion (AllAfrica, 2003), while others had lower estimates of Ghc 540 million (Simons and Cudjoe, 2009). The TOR recovery levy was established as a tax on petroleum products in 2003 to help pay down the TOR debt. It has been estimated that this tax has accumulated between US\$ 600 and 700 million (Simons and Cudjoe, 2009). It is difficult to get a clear picture of the TOR's overall debt, as there are various types of loans for construction, import, chemical purchase and maintenance, from several different Ghanaian banks and foreign governments. In 2016, several media outlets reported that the TOR's remaining debt of Ghc 950 million had been converted to bonds (Dzawu, 2016), while reports also suggested that this conversion did not include all debts owed by the refinery to Ghanaian banks (Citifmonline, 2016).

Throughout SAPs the oil refinery remained state-owned. Both politicians and workers at the refinery misused the resources available from TOR, and while the justifications for these abuses vary, it nevertheless resulted in high debts and more damage to the machinery than if it was running as it was intended. These decades saw the refinery gain a reputation that equated to most other state-run operation in Ghana. It was seen as an entity for misuse of state assets, at least among those who were not benefitting themselves. This notion carried on, and still prevails today – as the nation remains split about the role of TOR and its future potential. As the next section will demonstrate, the tug of war between the two political parties in Ghana and its impact on the refinery complicated the operations further. In a difficult environment, the workers chose to downplay the history of mismanagement and stealing at the refinery, and refer back to Nkrumah and the vision in their contemporary struggle to refine petroleum products.

Democracy, Deregulation and Discovery

As previously noted, Ghana's return to democracy came with the Fourth Republic in 1992. Rawlings won the election with his party National Democratic Congress (NDC). In 1998, the refinery entered into collaboration with the South Korean Government to modernise the machinery and expand the tank farm. A loan was provided from the South Korean government, and a South Korean company constructed the new machinery and gave the Ghanaians training in operating it. This project was referred to at the refinery as the latest modernisation project. Emmanuel and Kwame pointed out that supervision from the South Koreans during the project minimised stealing and explosions, and the newfound work ethic and technology started a new period at the refinery.

The modernisation project consisted of several new components to the refining plant. It added new boilers, a new cooling tower, a new tank farm and an additional refining plant. The new refining plant was a Residual Fluid Catalytic Cracker (RFCC). The RFCC processed the residue that was left after the first refining of crude oil. This secondary unit added value to the crude oil acquired at the refinery, by producing liquefied petroleum gas, petrol and diesel, and a capacity of 8000

barrels per day. This provided more value to the refinery's current refining capacity of 45 000 barrels per day.

Essentially, the RFCC was a technological update, as well as an upgrade for the refinery's capacity. After the modernisation project, managers at the refinery claimed that the refinery was again a state of the art plant (Ampofo, 2015). While the South Korean Company had built the plant, it was built with American technology, testifying to the quality of the project. Not only had the project updated the plant, but the loan from the South Korean Government was paid back in six years. Initially, the loan agreement had a payment time of ten years, but successful operation of the refinery and the additional value added from the RFCC decreased the payment time. Workers at the refinery touted the RFCC as the beginning of a new era for the refinery, making a break from the previous culture of theft and inefficiency. The repayment of the loan spoke to the refinery's capacity when dealing with what Emmanuel referred to as "outside clients", indicating that debt required in cooperation with the state were not necessary a reflection of TOR's technical capacity or production capability.

In 2000, the NDC lost the election to the National Patriotic Party (NPP), and Ghana's president for the next two terms (eight years) was John Kufour. The NPP had promised the electorate an end to fuel shortages and cheaper fuel for the Ghanaian consumer. TOR, with an operating RFCC, experienced a renaissance of refining as petroleum product subsidies were initially high, and the government provided credit to keep the machinery running – another reason the refinery was able to repay the South Korean loan in record time. While Rawlings had been more cautious in providing crude oil to the refinery, Kufour provided Letters of Credit to the refinery and set up a credit scheme for the oil companies in order to encourage the industry to produce a large volume of petroleum products for Ghanaian filling stations.

When Kufour and the NPP had secured a second term, plans to reform the downstream petroleum industry were initiated. While subsidies were still kept relatively high, other parts of the deregulation reform were carried out. The National Petroleum Authority (NPA) was established in 2005, and the credit scheme was expanded to promote the start-up of Ghanaian Oil Marketing Companies (OMCs).

On the back of the credit scheme, new companies entered the industry and became customers at the refinery. OMCs could purchase petroleum products from the refinery and pay one month later, when the product had been sold to customers. As a result of this move, Kufour became known in the industry as the president "who filled our tanks." Fuel was available and it was cheap. With the OMCs, and the construction of new filling stations across Ghana, the refinery was not able to keep up with the increased demand for fuel. The reform made it easier to register and operate Bulk Distributing Companies (BDCs). These were companies that could import petroleum products to meet the demand that the TOR was not able to fulfil. People with experience from the refinery or otherwise in the industry registered these imports companies and started operating alongside the refinery to fill the gap. The reform and the new companies will be examined closer in Chapter Three.

While everything seemed to be running smoothly, refinery management experienced a severe challenge in September 2005, when 14 senior engineers at the refinery handed in their resignations. Several Gulf States had or were in the process of constructing RFCCs at their refineries, and Ghanaian experience from the TOR in operating this sort of plant had become very attractive. The Gulf States could triple the salaries of Ghanaian workers, and provided further benefits of housing, transport and food. The management of the refinery responded that while the situation was unfortunate, they were able to deal with the challenge at hand, planning to bring back the South Korean team to train current workers at the refinery in the operations of the RFCC (Mensah, 2005). Not everyone could so easily contain their disappointment in the engineers who sought greener pastures, however. The Minister of Energy at the time, Aaron Mike Oquaye, called them "run away engineers", and described the exodus as unpatriotic. He reportedly asked for Ghanaians to be more patriotic, to choose to stay behind collectively, sacrificing individual gain in order to find lasting solutions to the numerous problems facing the country (Ghana web, 2005).

In 2007, the engineers at the refinery celebrated the discovery of the Jubilee Field, and followed the development of the new oil industry closely. As soon as there was confirmation of the amount and type of crude oil found, there was great applause and discussion at the refinery regarding the possibilities of the near future. Many workers had left for the Gulf States for their career development and better salaries, but the

workers at the refinery now started to discuss how these people surely had made a blunder. Oil had been discovered in Ghana, and the workers at the refinery were going to be part of a new era in the history of Ghana, in which the refinery – as Nkrumah had initially planned – would become a centrepiece for an integrated petroleum industry.

There was a change in government in 2008, and the NDC regained power under president John Atta Mills. This change stirred some conflict in the newly revitalised oil industry. Contracts were put under scrutiny, some companies were suspended from operating in Ghana, and the credit scheme that had kept the refinery running was suspended. The suspension followed an investigation, as according to the new government, the refinery's debt had spun out of control. Some of the OMCs had not paid their bills, but with their political connections they were still able to operate, providing a problem for the refinery's bank balance. Emmanuel and Kwame often talked about how the NPP was supportive of the refinery, while the NDC was supportive of the other state petroleum assets, such as the state-owned Bulk Oil Storage and Transportation (BOST). This assessment suggested a tug of war between the two dominant political parties in Ghana, with their preferences for different state-owned enterprises. This party-political favouring of enterprising was also reflected in the various strategies deployed by the two political parties around the GNPC, discussed in Chapter One, and is not unique for the petroleum industry.

Emmanuel and Kwame remembered the next two years at the refinery as a period of confusion. Production had halted, and importing companies that were initially set up to fill the gap now provided most of the market demand in Ghana. The Jubilee Field was fast developing, and the activity at the refinery almost exclusively took the form of maintenance. There was a lack of information, and as newspapers wrote about the new oil industry almost every day, rumours started to spread about plans for privatising the refinery. Since the change in government, the refinery had been left mostly dormant. Various sets of local news reports claimed that the refinery was not operating due to maintenance and financial difficulties. The engineers at the refinery knew that this was only half the truth, but agreed that the state of the refinery was not optimal going towards first oil in the Jubilee Field.

Emmanuel explained that the refinery received batches of crude oil only once every six months after the election in 2008. When the crude oil was not flowing consistently, the start-up and shut-down of the refining plant was very expensive; at the time, refining only made the financial situation worse than it already was. The engineers were aware of these dynamics, and a there was a growing resentment over how things were run – especially considering the importance of timing, just before crude oil was being extracted in Ghanaian territory.

Resentment among the workers was further fuelled by the practices of the private importing companies, the BDCs. Not only were they taking over the market share of the refinery, they were also using the refinery's tank farm and pipeline system to do so. The refinery had long rented out storage space in their tank farms to private companies to make additional money. However, at this point – when the refinery was dormant, and all the storage space was up for rent – the workers viewed the practice as suspicious. "Could the refinery be left intentionally dormant so the private companies would make money?", Emmanuel remembers questioning during this uncertain phase. The engineers were further agitated by the fact that the cost of the rental of storage space was set by the NPA at what the workers thought was a suspiciously low price.

Working under difficult circumstances, and convinced the NDC was trying to halt the operation of the refinery altogether, the workers were still utterly shocked by the Tullow Oil Ghana's position after production started on the Jubilee Field. The consortium of oil companies operating the Jubilee Field held a press conference in Tamale, where they stated that the TOR was not able to refine the Jubilee oil produced in Ghana. The statement was prompted when a journalist asked about the refinery's role in the new upstream petroleum industry, and how local industries would be incorporated. A Ghanaian engineer with Tullow Oil Ghana told the journalist that the refinery needed to be retrofitted to be able to refine the type of crude oil produced by the Jubilee Field. He claimed that the refinery was only able to refine lower quality types of crude oil, and that it lacked the technical capacity at this point. He further pointed out that retrofitting of the refinery would be very expensive, and that it might become counterproductive as new oil discoveries in Ghana could produce other types of crude oil (Ghana web, 2011).

Retrofitting the refinery meant overhauling and updating the refining equipment and machinery, implying that the refinery was not sufficiently modern. Given the recent South Korean modernisation project, and the fact that nothing more than maintenance had been carried out since 2008, the workers at the refinery received this information with great frustration. Emmanuel and Kwame said that the news made them sad and frustrated. A meeting of the TOR union ensued. They remembered it as a heated meeting, where all the "Jubilee frustration" that had gathered over the years came to a boil. Some people were saying they knew this would happen; others just could not believe that a Ghanaian could say such a dismissive thing about the refinery. The meeting agreed that the only thing they could do for now – since organising a strike was out of questions at the inoperative refinery – was to contact the media. Everyone who knew journalists called and tried to get newspapers and radio-programmes to talk about their version of the story.

Kwame and Emmanuel agreed that it was good to produce some counter claim to the false statements about the refinery, but they had their doubts about whether anyone would believe them. Emmanuel said that the Ghanaian people in general wanted the refinery to work, but for good reasons they were suspicious about the state of the refinery and the amount of corruption that would prevail if they got their hands on the new oil. When the Minister of Energy at the time, Emmanuel Kofi Buah, again confirmed TOR's inability to refine Jubilee oil – thereby legitimising the claim of the Tullow engineer (Myjoyonline, 2014) – it did not make the situation any better. Kwame and others were of the opinion that the current government was anything but supportive of the refinery's operations. Rumours about privatisation became more pressing when President Mahama stated in his annual State of the Nation address that the government was closing in on a joint venture agreement between the TOR and PetroSaudi (IMANI, 2014).

The consortium of oil and gas companies operating the Jubilee Field had no obligation to sell or provide TOR with crude oil. Access to Jubilee crude oil could have been agreed upon during the negotiation of the Product Sharing Agreements;

⁵ As a direct result of this outreach to media, see articles like Modern Ghana, 2011, News Ghanamma, 2011. Continued work by the engineers to spread their side of story can be seen in: Ghanaweb 2014c; Myjoyonline, 2014.

but as Ghana had very little to offer in the negotiations, in terms of capital and petroleum infrastructure for extraction, there was not much to bargain with. The track record and capacity of the refinery might also have made it difficult to convince the oil consortium to agree to such terms. The disconnect between Ghana's upstream industry, which oversaw the extraction of crude oil, and its downstream industry, the refinery in Tema, was not exceptional. Over the last few decades, the refinement of crude oil has become focused around hubs in Asia, Europe and North-America, with large scale, high-tech refineries. The ease of seaborne trade, the availability of special economic zones, and the general flow of raw materials globally has encouraged this sort of centralisation (Bridge and Billion 2013, pp. 51-52). Jubilee crude oil was transported for refining in France, and the Swiss trading company Vitol got the contract to market it (Vitol, 2010).

While the workers at the refinery were aware of these global conditions, they still felt that the GNPC could have provided them with crude oil, given their stake in the Jubilee Field. The conflict became a particularly pointed issue of discussion during union meetings; one informant reputedly asked whether all Ghanaians working in the petroleum industry were not on the same team – mother Ghana. The engineers at the refinery would invoke Nkrumah's plans for an integrated petroleum industry and call for patriotism and national spirit. Their lack of access to Jubilee crude oil was yet another setback in a period marked by intermittent operation and a sense being neglected by the government. As Kwame would say, "It's ironic that in the time of oil, the refinery is left out."



Image 2.2: Tema Refinery. Author (2014).

Gas Processing: distracting attention

Across new oil and gas producing countries in sub-Saharan Africa, there is an increasing tendency by operators and government alike to focus on the gas aspect of the discovery. With the help of local governments, multinational oil companies tell a dramatic narrative of transformative gas industries in Africa, which provide an abundance of electricity and clean cooking. While the crude oil is shipped away without much complication, the natural gas found in the same deposits are more expensive to transport. The alternative to flaring the gas⁶ is to build domestic or regional processing plants, either offshore (as planned by ENI in Mozambique) or onshore close to the extraction site – like Atuabo, in Ghana.

The Atuabo Gas Processing Plant in Ghana shared quite a few similarities with the oil refinery when it was built. It was built with foreign expertise and capital – in this case, with a Chinese government loan, and with oversight of its construction and

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⁶ Flaring is a term that refers to the burning of gas.

operations by the National Chinese oil company, Sinopec. The plant was promoted as an industrial development project which would benefit the Ghanaian public and industries through the provision of electricity, derived from the newly discovered Jubilee Field. The plant has further been attributed to the progressive vision of the late President John Atta Mills.

The initial plan was that the plant would begin operating in June 2013, but continued delays saw the gas flowing through the pipelines for the first time only in early 2015. The delay was scrutinised by civil society organisations and the public, because gas was being flared offshore, and extensive load shedding had been carried out across the national grid. The gas had been provided for free by the Jubilee Partners; but the infrastructure, the pipelines and the plant, had to be built by the Ghanaians.

When I first visited the plant in July 2015, it was operating on and off. The Ghanaian engineers were complaining that the Chinese engineers kept delaying the completion of the knowledge transfer programme. They suspected that it was an intentional bid by the Chinese to get their contracts extended. The plant was clearly overstaffed, with both the Ghana Gas Company and sub-contractors having people just "hanging around." In an interview with a junior manager of the Ghana Gas Company, I was told that the main problem at the plant was financial. The plant was supplying thermal energy, for electricity generation, to state-owned electricity companies, and they were not paying their invoices. Moreover, only stage one of the plant had been completed; another two parts of the plant were still to be commissioned, and as a consequence, part of the gas was being flared at the plant.

While the refinery and the gas plant were two very different entities in terms of their technical capabilities, with opposite problems – one had no crude oil, where the other had free natural gas – they were also strikingly similar. They were similar in terms the rhetoric behind their construction and their role as catalysts for economic development. The main point I want to make is that by creating Atuabo Gas Processing Plant and focusing on natural gas, instead of on crude oil, the development component of the industry had been satisfied – which somehow justified leaving the refinery behind. The trouble experienced at Atuabo, in turn, was used to further legitimise claims that the refinery could not possibly provide a

suitable service for the new petroleum industry. I now turn to a discussion of everyday life at the refinery and how it ties back to the historical trajectory examined thus far.

The missing cargo: Everyday life at Tema oil refinery

It was a regular day at the refinery in December 2013. Kwame and I were conducting our morning routines. I had been allowed to shadow a few engineers at the refinery, but was mostly confined to the administrative building. The morning routines mainly consisted of making sure that all the machinery was still intact, and that there were no leakages from the pipes connecting the machinery and the tanks. Afterwards, we sat down outside of the office building, facing the distillation tower, which provided us with decent and much needed shade. We could see dark clouds coming from the coast side, and we were both hopeful that rain would fall to clear up the air. The humidity was high, and a mixture of petroleum scents washed over us in frequents intervals, making for a rather unpleasant environment. We quarrelled about whether it was the smell of diesel or kerosene that was most evident. Kwame had worked at the plant for eight years, and I realised he was probably right. It had to be kerosene.

I asked Kwame when he thought we would get some crude oil to refine. He shook his head and said, "Unless I see it with my own eyes, I cannot tell you." He went on to tell me about an incident that had happened two months earlier, when they had a vessel coming to the Tema Harbour, supposedly loaded with crude oil for the refinery. "By our own efforts, we had bought [crude oil] from some other place," he said, indicating that it was not the government who had supplied them with either the crude oil or the credit to purchase it. The comment reflected the tense relationship between the workers at the refinery, in particular the TOR Union, and the politicians in the current government's administration.

I was surprised by this information, since I had been at the refinery at the time Kwame was talking about – and to my knowledge there had not been any refining. My face expressed confusion. "You see, I'm coming [to the point]," he said laughing. "The vessel came, and as it was about to discharge, they [harbour staff] realised that the vessel was too big for the offshore mooring dock. So they did the ocean transfer.

When they had transferred it into two different vessels, the vessels took off. And the product [crude oil] was gone." "Where did the vessels go?" I asked. "All we heard was that some other place needed the crude oil more than the oil refinery. One vessel turned to Spain and one to Cameroon," Kwame continued. "We had the LC [Letter of Credit] to buy the crude oil, the vessel came right up to the discharging point, and then one goes for Spain and one for Cameroon. Can you believe it?" Kwame's laughter came to an abrupt halt and he added in a disheartened tone:

You have seen it. We know how to refine. We are not useless engineers here [at the refinery]. What is this, sitting here? For people to think we are useless, like all of them. So you should know that, this industry, what we call the oil and gas industry, the forces we are battling with are not small. We find ourselves not able to do anything.

In order to make sense of this conversation with Kwame – which resembled so many other conversations I had with engineers at the refinery – we require an understanding of the historical and contemporary dynamics of Ghana's petroleum industry, and specifically of the refinery's ability to refine Jubilee crude oil. The claim that TOR was not able to refine Jubilee oil was based on accusations that the refinery was not technologically equipped to refine the specific composition of hydrocarbons that made up the Jubilee crude oil. This claim, erratic threats of privatisation, and a dire state of production were impacting everyday working life at the TOR when I conducted fieldwork there in 2013. With the absence of crude oil to refine, speculations and rumours infiltrated social interactions at the refinery and fuelled a strong sense of uncertainty among the workers. While there was a prevailing uncertainty there were also a sense of security regarding the future of the refinery as a state-owned enterprise and hence the individual job security.

The refinery had received only small supplies of crude oil since the change in government in 2008/2009. The reason was said to be that the refinery was carrying a huge amount of debt. My informants, however, pointed out that more debt was incurred during the refinery's dormancy. Starting up and shutting down the refinery equipment had a price tag of around US\$ 5 million. These costs increased the refinery's debt in a time period when the refinery had almost no income. The threat of workers going without pay due to the state of the refinery also loomed. Kwame

would comment on how much debt it would incur to pay the 800 workers every month.

As already mentioned, debt was central to any discussion about the TOR. The numbers were usually unverified and conflicting, coming from various sources; but the overall weight of debt was not in question. Everyone knew that there was debt, and that it was significant. The debate centered on the question of whether the debt was due to the refinery's financial mismanagement – as was often argued by the media or "experts" – or whether, it was due to a tendency among government ministries to use the TOR as their personal filling station, helping themselves to petroleum products without paying – the view held by engineers at the plant. Refinery workers saw the portrayal of the refinery as inefficient, and of the workers themselves as thieves without any technical prowess, to be a political manoeuvre; and they and their union wanted to fight this image. They viewed it as a 'political' sabotage of the refinery and started a campaign called "Operation Save Tema Oil Refinery".

At the refinery, the prevailing uncertainty was dealt with mainly by making claims on the past, and by drawing on the refinery's role as a symbol of the progress and development of the nation. The discovery of oil in Ghana and the introduction of multinational oil companies operating an upstream petroleum industry added a layer of political uncertainty. "The forces we are battling with are not small," Kwame said, wanting to convey to me that while the petroleum industry in Ghana had always been something of a "political nightmare", it was now "even bigger than we can imagine." With the explicit aim of deploying their political agency, the workers at the refinery underscored their technical capabilities and sought to shore up the political importance of the TOR for Ghana. The missing cargo became one of the examples of the ways in which refinery workers were unable to control or impact the refinery's operations; but the continued existence of the refinery as a state enterprise – even as IMF and others⁷ were advocating for privatisation – gave the workers faith in their importance and status as a political entity with significance for the state.

⁷ A small group of civil society organizations continued to call for the privatization of the oil refinery (Quist, 2016; Baafi, 2014)

At the refinery, there was a strong emphasis on workers' technical prowess. A favorite point of reference was the 2009 visit of President Barack Obama to Ghana. The US President visited Ghana, and his Air Force One personnel came to TOR to test the aviation fuel that the refinery produced. Engineers in the lab would frequently make reference to the visit, as a stamp of approval for the quality of their work. The aviation fuel was tested and approved, and used by Obama for his trips around Africa. Other African heads of state, prominent individuals and industries throughout West Africa also relied on the services from the refinery. These and other success stories from the past were frequently discussed with me in interviews and informal conversations, promoting a positive image of the refinery and the engineers there.

However, the situation during my fieldwork in 2013 was dire. The missing cargo that was expected to arrive was one of regular disappointments at the refinery. People were "sitting down", and Kwame attributed my stay in the administrative building as a way of hiding this fact from outsiders. He stated:

It is because they don't want you to see that we are sitting down. They do not want anyone to know what is going on. That way, they can just talk and lie. The politics here is too much. Some people making money on us sitting down. But they know it is wrong, that is why.

Kwame's statement echoed many other conversations I had at the refinery. There were multiple claims, supported by different levels of evidence. It was certainly true that the manager did not want me to know about the dormancy of the refinery, always referring either to maintenance work or citing weather conditions as reasons that the crude oil had yet to arrive. Kwame also said that someone else was making money on the dormancy, which was a widespread rumour in the industry. The BDCs, led by political patrons and industry seniors, were indeed profiting on the dormancy of the refinery. However, there was no hard evidence of this profit-making being purposefully enabled by the refinery's dormancy. It was not clear why the refinery was not refining, nor what the future of the refinery might look like.

Trying to make sense of the everyday working life of the engineers that worked at the refinery was a difficult task – not because what they were saying did not make sense, but because they were in the processes of making sense of their working life

themselves. Surrounded by rumours about arriving batches of crude oil and false claims about the refinery's ability to refine, explanations were sought in what they referred to as 'politics' – a sense that something was not working at the expense of something else, for reasons that were only partially known.

In order to explain these 'politics', people continuously referred to an unknown group of people, described only as 'they'. "They don't want the refinery to work", "They lie", "They know it is wrong", and so on. It was unclear who "they" were, but "they" were the ones causing the refinery to have problems. It was suggested to me by several engineers that "they" were the top management of the refinery – people who were politically appointed by the NDC government. Elite businessmen operating companies in the industry were also mentioned. While there was no consistent explanation for who "they" were, there was a common understanding among the workers as to what was meant and who was referred to. In the same capacity, Kwame and Emmanuel referred to "they" when they discussed the fact that the refinery would again become an important asset to the Ghanaian government.

Rumours have been extensively theorized in the social scientific literature as important elements in the construction and deconstruction of order (Marfaing and Thiel, 2015, p. 412). Rumours have been described variously as the tactics of the marginalised (Enueleguele, 1998), the principal means of acquiring information among city dwellers in Togo (Ellis, 1993, p. 436), and a reflexive effort for constructing meaning and order in the everyday flow of events (Abe, 2011). Claude Abe (2011) further argues that rumours are always intertwined not only with desires but also with their logical counterpart: anxieties. As Laurence Marfing and Alena Theil (2015, p. 412) argue in their study of entrepreneurs in Ghana, rumours are also performative accounts that are used in order to make sense of a dramatically changing business environment. Rumours are therefore not false or irrational, but biased truths that are constructed based on peoples' engagement with the surrounding environment.

The workers at the refinery drew from a varied set of experiences and rumours in explaining the situation at the refinery. There was a fundamental belief in the refinery's role as a force for economic development, but the current situation

produced a sense of confusion. Explanations were found in the 'political'. The 'political' became a way of explaining the inexplicable, those actions or inactions that went against one's beliefs and desires. For the most part, the political was described as something that was working against refinery workers. However, my informants were not shy about sharing the ways in which they also embodied the political, the ways they felt they had a modicum of power. This political agency emerged particularly in response to rumours of privatisation. The following conversation with Emmanuel exemplifies this sense of politics:

Monica: What happened to the private partnership between Petro-Saudi and TOR?

Emmanuel: Which one was that?

Monica: I read about in the news a few months ago. Mahama said they were doing the final negotiations.

Emmanuel: You see. This is what they do. They lie. We heard this story, but our managers did not know anything. How can you say we are going into a partnership, and the people working, me, I am running the machines, I don't know.

Pause.

Emmanuel: Monique I will tell you this much. They cannot touch us. It is political. They can let us sit and wait. But we are the ones who can make kerosene for the fishing communities at Election Day - if we strike, there will be a shortage. They cannot touch us.

Another pause.

Emmanuel: These partnerships with what-what Saudi people. It's not the first one and it will not be the last. They sometimes say these things to show that they are working on our industry.

In this conversation, Emmanuel reveals a sense of safety he feels against privatisation. Threats of privatisation met resistance among workers at the refinery and the general public. He implies that the government would, from time to time, make announcements about changes to the industry, public-private partnerships, caps on subsidy spending and so on, but that these were rarely acted upon. According to him – and many of my informants in the industry shared this feeling – these announcements were more for the sake of theatre, than to broadcast actual plans. This explanation was also the first response from my informants during fieldwork when the Finance Minister announced plans to merge TOR with BOST in parliament.

Reading the newspapers in 2016, it seemed like the winds had turned for TOR. While Mahama stated in annual address of the nation in 2014 that TOR was in final negotiation with PetroSaudi over a merger (Ghana web, 2014b), he was quoted saying: "Government has no intention of selling the Tema Oil Refinery and we will rather assist TOR to re-establish itself as a vibrant state enterprise in petroleum production," during a visit to the refinery in 2016 (Benaba, 2016). The President said that the government was planning to build a new crude distillation unit, expanding capacity of the refinery and re-establishing TOR as a viable entity and position it as one of the foremost state enterprises in Ghana (TOR, 2016a; TOR, 2017b).

In February 2016, several news outlets published articles stating that the refinery had come back into operation. Reports said that the TOR had been receiving crude oil from BOST, and that the cooperation between the two state-owned companies was likely to continue. The TOR had gained financial support from the government — though only half of what was promised. However, the workers were happy for the plant to resume operation (Ocloo and Mordey, 2016). To show their appreciation, a group of workers from the TOR travelled to Wa in the Upper West Region, were President Mahama was having a political rally. Media reported on the event, and a representative from the TOR union thanked the President for bringing back the crippled national asset and restoring national dignity and security (Ocloo and Mordey, 2016). The picture below shows the workers attending the political rally, holding signs promoting the importance of the TOR.



Image 2.3: TOR Workers at Rally. (Ocloo and Mordey, 2016).



Image 2.4: MD of TOR. (Ocloo and Mordey, 2016).

The start-up of the refinery was celebrated with a Thanksgiving Service at the refinery. The theme of the service was "Thanking God for TOR", and having invited the media, the managing director of the refinery declared, "The spiritual battle that faced the refinery is over." Mixing religious metaphors and political dialogue, he continued to say that debt had been taken off the books of the TOR due to government policies. The picture below shows the managing director, reportedly

dancing with joy, to celebrate the return of crude oil and operations at the refinery (Ocloo and Mordey, 2016).

The revival of the TOR and the Thanksgiving Service, though on a smaller scale than the opening of the refinery, can be seen as a similar political ritual. Emphasizing the broad significance of the refinery for Ghana's economy or security was in the best interest of workers at TOR. TOR's Managing Direct was quoted saying: "I am not a believer that TOR needs a foreign strategic partner to operate. I believe that the refinery has the men and women to be able to take this to the next level." (Ghana web, 2016).

Bringing a religious component into Ghana's oil politics was not unprecedented. President Kufour stated at the time of discovery that "God has given oil to the NPP to be presented to Ghanaians." The Ghanaian Daily Mail published the headline, "Thank God. Oil at last. Thank God." Furthermore, churches held services and thanksgivings for the discovery of oil (McCaskie, 2008, p. 324). Use of Christian rituals and language in Ghanaian national politics is fairly common (Assimeng, 1986; Abogaye-Mensah, 1994; Pobee, 1991; Yirenkyi, 2000), and I would hesitate to ascribe further meaning to politicians or single statements that combine politics, religion and oil, than to ascribe it to Ghanaian sociality. However, hosting a thanksgiving service at the refinery with invited press coverage does resemble a political spectacle, intending to showcase the political success of the refinery, as both engineers and politicians alike benefit from the press coverage. Engineers maintain the narrative of the refinery as an important national asset, and the government showed that they had not given up on the refinery, in a crucial election year.

My key informants at the refinery confirmed that the TOR was operating again, and that the atmosphere had changed. Emmanuel did, however, point out that they were suspicious about this turn of events in an election year, and wondered whether it was just a political move to keep the NDC in power. Part of the TOR's success comes as a consequence of cooperation with BOST, and Emmanuel and others were suspicious of how long the 'friendship' was going to last. Nonetheless, the events in the Upper West Region and the thanksgiving service at the refinery were political events that

again confirmed the importance of the TOR and the symbolic status that the TOR had retained through uncertain times.

Conclusion

The First President of Ghana, Kwame Nkrumah, had a clear strategy in building an oil refinery that could be the start of an integrated petroleum industry if Ghana discovered oil. For the engineers at the TOR, the refinery embodied and symbolised this vision and promise; and in the midst of its dormancy, they utilised the symbolic representational history of the refinery to call for patriotism and unity in order to get in running again. The continued public display of governmental intentions to privatise the refinery, and the persistent unavailability of crude oil for operations, was understood as politics of petrol; and while the threats of privatisation were real enough, the importance of the refinery as a state-owned enterprise providing a basic public service remained crucial to all governments in Ghana. The refinery has become synonymous with the provision of petroleum products, and as such has importance for the popular vote in Ghana's democracy.

Petroleum products are politicised in most countries; the condition is not unique to Ghana. However, the process of politicisation, the reasons and ways in which petroleum products come to carry such political significance, depends on specific historical trajectories of petroleum assets and management. As I have shown, the refinery occupied a particular position as a state-owned enterprise; throughout Ghana's changeable political and economic history, it has been protected against privatisation. The construction of the RFCC, and the NPP's policies at the refinery, reenergised the operations and the language around its modern technological status. When several engineers left the plant for the Gulf States, politicians called for patriotism and unity at the refinery for the sake Ghana's economy. The TOR has managed to retain an important role in Ghanaian politics, although contradictory and complex, it remains important for the contemporary politics of petrol in Ghana.

At the TOR, workers experienced anxiety and confusion regarding the future of the refinery, while at the same time being well aware of the refinery's political status in Ghana. The TOR union was vocal, and arguably crucial for the refinery's continued

survival, and they built on claims of patriotism and unity, drawing from the vision and symbolism deployed by Nkrumah. The TOR was the cornerstone of Ghana's downstream petroleum industry, and the oscillation between operation and dormancy opens up the universe of contradictions, possibilities and negotiations that constitutes the politics of petrol. The next chapter will examine in detail the reform of Ghana's downstream petroleum industry that brought about new companies, amongst others the BDCs that were claimed by engineers to be part of the sabotage of the refinery from 2009 onwards.

Chapter Three The Tema Heavy Industrial Area and Reform

Introduction

In 2005, Ghana saw the implementation of yet another petroleum sector reform. While successive Ghanaian governments have attempted to implement reforms on this sector since 1996, it was in Kufour's second term and after the first oil and gas discoveries that major changes in Ghana's downstream petroleum industry became evident. The downstream industry experienced a dramatic growth in the number of Bulk Distribution Companies (BDCs) and Oil Marketing Companies (OMCs). The proliferation of companies resulted in a more competitive market, an expansion of filling stations across Ghana, and an end to the fuel shortages that had become commonplace in many areas. This chapter examines some of everyday realties behind the impressive growth statistics that followed on neoliberal reform.

In this chapter, I look at how private companies represent themselves as distinct from older state operations. The tension between the new operators and the old operators were considerably heightened as the competition for Ghana's petrol market increased. I examine how private entrepreneurs utilised business strategies that moved the politics of petrol beyond the realm of the state into reciprocal relationships with other entrepreneurs and social obligations tied to kin and place. Finally, this chapter unpacks control measures implemented to 'clean up' the industry, demonstrating the varied outcomes of neoliberal reform, while shedding light on some of the continuities of the politics of petrol in Ghana.

My informants, media and politicians described the establishment of the National Petroleum Authority (NPA) and the reform in terms of the 'deregulation'. That said, the reform does not represent deregulation so much as a new form of regulation. The petrol industry in Ghana has high economic and political stakes, and while the latest reform represents the most pervasive liberalisation to date, its neoliberal mandate does not seek full deregulation, but rather a strong state regulator. Therefore, while my informants talk about deregulation, I translate this in my analysis as 'reform'.

Everyday business at Tema Heavy Industrial Area

At the refinery, Emmanuel and Kwame were acutely aware of the new companies that were carrying out the importation and distribution of petroleum products. According to both men, these companies reduced the need for an operating refinery. The companies had taken away some of the clout that the workers at the refinery could previously draw upon. Now, a strike from the engineers could not block the flow of petroleum products, as private companies were responsible for most of the market demand anyway. In the last few years, several private depots had been built at Tema Heavy Industrial Area (THIA), and Ghanaian BDCs and OMCs carried out the primary trade and distribution of petroleum products. THIA was an area of Tema that had been designated by the government for industrial activity.

The new depots were minimalistic and modern looking, with simple administration buildings and new, shiny white tank farms. While some tanks at the TOR were new, most of them showed signs of wear and tear, and some were covered in rust. The new tank farms at the private depots were regularly painted, and the clear white colour made them look like white clouds or even marshmallows in contrast to the dusty and dry THIA. "They look out of place," Kwame said, reflecting on how he felt about the depots.

While the new depots did not have the same storage capacity as TOR, they had new and more practical storage systems. The loading racks made truck loading more efficient, they had larger (if fewer) tanks, and they had a separation between the loading area and the administration. The entrance to the loading areas had brick fences with texts painted on them, including 'no payment beyond this point, no bribes' – reflecting popular perceptions about the refinery in terms of its operational culture.

Just across the road from the refinery was a large, unfinished multi-storey building. In the shell of the half-built, dusty structure, the ground floor was busy with traders and small food stalls. The second floor was yet to receive it's roofing, and had visible iron rods sticking out of the half-finished cement walls. Between them, however, the first floor was finished and furnished, and housed over a hundred small offices, each about ten to fifteen square meters. The offices were home to BDCs and OMCs, and a

larger office for the NPA. This building, which no one seemed to have a particular name for, housed the everyday deals of the petroleum product trade.

Before and after conducting my fieldwork at the refinery, I spent time in these offices studying the everyday business of private companies selling and purchasing petroleum products. As a base, I had a desk at Naagamni's office in the building. We had a tiny office, which we shared with two other OMCs. There was only space for two desks: Kelani, the Naagamni representative, and I shared one; and another one was shared by two older men from other companies. Kabo, our errand man, also came to the office from time to time, making it a rather tight and busy space. We had a half-functioning air-conditioner, but the smell of petroleum from the test samples placed on the floor made the room stultifying.

The fact that the office was small and the air quality questionable was not detrimental to the work we had to execute. We would leave the office, to visit the TOR and the private depots; we would visit other companies that we were conducting deals with; and we would have to go to the NPA office to get our paperwork signed. Everything was within walking distance, except for a few private depots to which taxis were shuttling people consistently. It was a very busy, and sometimes chaotic environment, in sharp contrast to the space of waiting at the TOR.

Every day Kelani sent trucks of petroleum products from THIA to the north according to instructions that we received from the head office in Accra. Naagamni was an OMC, purchasing petroleum products from BDCs. When one of our filling stations had low levels of petroleum products in their tanks, they would report this to the head office. The head office would make a decision about whom we would purchase from, which of the multiple BDCs, and send the order to Kelani in Tema. Kelani was there to sign the papers and communicate and enforce the decisions made by others. This role involved paperwork and facilitation of the loading of trucks. The truck loading process was gradually becoming more complicated as controll measures from the NPA were increasing in numbers. Kelani and Kabo had to take test samples from the loading, siphon them into plastic bottles and keep them in the office. After taking the test samples, cable ties had to be placed on the truck vaults to signify that the truck had been sealed from its point of departure in Tema. In the near

future, the trucks would have to be equipped with GPS. Kelani and Kabo frequently discussed the increasing hassle of loading trucks, speculating on what would be the next in the long line of what they viewed as "useless control measures." I return to these control measures later in this chapter.

Naagamni did not face particular challenges in purchasing petroleum products. They had a good track record of payment to BDCs, and so BDCs were often chasing Naagamni to make purchases from them. Not all OMCs enjoyed the same reputation. Given the high numbers of OMCs and BDCs, and the ease of registration and licencing, some BDCs had found themselves selling petroleum products to OMCs and struggling to obtain payment within the stipulated thirty days. This arrangement had left the BDCs in trouble with the banks, and they were now competing to sell to the few successful Ghanaian OMCs – including Goil, as well as the multinational oil companies Shell and Total.

While Kelani did not have much influence on whom we should purchase from for how much, he still played a crucial role in finding out which companies were doing well, what alliances Naagamni should be making and why. The social relationships at THIA were highly instrumental. People were continuously visiting each other, exchanging small pieces of information, calling upon friendships and favours when it was time for deals to be signed. Several BDCs had hired women as their sales representatives. These women conducted their sales jobs in a skilful manner by attracting attention to their appearance and flirting with OMC representatives like Kelani. Both at the office complex and in the depots, the percentage of female workers was very small (excluding pettyttraders). The male-dominated environment at THIA highlighted the presence of women, and they were known to be the best BDC sales representatives as they were persistent and highly socially skilled.

The everyday business environment at THIA stood in stark contrast to the operations at the refinery. In fact, the only busy area of the refinery was around the tanks that had been rented out to BDCs, where petroleum products were loaded. The price for rental was favourable compared to rental prices at private depots, and it was therefore always in use. The growing petroleum product market in Ghana could only be observed from outside the huge refinery fences. The companies were many, and

gathered in one place, it became clear how fierce the competition was between various BDCs to sell to reliable and financially stable OMCs. This fierce competition frustrated workers at the refinery, because these companies utilised the infrastructure (pipelines and storage tanks), bank system and manpower that previously had kept the refinery going.

The Regulator: The National Petroleum Authority

The structural adjustment reform implemented in Ghana in 1983 included a petroleum sector reform that partly materialised in 1996. The government's view on energy enterprises as strategic, and the public dismay with privatisation processes, delayed various reform measures as already discussed (Adda, 1994). In 1996, the government removed the GNPC's monopoly over the importation of crude oil, and adopted a system of open bidding for the procurement of petroleum products. A competitive tendering process between the GNPC and OMCs was initiated, essentially allowing multinational oil companies to import petroleum again (Addison and Osei, 2001, p. 13). A pricing formula was adopted for the retail prices of petroleum products, to reflect international price and exchange rate changes, but it was not consistently implemented at the pump (IMF, 1998). In 1998, the IMF reported that more comprehensive changes were coming as the government had said again that they would commit to removing subsidies on petroleum products, liberalising importation, and preparing the TOR and Goil for sale (IMF, 1998).

At the time of initial reform, the only OMCs in Ghana were multinational oil companies and Goil. The reform enabled these companies to import petroleum products, which aimed to increase indirect taxes and decrease government spending on importation. This change, and a number of taxes added to petroleum products at around the same time, led to a minor increase in fuel prices in the late 1990s. While the price increase was unpopular with the public, justifications were put forward arguing that taxes on petroleum products were important in raising revenue for the state to pay the wage bill, to curb smuggling to neighbouring countries, and to avoid oil speculators gaining large windfall profits without contributing to the national economy (Government of Ghana, 1991, p. 20; Government of Ghana, 1993, p. 8; Younger 1996, p. 234; Kusi, 1998).

The petroleum sector reform in Ghana in the 1990s was unsatisfactory from the perspective of the IMF because the price on petroleum products continued to be subsidised by the government, and because state-owned enterprises were not sold off (IMF, 2002). Importation by the state and subsidies for petroleum products continued to be a large expenditure on the state budget. The IMF recommended capping spending and further privatisation of the petroleum industry. Responsibility for the regulation of the petroleum sector belonged to various institutions up until 1997, when an Act of Parliament established the Energy Commission. The Energy Commission became the regulator in charge of overseeing operations and granting new licences to all petroleum-related ventures. The Petroleum Tender Board was established in 2003 to adjust petroleum prices according to an automatic adjustment formula. These bodies, the Energy Commission and the Petroleum Tender Board, were later merged under the Act of Parliament 691, which established NPA in 2005.

When established, the NPA's main objective was to "regulate, oversee and monitor activities in the petroleum downstream industry and where applicable do so in pursuance of the prescribed petroleum pricing formula" (Act 691, 2). The NPA is a government body, subject to the Ministry of Energy and Petroleum. The governing board is appointed by the President of Ghana, and consists of a range of industry representatives, civil society representatives, and technical and political experts. The NPA consists of three departments: Inspection, Monitoring and Licencing (IML), Planning, Pricing and Research (PPR), and the Unified Petroleum Price Fund (UPPF). In 2014, the Petroleum Product Market Scheme (PPMS) was launched as a new department; and in 2015, the NPA Amendment Bill was passed in parliament to lay the groundwork for the implementation of the full price liberalisation of petroleum products.

Regulated deregulation is at the heart of neoliberal reform. Responding to the failure of structural adjustment programmes of the 1980s, reform in the 1990s expanded economic liberalisation to include political adjustments. According to neoliberal theory, the state should be properly positioned to correct economic phenomena that hamper competition and maximisation, such as monopolies and price instability. The state is supposed to be reengineering markets in neoliberal reform, where economic growth determines the ability of the state to shape a framework within which

individuals are free to pursue their interests. Neoliberal reform is supposed to trigger modifications of subjectivity and social relations, making them correspond to the metaphysic of the market (Hilgers, 2012, pp. 80-81).

As a neoliberal regulator, for the downstream petroleum industry, the NPA has focused on building a strong representation in its role as deliverer of 'deregulation'. The NPA Act of 2005 lists the various tasks that the NPA has the mandate to carry out, including the implementation of price setting mechanisms, licencing, oversight of fair trade practices, the promotion of competition, and the assurance of safety and security for Ghanaian consumers. However, in a series of self-promoting newspaper articles, the NPA have made a more ambitious sense of their role clear for the public. A 2014 double-sided newspaper article, for example, featured a carefully constructed narrative of the NPA's heroic efforts to carry out 'indigenisation' and 'deregulation' of the industry by promoting a liberalised sector where Ghanaian entrepreneurs can partake (Owusu, 2014a).

The article describes how, in 2001, there were fourteen OMCs operating in Ghana, of which six were multinational oil companies controlling 72 per cent of the petroleum product market. In 2006, after the establishment of the NPA, there were still six multinational oil companies, but they only controlled 55 per cent of the market. The number of Ghanaian OMCs had risen to 28, in addition to five Ghanaian companies dealing in Liquefied Petroleum Gas (LPG). The article continues to illustrate how the industry has grown in the hands of the NPA, enumerating the establishment of different types of Ghanaian companies in its wake. 22 Oil Trading Companies (OTCs), 18 BDCs, over 2,000 Bulk Road Vehicles (tanker-trucks), Bunkering Companies, Calibration Companies, Lubricant Blending companies and more made the list.

According to the article, taking over the responsibility of all activities in the downstream petroleum industry was a major task, a goal the NPA has not just achieved, but surpassed, well beyond its given mandate. The NPA has rigorously regulated, but also opened up the market for indigenous companies. And growth in Ghanaian companies has been managed through a focus on local content participation. Without explaining how this local or indigenous participation came

about, the article states that it was extremely successful, and led to an "unprecedented proliferation of investment." (Owusu, 2014a, p. 1) The article concludes by saying that indigenous companies are financially weaker than the multinational oil companies, but that they now have the capacity to provide the downstream petroleum market with product if the multinationals pull out. This conclusion was, of course, great news for the country, in which people should continue to invest for the development of national capacity and local expertise (Owusu, 2014a).

In a second newspaper article (Owusu, 2014b, p. 1) titled "The essence of the National Petroleum Authority," the NPA's role was described through a metaphor:

Imagine a game of football where there is no referee, no rules and no standards; it becomes a 'free-for-all' contest where the strongest takes advantage of the weak; or better still, it can be linked to the jungle's "survival of the fittest".

The public relations officer at the NPA, the author of both articles, wanted to convey the strong role of NPA in regulating oil companies that would otherwise engage in dubious business practices and operate as cartels. The work of the NPA was described as 'deregulation', while they simultaneously emphasized their role as the 'regulator'. In describing both foreign and Ghanaian oil companies, NPA assumed a certain set of behavior that would hamper 'healthy competition'. This was in thread with current language of neoliberal reform, but it did indeed stir confusion and sense of contradiction in the industry. The NPA was not seen among my informants to embody the 'free regulator role' that NPA ascribed to itself, but rather an institution that carried out selective control of the industry, according to multiple 'political' considerations.

Expansion and 'deregulation': 'BDCs and OMCs'

The discovery of oil and gas in 2007, and the rapid development to 'first oil' in 2010, got many Ghanaian entrepreneurs eager to take advantage of the opportunities that the industry would bring. The downstream sector was touted as the one with the most potential for Ghanaian entrepreneurs, as the upstream consisted of small-scale highly technical expert work (Energy Commission, 2010, p. 15). Many of my informants

gave the oil and gas discovery as part of their rationale for starting companies in the downstream sector. However, they also referred to 'deregulation' as the enabler for the business start-up. The combination of the two was what sparked an exponential growth in OMCs and BDCs, as illustrated by the graph below.

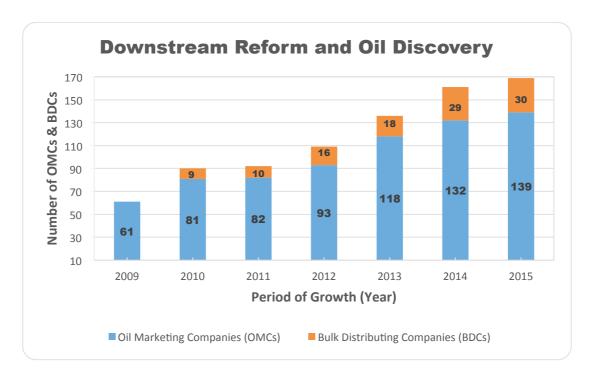


Table 3.0: Source: NPA Statistics 2016, Table: Author (2016).

Before the establishment of the NPA, OMCs imported petroleum products, in addition to direct state import and government-to-government agreements. With the new set up of the industry, BDCs also registered to import petroleum products. As shown by the graph, it took some time for petrol entrepreneurs to register and start operating BDCs. According to interviews with BDC representatives, this delay was due to the initial start-up capital required for importing petroleum products. While numbers were only available from 2010, interviews at the NPA confirmed that the numbers of BDCs only started growing half a decade after reform was initiated. After the NDC administration secured its second term – itself a drawn-out process, following an election and subsequent court-case in 2012/2013 – growth continued significantly. By 2015, there were 30 BDCs operating in Ghana – far more than what

most of my informants, including those who worked for the BDCs themselves, considered necessary.

The new BDCs did not have their own storage space for petroleum products, and were operating as financial middlemen, importing petroleum products with the use of already established infrastructure (pipelines, depots, loading racks etc.) – including that of TOR and BOST. The BDCs imported petroleum products from international OTCs and sold the product to OMCs. These BDCs were initially supposed to absorb the risk of foreign exchange losses that the government had previously carried. The growing debt at the refinery was partially ascribed to foreign exchange losses with a fluctuating Ghanaian cedi. Giving importation to a liberalised market was one of the key components of the reform to relieve government expenditure on the industry (IMF, 2002).

The BDCs purchased petroleum products in US dollars, and sold them in the local currency, for a regulated price decided by the government. Funds were distributed to the BDCs according to foreign exchange losses and losses on sale due to subsidised prices — ensuring the operation were not high risk. Rather, industry funds tied the operation of the BDCs directly to the government. The erratic payment of these funds to BDCs created a dependency bond between the BDCs, the government and the banks. As one of my informants said, "[...] nothing has really changed, apart from a dozen new men in suits."

The new BDCs in the industry were not very popular among the people who worked outside of the BDCs. People pointed out that they did not have any productive purpose, and they were frequently referred to as the BDC-cartel. The growing number of them, combined with the lack of tangible effect on the productivity of the industry made people very suspicious of political involvement and large-scale corruption. My informants pointed at one particular company, which had experienced huge success, as evidence of the suspicious set-up of these new companies. The company in question was operated by a father and son, and had not only set up a BDC, but had ventured into other sectors on the back of the successful petroleum import company. While the son was the managing director of the company, people would refer to the father as the person behind the scenes getting government

contracts. The father had a previous career as a politician and civil servant, and had at one point held the managing director's position at the TOR. At the time when the TOR was not working, and BDCs were benefitting from a sharp increase in demand, such links became heated topics of discussion and further fuelled suspicion and conspiracy theories regarding the role of the BDCs.

These suspicions were not unique to the petroleum industry. Brenda Chalfin's study of 'deregulation' in the shea market in northern Ghana illustrates the multifaceted nature of privatisation and liberalisation. Various groups, inside and outside the realm of the state, took on different roles as the parastatal company was dissolved in policy and an array of regulatory frameworks and new institutions took its place – often reinventing its previous functions. Chalfin (1996, p. 424) refers to the process of deregulation from state control as a "[...] dismemberment and reassemblage producing an apparently new creature – but one, upon closer inspection, retaining former traits and tendencies." What looked like a withdrawal of the state was actually a shift to a state-led system in the private sphere, with the same networks, infrastructures and social capital. It was this kind of critiques that my informants voiced regarding the BDCs. They were suspicious about the new arrangements with BDCs, as it looked like they simply enabled an accumulation of wealth and unfair advantages for the political and economic elite.

Paul Nugent (2007, p. 270) has argued that the economic liberalisation in Ghana turned yesterday's revolutionaries into today's company directors. NDC politicians discovered that privatisation and deregulation harboured unforeseen possibilities for private accumulation. Others have pointed out that African leaders, and leaders worldwide, have displayed a sophisticated management of the reform process that allows for some progress without threatening their hold on power (Tangri, 1999, p. 99; Van De Walle 2002, p. 276). Many questioned the nature of the majority of BDCs in Ghana. They were not abiding by industry regulation that required them to build tank farms in order to add storage capacity in downstream industry. They were operating from a set of advantageous practices established by the government such as the ability to rent cheap storage space at established depots and the refinery as well as funds to cover foreign exchange losses in trade with OTCs. However, this can not be extended to all the BDCs. A handful of them built storage depots at THIA and

were considered as productive companies that represented *de facto* expansion of the industry.

While there was suspicion of the productive output of BDCs in the industry, the new OMCs were not exempt form the same accusations. The most significant growth in petroleum companies has been among the OMCs. OMCs are companies that purchase petroleum products from BDCs. After purchasing the product, OMCs can either market the product to independent retailers (filling stations) or supply their own filling stations. The table above demonstrated an expansive growth in OMCs. Most of the companies were new, but some of them were independent filling stations that decided to register as an OMC, or informal sale outlets that formalised their retail stations.

At the time of my fieldwork in 2013/2014, many of the new OMCs were only operating one or two filling stations. Their presence was still required at the administrative building at THIA, but with limited financial capacity to rent an office, many ended up in Naagamni's situation, with several companies in one office. The two men sharing the office with us were both working for new small OMCs. One company had two filling stations in the Volta region, and another had one filling station on the main road between Accra and the Cape Coast. They served their filling station once every two or three months as they were not at prime locations. Both companies were in the process of acquiring more filling stations, but with high interest rates for financial assistance in Ghana, it was taking their companies time to build and expand business.

There were many types of OMCs. There were several groups of OMCs that could be linked through their ownership. BDCs with international connections – such as, for example, Nigerian Oando – had a number of OMCs linked to their operations. This cooperation was not registered with the NPA (as it was technically illegal), but it was common knowledge at THIA that these were companies that only traded between themselves. There were a new group of OMCs, directly connected to BDCs and belonging to international commodity trading companies, blending low quality fuels for Ghanaian markets. There were multinational OMCs, state-owned Goil and a range of Ghanaian OMCs.

All OMCs had filling stations. Although they might be connected to larger networks of BDCs or a group of OMCs working together, the name of the OMC would correspond with a filling station somewhere in Ghana. The common perception in the industry (although not possible to verify) was that OMCs were making considerably less profit than BDCs, and due to their visible productive purpose, selling petroleum products in the market, they were seen as legitimate companies that provided a desirable service for Ghanaian fuel consumers. Due to the new OMCs filling station in Ghana was built throughout the country and several places experienced a formalisation of their fuel outlets (informal sale to filling stations), and while this was not desirable by everyone, the capacity of a filling station did make fuel shortages less frequent. While the general public seemed satisfied with the increase in Ghanaian OMCs and the filling stations they provided, there were critical voices within the industry. The next section examines what the established petroleum actors in the industry thought of the new actors brought about by reform.

"The system is too much": Voices from established petroleum actors

While the NPA promoted itself as a strong and effective regulator of the downstream industry, the people I interviewed from established companies and state-owned enterprises saw it otherwise. These people frequently voiced an opinion of the NPA as inefficient and soft, without political independence to implement price adjustments, and responsible for making the downstream sector more difficult to work in. They, informants from TOR, BOST, Total and Goil, felt that the NPA gave out licenses too easily, and that smaller companies were able to avoid or bypass the sector's regulations. An interview I conducted at Goil headquarters in Accra reflects these sentiments clearly, and shows the tension in the industry between the new and old petroleum sector operators.

The Government of Ghana established Goil in 1960, with the same Italian shareholders they had worked with on the TOR. In 1974, Goil became fully state-owned during the nationalisation of the petroleum sector. Reform initiatives and conditions from the IMF and WB have called for the sale of Goil without success. A restructuring exercise led to Goil becoming a public company registered on Ghana's

stock exchange in 2007. The Government of Ghana owns 51 per cent of the shares. Goil has the largest retail network across Ghana, and I frequently visited their filling stations. Getting hold of their management team, however, was a more difficult task. I succeeded, as in many other instances, by asking someone I met at a social function to introduce me to their friends in the sector.

I finally met with Kingston, a Goil service manager turned property hunter, in December 2013. In the busy and crowded Goil headquarters in downtown Accra, he told me about how the reform of the downstream industry had changed the nature of his work. "I used to be in charge of the filling stations in Accra, but with my experience, I now look for new plots for Goil." Kingston explained that the reform of the industry had increased the competition, and even with a good market share and government contracts, Goil was bearing the brunt of it. Acquiring property in the hinterlands of Ghana was easier, but business was more challenging there. Acquiring lands in Accra and Tema, where petroleum sales were high, was very expensive. "My job is becoming very challenging," he said.

Goil had about 160 filling stations at the time of our interview, but were looking to expand in order to keep up with new developments in the downstream industry. Kingston said that the business environment was difficult because 'deregulation' presented specific new challenges. He was thinking about the number of new companies and their impact on Goil's role in the sector. He explained it through a metaphor, "If you have a big tree and there are red ants, it does not matter how small the ants are compared to the tree. They can do a lot of damage, if they are many, as a group they can take down the tree."

His sentiment reminded me of conversations I had had with workers at the TOR. There too, people were concerned with the growing industry and their place in it. Kingston and others would ask about the role of certain companies, and what productive purpose they had. He was not just concerned about the number of these companies, but also the nature of them. He stated:

Some of them are even armchair companies! They are not real companies, maybe one or two staff. Especially the BDCs. They do nothing really. They import through the TOR, and sell at the TOR. Why does there need to be a BDC to do that? TOR can do that. Now there are even Ghanaian OTCs. For what? The system is too much.

Kingston was clearly unhappy with the state of the industry and the direction in which it had developed over the years prior to our conversation. While he agreed that increased Ghanaian participation in the industry was good, he also firmly believed that many of the new companies were not sustainable companies, and that they should not have been granted licences. He said that the market was now overcrowded with companies, which had altered practices and made it more difficult for Goil to operate. He utilised another metaphor to demonstrate his point.

You have seen the traffic here right, especially in Accra at certain times and places. [I nodded agreeing that traffic in Accra was chaotic.] It's like that. There are too many cars on the road. When there are too many cars on the road, they start forming queues on the side of the road and they overtake each other. There are roads, but they don't use them. They don't want to wait in line. Wait for their turn. It's like that with the laws here in Ghana. There are laws in the industry, but we [companies] are too many now. So the small companies they try to avoid it. There are laws in Ghana but the enforcement is too weak. The deregulation has made the system too much.

Through the use of a traffic metaphor, Kingston explained that a divide had emerged in the industry, whereby the small petroleum companies were able to conduct business with larger risks. The established companies with more to lose had to diligently obey the regulations. This new environment created a business sphere that he found unfair and increasingly challenging. As we were chatting about the new companies and their dubious ways, several of Kingston's colleagues came by the office and joined the conversation. One of them explained that his brother had contacted him to ask if they should register an OMC. We all burst out in laughter. Kingston said "the system is choked, and you want to go and register?" We all kept laughing.

Goil, Kingston explained, had to follow the rules because the stakes were high. The punishment for not abiding by the regulators' measures and frameworks for operations was expensive (although Chapter Five demonstrate some leeway on this). The multinationals also had to follow the rules, but they had profitable foreign bases

and could get marketing strategies and material from their headquarters. The new companies, however, could register, take huge risks, announce bankruptcy if they failed, and start again. "If it was not for the government, we would have been in big trouble," Kingston admits, explaining that while the government has no obligation to buy product from Goil, they do it anyway. He noted,

It is just natural that the government buys from Goil. Goil will also stretch itself longer for the government. You know, CSR [Corporate Social Responsibility] and stuff. [I did not know what he meant, but he did not leave me room to ask.] The internationals are aggressive in their marketing. But when the government spend on Goil it will stay in Ghana. If the government spend on Total, God knows where it goes.

Kingston notes that while the government initiated the reform that had caused the increased competition, it became the source of the problem and the only available relief. He explained that before the reform there were only a few OMCs. Now there were too many to count. "I doubt the NPA even knows how many," he said in frustration. When I asked him directly about his experience with the NPA, he expressed his dismay with the institution and repeated his reasoning:

I do not like the NPA. As a big company you have to follow the rules and it's slow. The smaller companies can avoid anything, but we have to abide by every little thing they decide to try out in the industry. It's a pain and it's very costly for our company. The market is not deregulated, they make rules and do whatever they like.

Kingston had worked with Goil for two decades, and was well positioned to take a long view on the results of reform. His opinions were rooted in his position at Goil, and his complaints and resentment towards the NPA and other new actors needs to be seen through that lens. While Goil had had a favourable market share in Ghana previously, reform had brought about a new set of competitors. These companies competed for clients, but they also had caused an increase in the price of land for filling stations. For Kingston, and other Goil workers I interviewed, these companies were nuisances, and reform had made the business environment more challenging.

As we have seen, the growth in Ghana's downstream petroleum industry preceding reform was received in the industry in various ways. The private depots in THIA were utilising visual technics to distinguish themselves from the refinery, from the more subtle use of new paint to the less discrete markers that spelled 'no bribe'. The

NPA was blowing its own horn through newspaper articles that described its success as strong regulator. However, tensions in the industry were high. Some of the new companies were viewed with more suspicion than others, but nevertheless, increased competition had the petroleum establishment complaining. A reoccurring complaint and source of suspicion were the operations of BDCs. People were the questioning what productive purpose these companies had. The suspicion was further fuelled by the fact that information regarding operation of BDCs was not available.

Some of the concerns from the established petroleum actors and others were indeed justifiable, particularly at TOR, where BDCs were operating on their premises, and TOR workers were waiting for operations to resume. The accusations from the Goil manager that all small OMCs were able to bypass regulation from the NPA were not entirely correct. While there were ways for OMCs to speed up processes at the NPA for licences, this was not a cheap option that was widely available to everyone. The Goil manager claimed that OMCs were responsible for making the industry chaotic, in which he referred to OMCs that he believed could operate on the borders of industry regulations. The reform brought about a set of new companies and practices, and hence diversified the 'politics' in the industry. In the next section, I take a closer look at one of the new companies in the downstream industry, and how 'politics' came to matter for them.

Naagamni Oil: The Politics of Petrol in new spaces

One of the companies represented in the statistics above, and referenced by the Goil manager as small companies that made the industry more chaotic, was the company to which I was attached during my fieldwork. Naagamni Oil Limited was registered as an OMC in 2005. Sumaila Mesuna, CEO, built and operated his first filling station in Tamale. He continued to build filling stations in Tamale and other northern cities, such as Yendi, Bolgatanga and Bawku. He bought his first filling stations in Accra in 2012, and by the time of my fieldwork he had twelve stations in the North, three in the Greater Accra region, one in the Volta region and one in the Western region. The filling stations in the North he built from scratch, while the ones acquired in the South were bought from other operators.

Sumaila worked as a filling station attendant in his teens, and after finishing school he started his own small cement venture. He rented a small truck and drove from Tamale to Accra and back to sell bags of cement. He stayed overnight in Buipe, where he got to know the people at Buipe Petroleum Storage Depot. By working in a filling station and driving a truck frequently over long distances, he saw the need and opportunity to tap into the petrol market in the northern regions.

He spent six years building his first filling station from his savings in the cement business. His father gave him a piece of land just outside Tamale. He operated the filling station for three years before building a second station in his hometown of Gambaga. While Gambaga did not represent a profitable market, he felt obliged to build there considering the initial help that his family, and his father in particular, had extended to him during the start-up of the company. He further received a lot of help from his relatives in building his stations, including in the acquisition of land, labour for construction, labour at the stations and administrative help for the company as it expanded. While he remained a boss, with strict control over every part of the company, the endeavour, he insisted, was not a one-man effort.

The people working at the Naagamni head office included Sumaila's two sisters and a brother, as well as other relatives. Kelani, stationed at THIA, was married to Sumaila's cousin. The regional managers were all male in-laws. The few people that were 'sourced' outside of the Mesuna extended family, such as the chief accountant, were from the North, and had some connection with the family. Sumaila also hired truck drivers and labour for his filling stations from his hometown, Gambaga, including various untrained extended family members. Both truck drivers and filling station attendants were low-salaried positions, and most companies struggled to combat stealing and other mischievous behaviour from people employed in these positions. By only hiring people with whom he had family connections, Sumaila felt that he had a layer of familial security against stealing and sabotage. It also meant that he could not treat his employees without care, and while his salaries were standard industry salaries, he did make contributions to his workers if they were in need, or for specific social events (weddings and funerals particularly).

I first met Sumaila in 2012, when he helped me gain access to the NPA for my internship. At that time, he had just returned from a trip to China, where he had acquired new petrol pumps and other construction materials for his new filling stations. In his house in North Accra, he showed me pumps and other construction material, commenting on the savings he had made by importing containers from China instead of buying in Ghana or importing from Europe. Good consumer prices and cheap shipping from China had cut the costs of constructing filling stations, and the reform of the industry had made stations easier to build.

Sumaila had good contacts within the NPA, and by regularly attending to certain civil servants in the institution and providing them gifts from his trips abroad, he was able to fast-track various licences and approvals when he needed them. My first experience with his generosity and gift-giving to civil servants in the NPA came when I was granted my internship. Without any warning, he presented two iPhones to the man who was going to mentor me, and swiftly told me to leave the room, as they were going to talk about business. On the way home in the car, I suggested that it might be problematic if those phones were bribes on my behalf. He assured me first that they were not bribes, but gifts; and secondly, he told me to get a grip, toughen up and prepare for my internship.

Apart from building his business by relying on his family and extended kin network in everyday operations, and skilfully keeping important contacts at the NPA, Sumaila had to build networks in the industry. He had to make sure he was dealing with reliable BDCs, and that he was able to purchase petroleum products when he needed them from those BDCs. He was therefore careful in his selection of business partners, and made sure that they had strong reciprocal bonds between them on a personal level. This strategy was ensured through the creation of friendship, gift giving and the exchange of favours. For instance, when one of his friends started a BDC, Sumaila suggested that he would let some his best-trained workers leave Naagamni to join the new BDC. As his friend did not have much experience, nor many contacts in the sector, this favour was important to the BDCs success – and it sealed the friendship and business relationship between the two men.



Image 3.1: Sumaila at a filling station in Tamale. Author (2014).

Apart from building his business through extensive family- and friendship-building, a couple of other things were central to Sumaila and Naagamni's business strategy. While many of the new OMCs played on religious themes in their company names and filling stations signboards (Grace Oil, Trinity Oil etc.), Naagamni was perhaps the most prolific user of religious symbolism. This symbolism could be seen in the logo, at Sumaila's filling stations, in the offices and on the Naagamni vehicles.

Naagamni's first logo was very similar to the Ottoman flag, but when they expanded to operate filling station in the South, Sumaila considered the logo too Islamic for markets there. He therefore adjusted the logo, so that the star was on the top and the crescent captured the star. This way, it was still recognisable as Muslim symbolism for his target customers in the North, while it was not perceived as exclusively Islamic in the South.



Image 3.2: Naagamni Logo. (2014).

The Naagamni offices, both in Accra and elsewhere, had Islamic symbols hanging around, and there was almost always a Koran visible on desktops. The same applied for the company cars. The most visible and perhaps unusual of Naagmani's religious features was the inclusion of small mosques and prayer spaces at filling stations. These were for the use of filling station attendants, but also customers like truck drivers who often spent the night parked there. Water was provided in plastic dispensers for ablution, and prayer mats were made available. If you stopped at a Naagamni filling station there would always be a way for you to conduct your prayers, and Sumaila said he often encouraged his staff to communicate this to his customers in the North.

Sumaila's use of Islamic symbolism, and the increasing use of religious symbolism in Ghana's downstream petroleum industry more broadly, reflect two things. First, Sumaila and others are aware of the value and attraction religious symbolism has among Muslim and Christian customers. Religious names for shops or businesses are very common in Ghana. By using these symbols and building space for prayers Sumaila wanted to extend the customers experience of a filling station beyond the purchasing of the petroleum products. In this sense, he was hoping that the extended experience of the filling station would provide future patronage by the customers. This became increasingly important as the competition intensified with new companies and new filling stations. Secondly, it reflects Sumaila's personal choices and commitments. Sumaila and his family were devoted Muslims, and, because he wanted to have his business reflect his character and personality, he chose to brand his company and filling stations accordingly. Moreover, a subtle indication of moral

rectitude and reliability was being communicated through these symbols. When I conducted fieldwork at one of Naagamni's station in Bolgatanga, conversation revealed that the symbols signalled trustworthiness – and it enabled Naagamni to tap into existing religious communities in the competitive market in Bolgatanga.

For Sumaila, relying on extended kin-relations and utilising religious symbolism as a business strategy, was a very conscious choice and he believed it was crucial for his success. "Sometimes you have to do politics outside of politics", he said when explaining why prayer spaces for filling stations were important. He also referred to "family-politics" when I asked him about why he would build a filling station in Gambaga. "They enabled me to build my business, my wealth also belongs to them", he explained while pointing out that he also built a mosque and a school in the town. He considered his social obligation towards the family as both beneficial for his family (through gifts and employment) and for his business venture (contacts and labour). In a similar manner, navigating relationships in the industry, continuously making sure he could trust his alliances were another form of 'politics'. This was necessary to avoid affiliation with politicians or having to partake in state contracts.

Sumaila and other petrol entrepreneurs carefully downplayed party politics. While many business ventures were successful precisely because of their political connection to political parties, petrol entrepreneurs who were planning to build long-term businesses – like Sumaila – recognised the potential pitfalls of being associated with political parties, including taking part in government contracts. This was a strategy used by all the petrol entrepreneurs I followed during fieldwork. A story from a day at the Naagamni head office demonstrates how I came to learn about the importance of avoiding political association in regards to political parties.

I was busy scribbling down what I could remember from my morning interview when Sumaila interrupted me, slamming a stack of papers down on my desk. He told me he would be busy all day, and that he needed me to analyse the project proposal in front of me. He asked me to give him a short brief at the end of the day. While I had conducted work for Naagamni before, this was the first proper assignment I had been given. I was excited, and thought to myself that I had gained his trust and was finally doing proper oil work.

I studied the document for hours. I calculated the numbers and double-checked our expenses. I started drafting a proposal on Naagamni's behalf, and I prepared a brief presentation for Sumaila and the chief accountant. The document that was in front of me stipulated a transportation contract for petroleum products, with the government as the owner. It was asking for proposals from Ghanaian OMCs or haulage companies to transport a certain amount of fuel from the state-owned distribution company, BOST. Transport was required from the depot in Tema to the depot in Kumasi. It provided a maximum price that the government was willing to pay for the contract, while stating that they were looking for competitive offers. I calculated the profit for Naagamni according to the maximum price, as well as with a five per cent and ten per cent decrease in price. Each of the alternatives was profitable, and by the end of the day I was ready to present my day's work for Sumaila and the accountant. With my flipchart and calculations, I argued that we should present a proposal for the contract –hoping that Sumaila would put me in charge of writing it, after he saw how thoroughly I had worked on the document.

Ten minutes into my presentation, Sumaila started laughing and told me to sit down. Well situated in his shiny Chinese imported chair, he told me that we were not submitting a proposal for this contract. He applauded my hard work, half-jokingly. He told me he had given me the document for learning purposes. I was taken aback by his reaction and comments, and, frustrated, asked him what exactly he wanted me to learn. He explained that he wanted me to learn how profitable government contracts were, and why it was important not to take them. He explained that if Naagamni was making major profits from a government contract, they could be labelled as an 'NDC company'. If they were to be labelled an NDC company, or seen to be colluding with the government, a possible change in government during next election could be fatal for Naagamni. After explaining the precarious nature of political parties and Ghana's democracy to me for a good fifteen minutes, he ended his lecture stating: "At Naagamni, we want to be in business for more than four years, we do not take risks anyhow."

The difficulty of being an entrepreneur or running a business with considerable impact on the productive economy has a long history in Ghana. The post-independence literature on Ghana describes a business environment structured along

political party lines, with strong connections to presidents and ministers, dating back to Kwame Nkrumah (Herbst, 1993, p. 105). For the petrol entrepreneurs I interviewed, the strategy of remaining free of party political association was a strategy of security. They wanted to avoid being seen as party patrons in case there was a change in power and repercussions for those who were perceived to be part of the political elite.

Naagamni was far from an armchair oil company. They were growing steadily, and providing northern markets with awaited fuel supplies. Sumaila was not running a social enterprise; he was a calculating businessman who wanted to build a profitable business. He knew that the markets in the north were tough, but was successful by relying on various types of cultural and social capital. When he started operating in Tamale, his was one of the first Ghanaian stations. People associated Goil and multinationals with quality petroleum products, and were suspicious of newcomers. However, fuel shortages were frequent, and while Goil and the multinationals prioritised their stations in more central areas, Sumaila made sure that his filling stations in Tamale were always stocked. Over time, his customers became loyal.

Sumaila had a vision of conquering the markets for petroleum products in the northern regions. He had built his company rapidly, without banking support and without taking part in government contracts. He did not take bank loans as it conflicted with his religious principles, but borrowed money from family members to start his business. Sumaila's filling stations soon became popular in Tamale. He and another northerner, who ran Nasona oil, built the first private Ghanaian companies to tap into the markets of the north. Sumaila capitalised on his Muslim identity, not only through his logo, but also by building small mosques and prayer spaces next to his filling stations. He used his knowledge from his years in the transport business to place his stations strategically on the outskirts of towns, with large platforms for trucks to enter. The filling stations in Bawku and Bolgatanga were strategically placed to tap into long-haul trucking transport and smuggling activity.

The reform of Ghana's downstream industry enabled entrepreneurs like Sumaila to take part in the industry. Armed with new business strategies and conquering a considerable amount of Ghana's petrol market the new companies were shaping the

contemporary politics of petrol. The narrow avenues to which private entrepreneurs could gather the capital that they needed to start-up companies saw them forge strong bonds with family and friends who helped them along the way. These became obligations and reciprocity bonds that shaped the 'politics' of petrol. This thesis will return to their relationships in the following chapters. This chapter started out at THIA, and I return to THIA in the final section. The NPA wanted to regulate (and improve) the domestic petroleum market by implementing a set of control measures. These were topics of discussion as well as they illustrated practices in the industry that did not seem to be easily changeable.

Cleaning up the industry: Continuities in the Politics of Petrol

Back at THIA, we were not terribly concerned about who were armchair companies and how they were impacting the market. It was quite clear from our office life that the two companies sharing the office with us were perhaps what the Goil manager had described as armchair companies. To us, they were just less busy. We were very busy, however, loading trucks and making sure we abided by all the control measures implemented to 'clean up' the industry by the regulator, NPA. The reform measures discussed in this section includes the following: petroleum products samples taken from trucks at loading point, GPS monitoring and pink cable ties that sealed the vaults of the trucks to avoid stealing. These were measures of control, 'magic bullets' put in place to deal with unwanted practices, such as stealing and adulteration. These measures were muddled with older practices, and did not always serve their purpose. Hence these control measures neatly illustrates continuities in the industry that were considered part of the politics of petrol by my informants.

The control measures were put in place to improve the quality of the petroleum products for Ghanaian consumers, to control unwanted practices, and to align Ghana's downstream petroleum sector with the international oil industry. Regulations were supposed to advance the safety of workers and consumers, and to ensure quality of products across Ghana. For such aims to materialise, a number of industry practices needed to be tackled, particularly with so many private companies entering the industry. An informant at the NPA explained, "[...] deregulation means

we are letting private individuals enter the industry. It comes with a risk. We need to control them. If we can control them, we are doing our job."

All petroleum products that entered THIA came in their original form from mainly European and Middle Eastern refineries. The quality of the product was tested either at the TOR or at private depots. One of the tests that were carried out was sulphur testing, in order to make sure that the sulphur content in the petroleum products was aligned with Ghanaian standards. Ghanaians sulphur standards, along with other West African countries, were some of the weakest in the world. High sulphur content in fuels produces particulate matter, one of the most damaging atmospheric pollutants emitted by vehicles. Traffic-related air pollution is becoming a major health problem in African cities, and the average level of particulate matter is five times higher in Accra than in London, due to the high limit of sulphur allowed in imported petroleum products (Dirty Diesel, 2016, p. 10).

While the regulator did not address low-quality fuel from outside (addressed in Chapter Six), other issues were on the agenda. One of the persistent challenges for regulators and companies in the industry has been tanker drivers stealing product. Due to their low pay and poor labour conditions, tanker drivers often stop along the road on the way to their destination to sell off some of the petroleum product. Because it was difficult to measure if small to medium sized quantities of petroleum products were missing from the original loading, filling jerry cans and selling them off along the road became a way to earn some additional money for the drivers. One of the ways tanker drivers used to conceal the fact they had stolen product was to add water to the product, to raise the volume of the product in the truck. This technique would reduce suspicion during inspection at the filling stations. But it also meant that the consumer was just as likely to get adulterated product at a brand new filling station as they were if they bought their petrol on the roadside in buckets or bottles.

Not only did OMCs suffer losses when truck drivers sold their products along the road, but petroleum products were widely available outside the regulated industry, fuelling the illegal sale and informal markets of petrol. While this was officially portrayed as a problem in the industry, informal markets and petty traders played an important role in providing fuel to places that did not have a filling station. These

places needed access to fuel, and sale along the road by trucks was the most convenient access point. Many of my informants commented on the situation, and said that the government would create shortages if this practice were completely stopped. Therefore combatting these practices could have important side-effects. Truck drivers were convinced that the control measures were easy to manipulate due to the value that this informal sale still had.

Before the product was sent out on the road, petroleum product samples needed to be taken. OMC representatives or truck drivers took these samples. The samples were kept in small plastic bottles in the offices of OMCs at THIA, as proof that the products were clean when they left THIA. In practice, these bottles were kept a couple of days in the office, before they were thrown away. In theory, NPA could seize the bottles, but Kelani and others said that it had not happened for the few years that the practice had been active. They made every office smell of petroleum fumes, and while everyone was required to take the samples, there were no instructions for disposing them. There were no requirements to keep the bottles for later evidence, and most people saw it as a waste of the product. Moreover, it was a health hazard for the office workers at THIA.

A final step, also introduced by the wave of reforms was required. Small bright pink cable ties would be attached to the two vaults on the tanker-trucks, one at the backside of the tank and one on the top. The choice of pink was deliberate, as the trucks vaults were covered in grease and sand; the cable ties were visible through the surrounding dirt as a ribbon of approval. The ties were a measure to facilitate the safe transportation of the product, from the new and improved THIA to its intended filling station. Only at the final arrival point should the owner of the filling station, having secured a product directly from THIA, remove the pink cable tie.



Image 3.3: THIA Office Pink Cable Ties. Author (2013).

The pink cable ties were put in place to deal with an industry-wide problem, but more importantly, they were meant to show that the NPA had cleaned up the industry, by providing the Ghanaian consumer with a clean product. The cable ties worked as a mechanism and symbol for a clean product and a clean industry. Ironically, however, once they had left THIA, there was no follow up on the cables ties – and companies were free to use them however they saw fit. At Naagamni we did check whether the pink cable ties were still intact when the truck arrived at the filling stations, but they were also lenient with truck drivers who could offer plausible explanations as to why the pink cable tie was missing.

In 2013, the NPA announced that all trucks in the downstream industry had to be equipped with GPS trackers by June 2014. These GPS trackers were the latest control measure implemented to secure the safe transportation of petroleum products from THIA to filling stations. Following the perceived successes of control measures in cleaning up the industry, the trucks were now supposed to be monitored in order to

expand and control the clean-up exercise beyond THIA. Being able to track the trucks through GPS devices, and compare their movements with the paperwork at hand, had the potential to curb stealing and smuggling. The multinationals, Total and Shell, had GPS trackers in place when I first came to Ghana, and the Ghanaian companies followed as it became an official industry requirement.

The GPS was intended to disclose suspicious activity, such as unexpected stops or detours from the trucking route. Tracking enabled authorities to investigate certain areas more closely, to look for informal markets or stolen product. An NPA official explained, "If a truck is headed for Buipe to discharge at the depot, and stops for an hour in Techiman or Kintampo, this would be suspicious to us. Why would they stop so close to Buipe?" Such unplanned stops implied that at these towns were prone to theft, which made it easier to investigate. The NPA official also claimed that trucks with petroleum products for the domestic market would cross the borders, especially in the North, and that GPS trackers would make sure this practice stopped.

The GPS trackers added a new set of paperwork procedures, detailing where the product was coming from and where it was going. This paperwork was stamped and checked at different points in THIA, and a report was submitted to NPA by the companies every day to keep track of which company had loaded which product and where it was all going. The pink cable ties had specific numbers so that every loading could be traced. These documents were kept in huge filing cabinets at the NPA's office in Tema. But as with the pink cable ties, the NPA did not collect the GPS data from the trucks after they left THIA. While collecting such data may be planned for the future, during my fieldwork, Sumaila and other petrol entrepreneurs were unhappy with the fact that GPS tracking was required on their trucks – a relatively expensive control measure for which the companies carried the cost – without there being any use of the data accumulated. NPA claimed that they were collecting the data, and were in the process of hiring people who could analyse and set up a system of monitoring.

To most people working at THIA, the reform measures were rather peculiar. At TOR, Emmanuel asked how he would use a pink cable tie to stop the Fire Service Department stealing from him. To him, there were much larger systematic problems

that needed to be addressed, rather than simple control measures sought to symbolically demonstrate reform. The pink cable tie did not deal with underlying problems for the workers at the refinery, and neither did it stop truck drivers from stealing. Both the state access to petroleum products from the refinery and the trickling down of products along the road into informal markets persisted – indicating their ongoing importance to the politics of petrol. Allowing Ghanaian companies to enter the market was acceptable, but reforming other practices could constitute changes with larger impact, such as creating shortages. The promotion of a clean industry was seen as a self-promotion by the NPA, while the control measures were often talked about as too 'political'. If the control measures were to eliminate stealing in the industry, my informants believed that too many people would be affected. Together with the creation of shortages, it simply did not seem feasible.

Truck drivers at THIA were calling for control measures that would prevent them from having to pay bribes to technicians at the loading depot and at police barriers along the road. The truck drivers were particularly annoyed because they felt targeted by the control measures, without having their difficult working conditions acknowledged. Many of them had to use their own money to pay various bribes along the road. Issah, one of Naagamni's truck drivers, noted,

All the changes with loading in Tema tells you one thing. We are the bad guys. We work for the peanut money. Nothing we get. We drive and drive. We wait and wait. They think they are smart putting on these cables ties, soon they will be monitoring us with GPS. What is left of these people? Meantime, we are not the ones making trouble, we are just easy to blame.

Issah pointed out that truck drivers were easy to blame and indeed the lowest rank in the petroleum trade hierarchy. Truck drivers were often uneducated people from the North with the lowest salaries, below filling station attendants. Focusing control measures to clean up the industry on these people distracted attention from the systematic stealing that occurred by state departments at the refinery and the fact that petroleum products entering Ghana was already dirty. The drivers on their side consoled themselves with the ease of manipulating the control measures, and lack of follow up.

Petroleum product samples, pink cable ties and GPS tracking of trucks were all reform measures that were set to improve the distribution of petroleum products, and to ensure quality at Ghanaian filling stations. The control measures came with new sets of extensive paper work, tracking the fact that they had been implemented at THIA. Beyond THIA however, it was up to the OMCs to regulate themselves. The reform measures reflect an international trend in the petroleum sector, with a focus on risk and minimising human tampering. Human tampering, however, was key to the politics of petrol in Ghana. In the next chapter, I turn to a closer examination of petroleum infrastructure that demonstrated this point further.

Conclusion

This chapter have focused on the 2005 reform of Ghana's downstream petroleum industry. I have examined the 'new' companies and the regulator of neoliberal reform, the NPA. While there were to some extent a divide between the 'new' companies and the older petroleum state enterprises, there was also overlap between them, particularly with industry seniors starting new BDCs. My informants at TOR, Goil and BOST claimed that the reform of the industry had made it more difficult to operate, due to increased competition from the new companies. The fact that these companies were able to build filling stations quickly had managers like Kingston at Goil questioning their methods. Moreover, the expansive growth of BDCs and OMCs complicated the layout of the industry. It was not completely clear how the companies were operating and people like Kingston would therefore claim that the 'politics' of the industry had become more intricate.

To contrast and complicate these assumptions I examined Naagamni in more detail. Sumaila and other petrol entrepreneurs avoided party political associations but referred to other types politics in their everyday operations. The strategy included religious associations and familial and social reciprocity in relation to trade networks and recruitment of labour. Strong personal relationship was built among industry entrepreneurs in order to survive without state contracts. While these dynamics were important and parts of everyday politics of operating a company, so was the need to keep good relationships with civil servants in the NPA.

Finally, I attended to some of the practical control measures that had been implemented in the industry by the NPA. While Sumaila's business strategy with Naagamni illustrated how the politics of petrol had diversified into new spheres of private life – the changes that were supposed to be enforced by the control measures suggested that certain practices in the industry were not easily changeable. First of all, my informants did not think that the control measures were targeting the 'stealing' in the industry that were damaging. And secondly, the reform measures were seen as intentionally weak and without consequences as the practices that were targeted had a purpose in which many people actually benefited. In sum, this chapter have shown how the reform of the downstream petroleum industry have brought about change, and to what extent some practices still continues to be key parts of the politics of petrol.

Chapter Four Waiting for Petrol

Introduction

At THIA, control measures were preoccupied with securing the safe transport of petroleum products by trucks from THIA to designated filling stations across Ghana. The transport of petroleum products is central in this chapter as well, in which I shift attention to petroleum distribution infrastructure in Ghana's downstream industry. Moving out from THIA, this chapter focuses on my field site in Buipe, examining a petroleum storage depot and a town waiting for petroleum products to arrive through the state-owned petroleum distribution infrastructure. The state-owned infrastructure consisted of pipelines connecting Tema to Akosombo, lake barges transporting petroleum product upstream the Volta Lake – connecting to Buipe petroleum storage depot, with additional pipelines connecting Buipe and Bolgatanga.

This chapter examines the dormancy of infrastructure and the subsequent wait for its awakening. Drawing mostly on fieldwork from Buipe, I examine waiting and rumours in relation to the politics of petrol in Ghana. I look at how the depot workers and the town were actively waiting for the petroleum products to return, even after years of disappointment. I continue to examine the various aspects of the petroleum distribution infrastructure and their 'political' functions — which enable the infrastructure to remain dormant while the reasons for its dormancy remain so ambiguous that its return to operation could always be imagined. These dynamics left a sphere of uncertainty and anticipation, a sense of the 'political' that was detrimental to operations but negotiable and changeable if persistence was applied.

BOST and Buipe

In charge of this distribution network was the Bulk Oil Storage and Transportation Company (BOST). BOST was founded in 1993. The company was state-owned, and had authority over the nation's petroleum distribution. As the Buipe depot was being built at the same time as the establishment of BOST, an industry player with

considerably more experience – Ghana Oil Company (Goil) – was initially entrusted with its operations. After a few years, BOST had developed its own capacity, and ran oil storage and transportation throughout Ghana. Since then, BOST and the TOR have been primarily responsible for managing the depot. With the change in power from the long-term president Jerry Rawlings in 2001, the industry experienced major structural changes. President John Kufour and the NPP put the TOR in charge of the depots, limiting BOST to transportation, and initiating the current political tug of war between BOST and the TOR. When the NDC regained power in 2008/2009, BOST was again assigned the management of the decentralised depots, including Buipe depot. In early 2014 BOST started a restructuring exercise to optimise the operations of storage and distribution, acquiring help from a Nigerian distribution company, TSL (Owusuaa, 2014).

Both Buipe depot and the Buipe-Bolgatanaga pipeline were constructed with development assistance loans from South Korea. Construction began on the Buipe petroleum storage depot in 1990, and it opened in 1993. Buipe's strategic location at the edge of the Volta River made it the central distribution point for petroleum products for Ghana's three northern regions. Pipelines connected the tank farms in Tema to Miami Waters, a BOST-owned tank farm in Akosombo. Akosombo – most famous as the site of the largest man-made dam in the world, and the source of Ghana's electricity supply – has access to the Volta River, which approximately 520 km upstream leads to the northern town of Buipe. At the upstream edge of the Black Volta River is Buipe Port, itself connected by pipelines to the centre of Buipe town and the Buipe petroleum storage depot. The state-owned Volta River Transport Company operates the Buipe Queen and the Volta Queen, lake barges that transport cottonseeds, shea nuts and other agricultural goods from north to south, and petroleum products, cement and other processed goods from south to north.

In 2000, the project of constructing a petroleum product pipeline from Buipe to Bolgatanaga began. By the time it was completed in 2005, there was state-owned petroleum infrastructure available to transport bulk cargo from Tema in the south to Bolgatanga in the north. This infrastructure had the potential to transport petroleum

products cheaply and efficiently to the northern regions, putting an end to fuel shortages that had had particularly damaging effects on the agricultural economy of the north.

The map below illustrates the state-owned petroleum infrastructure in Ghana. Image 4 shows the pipeline connection between THIA and Akosombo with the blue line. The thin red line shows the water voyage on the Volta River, from Akosombo to Buipe. The green line shows the pipeline connecting the petroleum storage depot in Buipe with the petroleum storage depot in Bolgatanga, with a pump station in Savelugu. Image 4.1 is an overview of Buipe town, showing the port and the petroleum storage depot. It also illustrates Buipe's strategic geographical position, on the river, along the main road, and as the first town on the border between the Brong Ahafo Region and the Northern Region. I now turn to everyday life at Buipe petroleum storage depot

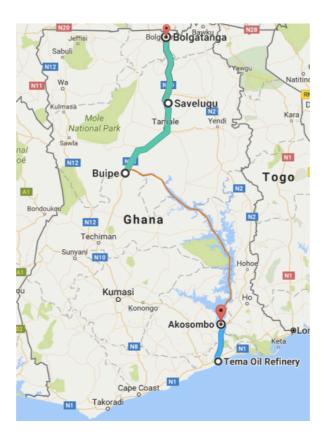


Image 4.0: State-Owned Petroleum Infrastructure in Ghana. Google Maps (2014).



Image 4.1: Satellite Image of Buipe Town, Port and Petroleum Storage Depot. Google Maps (2014).

"It's coming"

"It is coming," said Amida, rushing over from the main building at the depot to the entrance, where a group of technicians and I were sitting. Partly out of breath, he was pointing at his phone in his hand, explaining that he had just received a phone call from the headquarters in Tema. "There is a shipment [of crude oil] coming to the TOR this week, and they have already said it will go to BOST. We should be expecting it here in no less than two weeks," Amida explained with excitement in his voice.

One of the technicians, sitting among the four of us, exclaimed: "This is good news!" We had been sitting by the entrance of the depot for about twenty minutes, waiting for our official lunchtime to commence. We still had an hour to kill. Surrounded by a tall wired fence, which extended around the large tank farm at Buipe petroleum storage depot, we had been discussing our preferences for lunch and sharing some rather gloomy gossip about the arrival of the new Pentecostal pastor in town. We had finished our morning routines at the depot early, mainly because we had skipped

some parts of it. Checking for leaks in storage tanks that did not contain any petroleum products seemed like a cruel joke. And while we normally played along, some days we ended up sitting by the entrance of the depot for hours. Waiting.

Normally, we would leave the depot for lunch at 1 pm. The workers were careful not to leave earlier in order to avoid conveying an impression of idleness. Consequently, we were often waiting just inside the gate while carefully monitoring our watches. Then, as usual, we would ride on our motorbikes from the depot, moving around to different places in the small town. We were wearing our depot uniforms, which consisted of hard hats, safety boots and thick black and blue overalls. The precision and visual effect of the depot workers leaving for lunch could, according to a businessman across the road, replace his clock on the wall. And while they were not the only wage earners in town, the restaurant across the road would cater to this specific time, starting to pound fufu – a staple Ghanaian starch made of mixed plantain and cassava – just before 1pm.

Back at the depot, we were left with what was normally the rather boring afternoon stretch of the working day. The news from Tema, however, had provided the workers with new energy, and Amida – the most senior engineer – made everyone conduct their morning routines again. Robert, another engineer, and I were in charge of checking the old tanks, T1, T2 and T3. While in the morning we had taken a walk around the area and checked the control room for alarms, this afternoon we were climbing the 25-meter tall tank on the rusty stairs that spiralled up around it. At the top, Robert checked the vault and removed some leaves. We then stood at the edge, to enjoy the view over Buipe town. We could see some smoke from the cement factory, while the shea nut factory, the hotel, and the rest of the town was completely quiet. In the parking lot outside of the depot, a truck arrived. Robert laughed and said that the driver probably heard the rumour already and had come to check on his contacts. I asked Robert if he really believed the product would come this time around. He sighed, looked over the town and responded:

Buipe is a different place with the [petroleum] product. This place [he points at the main road in front of the depot] is busy. Plenty of people selling. Women. Kids. People park everywhere. They eat and drink. You have not seen it, so you think we are waiting for [petroleum] product only. [He looks and tut-tutted at what he reckons was my naïve understanding of what they were waiting for.]

We descended from the tank, and continued our thorough check of the old tanks, the water system and the pipes that ran from the control room to the tanks. Robert went into the control room again to check the alarms, and while that morning he had insisted there was nothing to attend to, he now wanted to call the mechanic to check a blinking red light. For Robert, and the other workers at Buipe petroleum storage depot, waiting for petroleum products was about more than simply resuming work. They waited not only for product to flow through the pipeline, but for Buipe town to regain its liveliness, and to regain its proper place as the supplier of fuel and development to the northern regions.

Every time there was news from the south regarding an arriving batch of petroleum products, the workers at the depot would come alive out of their hibernation, gain new energy and start preparing the depot. The situation described above happened a few months into my stay in Buipe, but it wasn't the first such incident. The very first time we had information from the south was shortly after my arrival, and I believed I had arrived at the depot with perfect timing. The atmosphere of anticipation around the arriving petroleum products was unmistakable. The engineers and technicians were discussing everything, from the time they would come to the reasons they would come. The amount in litres was estimated, debates emerged over whether it would arrive by trucks or barges, as well as over what the organisational arrangement would be — either the TOR selling to BOST, BOST importing, or BDCs bringing petroleum products to sell. Given the intensity of anticipation and the movement according to the rumours and information about petroleum products arriving, I was surprised to find that a week later, no petroleum products had arrived. No one else seemed to be very surprised, however. The waiting simply resumed.

The depot was not the only place 'on fire' with the news of petroleum products in the pipeline. As Robert had pointed out, everyone in the small town of Buipe was waiting for petroleum products to arrive too. Across the road from the depot was a strip of businesses, including a pharmacy, a bank, a clothing shop and a restaurant. The long building, with room for a dozen businesses, had been built to cater for the activity at the depot. With the depot in dormancy, and such little activity in the town, some people had closed their shops; others waited patiently for things to resume. The activity from the depot had injected capital into Buipe through employment at the depot, the arrival of migrants and the economic activity that followed. Hotels and restaurants were built for truck drivers that would eat and sleep in town. The growth of the town attracted further interest from businesses, and the establishment of a secondary school and a church (though the local population was primarily Muslim) secured Buipe as the capital of the West Gonja district. Buipe had gained a place on the map, previously having been known only for a cement factory and its port. It developed into a vibrant town, with employment opportunities and petroleum products for the benefit of the development of the north. When I spoke to one of the engineers who worked at the depot in 1996, he explained that the atmosphere was unique, and unlike anything he had experienced before in Buipe;

We knew how to operate and the product was flowing. The capacity was smaller at that time, compared to what we had later. But there was something about the feel of the town, like something explosive was coming. We were lucky and proud. It didn't take long before those businesses across the road started coming up. The restaurant and the drinking spot was the most popular.

The tank farm has been updated over the years to store approximately 50 million litres of petroleum products. The distribution network for the north has grown to include pipelines and petroleum barges, and an additional decentralised depot in Bolgatanga. It was an impressive state-owned petroleum distribution infrastructure, with the ability to secure strategic stock, reduce fuel shortages, and minimise the deterioration of roads from long-haulage truck transport.

Due to the NPP's preference for the TOR, BOST was not able to import petroleum products for distribution in the early 2000s. Its operations were therefore halting, and became dependent on the TOR management's decisions. The reform of the industry in the mid-2000s brought about a significant change for the Buipe depot, as well as Buipe town. BDCs were able to rent storage space at Buipe, in the same fashion as at the refinery in Tema. BDCs and OMCs serving the northern regions started to use Buipe petroleum storage depot as a loading point, and Buipe was again flourishing – although BOST was technically only a landlord, and private companies were making the profit from the petroleum product trade. However, there was activity at the depot, as well as new offices for BDCs and OMCs, which brought with them sales representatives who would rent local housing, eat and socialise.

When the NDC came back to power in 2008/2009, all of the BOST depots had their operations put on hold, and another restructuring exercise began. All responsibility for the distribution of petroleum products was moved to THIA, and while some BDCs and OMCs kept their offices in Buipe for up to a year, they eventually closed down and moved their people to Tema. The local people who had been hired were laid off, and the business and the local economy suffered. Since NDC came to power then, the workers at Buipe petroleum storage depot had mostly been waiting for operations to resume again. This waiting was linked to the presence of the infrastructure and the faith that people had in 'politics' to change.

Waiting, Rumours and Infrastructure

Conducting fieldwork in Buipe town was like working and living in an alternative timescape. The depot had not been in full operation since 2009, shortly after the current government took power. Time was in abundance. Workers, businessmen and the people of the town were waiting for the depot to start operating again. In the meantime, there was a scarcity of customers and money for the various services in Buipe that had thrived during its days of full operation.

Arriving in Buipe, I rented a house from Amida, the senior engineer working at the depot. The house was clearly set up to attract cash from outsiders, with its

exceptional standard compared to the mud-huts surrounding it. The price, however, was surprisingly low. Amida explained to me that with the current stagnation of the town, he was happy with any income from the house. Showing me around the neighbourhood, Amida told me he owned most of the land, and initially thought the house I was renting would be the start of Buipe's oil village. He explained:

The way things were going here, I was thinking I could build houses for the companies to rent. When the BDCs first came this place was booming. Your house there was three people sharing. Now I allow my family, this here my aunty, to build on the land, until the petrol comes again. By next month, insha'Allah.

Amida was clearly disappointed with the state affairs in which the shutdown of the depot had left him. As an employee of the depot he was guaranteed his monthly salary, but without any customers, there was no way of making additional money. His wife used to work for a BDC, but was currently unemployed, and he was worried about being unable to afford to send his kids to a good secondary school in Tamale. While painting this rather uncertain and gloomy picture, he still expressed determination: "Like the depot, my house will not go anywhere," he said, indicating that the investment should render itself useful at some point in time.

I was under the impression that the more I got to know Amida, the more he would feel able to admit that his insistence that "petrol will come next month" was empty and meaningless, and perhaps just a coping mechanism for an unfortunate situation. But the reality I encountered in Buipe was different. Inside the tall wire fencing that surrounded the depot, I would sit with Amida, and we would gaze over at the strip of businesses across the road. We would talk mostly about the time when the depot was in operation. His kids would come by after school, and he would send them to their mother with some paperwork. Truck drivers would be hanging around, and the main road in front of the depot — which bisected Buipe, as it was the main road to Tamale — would be busy with traders and consumers. While talking about the glamour of the past in a nostalgic way, Amida was never far from conversation about the future. "When the products come back, you will see." If I asked him when that might

happen, he would assert, "It could be any time now. They say next month. We will wait and see."

At the time of my fieldwork, the activities being undertaken at the depot were very similar to the ones at the refinery. Certain routines were conducted every morning to check that all the equipment, pipes and machinery were in order. There were the old tanks, T1, T2 and T3, and the new ones, T100, T200 and T300. After the routine work was over, we would 'sit down', wait, and discuss the latest rumours concerning the arrival of petroleum products. At the TOR the activity was similar, though we had discussed the rumours of arriving crude oil there instead.

The information coming to the depot would vary from week to week. The most frequently circulated piece of information was that someone in Accra or Tema had said that by next month the petroleum product would arrive. From time to time, rumours came that one of the barges had set off from Akosombo. The information would always include the quantity of the product supposedly carried by the barge, making it more believable to me and everyone else. It was always very specific in terms of time and quantity, and we would calculate when it would arrive, and when we could stop 'sitting down'. Once the routine work was finished in the afternoon at the Buipe depot, and since there was only so much to discuss among us, we would drive around town on our motorbikes, visiting friends (mostly at filling stations, for my part), and stopping for food at the restaurant across the road or the container restaurant at the Port junction. The whole time, we kept wearing our blue hard-hats and work clothes – as it was still working hours. During these trips around town we would share the information that we received at the depot.

Business owners would repeatedly ask for the latest news on developments at the depot. My colleagues would then repeat the discussions we had at the depot, based on the rumours we had heard. Most often, they would say, "Next month product will come, insha'Allah." During my first week working at the depot I shadowed Amida. During this time I learned that part of the role as workers at the depot was to share the information they had about petrol arriving. Amida explained to me that they were

not the only people waiting, and that we were all bound in a network. He explained how people relied on business and exchange in the town, and that when the depot was closed, Buipe suffered. As such, it was important that the workers shared good news if and when there was any.

One day during lunchtime, Amida was telling Charles – the owner of the pharmacy across the road from the depot – that the product was about to arrive. He explained to Charles carefully how the NPA had ordered calibrations of the tanks, and the government had released funds to the BDCs. It was just a matter of administration, and the depot would start operating again. Perplexed by the level of detail Amida provided to Charles, I asked him whether everyone in Buipe was familiar with the detailed structures of the industry. Amida explained that Charles probably did not understand the details of the explanation he gave, but that it was important to be very detailed in providing information about the depot. "If the product does not arrive, you need to explain to them. You need to tell them why," Amida said, noting that the level of detail was necessary to provide credible explanations when things went awry.

Two weeks later I was present when Amida told Charles that the government had not released funds to the BDCs as promised, and that they were still working on a new arrangement. In the meantime they were back to waiting. For Charles, as with other small business owners, the operation of the depot meant an influx of people and money, and custom for his pharmaceutical products. With the depot down, Charles would say, "only malaria can help me now." Fortunately for him, the river and mosquito prevalence secured his regular sale of drugs.

I got to know Charles fairly well, as I re-opened the Naagamni office in the business strip across the road from the depot. When I first opened the doors to the office, I was met with an overwhelming amount of dust – fairly unsurprising, given that Naagamni had closed it when the depot stopped operating in 2009. My next-door neighbour, who sold everything from paint to old refrigerators, handed me a broom and said, "That is Buipe for you." suggesting that the whole town was covered in

dust, just like the office. The office provided space to interview people from town, or depot workers outside of the depot.

One of my frequent visitors was Issah. Issah was twenty-seven years old. He had been employed by Chase, one of the larger BDCs, and earned a good living from the petroleum storage operations in Buipe. On my blue couch in the Naagamni office, Issah reminisced about the days when the depot was operating:

I used to complain that there was too much work [he laughs]. We [the BDCs] were in fierce competition for customers [the OMCs]. This here, your office, I used to come here to beg Naagamni to buy from us. I had to convince x [the name of the Naagamni worker in Buipe] by buying him credit. Sometimes I even gave him chop-money. I used to think he was very greedy. Now everything is dead. Nothing is happening. I just pray the greedy man will come back.

Referring to the everyday difficulties of operating at the time when the depot was running, Issah said that what he used to see as annoying – paying bribes from his own pocket – was now something he would do anything to get back. But years of waiting had left him peeved and sceptical. He had started a small garden just outside of his apartment, trying to grow tomatoes and okra. Inside his flat he had a flat-screen television and an American-sized fridge. And while he was attending to his tomatoes, he wore a suit from his working days at Chase.

For hours, I would sit under the mango tree outside the office with Issah and Charles. I would listen to them describe how busy and lively it used to be. Issah talked about how he would run between the offices, signing loading papers and competing for customers. The street would be crowded with people, from early morning until late evening. Truck drivers would stop here for hours, eating, socialising, and stocking up on supplies for the trip north. Locals were selling fruit and sachet water in abundance, and there was something to do for everyone. Charles would chip in to explain the profit he had made from selling 'adult' pharmaceutical goods such as condoms.

One day, coming to the Naagamni office in the afternoon, I met a curious Issah by my door. He wondered if there was something going on at the depot. I explained to him that we had news that the barge had been discharged on Wednesday. I explained that we had carried out calibrations two days ago. I then referred to a meeting

between the NPA and industry representatives two months ago, and claimed that the NPA had negotiated with the BDCs to bring products to the depot. As I repeated this to Issah after my shift at the depot, I realised I had no idea if anything I was saying was true. In fact, I knew that the situation I was describing was probably too good to be true, and that I had been caught in the spin of rumours that was currently the only thing going in the town of Buipe. After I told Issah the rumour, he gazed at me and said he had to check on his tomatoes and okra. Although Issah had stopped believing in the rumours some time ago, he would still entertain them, as doing so was a way of life in Buipe.

The following Friday, the barge was supposed to arrive. Unsurprisingly, it failed to do so. The rumour started to fall apart. The manager at the depot claimed that some payments had not been successful. A phone call from Tema to one of the engineers at the depot revealed that there had been a hold up in Akosombo due to a technical issue with the barge. Petroleum products were not coming this time either. Waiting again resumed.

James Ferguson's (1999, p. 236) description of the "abjection" experienced by mineworkers in the Zambian Copperbelt evokes an interesting comparison to the depot workers, Issah and others in Buipe. Abjection is a state that describes a feeling of being thrown aside, expelled and discarded from the promises of modernisation, a cast-off economic liberalisation and privatisation. Ferguson uses the notion to critique global capitalism and the myth of modernity, as it sets out expectations for linear development that do not materialise in time and space. Abjection has also been used to describe the consequences of state policies and privatisation of the mining industry for mining communities in Ghana (Bush, 2009), and the declining economic and political importance of the Cape Coast and Elimina in the post-colonial period (Holsey, 2008).

While it was possible to observe similar sentiments in Buipe – especially with regards to Issah and his tomato plants – the sense of anticipation that petroleum products would come back magically was much stronger. I suggest it would be more useful to draw on Brian Larkin's (2008) argument about infrastructure. The depot,

the oil-city house and the strip of businesses were a constant reminder of the past, and people were still drawing on Buipe's potential as a catalyst for development in the northern regions. The fact that it was unclear why the depot was dormant, and the constant flow of rumours about petroleum products arriving, kept hopes alive; and the very physical presence of these infrastructural entities confirmed the possibilities of the return of a good life. The continuous work of maintenance and the recent restructuring exercise with TSL, helped maintain the hope. The infrastructure had been inactive but not abandoned.

Elsewhere, anthropologists have traced the everyday spaces of waiting not to focus on what is lost under conditions of privatisation and crisis, but to explore whether the chronic waiting produces new forms of social reproduction. Adeline Masquelier (2013) argues that, in the absence of temporal markers punctuating daily life, young men in Niger turn to preparing and consuming tea in male social conversation groups, carving out meaningful temporalities and hence reconfiguring their relation to the future. In Buipe, the rumours of arriving petroleum products played a key role in the organisation and structure of social life. They tied together the depot workers and the rest of the town, in communication and in rounds of waiting. It created a communal social limbo, which was tied both to infrastructure and to the promise of returning petroleum products.

The language of rumours always carried a technical component – as, for example, rumours about the end of a scheduled maintenance for docking pipes did. At first, I did not question this emphasis on the details; however, I later understood that when the rumours were finally deemed to be untrue, a logical explanation could be derived from the original technical component of the rumour. If the maintenance of the docking pipes was delayed, or some part of the pipes needed to be imported from America, these technicalities would add time and scope to the original maintenance project. Emphasising the technical components had two main roles. First, an emphasis on the technical downplayed the government's 'political failure' to make use of state-owned petroleum distribution infrastructure. Secondly, in Buipe, technical details were used to distinguish the depot workers – who were the carriers of this technical knowledge, and therefore the communicators of expectation and hope for the people in the town. This was directly linked to their skill of operating

the infrastructure. People like Robert and Amida depended on the industry for jobs, and their economic ties and social relationships were tied to Buipe. In a sense, they were manipulating time by performing the ritual of making people expect petrol to arrive.

The 'Politics' of Distribution

While waiting in Buipe was interesting as a collective social process, its analysis would not be complete without linking the dormancy of these petroleum infrastructures to the politics of petrol in Ghana. This link was of course something with which my informants, in Buipe and elsewhere, were primarily concerned. It is worth a reminder Timothy Mitchell's (2011) argument about carbon democracy and infrastructure here. Mitchell argued that petroleum infrastructures – mainly pipelines – have become characteristic of the type of democracies that exists today. Pipelines piercing through miles of land, underground or heavily securitised, make governments income from petroleum in ways that rely on a small workforce. This infrastructure centralises power, and instead of relying on the labour force to produce wealth, wealth is expected to trickle down from the state – who can effectively discard the demands from its population.

In Ghana, the various petroleum infrastructure marked the potential for an efficient flow of petroleum products as the maps above has demonstrated. But this kind of efficiency hampers profitable and important political networks and practices. This section will examine the petroleum storage depots, barges and pipelines in these terms, before turning to trucks, the main mode of petroleum distribution in Ghana. Entertaining Mitchell's arguments about the power dynamics embodied in petroleum infrastructure, I argue that the dormancy of such infrastructure in Ghana speaks to the politics of petrol; and that the importance of alternative distribution practices in shaping the circulation of petroleum products in Ghana makes those politics participatory and open to change.

Petroleum Storage Depots: Theft and Uncertainty

As the previous section demonstrates, most of my informants found the operations of the depot in Buipe difficult to interpret. My informants at the depot blamed the current government, and their inability to get BOST operating. However, some other explanations lurked among the people in the town and other informants – namely the amount of theft from the depot, which had led to the restructuring exercise in early 2014 with a Nigerian company (Adjei, 2014). While I can only speak of my experience in Buipe, I was told that Miami Waters and Kumasi were having similar challenges to Buipe. As for the Bolgatanga storage depot, I did have one day inside the fences of the mysterious northern tank farm.

Before my fieldwork in Buipe, I spent time in Bolgatanga, which had a very similar petroleum storage depot. Bolgatanga was the end point of the distribution chain, and was intended to distribute petroleum products to trucks serving neighbouring countries, such as Burkina Faso and Mali. The depot was located on the outskirts of the town and surrounded by a few filling stations and a bus station. It was much less central and important to the life of Bolgatanga than the depot was in Buipe. In fact, when asking people in Bolgatanga about it, I encountered a number of people who did not even know of its existence, nor indeed that it was a tank farm for petroleum products. The owners of the filling stations around it referred to it as "the black box," having completely given up hope of finding out when it would operate again. The secrecy around the operations was explicit. After asking for months, I was not granted a single interview with anyone working there. One of my friends in Bolgtanga, Bryan, had previously worked at the depot as a security guard; and through him I was eventually allowed inside the tall fences to have a look at the depot and to greet the few staff that were working there.

Like Buipe, there were no petroleum products, just a brand new tank farm, pigeons and a few security staff sitting around. In the main building, Bryan and I greeted a middle aged woman who looked like the secretary, and a man dressed in a suit, lying in a chair, looking bored out of his mind. We asked for permission to have a look around, with my friend explaining to these people that I was his in-law, studying oil and gas, and just interested in seeing the depot. After exchanging some pleasantries we were given approval to go to the tank farm.

Bryan wanted us to climb tank number 311, as this was the one he remembered best from his work in security at the depot. As we climbed the stairs spiralling towards the top of the tank, he told me that a large theft had occurred here. "Some businessmen had collaborated with the security staff at the depot," Bryan said, and added, "The security probably made tea for the thieves – it was an inside job." He continued to explain the details of the theft. A truck was parked outside of the fence, and the vault was opened. Barrels of petroleum products, estimated at twenty thousand litres, were stolen from the depot that night. Bryan assumed it was taken to the border and sold within a few hours to smugglers. He was also convinced that the managers were part of the operation and took their cut. "Worst of all," he said, "was that the managers were only re-positioned within the company, making it look like there were no repercussions for the incident." At the top of tank 311, he questioned who the real thieves were. And, he added, if there were nothing going on here, why would they not let me conduct a simple interview?

With my excellent access to Buipe depot, I was determined to find out why the depots were not operating, and whether any of the stories surrounding the depot in Bolgatanga had any legitimacy. In an interview with the Nigerian TSL manager of BOST in Buipe, when I asked why there were no petroleum products, he replied, "we are struggling with some technical issues on our tank farm." When I asked further about the nature of these technical problems, he said that something was causing water to enter the tanks, altering the quality of the product. He continued to say that the problem was worse because of the rainy season, and that he was expecting products to arrive next month.

The next morning, when Amida and I were conducting the routine checks on the tanks, I asked how it was possible for water to enter the tanks. Amida laughed and said that these tanks were not leaking. As I wondered if it would be ethical of me to ask why his boss had told me that, he pre-empted my conundrum, and stated:

Director [the Nigerian manager of the depot] probably told you that because you keep asking why things are not working. It is like you are not happy with the answer we give you. Maybe it is not in his hands. Maybe we [would] all like to know why, but we just have to manage what we have. Now we have next month, we can only be ready when it comes.

From time to time, technicians and engineers would say "technical fault," only to smile and start laughing when they realised I knew it was just an expression. Working at the depot in Buipe, accepting changing excuses for inactivity became part of everyday working life, just like the waiting. This environment kept people like Amida and the rest of the workers motivated and alert, even years after shutdown. A security man suggested to me that knowing *why* might get people very upset, making them unmotivated to get up in the morning. Getting him to explain to me what exactly would make people so upset was tricky, as he just said he would rather not know himself.

I could only assume that the people working in Bolgatanga did not want to be interviewed for the same reason: they would not be able to explain what was happening. As in Buipe, there were only guesses and speculations as to why there was no product, or as to when it would arrive. Because of my connections, the manager at Buipe had to give me access to the depot. However, the only revelation I had by being allowed inside was that people inside the depot knew just as little as those outside the depot. No one really knew why it was shut down or when it would open again. Some people, however, were convinced that the shutting-down of the depots was due to the number of theft incidences. And, so, they expected that the arrival of the Nigerian manager would lead to operations again.

One of my key informants in Buipe was one of the traditional chiefs in the area, and he had worked as a security man for BOST for ten years. The Chief was very popular in Buipe, and especially among the people now waiting for the depot to open again. He claimed his popularity was due to his hard work and moral integrity when working for BOST. Most people in the town confirmed the sentiment. One day, he told me about an episode that almost got him fired as head of security at the depot:

There was once a theft case, and I caught those who were trying to steal from the depot. The chief security officers came from Accra to investigate, not knowing that they were close to the thieves. I had collected tests and evidence and given it to the police. When I came the next morning I could see they were loading the jerry cans onto a bus and were ready to leave the depot. I ordered the security to lock the gates, and the main security from Accra ordered to open them. They were taking away the evidence, and they said they would transfer me to Tamale. I wanted to make a point that I worked for the company and not for them.

During its two decades of operation, Buipe depot had major problems with theft, similar to the challenges experienced at the refinery. The Chief gave me examples of the most frequent ruses, including the practice of paying for one load in Tema, making copies of the receipt, and loading trucks several times at Buipe. On a smaller scale, technicians would receive dash/bribes to load more than was authorised, or steal from the tanks for private purposes. The Chief explained:

Sometimes the technicians would take bribes for overloading the trucks. They know how to work with the meters. They can underload one car and top it up on another. If the driver saw his master (accomplice) outside, he would bring him inside and they would make such a deal. They would short one driver and top up another one and drive to the filling station. The government of course gets the bill for the 'spillage'.

According to the Chief, none of the many managers who had passed through the depot in recent years had cracked down on theft. The Chief even claimed that some of them encouraged their staff to steal – echoing Bryan's story from Bolgatanga – so that later they would have a piece of the profit. The Chief stated,

Some managers encourage the technicians to steal. They are in on it. Then they go together and blame the security. Back then, we were trained security, we worked for the company. Then they started taking in private security firms. They just pick the boys from the street. They pay them under GHC 200 a month. They have to take bribes to eat. It is not safe anymore. They always find a way to blame security, and sometimes they might be right, look at Bolgatanga and Kumasi (referring to theft cases that had been reported in the media over the last few months), but we still don't know if that is true, because it is just the official explanation. They tried to trick me so many times, taking the blame for their mismanagement. But God was on my side, and some big men helped me out. I would not take it. The managers would like to buy posh-posh cars and get big buildings for themselves.

It was difficult to get a sense of how much stealing, large-scale corruption and bribes had been part of the operations at Buipe, and whether it had influenced the current state of affairs. Most people spoke openly about it, and some were of the opinion that stealing could be positive as it fed into the development of the town. Others blamed a 'stealing culture' for the current lack of petroleum products at the depot, although there was no evidence of such claims. Among the workers at the depot, those who were willing to talk about corruption and theft said that it had changed over the years. Managers had come and gone. Some stealing operations had gone undetected by the public limelight, while others had made the national newspapers. The bribes were justified by relatively low salaries, and by the normality of bribes in the industry and in Ghana in general. It was just how it was; and when the depot opened again, nobody believed it would change significantly.

Petroleum barges and Pipelines: Maintenance as 'politics'

The Chief owned the building where the Naagamni office was located and came on daily visits to the area, to eat and socialise with those who were hanging around. He had clear views about much of the petroleum-related infrastructure, including the barges supposed to ship petrol and diesel from Akosombo to Buipe. He had been given a calendar from BOST with various pictures of the petroleum infrastructure that he brought to the Naagamni office one day. "You see this one, it is brand new," he said and paused. Not following his train of thought I said it looked fine. He asked me to look closer and read the text next to the picture. The text read: 'Transportation boat between Akosombo and Buipe'. As I was reading it out loud he shook his head and went on to tell me about mischievous politicians spending millions of borrowed money on infrastructure and new technologies – raising the standards and hopes of everyone watching – only to disappoint the hopeful.

After lunch one day, Issah came to my office and said that the barge had arrived and was docked at the port. I had been half asleep on my blue couch in the Naagamni office, but I was thrilled that something was happening, and got on my motorbike to see the fabled barge, 'Buipe Queen'. Arriving at the port, I found young men carrying cement bags from the barge to a truck at the portside. I was unable to talk to the men loading the cement onto the truck, and after a short time I returned to my

office very disappointed. Telling Issah about my cement-fiasco, he laughed and told me he never said the Buipe Queen had petroleum products. I asked him why they would transport cement and not carry petroleum products with them. As per usual he could only guess, and his guess was just as good as mine – or anyone else's in town.

According to the Chief and other informants in Buipe, two new barges had been built around the same time as the Buipe-Bolgatanga pipeline, ten years ago. They had valuable updates compared to the old ones, which increased the volume of petroleum products they could carry and enabled them to reach further up the river when the water level was low. The barges would also bring cement and other goods from the south that could easily be sold in Buipe. As with the storage depots, the reasons why the barges were not transporting petroleum products were unclear. Buipe Port did not have regular staff, and while interviewing various people in the industry I was given vague explanations ranging from poor operation of the Volta Lake Transport Company to low water levels inhibiting the secure transport of the product and technical problems. They were all excuses that sounded very familiar after having examined the other infrastructure in the industry.

The pipelines, like the depots and barges, evoked suspicion and rumours. The pipeline system was able to carry diesel and petrol and was mostly underground. Like the pipelines themselves, information about the pipelines seemed to be buried underground. In one of my first interviews in Accra, speaking to one of the operational managers of Total, I was told that pipelines for petroleum products in Ghana were either unreliable or not there. In many of my interviews, addressing the distribution system, the pipelines went unmentioned, and very few people knew anything about them.

At BOST, the operator of the pipeline, I was told that the pipeline was of superior quality: American ten-inch pipes, strong and resilient. In an interview in Tema, the public relations officer at BOST showed me maps showing that the same pipeline system as currently linked Tema to Bolgatanga were planned for the triangle between Tema, Kumasi and the Western region. In the meantime, he explained, petroleum product was not flowing through the pipelines from Tema to Akosombo because of 'maintenance issues'. The Buipe-Bolgatanga pipeline, he claimed, was waiting for

parts that had to be changed. Regular maintenance of the pipeline had revealed that some parts of the pipeline needed to be replaced, and the new parts had been ordered from America. They were now waiting for the parts and the pipeline engineer to make the amendments. The public relations officer explained that the maintenance had taken more time than expected due to a shortage of pipeline engineers.

In Buipe, I met the only individual during my fieldwork that had any actual experience with the pipeline. As he had worked previously at Buipe depot, Adam's experience in the industry was valuable to my understanding of how things worked. I first met him in Buipe, and he introduced himself as an engineer working at the pipeline's pump station in Savelugu. My initial response was, "But the pipeline is not working." He laughed and responded, "But nothing is wrong with the pipeline, something is wrong with politics." He recalled the opening of the pipeline network between Buipe and Bolgatanga:

[...] We tested it when it was ready in 2005, I think. So at least we know it is working. We tested it, had to do some final arrangements, tested it again and the product was flowing. That day, we celebrated, all of us, like we had won the World Championship. The following week we were waiting for the official start, go and come they said. We heard there was some technical fault delaying it further. Now, we are here and there has not been any product flowing from that stupid day we were all celebrating. What were we celebrating? At least we know it is working. It is because of mismanagement, someone is making big money.

Since the day they tested the pipeline, Adam informed me, it had not been used. When I asked him if anything was wrong with it he just laughed and said, "This is how it is" – implying that even if the pipeline was working like it was supposed to, it would not have been utilised. As for the reason why, he could not be sure, but placed his explanation in that diffuse category that so many of other informants referred to: "politics." He also told me he was getting used to giving people excuses that sounded familiar to the ones circulating in Buipe: "broken pump," "water shortage," "maintenance," and so on. He said that people in the village of Savelugu, the few who cared about the pump-station, either believed the excuses or just did not care. He stated,

It is not working - people believe it to be true. Madam, it is working, but when you don't expect it to be, that can easily be the truth. I am the engineer so they trust me. The only thing I cannot fix is lights out, as for lights out I am not a magician.

Pipelines require large amounts of electricity to work – and with the ongoing electricity crisis in Ghana, known as *dumsor* (lights off), it was very possible that operating a pipeline would be challenging, when there were alternative modes of transportation available. Even when there was stock in Buipe, trucks were used to transport petroleum products to the Upper East Region, where the Bolgatanga depot was located. The pipeline remained unused. Buried in technical jargon, explanations for the idleness of infrastructure focused on maintenance regularly featured in my interviews, in newspaper articles and on radio-shows discussing the petroleum industry. As for the pipeline, which spanned a large geographic area and employed a few workers at various pump-station, the maintenance explanation served its purpose perfectly. There was no easy way of finding out whether there was any truth in it.

Throughout the industry, beyond the specific case of pipelines, 'maintenance' provided a convenient justification for why things were not working. For a nontechnical person, like most people outside of the industry including myself, maintenance sounded like a credible explanation for why something was temporarily shut down. After all, keeping machinery maintained was about assuring safety for the workers and extending the lifespan of the machinery or infrastructure. One could not argue with that. However, it did not take long to realise that maintenance was being used to distract attention. Maintenance is a word that refers to a process of preserving a condition or a situation. Conducting maintenance on infrastructure in the industry meant that an activity was conducted to maintain or improve the machinery. Depot workers used maintenance regularly as an excuse to people in Buipe town, and industry managers and politicians alike referred to maintenance to depot workers and the nation as a whole though media and public reports. The work of maintenance, itself fed by delusional rumours, helped maintain the hopes. The infrastructure was inactive but not abandoned. Calling upon maintenance therefore, was a crucial part of the politics of petrol, keeping the infrastructure idle, while being able to produce the benefits of truck transport, another form of distribution discussed in the next section.

Trucks: Distribution Politics and Unified Petroleum Price Fund

At the time of my fieldwork, the road passing through Buipe and in front of the depot was something of a nuisance. "It's just so visible, it's obvious. All of them pass here," Issah said as we were sitting under the mango tree. He was referring to the large numbers of tanker-trucks that passed through town. "Some of them still stop here, because we know the drivers. But it's less and less. They also have tight schedules now. Some of them even have GPS, so they will be questioned if they stop." Every day, tanker-trucks that for years had been loading product at Buipe depot were now passing through Buipe town with product collected in Tema. As long as the decentralised depots in Kumasi, Buipe and Bolgatanga were not operational, OMCs serving the northern regions had no option but to load in Tema. Studying the haulage section of Naagamni Oil, it was easy to understand why this practice had come into being and why it likely contributed to the continued dormancy of pipelines and decentralised depots.

At Naagamni, the haulage section of the company was just as large as the retail section. We had as many trucks as filling stations. For Sumaila, it was a matter of managing as much of the fuel chain independently as possible in order to avoid unnecessary delays in our day-to-day business, and to avoid relying on external actors in which he did not have a close relationship. As Sumaila ran most of the filling stations north of Buipe, relying on a pipeline and depot that worked from time to time was just not an option. Alternatively, one could manage one's own haulage business, by hiring trucks from one of the many transport companies or individual truck-owners. Sumaila, however, insisted that this arrangement could get you into trouble, as a large number of politicians would want you to use their services. Naagamni would be a good customer based on the large quantities of petrol and diesel it sent from Tema to Tamale every week. Having trucks meant that Sumaila could avoid doing business with politicians, as well as making profits through his own transport services. This transport service was made particularly profitable due to the Unified Petroleum Price Fund (UPPF).

The UPPF was one of the departments of the NPA. The fund was set up to make petroleum prices uniform across Ghana. Its basic principle is that the price of petrol should not be more expensive for a customer in the north compared to a customer in

the south, regardless of the distance and transportation cost from the distribution centre. The UPPF was funded from taxes on petroleum products and it worked through an internal industry payment arrangement. The industry arrangement was based on transportation zones. The rate the company paid into the UPPF depended on the distance between the filling station and the discharging point of petroleum products (i.e. Tema oil Refinery or Buipe petroleum storage depot). The profitable markets of Tema and Accra were responsible for the most payments into the fund. At the time of my fieldwork this distance was 121 kilometres. If the filling station were located outside of the so-called minimal zone of transport, compensation would be provided in order for the transport cost not to affect the marketers' margin. The further away from the discharging point the filling station was located, the greater the compensation.

Due to subsidies, the UPPF earnings from transport between Tema and Tamale could be considerable, while costs were kept low because drivers were cheap labour. The average profit from sending one of our own trucks to Tamale was around US\$1500, whereas the cost of hiring a truck to do the job would be expensive and lower the profit from that particular loading. Using his own trucks, allowed Sumaila both to make money and avoid making relationships with truck-owners. In spite of how advantageous the system was for his company, he had no qualms in admitting its effects on the distribution infrastructure. He stated:

Tanker owners don't want the pipelines to work. The same goes for the depots. That is how they make their money. And they are so influential in both [political] parties. They will not vote for someone who will fix these things. There is always some fault somewhere and then they load the BRVs [Bulk Road Vehicles]. Most of them [politicians] have their own BRV now.

It was relatively well known in Ghana that many politicians, MPs especially, had invested in trucks. It was less known, however, that the decentralised depots and pipelines had been shut down and that this made fuel transport and the accompanying subsidies even more appealing. Like Sumaila, many people in the industry had put two and two together, and realised that as long as truck transport continued to be so profitable for the political elite, the pipeline and decentralised depots would not

operate again. When I asked Adam about it, he simply replied, "It's obvious what they are doing, it's politics, it is how it works."

A government audit report of the UPPF for 2010-2012 confirmed that the fund relied on the operation of BOST's decentralised depots and zoning system to operate in order to have a positive balance of payment. With BOST and its infrastructure not operating the cost for the period exceeded the income. The fund had acquired considerable debt over the years and was projected to continue to do so unless the state infrastructure were utilised (Quartey, 2014, pp. 8-9). While truck transport and state subsidies provided what some people thought were obvious explanations for the government's apparent reluctance to jump-start the operation of the state-owned petroleum infrastructure, truck transport also provided further benefits. The reform initiated in 2005 extended access to petroleum products on a large scale across Ghana, but there were still towns and villages that did not have stable access to petroleum products. Theft from trucks provided a large amount of this supply, and an operating pipeline would have cut it off.

Conclusion: Why wait?

Given this context, one can wonder why the people of Buipe town, engineers, business owners and people like Issah waited around for the product to return. Much of the answer to this puzzlement lies in personal stories, social and economic ties to the town, and a lack of opportunities and wealth of uncertainties elsewhere. However, the answer is also grounded in the hopes and expectations connected to infrastructure, the depot and the pipelines. The people working at the depot knew that there was nothing wrong, and that the depot would be reconnected eventually, as long as they kept it well. It was just of a matter of time and a matter of surviving the waiting.

The waiting, of course, was caused by 'politics' – an uncertain and secretive category that at the time of my fieldwork mostly referred to truck transport businesses and their political affiliations. Over the years, the depot workers had experienced a number of different shutdowns, some related to stealing, others rather inexplicable. What really mattered was the fact that 'politics' were markedly changeable. Like waiting, any political dispensation could come to an end. The depot was a permanent,

physical structure, with clear developmental aims. Waiting was a mode of life in Buipe, but also a mode of resilience and resistance. Due to the fast-changing nature of the industry, and indeed of 'politics' in Ghana, it was instead much more dynamic and expectant. Rather than being rendered abject by modernity, Buipe and the workers of Buipe petroleum storage depot were put on hold.

Shortly after I left Buipe in June 2014, some journalists visited the depot and reported that it had been completely shut down for over a year. They reported that OMCs were asking for the depot to resume work, as transport costs were increasing. In typical Ghanaian media fashion, the news spread among the newspapers in almost identical form, and provoked a response from BOST. The response from the BOST management was that the depot was not shut down, but that they were conducting maintenance. They claimed that none of the machinery and equipment was functioning normally, and that the company had to do maintenance to increase the lifespan of the depot. They also added, with no apparent factual basis, that there were two petroleum barges in good condition that were supplying Buipe with product through lake transport (Abdul-Majeed, 2014; Naatogmah, 2014).

The pipelines, pump stations, petroleum barges, and decentralised state-owned tank-farms were left dormant at the time of my fieldwork. Why? 'Politics,' echoed my informants in Buipe. By cobbling together my research in Buipe, Bolgatanga, and with Naagamni, I argue that the proper functioning the state's infrastructure would entail a depoliticisation of petroleum distribution that many deem undesirable. In Ghana, pipelines contributed to a separation of the product from the people, which both inhibited trickle down from trucks along the road to informal markets, and inhibited truck-owning entrepreneurs and politicians from taking advantage of transport subsidies. Separating the product from the people in this fashion would disrupt relationships that underpin the everyday politics of petrol.

Chapter Five: Safety, Contamination 'Politics' and Petroleum Hierarchies

Introduction

This chapter examines safety and patrolling of petroleum products at filling stations in Ghana. I begin by examining a filling station explosion on the 3rd of June 2015, which triggered a raid of filling stations in Accra and Tema by government officials and a media crew. The explosion and its aftermath demonstrates the low level of attention to safety at Ghanaian filling stations, and the 'political' environment in which filling stations in Ghana exist. I follow a group of young NPA employees at work, inspecting filling stations and testing petroleum products in the Ashanti region. In their search for thieves and petrol-criminals, these civil servants had to manage complex political considerations at the heart of their work, navigating petroleum hierarchies while at the same time dealing with their own dependence on imported American technology.

By examining safety in petroleum industry, we are able to uncover particular petroleum hierarchies in Ghana. These hierarchies are part of the politics of petrol, but also relate to wider dynamics in international petroleum industry. Safety takes centre stage in the upstream petroleum industry in Ghana, while downstream operations lack basic safety equipment such as fire extinguishers or protective gear. Within the downstream sector, safety standards vary greatly, urban filling stations receiving the most scrutiny. At the bottom of the barrel, we find rural Ghanaian filling stations, where people's access to fuel – their role as consumers – supersedes any consideration of their safety. Safety standards reveal existing hierarchies of value, as risk in the petroleum value chain is not evenly distributed and those who are already disadvantaged face higher risks. There is a close relationship between safety and profit in the industry, and this practice extends the inequalities already existent in petroleum hierarchies.

The Explosion at Nkrumah Circle

Heavy rain had been pouring down in Accra for days, and the city's road network had turned into small rivers, forcing the traffic in Ghana's capital to a standstill. The drains had filled with garbage, and illegal structures blocked natural waterways. At Kwame Nkrumah Circle, an area in central Accra, people were seeking shelter from the rain at the Goil filling station. Known for its bustling life at all hours of the day, Circle – its vernacular name – was home to a large market and functioned as a focal point for public transport in Accra. Late that evening, in the pouring rain, while commuters tried to make their way home from work, the Goil filling station exploded. Ghanaian newspapers described the event as the worst disaster in Accra in the recent past, with human beings burnt beyond recognition in an inferno during the torrential rain that rocked the city (Lamptey, 2015, p. 1).

According to investigators from the Ghana National Fire Service (GNFS), flooding from the rain had leaked into underground tanks at the filling station. One of the vaults had not been closed properly, and water had displaced the petrol and diesel, which flowed to the surface. The leaking petroleum products came into contact with fire, likely from a cigarette tossed away by one of the many people gathered at the station (Ghana web, 2015c). A total of 154 people were reported killed by the explosion, with just as many injured. This number included the eight filling station attendants on duty for Goil that night, customers at the station, people seeking shelter from the rain, traders and travellers. In the following days, newspapers and social media were filled with pictures of their burned bodies.

The Public Relation officer at GNFS, Prince Billy Anaglate, claimed that the vaults of the underground tanks had not been tightened properly, and that the explosion was therefore a result of a one-off human error (Lamptey, 2015). Journalists, however, had contacted filling station staff that were not on duty that day, and reported that the surface metal covering on the underground tank was bent. The bent metal left a gap between the underground tank and its lid. According to the filling station attendants, every time it rained, water would leak into the tank because of the broken lid. They claimed that the filling station supervisor knew about the situation, but that for some time the problem had simply been dealt with the quick fix solution of covering the tank with polythene rubber held down by stones. The journalists called for the

authorities responsible for supervising the filling station to hold someone accountable, as the quick-fix solution was a clear deviation from the prescribed safety standards in the industry (Allotey, 2015; Lamptey, 2015; Quansah, 2015).

The morning after the explosion, President Mahama went to see the damages for himself. He called the explosion "catastrophic and unprecedented" (Weaver, 2015, p. 1), and called for three days of national mourning. Ghanaian news reported him as "shaken up", referring to the loss of life as devastating. Mahama's main political opponent, the leader for NPP, Nana Akuffo Addo, was also present at the scene of the explosion the next morning. While he expressed sorrow and shock for what he had seen, he made the point that the incident was not unprecedented – though it was of a different magnitude. He was quoted saying, "it is a big, big crisis for the nation... Year-in year-out we have this problem" (Kwakofi, 2015, p. 2).

Akuffo Addo was referring both to the frequent floods in Accra, and to the lack of safety regulations at filling stations across Ghana. The explosion presented a good opportunity for the major opposition party to criticise several failures of governance in Accra: drainage, waste, illegal structures, and downstream petroleum management. The opposition linked the incident to weak governance, suggesting that the ruling NDC was not regulating filling stations properly, thereby putting people in danger. In response, the government attempted to demonstrate a commitment to making sure a similar disaster would never occur again, undertaking wide-ranging inspections of filling stations throughout Accra and Tema.

A few days after the explosion, an official team from the NPA and the Ministry of Environment, accompanied by invited journalists, searched Accra and Tema for filling stations that did not meet official requirements, and/or were blocking natural waterways. It was reported as a "war against unauthorised fuel stations", and several stations were shut down when they failed to provide permits from the Environmental Protection Agency (EPA) or proved to have unauthorised businesses on the premises – such as restaurants, supermarkets and pharmacies (Frimpong, 2015).

The filling stations that were shut down were deemed unsafe by the authorities, and their premises and equipment were attacked. A group of young men followed the team of inspectors, and gathering crowds joined in when the young men started tearing down the filling station overheads and smashing the pumps. In an interview I conducted a few weeks later, one of the journalists following the team noted:

All the anger came at once. And people joined in. The filling station owners had enriched themselves on the behalf of the safety of the Ghanaian people. Risking lives recklessly. It was very powerful to watch people around attack the stations.

This display of power over the 'reckless thieves' of the downstream industry proved forceful. However, it also quickly reached its own limits. A Goil filling station in Achimota had failed to produce both an EPA permit and a construction permit from the NPA. Moreover, the station had been built in a residential area and blocked an important waterway. The filling station was ordered to close down and the demolition was scheduled for the following day. The problem was that the filling station belonged to a Member of Parliament for the NDC. When the bulldozers showed up the next day, arrangements had been made for the structure behind the filling station to be demolished instead. The filling station resumed operation a few days later, when the raid of inspections had cooled down and "people had moved on to more pressing issues" according to the news report (Frimpong, 2015). The other stations also resumed operations shortly after the raid, once they obtained the right paperwork and repaired the damages caused by the public mobs.

The explosion at Nkrumah Circle was catastrophic. While accidents at filling stations in Ghana were not uncommon, this explosion was of a different magnitude, and the media coverage of the event far exceeded coverage of previous incidents. The explosion and its aftermath demonstrated the vital importance of safety regulations for filling stations— and the anger and violence with which people react when these regulations are grossly disregarded. The politicisation of the event intensified the situation. Opposition party politicians exceriated filling station owners for making large profits on petroleum products, while failing to provide for the safety of their customers at the station. The government had to respond by cracking down on noncompliant filling stations.

Accidents in oil and gas expose the inner workings of the industry, as Hannah Appel et al. (2015, pp. 3-5) have noted for both the Exxon Valdez spill in 1989 and the more recent Deepwater Horizon explosion in 2010. Explosions in particular have the capacity to expose the infrastructural guts of the industry, literally and figuratively. The response to the explosion at Circle opened a debate about safety at filling stations in Ghana, and people became furious with the routine corruption and danger prevalent at fillings station. The public directed their attention towards safety – or the lack thereof – in Ghana's downstream industry.

The explosion and its aftermath contained important lessons. The lack of safety at filling stations can have fatal consequences. Many filling stations are social gathering points or places that provide more than trade of petroleum products. The lack of attention to safety at these stations storing highly flammable products is a danger to human life. While there were extensive safety regulations in the industry, they were neither abided by nor checked by the authorities. The aftermath of the explosion demonstrated that filling stations in Ghana were not free from scrutiny. Filling stations without the right permits had their licences revoked, and for the sake political PR they also had their equipment vandalized. However, not all filling stations were subjected to the same level of scrutiny. When the owner of the filling station happened to be an MP, safety regulations came second, and his property garnered protection. The link between safety and 'politics' became clear, the MP's profits trumped the safety of his customers.

Next, I turn to a team of engineers working for the NPA. These people were tasked with patrolling petrol, with the aim of avoiding explosions such as the one at Circle. The team was also concerned with catching those selling adulterated petroleum products. The everyday work of the NPA team complicates the 'politics' of filling stations in Ghana; and while efforts were made to regulate, control, and police filling stations for their adherence and implementation of safety measures, the importance of the flow of petrol remained paramount.

Risk in the Ashanti Region: NPA and the Petroleum Product Marketing Scheme

In previous pages, readers have encountered the national industry regulator – the NPA – a number of times. The regulator's presence was most clear in Accra and THIA, but the NPA had a few regional offices as well. In Kumasi, the capital of the Ashanti region, a team of committed young engineers were dedicated to the Petroleum Product Marketing Scheme (PPMS), which was the NPA division responsible for the inspection of petroleum products at Ghanaian filling stations. Prior to the establishment of the NPA, the Energy Commission carried out compliance monitoring exercises at filling stations, but these were few and far apart. The PPMS therefore marked a new and substantial commitment to control of filling stations in Ghana's downstream industry.

The PPMS was launched by the NPA in March 2014, after a three-month pilot conducted in 2013. According to Moses Asaga, head of NPA at the time, a thousand filling stations had been sampled during the pilot. The samples tested the quality of the petroleum product supplied at the filling stations. The NPA found 32% of samples were in violation of NPA regulations, and, according to Asaga, these violations translated into GHC 50 million worth of diverted petroleum products. The PPMS was initiated to tackle challenges in the industry, with its main emphasis on combating the adulteration and diversion of fuel in Ghana. The Minister of Energy and Petroleum, Emmanuel Kofi Buah, was quoted stating: "We are happy to learn that PPMS will discourage this practice of diversion which is detrimental to our efforts to build a just and fair society" (Kwawukume, 2015, p. 1).

The introduction of the PPMS had a broad aim: to clean up the downstream petroleum industry by removing adulterated product from the market, thereby offering higher quality petrol to Ghanaian consumers. The work of the PPMS teams would detect and penalise actors engaged in adulterating and/or smuggling of petroleum products. In order to provide this kind of monitoring, a petroleum product dye had been added to the product in Tema. This dye provided the product with a "finger print", which allowed inspection teams to identify the origin of the product and whether it had been tempered with. An American team had trained the PPMS

division of the NPA in the testing and detection of adulterated petroleum product, and supplied the relevant technology required for such an assignment.

According to the NPA, the operations of OMCs and filling stations had been cleaned up considerably since the initiation of the PPMS, and the most serious criminals had been removed from the downstream petroleum industry (Larbi, 2015; Nii-Aponsah, 2015, p. 4). The NPA claimed that, by rigorously patrolling filling stations and testing their product in the Ashanti region, the PPMS programme had improved and cleansed the industry of its old habits - smuggling, diversion of state subsidies, adulteration and contamination of petroleum products that damaged motor engines across the country (Larbi, 2014).

It is noteworthy that both the pilot and the fully-fledged PPMS programme were carried out in the Ashanti region. The region has been a stronghold for the current opposition party, the NPP, which had historical roots in the Busia-Danguah political tradition. The NDC government had carried out other pilot projects in the Ashanti region – including the National Health Scheme –that had drawn criticism from the public for targeting the Ashanti region as guinea pigs (Rockson, 2014). The PPMS was bound to suffer from the same problems as other schemes in the Ashanti Region. Adulteration of fuel at filling stations had been a long-standing, common practice across Ghana; any region monitored would likely produce a high rate of violations. By carrying out the pilot and the programme in the Ashanti region, the political risk, of losing votes or important cooperation for the NDC were comparatively minimal. However, political considerations of a different sort were also on the agenda for the NPA team in the Ashanti region. Apart from being an opposition stronghold, the Ashanti region is one of the few regions that do not have a border with neighbouring countries. The smuggling of adulterated petrol was the most profitable illegal activity in the downstream industry, and – as we will see in Chapter Six – this profitability was tied to networks linking smuggling to the political parties. Ashanti was a lowrisk region in which to pilot PPMS because it would not interfere with smuggling activity on a large scale.

Adulteration and Contamination

It was early on in my fieldwork, I was invited to spend a few weeks with the NPA team in the Ashanti region. I had contacted one of the young professionals working there as we had acquaintances in common on an online site for professional networking. I reached Kumasi, the capital of the Ashanti region, late one evening in October 2013. My new friend, Atsu, took me directly to a 'spot' so we could watch the World Cup playoff match between Ghana and Egypt. The Black Stars ridiculed the Pharaohs, and won by six to one. After each goal, and throughout the game, we were presented with a message from the main sponsor of the match – Ghana National Petroleum Corporation: "Energizing the passion of the nation". Atsu and I agreed that the match had given us some energy, and he offered to go to the NPA office to give me a tour of the premises.

Arriving at the NPA, we entered a modern, white, multi-storeyed building. The NPA offices were located on the second floor, while a mining company and an insurance company were located below. It was a public holiday, and everyone was out celebrating the Black Stars victory. The place was completely empty. From the main door, there was a long hallway that ended in an oval-shaped room with computers and microscopes. The walls and ceilings were white and had a clinical look. On the floor were cardboard boxes filled with used and unused chemistry tubes, as well as samples that looked and smelled like petrol. The hallway had two doors – one that had an untidy paper note on it that read "driver's lounge", the other with a much more impressive plate, spelling "Laboratory".

We entered the laboratory, and Atsu started explaining the different purposes of the various equipment and machines. There were two large white machines, a table and a variety of technical equipment. Safety gear (goggles, masks and white coats) hung on the wall. Atsu showed me how the chemical tubes were used in one of the machines. He used an old sample that he fetched from the cardboard box in the hallway. He pushed some buttons and explained what the different numbers told us about the contents of the tube. The following conversation ensued:

Monica: So all these machines are to test the product, what exactly are we looking

for?

Atsu: We are looking for adulteration, not so much contamination.

Contamination is not that important.

Monica: What is the difference between the two?

Atsu: Adulteration happens when the chemical combination of the product is

changed. While contamination is when small amounts of dirt or water are

added.

Monica: Say we catch someone in adulterating the product, what happens then?

Atsu: Then the company will be called into the NPA. To avoid people

adulterating, the fines have been set so high that it will bankrupt most

OMCs.

Monica: Has anyone been caught?

Atsu: Yes!

Monica: Has anyone gone bankrupt?

Atsu: No...

I found it strange that contamination was not high on the agenda. When I conferred with the mechanics, they explained that contaminated product would break down your engine eventually, but that properly adulterated product would speed up this process, depending on what the product was adulterated with. If the goal were to clean up the industry, both contaminated and adulterated product would be matter out of place. Atsu explained that contamination was less important because it was not very easy for people to control; sometimes it "just happened." On the other hand, adulteration was more frequently a criminally engineered activity intended to increase profit by modifying the commodity and causing financial harm to others.

While both contamination and adulteration were harmful to car engines, and profitable for those trading in petroleum product, the distinction between the two was useful for producing space for negotiation in case the 'wrong person' was caught. According to Atsu, some people in the industry were protected against 'fire'; and

while they were told to correct their misbehaviour, they were not punished in the ways described by the regulations. Atsu told me that the industry had been considerably cleaned up since the NPA was created. Earlier, adulteration was commonplace, and whoever tried to run their business fairly could make considerably less money. "It is like a new industry now," he said, going onto point out that:

Before NPA, smuggling and adulteration was even worse, but there is still a lot of bad things in the system. But before NPA, OMCs themselves where mixing the product to make more profit. The people playing by the books did not really earn a lot of money before NPA. But those who mixed and did whatever they wanted had huge profits. But it will break down your car eventually. It also lost the government a lot in tax and it added plenty of toxic waste into the air.

Atsu said that "these days" the people who adulterate the product were mostly filling station owners, and he was doubtful whether the OMCs that brand the filling stations were aware of what was going on. "That could also be a way for them not to be complicit," he said, and laughed. On the question of whether stricter monitoring by the NPA had shifted the way that industry actors operated, he stated,

Because we are now testing the product, they are getting more advanced in their methods. Before NPA, everyone could mix [the petroleum products] and make a lot of money. But they are smarter now, it is getting more difficult to catch them. I will draw it for you so you can see how it is done. It will surprise you ooo [emphasising], these people paa [they are too much].

Atsu took a piece of paper and started drawing. He first drew three underground tanks, in plain squares. He indicated that each one contained different product: the first one contained petrol, the second one contained diesel, and last one contained kerosene. He went on to draw a line from each of the underground tanks to its own circle, which represented the pumps at the filling station. We now had three circles and squares connected by lines – and he explained that this was how the system should be underground at the filling station. Then he took out a new piece of paper and started drawing the same three underground tanks. This time he drew another square beneath the diesel and kerosene tanks. He connected one square (one underground tank) to the circle (filling station pump), and connected the two remaining squares to the fourth underground tank. "That is where the adulteration

process happens now, underground!" he exclaimed. He pointed at the fourth underground tank and explained that the diesel and kerosene were being blended in this tank. He drew two final lines between the adulteration tank and the three remaining circles (filling station pumps). He had demonstrated through his drawing that kerosene and diesel were being blended in an additional underground tank, before making their way to the filling station pump.

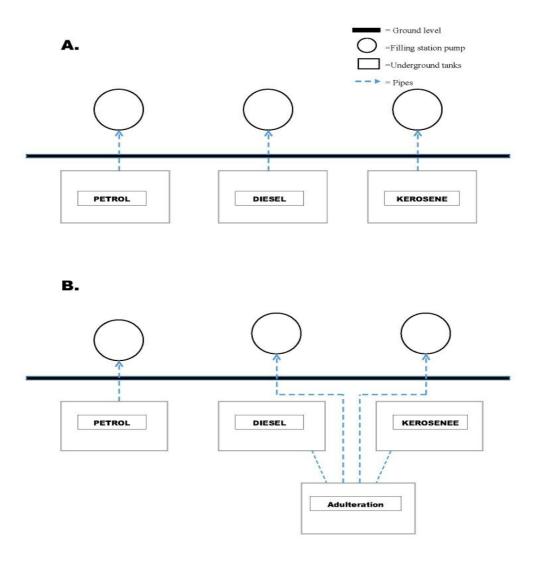


Image 5.0: Figure x: My Own Rendition of Atsu's Drawing. Author (2014).

He continued to explain why this practice was profitable:

This is because kero [kerosene] is around 0.9 cedi per litre, while the diesel is 2.0 cedi per litre. The retail outlet will only buy parts of diesel, mix it with kero and sell it for higher profit. They will have a kero pump but claimed that it is finished [sold out].

Atsu was claiming that because of constant monitoring by the NPA in Kumasi and the Ashanti region more generally, illegal methods in the industry had gone from being open and partially accepted to literally going underground, in far more intricate and secretive operations. He said that even with an understanding of how these operations now work, it was difficult to uncover the adulteration itself, as the PPMS team took samples from the underground tanks directly, and not at the pump. He had reported this issue to the management in Accra, but had been told to continue in the same way as before, while they assessed his suggestion.

Atsu made clear that progress had been achieved by the NPA and PPMS in cleaning up the industry, but that major hurdles still remained. While monitoring was getting stricter, the NPA suspected that people were getting more imaginative with the ways they ran their businesses. In conversation with Atsu and others, it became clear that filling station owners, whether MPs or private entrepreneurs, had a reputation for dubious business practices. The industry as a whole was under scrutiny, but according to Atsu, there was room for some people to 'escape fire'. He and his team suspected that methods of adulteration were becoming more sophisticated in response to the development of patrolling practice and regulation. The rapid speed with which reform had enabled new companies to enter the industry and filling stations to be built had put even more pressure on the small team in charge of patrolling these activities.

The main means of adulterating petrol and diesel was by adding kerosene. In Europe, this phenomenon is referred to as petrol-stretching, and recent investigations have shown that it is not a strategy reserved for developing countries only. While regulations are strict in most countries, the ease of starting a company and closing it again has made fuel scams more common. With the addition of ten per cent kerosene, petrol and diesel profits can increase enough to cover the cost of operating a

company for a short time (Deane, 2015). In Ghana, the significance of the use of kerosene goes beyond the adulteration of the petroleum products. Kerosene has been subsidised by the Ghanaian government as a poverty reduction target for rural households, though Atsu explained that only a small amount of the kerosene actually reaches the region. Most of it stays in Accra, and only comes as far north as Kumasi. Kerosene is used for both cooking and lighting, and it is cheap to buy and easy to store.

Adulteration of fuel at Ghanaian filling stations was not a new phenomenon, nor a result of the reform process. A retired truck driver explained to me that the adulteration of fuel was commonplace in the 1980s, "when there was hunger in Ghana." He explained that adulteration was a major problem, and that as with everything else, the kalabule saturated the market and the quality of commodities were stretched in response to scarcity. The adulteration of petrol was undertaken with subsidised kerosene. Fulani people – or, more broadly, Muslims – were commonly identified as the main actors in the informal trade of adulterated fuel in the period preceding the partial deregulation of the 1990s.

Truck drivers usually indicated that filling stations operated by the multinational oil companies – Elf and Mobil– had reliable quality petroleum products prior to reform. However, high prices and shortages led people to temporary set-ups for the retail of fuel. The retired driver said that he once detected a scam, where the product was severely adulterated. He returned to the fuel outlet the next day, prepared to expose the scam, only to discover that they had started selling a much better product. According to him, this was a strategy they used to avoid getting caught. Today, he claims, inspectors of filling stations and filling station owners alert each other when inspections are due, so the scams continue and it is difficult to catch those who cheat.

In Ghana, by the time of my research, it was no longer the case that filling stations branded by multinational oil companies were free from adulterated product. While their positive reputation still lingered in some places, the separation between companies and the operation of filling stations has removed companies from responsibility for the product at the station. According to the NPA team in Ashanti,

adulterated product was just as common at Shell stations as any of the local Ghanaian brands.

The fact that the government chose to operate the PPMS scheme in the Ashanti region tells us something about how sensitive patrolling filling stations was in Ghana. Filling stations were often owned by community leaders or politicians, and patrolling them entailed careful tactics of 'politics' - assuring that a minimum level of regulations were upheld while at the same time allowing space for negotiation. The divide between contamination and adulteration became useful in this regard. It ranked the illegal activity in order of gravity, and while it would be difficult for the NPA team to distinguish between the two, one was considered an immoral and grave offence and the other one an unfortunate accident. Contamination was part of the industry, as well as products becoming 'accidentally' tainted or contaminated, filling stations were being operated at the border of the regulations. For example, the location of filling stations were not supposed to be blocking natural waterways or located close to settlements. However, leeway was extended from the authority depending on who owned the filling station and what role filling station had in the community. Some filling stations owned by important people, like the one in Accra I discussed earlier. In other cases, the station's violations of safety regulations were not condoned, so that the availability of petroleum products was not put in jeopardy. The loose distinction between crimes and accidents was productive. As the next two sections will illustrate, safety at filling stations in Ashanti region was secondary; it was the continued flow of petroleum products and the avoidance of shortages that were paramount.

On Field Inspections

The NPA team in the Ashanti region consisted of a maximum of ten people during the time of my fieldwork. There were two teams of engineers, a manager, drivers and some assistants. The two teams of engineers took turns working in the field, inspecting petroleum products at filling stations, or testing these products in the laboratory in their Kumasi office. A fieldtrip might last for ten to twelve days, with an exhaustive list of filling stations to inspect. The team would return to Kumasi to sleep, but would normally work twelve hours a day during the inspections. The other

team would have long, but less exhausting days in the office, testing the petroleum product samples that were collected by the team in the field.

The team I joined consisted of Ben and Atsu, and our driver. A young woman had worked with them previously, but the field trips caused her to have several miscarriages, and she had resigned from her post at the NPA. Ben and Atsu were both Ghana-educated engineers, both with degrees from the Kwame Nkrumah University of Science and Technology in Kumasi. They were in their late twenties, and like many others, had ambitions to work in the upstream petroleum industry. Ben had conducted an internship at Tema Oil Refinery, and did his National Service with GNPC. He had received offshore training and been to the FPSO several times. Atsu was more of an entrepreneurial character, and wanted to start his own service company. He would talk all day long about his ideas, hoping I would take an interest and invest my (non-existent) savings.

The day following my first visit to the Kumasi office, we started our fieldtrip of inspections. Dressed neatly, we pulled up to each station due for inspection in our black, 4x4SUV, commanding people to open up their vaults for access to the underground tanks. We inspected a range of different types of filling stations. In and around Kumasi, many filling stations had huge storeyed buildings connected to them, with elaborate porches and gold painted mullions. They were explicitly designed as a display of wealth, and the conversation in the car often reflected that fact. Ben once queried, "Who makes this money in downstream? People are building like they are oil tycoons." Atsu laughed and attributed it to the 'Kumasi style', "people here like to show off their wealth".

In rural Ashanti however, filling stations were of simpler style. While they would often stand out from their surrounding environment, they were smaller and often had only one or two pumps. Many of the filling stations in the region would just have a shack connected to them. One particularly interesting filling station stood out, as it doubled as a graveyard. Gravestones surrounded the pump, and motorbikes drove zigzag between the gravestones to get to the fuel. This station reflected the ease with which fuel outlets in rural areas were located: in a middle of a market, at a crossroads, or at any other central connection point for social and commercial life.

The team only inspected NPA-approved filling stations, and therefore did not look at temporary outlets for retail. To my surprise, however, at one village we stopped at an outlet using a temporary structure for the sale of its product (see picture). When I asked Atsu about how the NPA could possibly approve this type of petroleum product dispensary, he replied:

These types of stations have always been very popular. In some of these villages, there is not the capital to build a filling station. So instead of making them criminals we approved the station. But we do not normally do that. This is one of the few. There are many of these stations, but few are authorised. It is also funny because if they built a filling station with underground tanks and everything that is required, the people here would still buy from this kind of pump. You can see how they can see what the product looks like and how much they are getting. People just do not trust what is underground.



Image 5.1: Rural filling stations in Ashanti Region. Author (2013)



Image 5.2: Temporary outlet. Author (2013).

As we arrived at each filling station, we would step out of the car and Ben would take the lead in introducing the team. Everyone would adhere to the instructions given, although not all of the filling station managers were comfortable or even knew what the NPA was. Nevertheless, filling station attendants and the surrounding

public gathered around the NPA team and carefully watched as petroleum product was tested in the back of the car.

Atsu and the driver would open the vaults to the underground tanks. A rather homemade-looking welded tube was connected to a rope, and was lowered down into the underground tank. The samples that were hoisted back up contained about half a litre of either petrol or diesel. Atsu would then take a chemical tube and pour the petrol or diesel into it before handing it over to Ben. Ben would first have a thorough look at the tube before putting it into the machine. From time to time, he would make a comment – "this looks off" or "that's a funny colour" – while a nervous filling station owner looked over his shoulder in to the portable laboratory (the car). Quite frequently, the results from the machine were inconclusive, and a new sample had to be taken. When this happened, tensions rose considerably, and people would start to gather around the car to see what the final result would be. Filling station managers and owners would often try to provide explanations for the quality of the product, and discussions regarding rain, trucks and other contingencies were common.

In some places, we had to struggle to get the product out of the tank for our sample, because the volume in the tanks was simply too low. At one particular filling station, the NPA team found ourselves scraping the bottom of an underground tank to get enough for the sample. The low levels reflected the irony of looking for petrol thieves in the rural Ashanti region. Consumption was low, and according to Ben, small communities were policing their own stations.

There was always one person in charge of the machine, and on our team that was Ben. Ben was seen as the team senior, not because he was older, but because he had the best education and experience. Although Ben had his training with GNPC in offshore work, and he ultimately wanted to return to that role, for now the NPA was what was available. Ben appeared very meticulous and stern, and was very detail-oriented in handling the machine. When testing the product, he wore gloves, glasses and a paper mask to cover the mouth and nose. There was no doubt: he was a scientist – and the trunk of the car was his laboratory. Once I gained Ben's trust (he initially thought I was there to spy on the team), he confided that his professional routine around the machine was overplayed to make up for the machine's

shortcomings. He performed his job for the audience – filling station managers and, at the time, a potential spy.

The result of the tests was signalled by either a red light or a green light. If the red light flashed after two tests it became a matter left to the discretion of the team. If they suspected something more serious – like significant dilution or adulteration – they could shut down the filling station. Such serious problems were usually evident in the product's smell and perceptible quality. Filling station closures did not happen very often during my stay, but the team would tell me about such incidents: how they would find green petrol, or diesel smelling like perfume. The more frequent exception was strange colours due to dirty underground tanks, or bits of dirt or gravel in the test sample due to low levels of petroleum products in the tank. This state of the fuel would not qualify a station for an immediate shut down, but further tests would be taken back to the laboratory in Kumasi.

As noted above, the machines used to test the product by the PPMS workers were from the U.S.A. An American team had visited Kumasi twice: first in order to set up the system, and later to check if everything was working well. The machine was key to the working day, and the team relied on it to work and to sustain a battery charge long enough to undertake testing on long inspection trips. Due to the fingerprint dye that had been added to all petroleum products at THIA, the machine was able to detect whether the product tested in the Ashanti region was of the same chemical composition as the one discharged from Tema. The machine could detect illegal petroleum product, which may have entered the country through unofficial channels, or adulterated product whose chemical composition had been tampered with.

When we drove between filling stations that were reasonably far apart, we would turn off the machine to save battery. Turning on the machine again was an embarrassing process for the engineers on the team. It was excruciating to wait for the slow piece of equipment to start the Windows Vista operating system, and to take a full ten minutes to open the software that was used to test the product. Edem, an engineer on the other team, was selling Chinese-made Techno Smart Phones as a side business, and we came to make many joking comparisons with the efficiency of the American machine. On the one hand, everything around it was efficient, sterile

and professional, from the fingerprint in the product to the safety equipment utilised by the people operating the machine. On the other hand, the machine itself was a slow and outdated technological inconvenience. The engineers assessed it as a technology-transfer gone wrong. However, the machine played its role. Not matter how slow, it provided scientific evidence of adulteration or illegal fuel; and the sight of it in the back of our car asserted and reflected the team's professionalism. The machine was central to the performance of authority undertaken by the young engineers. Most people working at a filling station could distinguish the quality of product by looking at it and smelling it, but the machine left no room for discussion.

The American machine, however, did not always serve us well. After a day's work in the field, one of us would take the machine home or to the office to recharge. Quite a few mornings, when we were all set to go, it turned out that the machine had not charged properly. We then had to make the decision of whether to charge it for two more hours or to go on, hoping that it would last the day, or that we would find a power outlet at some point during our trip.



Image 5.3: Taking Underground Tank Samples. Author (2013).

One morning, the worst possible situation unfolded. Atsu had taken the machine home, along with the car, and for some reason the battery had only charged around seventy-five per cent. We charged it for about an hour before heading out for inspections. At a Deliman filling station, on the very outskirts of Ashanti region, one of the product samples got the red light from the machine. As Ben prepared the second tube to be inserted into the machine, it went black. The battery was dead, and the machine would not work any longer.

The filling station only had a small structure connected to it, with a single power outlet. As we entered, we could see the power outlet hanging out from the wall. "It does not always work," we were told by the manager of the filling station, a young man in his twenties wearing jeans and a Coca Cola shirt. We pulled the machine out of the car and into the one-room house. At first, when we tried to connect it to the socket, it did not react. Atsu and the driver got down on their knees and pushed the socket back into the wall. For at least twenty minutes, the two grown men sat on their knees on the dirty cement floor, holding it there. When it was out of the car, standing on its own on the cement floor, the machine looked small and simple. The visual effect of its case and the surrounding equipment in the back of our car was removed. You could feel the engineers' embarrassment as they tried getting the machine to power up again. After fifteen long minutes, it was ready.

Ben tested a second batch of product, and the machine still showed red. The young filling station manager was instructed to find the paperwork that showed where the product came from. He came back with some receipts. After reviewing them for some seconds, Ben said: "Shut down this station, now!" The filling station manager protested and said the machine was not even working properly, and that he would call his influential friends. Ben reasoned with him regarding the machine, but sternly pointed out his problem with the paperwork. The loading papers clearly did not have the right authorisation from the NPA, and the product was believed to have been purchased illegally.



Image 5.4: Trying to Charge the American Machine. Author (2013).

As we got back in the car, the lights of the filling station were turned off and the whole area went dark. The receipt for the petroleum product did not have the right NPA stamps. In fact, Ben had never seen any receipt that looked like that before. He could only conclude that the product did not originate from Tema, as the machine was not able to detect the dye and the receipts looked nothing like the standard ones.

In the car back to Kumasi, we discussed where the product could have come from. Atsu thought that it might be from bush-refineries, which he described as small-scale illegal refineries in and around the Ashanti region. Ben and the driver were convinced that it was either stolen from a depot or brought in from another country. The trip back to Kumasi – of almost three hours – was consumed by discussion of the possible criminal ways in which the people running this filling station could have obtained their product. We were all aware that Deliman was a company that was

struggling, and we were discussing how and why illegal fuel would be present, and whether other companies that were struggling might turn to the same methods.

The Kumasi teams spent more time on speculation around criminal activity than they did on detecting actual criminals in the industry. As for the elaborate underground machinations that Atsu had described so passionately in the office, it was difficult to see how these practices could be possible in the various filling stations we visited. The rural ones were too small to have this kind of extensive underground tank system, while the larger ones in Kumasi were paved, and would have to go through a lot of (very visible) work to install an additional tank. However implausible, his drawing might be better interpreted as a metaphor for the sophisticated ways people have found to circumvent regulations and patrolling. Armed with an out-dated testing machine, there was only so much authority that the team could enact.

Safety Hierarchies

One day on an inspection trip, we encountered a filling station that raised several red flags. The smell of petrol was overwhelming when we stepped out of the car. The pumps were leaking, and there was no fire extinguisher to be seen. People were sleeping in wooden structures only a few meters away from the pump. The filling station attendant, a middle-aged woman, came to greet us. She was wearing worn-out sandals, leaving the skin on her feet exposed to the product, and had a baby sleeping on her back. The rest of the team did not seem to share the same sense of fear and shock as I had. When I asked Atsu about the safety of the filling station, he pondered it for a while, and then told me to go and stand at the other side of the road. The team took their samples; nothing seemed suspicious; and we drove on.

In the car, I asked the team if we should not call someone to report the filling station, or, better yet, just shut it down ourselves. Obviously the station was not safe, neither for the woman serving the customers nor for the child she carried on her back. The cluster of structures surrounding the station, and the people sleeping in them, were in immediate danger in case of fire. Although Atsu agreed that there were safety concerns at the station, he explained:

This is the only filling station for miles around here. If we shut down this station it will affect the whole area, everything relies on this station. These people do not understand what "is safety". They will not be happy if we do anything, so we just let them be. It is also about politics. The way they think, they will blame the president for taking away their filling station.

The team's decision not to interfere with the operations of this particular filling station reflected their experience with rural filling stations that were the only stable point of access to petroleum products for a particular area. Reporting or shutting the down the station would create extra paper work for them, and in the end they knew that the filling station would be opened shortly after. According to the team, a focus on safety, had to develop over time; while safety was important, and while the team believed most communities agreed with its importance, stable access to petroleum products was paramount.

While this filling station was worrying in terms of its visible hazards, my concern was especially elevated due to the child on the back of the woman, breathing in the fumes of petroleum products. The general gist of my experience in Ghana was that filling stations were filled with hazards and safety concerns. The leaking lid of the underground tank that was said to have caused the explosion at Circle was observable in many places, including the Naagamni stations at which I worked. Poor welding and lack of maintenance saw most of the tanks covered with something additional to the metallic plate – most often plastic covers which could not withstand heavy rainfalls. The lack of safety provisions at Ghanaian filling stations also included the absence of fire extinguishers and people who knew how operate them. If they were there, often they were out-of-date, and had not been replaced with new ones. Filling station attendants rarely fulfilled the regulations for work uniforms, including protective boots and jackets. The regulator did not measure the prescribed distances between the pump and buildings, and there was an overall sense by the attendants I talked to that attention and money were not put into making stations safe places to work.

Not all the filling stations that escaped the scrutiny of safety regulations – or other regulations for that matter – were owned by politicians or were connected to the political elite. There could be other political rationales. Like the station with the

woman and the child, some filling stations were crucial catalysts for economic activity. Fuel was needed to transport people and food, and it was needed to power generators for local clinics when the electricity grid was shut down. Closing down a filling station, which played such a crucial social and economic role for communities, would evoke protest, and – according to the NPA team and my own experience – people would indeed blame politicians. Behind most filling stations however, were also people who were aware of these 'politics'. Petrol entrepreneurs were strategic in their placement of filling stations and were aware of their role in the communities. These realities did not provide incentives for people to improve safety at the work place. As such the politics of petrol contributed to upholding different human safety standards at rural filling stations.

Tragic events in the form of explosions, fires, road accidents and the collapse of large structures, leaving significant causalities and financial loss, appear regularly on the front pages of Ghanaian newspapers. However, the question of safety regulations or responsible parties to these accidents was rarely discussed; and in a matter of days, a new accident was in focus, or people had just moved on. There was no question of responsibility or repercussion. Accidents happened, as they do elsewhere. The aftermath of the explosion at Circle was outstanding in that regard, as it led to several days' display of the public's power to bring down the fuel 'thieves'. While a commission was set to investigate what happened at the station, a year after the blast, neighbours were still complaining that the site had not been properly cleaned up. The scale of the accident led to several funds set up by the government and by Goil to support the affected families (Ofori, 2016). However, there has not been any report regarding punishment or fines for Goil as a company.

Health and safety regimes and laws are entering our lives in a growing number of ways. Health and Safety – and the newly added environmental policies, in combination with risk-management, are fetishized in the oil and gas industry. While the focus on safety and protection of life is welcomed, the close relationship between safety policies, risk and profit calls for an examination. Safety policies are put in place to protect capital, and according to most petroleum companies, people. However, the vast difference between safety in upstream and downstream industries enable a deepening of hierarchies of value regarding lives in the petroleum industry.

Attending a seminar within the framework of a project on technology transfer between NORAD⁸ and the Ministry of Finance in Ghana, I spent a few days with some consultants from Schlumberger, a major American oil-service company. This experience highlighted the safety gap in Ghana's upstream and downstream petroleum industries. While spending time at the 'high end' of the oil and gas industry, I observed oil consultants arriving late at all of our meetings, presentations and social events because of difficulties with transportation. According to their contracts - stipulated in terms of Health, Safety and Environment (HSE) measures they were not allowed to drive their own cars or take public transport, including private taxis, while working in Ghana. They were under instruction from the company only to drive the preapproved Schlumberger car, with a preapproved Schlumberger driver. If they violated these terms and had an accident, they were not only stripped of their rights to compensation for work accidents, but they could face charges from the company based on the violation of the HSE codes of their contracts. In this regard, the company had managed to make a rather mundane part of everyday life on the roads in Ghana - accidents and other incidents - the workers' responsibility to avoid. In abiding by the strict HSE codes, risk and human error would be minimalized. In return, blame could be shifted from the company to the person who had most likely had failed to abide by the HSE codes. The oil consultants, with decades of experience, were aware of these dynamics, and therefore took no risk in taking short cuts that would otherwise make their everyday movement easier.

For the Schlumberger consultants, having special transportation arrangements represented only a fraction of the considerations enshrined in the company-imposed HSE codes that supposedly minimised risk in their work environment. To meet with them and partake in the seminar, I had taken a vacation from my fieldwork in Bolgatanga, where I was working as a filling station attendant. The stark contrast between my work day at the filling station and the air-conditioned, five-star hotels in Accra was just one of many reminders of the differences between the upstream and downstream petroleum industries. While the Schlumberger consultants were carrying

⁸ The Norwegian Agency for Development Cooperation (NORAD) plays a crucial part in Norway's development programme, Oil for Development, which supports the Ghanaian oil and gas industry. I was invited to the seminar to observe and give a presentation on Ghana's downstream petroleum industry.

around a metallic suitcase with malaria and other tropical disease prevention and treatment kits at all times, I had recently found out that the fire extinguisher by my petrol pump was not working. Technically, we were all workers in the petroleum industry; but the risks involved in my day at the filling station far surpassed the thresholds of danger that these consultants could tolerate during their secluded and protected time in Ghana.

In the downstream petroleum industry in Ghana, and globally, we see that the safety cultures of major oil companies are difficult to implement on the retail side. Multinational oil companies were generally more vigilant in following set regulations, due to their higher susceptibility to paying fines. However, there were simply too many people and practices involved to be able to minimise risk, the way it was possible to control in offshore production chains (Appel, 2012). The solution for the multinational oil companies has been to distance themselves from downstream retail, either by creating subsidiary companies or by leaving behind downstream operations altogether. During my fieldwork, Shell announced that they were pulling out of all downstream operations in most sub-Saharan African countries, including Ghana. The branding would remain, but the ownership of the filling stations and other services would be sold to interested individuals. The downstream operations, which made entanglements with local populations and regional and national politics inevitable, proved too much of a risk for this major oil company, compared to the profits that these operations where making.

The other multinational oil company operating retail in Ghana's downstream was Total. Total had gone through a restructuring exercise, making all the filling stations independent from the company. Thus, if there were an accident or an internal conflict at a filling station, there would be a filling station manager or owner that would be responsible. This separation of responsibility is not something specific to Ghana or developing countries: Statoil made the same move in the Norwegian retail market in 2016. The Statoil retail stations around Europe have now been rebranded as Circle K, distancing the downstream segment from the main company.

Globally, we can observe a substantial move away from vertically integrated petroleum companies to many small companies and subsidiaries. This organisational shift does not mean that the traditional powerhouses have disappeared, but that markets and regulations require new methods for the maximisation of profit. For the downstream industry, the restructuring means disclaimers of responsibility by the multinational companies; and while international actors could have provided a similar safety standard at their stations in Ghana as they do in the global north, one Shell manager confided to me in an interview that safety and other types of regulation had made African downstream industries less profitable and therefore less attractive. He was of the opinion that the negative press that multinational companies could draw from downstream operations in Africa had to be weighed against the more limited opportunities for profit among those operations.

Hannah Appel (2012, p. 702) argues that oil and gas industries are deeply entangled in the "productive life of risk" (Zaloom 2004, p. 365). In her study of the petroleum industry in Equatorial Guinea, she rightly points to the precarious nature of health and safety in the oil industry, and the redistribution of risk to the local population:

The risks that temporary Equatoguinean rig workers take on in agreeing to tenuous and unpaid subcontracting agreements in a dangerous industry reap little reward for themselves or their families, but they enable both the spectacular accumulation and the more quotidian benefits of hedging to be enjoyed by those positions, for example, to invest in oil-future markets (Appel, 2012, p. 703).

With risk being so clearly repackaged as a commodity (Appel, 2012, p. 702), occupying the core of contemporary capitalist financial endeavours, it is easy to understand the limits of fashionable risk management tools in actually improving safety standards. I suggest that it is a rather an economic and political tool for maximising profit in the global petroleum industry, carrying forward the inequalities that already exists between the global north and global south, as well as between the upstream and downstream. We can observe a risk-safety-profit nexus whereby risk is calculated in relation to profit and safety policies become deeply entangled in protecting profit, rather than protecting life. As these policies materialise in the industry they do not just speak to the hierarchies of profit – where most money is

generated. The unevenly distributed safety standards also speak to a hierarchy of lives. Not all lives are equally worth keeping safe.

For my informants, the gap between upstream work and downstream work was mainly evident in the massive salary gap. However, several people noticed the extensive safety regimes and training that upstream workers had, the work equipment that they were given from the company, private transportation and so on. At several Total filling stations the upstream-downstream divide became a heated topic of discussion. A Ghanaian Total manager said that there had been complaints because the company had brought a few Ghanaian to work on upstream operations in Nigeria. On their return they complained that Nigerians working for Total, the same company, in the upstream sector were making considerably more money than the downstream workers. The Nigerians enjoyed more benefits and were given good quality workwear. Demonstrating the normalisation of hierarchies in the industry, the Ghanaian total manager, complained: "We are all oil workers. There is no reason for them to earn more. Even within the same company! Just because it is upstream. If anything, we are all Africans, Ghanaians should at least have the same as Nigerians". While Appel (2012) has shown how these HSE regulations became tools for processes other than safety itself, the stark contrast between the attention to safety and implementation of these policies in the upstream industry and the neglect of safety in the downstream industry spoke to the greater value attributed to workers in upstream over downstream.

In a presentation⁹, Shell's previous head of exploration in sub-Saharan Africa stressed repeatedly the oil industry's ability to perform under pressure, to cut costs when the oil price was low, and to keep profit margins afloat in challenging environments. He echoed the general sense one gets from talking to offshore workers and industry professionals, one of labour in a harsh and dangerous environment, where time is money and cost-cutting is at the centre of corporate pride.

It was striking to hear the Shell representative in the discussion afterwards explain his new role and challenges connected to being the Head of HSE for Shell worldwide. On the topic of Shell merging with the BG group, he was asked how difficult it

⁹ In Edinburgh, April 15th 2016, at the monthly meeting of the Scottish Oil Club.

would be to incorporate the two companies' different 'safety cultures' in the merger. He responded that the safety cultures between the two companies were easily aligned. The challenges arose when the safety culture in the operating country clashed with the safety culture that the company wanted to implement.

People seem to fall into this profession [HSE]. Look at me, I am a geologist, I used to source material from the safety department, now I am running it. You meet the people in the operating country, they have been given some basic instructions [on HSE procedures] but that is it. This of course gives us many challenges. People are sometimes randomly placed in this role and our understanding of basic risk and safety are not the same.

The Shell executive's position illustrates the arbitrary assignment of responsibility for HSE in major oil companies, and the limitations of professional expertise. A geologist has been put in place to head a department that requires the cultural translation of safety strategies. However, this only becomes important when safety policies are geared to protecting lives. In its current form safety policies protects profit first and foremost. It their present form at different points in the global and Ghanaian petroleum industry, these policies and standards shed light on petroleum hierarchies and contribute to deepen social inequalities between sectors and workplaces.

Conclusion

The spectacle of the aftermath of the explosion at Circle was echoed in the everyday work carried out by the PPMS team in the Ashanti Region, if without the violence and media surveillance. Regulations were clear and clean ups were intended, but political and local consideration unfolded in unpredictable ways. Shutting down a filling station owned by a member of parliament for the ruling party, or cutting off the fuel supply of an agricultural area in rural Ashanti, were not reasonable moves for regulators who understood the 'politics' of the industry and wanted to conduct their work as efficiently as possible.

My research demonstrates that safety at Ghanaian filling stations is a domain penetrated by the politics of petrol in Ghana. Political connections and access to petroleum products for local economies are key factors when making determinations about compliance with safety regulations. Ghanaian filling stations are diverse and saturated in social and cultural norms of exchange. All of the filling stations at which I made longer observations were more than retail spaces for fuel. Some of them had several altogether separate functions, doubling as fuel retail points and graveyards, phone charging places, nightclubs, and community centres. That filling station were used for multiple activities was a departure from safety regulations in place; but it reflected the role of filling stations in Ghana.

More broadly I argue that safety illustrates neatly the various hierarchies inherent to the petroleum industry in Ghana and globally. While safety regulations are portrayed as policies and measures to protect human life – they can ultimately be stripped down to the protection of profit. This does not however limit the distinctions that safety policies or equipment carry on as they materialise at various sites the industry. The vast difference between upstream and downstream workers and their access to safe working space reflects the difference in profits generated in these places, but also deepen inequalities between the sectors. It further deepened inequalities in Ghana's downstream sector, with rural filling stations in Ashanti, as elsewhere, continuing to be hazardous workplaces where people's role as consumers trumps the safety of their lives.

Chapter Six The Price of Petrol

Introduction

In this chapter I examine the price of petroleum products in Ghana. Most of my informants – in fact, most of the people I met – had an opinion about the price of petroleum products and how it tied into national and local politics. People's preoccupation with the price of petrol, diesel, premix and other products was easy to understand. The reform of the downstream industry, and the reform of the pricing mechanism of petroleum products has led to an approximately 360 per cent increase between 2007 and 2015. The price increase has had repercussions beyond the costs to people filling their vehicle tanks, impacting the price of public transport and food, deeply affecting everyday life in the country.

In order to address petroleum product price in a comprehensive manner, I have divided this chapter into two separate but complementary parts. First I examine the multiple attempts of pricing reform and public resistance to it, as well as the current pricing regime. This enables me to discuss the state-citizen relationship that many of my informants at the pump referred to, conversation that drew upon notions of harm and care to describe petroleum pricing policies. Secondly, I focus on economic practices and networks that have developed as a result of petroleum pricing policies. These economic activities highlight other forms of 'politics' existing within the realm of the pricing of petroleum products.

Since the early 2000s, Ghanaian governments and the International Monetary Fund (IMF) have attempted to remove subsidies. A new pricing scheme, called the Automatic Petroleum Product Pricing Formula (APPPF), has been implemented to regulate the price biweekly, according to a set of pre-established factors – such as the international price of crude oil and domestic currency value. My research findings, suggest that this scheme has furthered politicization of the price of petroleum products in Ghana. As my informants explained, 'politics' no longer concern only state-public relations, but also the influence of the IMF. The IMF's involvement and neoliberal reform have meddled in what my informants described as a relationship between the state and the citizenry, a social contract, in which care and the infliction

of harm are mediated through petroleum price regulation. No matter how strained, this relationship can be seen as a key component of the politics of petrol. The reform of pricing and public resistance to price increases will therefore highlight the continued significance of petroleum pricing in Ghana's democracy.

Throughout my field sites, I found that pricing of petroleum products were entangled in activities that were not always visible at the pump. Profitable economic networks were created or maintained by a favorable price on certain petroleum products or the petroleum pricing mechanism. These networks were another part of the politics of petrol pricing. Therefore, I examine what economic theory would refer to as 'externalities' in the pricing of petroleum products. Political and socioeconomic networks and practices have been facilitated through certain patterns of petroleum pricing – such as the cross-subsidisation of particular products – but also through weak regulation of illegal practices such as smuggling. As these economic activities emerge from petroleum pricing practices, they will also be impacted by changes in price or pricing framework. As such, they are intricately enmeshed in the politics of petrol. These networks and practices reveal key ways in which 'politics' become accessible to people and communities: through petroleum products and petroleum product pricing policies. Again, we return to the idea that the downstream industry, and the distribution and pricing of petroleum products, forms a political project in which various layers of society can participate through the everyday trade and consumption of petroleum products.

Price Reform and Resistance

The price of petroleum products in Ghana is socially and historically bound, and takes on diverse value among different people in Ghana. It has been adjusted according to the Ghanaian economy and political environment to such as extent that economic or market-based justifications for an increase in price, used by international financial institutions and/or national governments, has not been viewed as legitimate among the majority of Ghanaians (see Bacon and Kojima, 2006; Lindebjerg et al., 2015). However, over the last fifteen years prices on petroleum products in Ghana have gone from being heavily subsidised to align with

international benchmarks, with the addition of domestic taxes. This section describes this process of gradual increase and reform of the pricing system as it is intertwined with Ghanaian politics and public resistance to these changes.

As in many other developing countries, petroleum products have been subsidised as a pro-poor policy in Ghana, providing Ghanaian citizens with affordable public transportation and contributing to the affordability of domestic fuel and food prices. In the 1960s and 1970s, state-subsidies on specific commodities were encouraged as a development strategy, enabling people to afford the basics of living. Subsidies on petroleum products were especially important, as they were seen as key to economic growth in terms of mechanised agriculture and industrialisation. A low price on petroleum products also eased the burden of transport and mobility, connecting people and commodities to markets. Subsidies on petroleum products were still deemed acceptable under structural adjustment programmes, as they countered the harsher effects of economic restructuring.

From a neoliberal economic perspective, subsidies are perceived to distort markets and to provide opportunities for abuse by those who are able to manipulate the system (Crawford 2012; Cooke et al., 2014). According to the international financial institutions, instead of fuelling the market economy and lifting up the poor, subsidised commodities are often redirected to benefit wealthier sections of society (See Baig et. al., 2007; Granado et. al., 2012). Subsidies on petroleum products involve such a large expenditure in government budgets that the same financial institutions that recommended their continued use in the 1980s to mitigate the effects of structural adjustment are now advocating their complete removal (IMF, 2013; Coady et al., 2010). The removal of fossil fuel subsidies has also been closely related to environmental recommendations and policies from international environmental institutions amidst growing concerns around climate change (OECD, 2011; Merrill et al., 2015).

The price reform on petroleum products in Ghana came as a response to the cost of fuel subsidies on the national budget. The Ghanaian government attempted to deregulate petroleum pricing in 2001 as part of an IMF Poverty Reduction and Growth Facility Programme (IMF, 2004). The ex-refinery price – the price of the

product for retailers —was raised by 91 per cent, aligning it with the current international price of petroleum products. Public protests and a global price hike in crude oil and gas in 2002 made the NPP government withdraw from the international price setting mechanism. Petroleum products had become too expensive, too quickly and the first attempt of reform had to be withdrawn.

The government tried again in January 2003, and the Ghanaian people saw a price hike of 90 per cent. However, the price of petroleum products in 2003 was volatile, and liberalisation of the price proved politically difficult. Strong public opposition and discontent led to the suspension of the reform in June 2003 (Lindebjerg et al., 2015, p. 17). Petroleum products were again cheaper in 2004, and substantially so in the run up to the elections of December 2004 implying a strong correlation between votes and petroleum product price (Laan et al., 2010). The second attempt of petroleum pricing reform was not successful, and subsides reappeared.

After President John Kufour had secured his second term, there was a new push towards the liberalisation of the petroleum price. In his February 2005 'State of the Nation' speech, President Kufour stated that the government was dedicated to a deregulation of the industry, including the price of petroleum products (Lindebjerg et al., 2015, p.19). The third reform attempt was implemented, this time with the establishment of the National Petroleum Authority (NPA) to distance the government from the pricing of petroleum products. By mid-February the same year, Ghanaians experienced a fifty per cent increase in the price of petroleum products at the pump. Table 6.0 illustrates the price increase from 2007 to 2015, and Table 6.1 shows a longer development of price from 1989 to 2007.



Table 6.0: Dataset NPA 2016. Table: Author (2016).

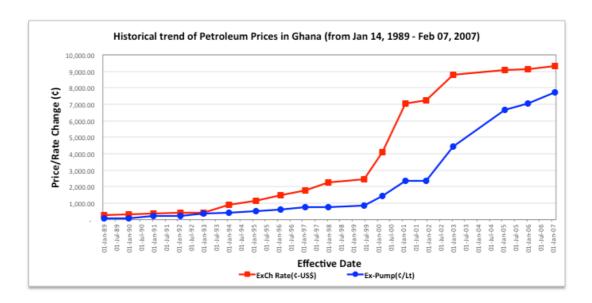


Table 6.1: Dataset NPA 2016. Table: Author (2016).

The Ghanaian government and the IMF collaborated on a public awareness campaign promoting the message that fossil fuel subsidies had a negative impact on the national economy. By removing subsidies, they claimed, the government could improve the industry and release funds towards social programmes. These social programmes included removal of tuition fees for state-run primary and junior secondary schools, health care schemes for poor areas and an increase in the minimum wage. An inquiry was made into the petroleum product market, and the

report of the Poverty and Social Impact Assessment (PSIA) that followed concluded that Ghana's subsidies were not benefitting the poor (Coady and Newhouse, 2006). The extensive public information campaign included radio broadcasting from ministers, interviews with government officials and trade union representatives, as well as column space in the largest newspapers, providing tables demonstrating that Ghana had the cheapest fuel in West Africa after Nigeria (Bacon and Kojima, 2006, p. 147).

One of the heavily subsidised petroleum products, premix, was supposed to undergo pricing reform, but strong resistance among the population reversed the reform plans. Premix, a mixture of petrol and oil, has been subsidised since independence, with a few interruptions. Premix was used for the fishing boats, and targeted vulnerable and relatively poor groups among Ghana's population. Premix is crucial for livelihoods along the coast of Southern Ghana covering major areas and economies. Fishing communities – studied in great detail elsewhere (Acquay, 1992; Marquetta et el., 2002; Mensah and Antwi, 2002; Mills et al., 2004) – are expected to become even more vulnerable after the offshore discovery of oil and gas (Boohene and Peprah, 2011; Ackah-Baidoo, 2013; Bawole, 2013; Adusah-Karikari, 2015); but it is the politics around their fuel consumption that is useful to examine briefly at this point, as it speaks to resistance to reform.

Various governments have changed the specific distribution mechanisms and management of the premix subsidy. The subsidy and its distribution have been managed either through institutions such as ministerial committees or national, regional and local premix committees (Tanner et al., 2014, p. 14). However, there is a recurrent problem: the subsidised product often finds its way to unauthorised premix service points, such as commercial filling stations, where it is used to adulterate petrol. And although subsistence fishery has decreased, Henrietta Abane et al. (2013) have shown how premix outlets proliferated after the reintroduction of premix subsidies in 1995 – from 127 to 600 in 2006, and approximately 900 in 2012.

Tanner et al. (2014) have noted that, although fishing communities acknowledge that the distribution chain of premix has been corrupted and redirected towards adulteration, nonetheless they were strongly opposed to the removal of subsidies.

Fishing communities' resistance was because the subsidies were acknowledged as the only means of positive influence on economic livelihoods. In suggesting other types of compensation (schools and health clinics), the study found that most fishing communities did not trust that "compensation policies" would be implemented sufficiently to provide a suitable replacement for subsidised petroleum products (Tanner et al., 2014, p. 17).

While the phasing out of premix subsidies has been tested several times, inevitably it meets opposition among intended beneficiaries. Fishermen have been aware of the diversion of premix fuel to general filling stations, and have appealed to the government to deal with corruption in these systems. However, the prospect of replacing subsidies with social programmes – like those the Kufour administration campaigned for in 2005 – was not well received by many Ghanaians. There was not sufficient trust in the government's contention that removal of subsidies would lead to other benefits for the poor, and that these benefits would materialise and be able to substitute the benefits of the subsidy (Tanner et al., 2014).

The IMF-prescribed policies of replacing subsidies with welfare and community programs did not convince many of Ghana's petrol consumers. Many of my informants remembered the public campaign by the Kufour administration in 2005, but a generalised distrust in politicians and their promises made it a target of countless jokes. The campaign failed to put the spotlight on the negative macroeconomic consequences of fuel subsidies. People did not believe in the planned redistribution of funds into public goods in exchange for the removal of subsidies. This scepticism of redistribution was further validated by the fishing communities, which continued to prefer a subsidising scheme that was vulnerable to widespread diversion, adulteration and corruption, but that provided some relief to poor communities, which trickled down throughout the value chain of the subsistence fishing industry.

Both the information campaign and the gradual liberalisation of petroleum prices came to a halt in the run up to the 2008 elections in Ghana. Energy prices became a key topic in the presidential campaigns, and the NDC promised to lower fuel prices if elected. The increased use of subsidies on petroleum products reflected electoral

cycles in the 2000s. The NDC's 2008 campaign promised to lower prices on petroleum products, and Laan et al. (2010) argued that the promise had an important impact on the election result.

According to NPA (2015) statistics, the NDC honoured their election promises by decreasing the price of petrol by five per cent in March, and subsequently ten per cent in April of 2009. Unfortunately for Ghanaian petrol consumers, the honeymoon with the newly elected government did not last. A thirty per cent increase came in June, and another five per cent came in October of the same year. According to NPA (2015), the profit margin for the industry was increasing only slightly, while the majority of the increase came from various types of taxes. The NPP and IMF managed to remove a large portion of subsidies on petroleum products in the 2000s, although subsidies were again utilised in the run up to 2008 election. However, the following eight years with NDC (and IMF) pricing policy resulted in further price increases, as additional taxes on petroleum products were introduced.

There were several dramatic increases in petrol price after the NDC came to power: thirty per cent in January 2011, fifteen per cent in December of the same year, twenty per cent in February 2013, and almost thirty-five per cent by July 2014. Prices fell by ten per cent at the start of 2015, the first major decrease in years. However, in May 2015 there was an increase of nine per cent. Ghana had gone from a pump price of 0.95 cedi in 2007 to 3.47 Cedi in June 2015, that is, a 360.74% increase in price on petrol.

The 2000s saw major fluctuations in Ghana's petrol prices, as both elections and the IMF called for conflicting policies. Conditions on IMF loans and development programmes translated into dramatic increases in petroleum prices at several times. But attempts to gradually phase out subsidies in Ghana proved problematic due to the products embeddedness with social and political life in Ghana. The establishment of the NPA was supposed to remove the pricing domain from the government, but frequent involvement of NPA in changing prices according to domestic circumstances such as elections have tarnished its credibility as an autonomous agency (Oduro et al., 2014, p. 18).

The price mechanism introduced by the 2005 reform, while suspended a few times, is still in place in Ghana. IMF and others (IMF, 2013; Lindebjerg, 2015) have attributed this partial success to the communication campaign and the transparency measures that were implemented with the reform. The next section examines some of the reform measures and how they were discussed in political debates and in the downstream petroleum industry.

The New Pricing Regime: The Politics of Transparency

To aid the pricing reform, an automated adjustment formula was completed in 2001, and came into effect in 2003 (Vagliasindi, 2013, p. 39, Cooke et al., 2014). The Automatic Petroleum Product Pricing Formula (APPPF) has been used to adjust petroleum prices every two weeks. The APPPF pricing policy was implemented to align Ghanaian petroleum prices with international benchmarks, in order to respond to currency exchange rates and to allow cross-subsidisation – which involves taxing a selected number of products in order to subsidise others. The NPA took over the management of the APPPF when it was established in 2005. The ultimate goal of the policy was to make price of petroleum products more responsive to market forces. June 2015 marked a turning point. Whereas previously the NPA had announced petroleum prices, now OMCs and individual retailers were in charge of setting individual prices at retail stations (Akalaare, 2015; NPA, 2015). While the NPA ceased to determine the prices of petroleum products, the NPA still continued to release press statements that commented on increases in price (NPA, 2017).

I conducted several interviews with people working for civil society organisations who criticised the inconsistent implementation of the APPPF, suggesting it was an unreliable policy that was only pursued when it benefited 'popular politics' or politicians (see also Bohaen, 2015). Criticism of the APPPF went hand in hand with general criticism of the NPA regarding its lack of neutrality and its inability to regulate the downstream industry without political influence (Oduro et al., 2014, p. 18). My internship at the NPA in 2012 confirmed others' speculations about the 'soft' implementation of the pricing policy. The research department gathered the necessary data to adjust the price every two weeks, but NPA workers would explain that the government only used it when the 'time was right'. The management of the

NPA, naturally, talked about the progressiveness of the policy, which allowed timely updates in domestic prices according to international petroleum prices. And they would emphasise the benefits for the Ghanaian consumer, as prices could decrease when there was a decline in international prices.

In the previous section, I demonstrated that the APPPF was used selectively throughout the 2000s, particularly around national elections, but also in regards to other factors such as strong public outcry. The inconsistent implementation of the APPPF intensified what people referred to as the 'political nature' of petroleum pricing. Sumaila stated something that several of my interviewees explained in various ways:

It is politics. Pricing has always been politics. [...] The APPPF is a government policy, NPA is supposed to follow through. All those people there. No consistency. If it was just government deciding the price, OK. We are used to that one. But all those fake things they do, and they still change the price anyhow.

Sumaila and others commented on the extent to which the government and the NPA selectively used government policy to adjust prices and explain increases at times when it was beneficial to them. For example, prices in Ghana increased as international crude oil prices increased. However, the drastic decrease in oil and gas prices on the international market since 2014 has not been reflected in decreased petroleum prices in Ghana. Many of my informants commented on how the government used international pricing as justification for increasing prices, but did not lower prices when there was a decrease in the market value of petroleum products. "There is no wonder we feel cheated," stated one of my customers at Yikene South Filling station in Bolgatanga during a heated discussion on the day of a small increase in March 2014.

The issue that people working in the industry had with the APPPF was not the fact that the government still used petroleum pricing as it suited them. The main criticism from petrol entrepreneurs was levelled at claims about an 'automated' services. The fact that the government claimed that the price was automatic was misleading. Sumaila and others understood that petroleum prices in Ghana were tightly linked to the electorate in election years, and that the popularity of political leaders was at

stake. However, my informants found that the pricing policy blurred the levels of politics involved, and it was becoming difficult to understand whether a price change was an outcome of the APPPF or due to other circumstances. This uncertainty led my informants to conclude that the politics of petroleum pricing had become more unpredictable with increasing pressure from the IMF to implement reform measures.

The APPFF was used as a mechanism to adjust the Petroleum Price Build Up (PPBU). The PPBU is a breakdown of the price components that make up the total price of petroleum products at the pump. The PPBU is built up from the ex-refinery price: the price of petroleum products from refining or import, that is, the production cost. While the ex-refinery price makes up the largest part of the PPBU, there are several other components, such as excise duty, cross-subsidisation levies, charges for funds, industry margins and other taxes. These are charges that the consumer pays at the pump, and the total price for petroleum products therefore represents a considerably more complex matter than the price of crude oil on the international market. The pie chart and table below demonstrate the multiple components that make up the price of petrol in Ghana. The original PPBU document can be found in Appendix 1.

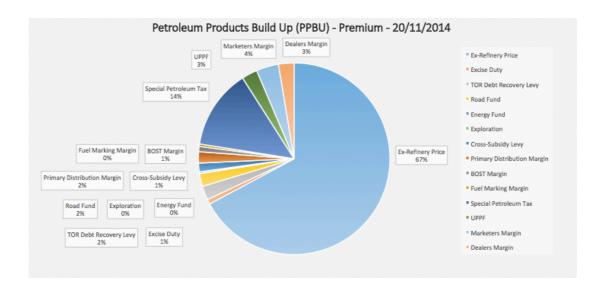


Table 6.2: Data: NPA 2014. Chart: Author (2016).

		Margin Percentage
BUILD-UP COMPONENT	COST Margin	(%)
Ex-Refinery Price	228.5766	67.17056605
Excise Duty	2.78	0.816943526
TOR Debt Recovery Levy	8	2.350916622
Road Fund	7.3231	2.15199969
Energy Fund	0.95	0.279171349
Exploration	0.1	0.029386458
Cross-Subsidy Levy	5	1.469322889
Primary Distribution Margin	6.5	1.910119756
BOST Margin	3	0.881593733
Fuel Marking Margin	1.4	0.411410409
Special Petroleum Tax	45.9031	13.4892951
UPPF	9	2.6447812
Marketers Margin	12.82	3.767343887
Dealers Margin	8.94	2.627149326
Ex-Pump Price	340.2928	100

Table 6.3: Data: NPA 2014. Table: Author (2016).

After the establishment of the NPA, the PPBU was published on the NPA's webpages every two weeks, according to the price regulation schedule. In my interviews with NPA management in June 2012, I was told that the publishing initiative was implemented to enhance the transparency and accountability of petroleum pricing in Ghana, and it was part of the process of deregulating and depoliticising petroleum pricing. There were a few exceptions to the regular publication of the PPBU, especially around an increase. The webpage of the NPA would shut down for periods of time, making the PPBU inaccessible to the public. However, the BDCs and OMCs were sent the document every two weeks, as the PPBU set the price ceiling under which petroleum products had to be traded. The picture below (top right corner) shows a short excerpt from the PPBU published in The Ghanaian Times in September 2016.

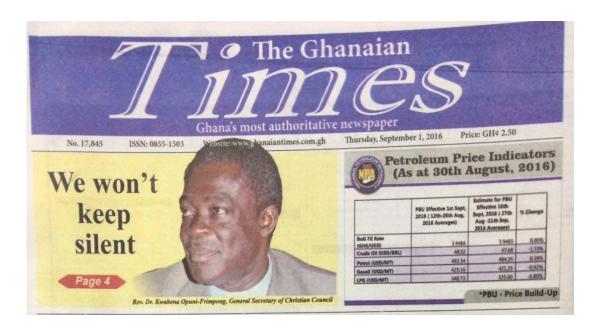


Image 6.4: The Ghanaian Times. Author (2016).

The publishing of the PPBU, in combination with increases in petroleum prices, led to broad public discussion of petroleum prices and their taxes — mostly led by Ghanaian civil society organisations, opposition parties (these two categories often overlap in Ghana), and industry actors. The transparency of the petroleum prices was questioned, as there was no 'follow-up' transparency. People were questioning whether the funds and taxes collected, paid for by the Ghanaian petrol consumer, were utilised as intended in the funds' mandate. The next few paragraphs examine a few of these critical debates as they unfolded in parliament, media and in the industry. The critique of these taxes added another layer of 'politics' to the petroleum price in Ghana.

The Tema Oil Refinery (TOR) debt-recovery levy was a topic debated widely in the industry and in the news. It was controversial for several reasons. Refinery workers noted that the money supposed to recover the debt at the refinery (outstanding debt was given as a reason for the refinery's non-operation) was not given to the refinery, and that someone else, presumably some corrupt politicians, was 'chopping' the money. According to the union chairman at the TOR, Emmanuel Eduah, the funds

from the TOR debt recovery levy had not found their way to the refinery since he started working there in early 2004. He was worried, however, that because of the name of the levy, the public's image of the TOR had been further tarnished. "Admittedly," he said, "the managements here have not had the best track records [...] It's understandable people make their conclusions based on experience." He said that it was problematic that people were under the impression that they were paying for the TOR's debt every time they bought petrol at a filling station – when in reality, the money recovered under the levy was most likely used for other purposes.

On a radioshow broadcasted by CitiFM in June 2014, Nana Osei Bonsu and other representatives from civil society organisations – questioned the TOR debt recovery levy, asking for transparency regarding the capital that the levy should have added to the refinery since its introduction in 2003. Bonsu said,

The TOR debt levy should have been paid off by now, if it's not, the TOR debt levy act came into being in 2003 and we are in 2014. For 10 years ...what was the debt initially? How much has been paid off? How much has been accumulated? (Alhassan, 2014, p. 1)

Although the PPBU was published, and the amounts calculated in the price build up correlated with the price at the pump, the civil society groups did not trust the different margins within the price. Bonsu and the others pointed out that levies and taxes had been added to petroleum products, without any accountability for where these levies and taxes had been spent.

According to the African Centre for Energy Policy (ACEP), neither the Road Fund nor the Energy Fund had accounted for their revenues and spending since they were established. The Exploration levy was said be a hangover from the time when the GNPC regulated both upstream and downstream industries – but critics pointed out that a major effort had been undertaken to separate the two spheres of operation, and they found it inequitable that the downstream should be funding operations in the upstream (Adam, 2016). With the commercialisation of the GNPC after the discovery of oil and gas, the Exploration levy had moved from the GNPC to the Petroleum Commission – the upstream industry regulator established in 2010. These levies were extensively debated and reported on by civil society without much response from the government. It was suspected and feared that the profit from the

levies was being diverted – especially in instances such as the Road Fund, where the government had appointed a committee to handle the funds, in much the same manner as the premix committees discussed above.

The Special Petroleum Tax was passed by parliament in November 2014. In the search for a larger tax base, Finance Minister Seth Terkper announced a series of new taxes, including on the profits of companies and institutions, on imports of certain commodities, and on financial services. While these taxes drew less attention, the Special Petroleum Tax gained a wide audience, and was discussed in national newspapers and in the industry (Amesimeku 2015; Baafi, 2015; Osam, 2015). The tax was 17.5 per cent, and affected the profit margins of OMCs— translating into a lower percentage increase for the petroleum consumer. However, it did increase the price of petrol at the pump; and the opposition parties named the tax the 'killer tax'.

A minority in parliament, with the NPP in charge, staged a walkout during the passing of the law. The NPP met the press afterwards, making sure they presented themselves as opposed to any rise in fuel prices. The Deputy Minority Leader, Dominic Nitiwul, stated, "This government has shown that it is not there for the people of Ghana, otherwise it will not introduce this IMF-prescribed tax to further compound the hardship Ghanaians are going through" (Ghana Crusader, 2015, p.1).

According to reports from various newspapers and radio programs, the NPP stated that they had resisted the introduction of the tax fiercely, as it would not be in the interests of the suffering masses. The NPP claimed they had tried their best, but the majority NDC, would not listen to reason and passed the law with urgency. While governmental ministers went to the media to talk about how the new tax base would increase government revenue, enabling them to support more social interventions, the minority's buzzword – 'killer tax' – resonated more strongly with the public. Critical voices against the tax called it barbaric and inhumane, and claimed that it would not only raise fuel prices but also the cost of public transport, food and other everyday market commodities. It would make life harder for Ghanaians.

The latest tax placed on petroleum products came in December 2015. The Energy Sector Levy was implemented to bring in cash for the energy industry in Ghana as the sector has experienced energy shortages since 2006. A public demonstration was

carried out in January 2016, headed by the largest Labour union in Ghana, the Trade Union Congress (TUC). Kofi Asamoah, the general secretary of the TUC was quoted saying: "There is a limit to what Ghanaians can bear and you do not tax people to death" (Laary, 2016, 1), referring to the latest taxes on petroleum products and their impact on Ghanaian livelihoods.

Unsurprisingly, fuel prices again became one of the topics of the 2016 presidential election. In an election where the bottom line was about the economy and a crippling energy crisis, NPP's Akuffo Addo promised to reduce taxes on petroleum products, with particular focus on the Energy Sector Levy. During a campaign rally in Brong Ahafo region, Akuffo Addo said:

We're being told that very soon, they are going to reduce the petroleum [energy sector] levy [on the price buildup of petroleum prices]. We, in the NPP, have been calling for a reduction in the levy to bring relief to the people. But, they [Mahama administration] said no. Once again, with the election around the corner, he is likely to do that [reduce fuel prices]. (Myjoyonline, 2016, p. 1)

While the 'transparency' of the levies and taxes that made up the price of petrol provided the public with knowledge about what they were being charged, it also created further confusion when there was no clarification of how much money the taxes had collected, and whether it was used for the intended purposes. Civil society organisations accused the government of skimming off the various taxes paid at the pump, and these claims further legitimised people's claim to a subsidised product. The price was not perceived as automatic, or as reflecting international market dynamics. While these debates were ongoing in the media, people I interviewed at the filling station talked about how they were not surprised about the corruption accusation in petrol taxes, and that it reinforced their claims to cheaper petroleum products. After all, the automatic adjustment was not realistic, and if politicians were skimming the taxes, they should also be able to provide subsidies.

Harm and Care: Politics of Petrol Price beyond the Acronyms

Jane Guyer (2015, p. 251) argues that there is a confusion of massive proportions in the public sphere when it comes to the price of petrol. The price of petrol operates as if in a black box, in which powerful parties reposition levies and charges according to their respective advantages. The composition of the price comes into play with the technical aspects of markets, fluctuations and profits – as well as a moral economy – with the upper limit of pain inflicted on the citizenry measured in petrol price (Guyer 2015, p. 243). The previous sections have unpacked some of these 'black box' categories as they were discussed in Ghana during my fieldwork. With a substantial increase in price in less than two decades the publication of the PPBU and the APPPF policy was a way of legitimising the colossal changes on the petroleum pricing regime by the use of transparency. However, transparency and automatic price-setting mechanisms did not manage to justify the increase at the pump in Ghana. Petrol price remained deeply socialised and political, and therefore figured within a moral economy that tied together the state and citizens in a social contract.

Among most of my informants at the pump, petroleum prices generated discussion about politics and relationships, what was fair, and how much 'pain' the politicians could spare ordinary Ghanaians. While there were heated discussions in some groups or individuals at the filling stations, most people were not familiar with the details of the APPPF and/or PPBU. At the pump, the general response to questions about the increase in price was one that explained how it put strain on everyday life and household budgets. The continuous increase in price was making it more difficult to afford fuel, and this was, understandably, a frustrating situation. According to the IMF, it was the richer segments of the population that benefitted from fuel subsidies, and it therefore did not work as intended as a pro-poor policy. However, there was more to the frustration over fuel prices than relatively wealthy Ghanaians (owners of a car) having to spend a larger amount of their budget on fuel.

When it comes to the price of petroleum products, it is crucial to emphasise petroleum products function as a catalyst or mediator for activities that are key to socioeconomic life and freedom. Such activities include but are not exclusive to transport of people and goods, cooking and use of generators for homes and businesses. Increasing price of petroleum products therefore leads to an increase in price of these key everyday activities. This was what I discussed with most of customers at the filling station, and the conversations almost exclusively returned to the relationship between the state and the citizens. The gradual increase in petroleum

pricing over the years were discussed in relation to an increasing lack of care by Ghanaian politicians regarding the livelihood of ordinary citizens, and their families.

I do not find it productive to question the IMF studies or findings that have led to reform of fuel subsidies. My time in Ghana's downstream industry did indeed reveal several enrichment avenues in which pro-poor subsidies were being fraudulently used (as discussed later in this Chapter). The question is therefore not whether fuel subsidies were a pro-poor policy, but to what extent it was a social policy that had significance for the social contract in Ghana. While large-scale fuel subsidies are unlikely to return, the role of fuel prices remain an important question as taxes on petroleum products keeps increasing. While prices of petroleum products have increased substantially over the last decade, my informants still emphasised the social contract and the obligation that political leaders in Ghana had to make fuel affordable.

Increasing the price of petrol was seen as a means of inflicting harm on Ghanaians, and that harm was attributed directly to political leaders, especially the president. Informants described a personal, visceral relationship with the state, using metaphors for the infliction of harm to describe increases in price: "If they increase it now, they will kill us," one consumer said when I asked him about a rumoured price increment. Another consumer was less worried about it, and stated, "Mahama knows it is not a good time, it will not happen." The price of petrol was discussed with a personalised language indicating a relationship of care between the president of Ghana and the body of his citizenry, suggesting that the price of petroleum products was an integral part of the social contract.

The obvious influence of the IMF was used to mitigate the criticism against the president regarding high fuel prices. "Mahama still cares, but the IMF is in charge," an NDC sympathiser at the filling station in Yikene South told me. Several people echoed the same sentiment, that petroleum pricing was somehow out of the hands of the president. However, the strongest sentiment coming through in my interviews was one of despair and disappointment. The full burden of fuel prices had been transferred to the individual consumer and the state were no longer taking any of the cost. Not only was the state removing itself from the previous social policy of

providing relief to Ghanaians through fuel subsidies, but the government were now also adding taxes onto the commodity.

Political leaders ascribing relational sentiment to petroleum pricing were not uncommon. In 2008, a decrease in price of petrol was referred to as a Christmas gift from the NPA to Ghanaians (Yeboah, 2008). In 2015, Akuffo Addo claimed that the taxes on petroleum products were 'insensitive' (Daily Graphic, 2015). Likewise, my informants referred to the naming of 'the killer tax' as evidence that some politicians were aware of the impact price increments had on ordinary citizens. While the government had distanced itself from the pricing of petroleum with the establishment of the NPA, this was not seen as a depolitisiciation of the price of petroleum products.

The first part of this chapter has demonstrated a number of things. Fuel prices in Ghana has a long history of subsidization, and the reform process was rocky. Policies were reverted several times in response to public outcry and presidential elections. It is notable however, that although there has been a stark increase in petroleum product prices in Ghana over the last decade, there was still a common perception that fuel prices figure within a moral economy. Political leaders were blamed for inflicting harm and seen as out of touch with Ghanaian economic realities. The public debate in the media regarding transparency and taxes agitated this feeling that the price of petrol was built up of suspicious funds and politicians benefitting at the expensive of a fuel consuming public. As such, consumers, drew upon the state-citizen relationship as the price of petrol continued to be negotiable, with the changing nature of 'politics'.

Externalities in the Political Project

Michel Callon's (1998) emphasis on and expansion of the term 'externalities' is a useful framework for understanding petroleum product price in Ghana beyond the consumer-state relationship. The notion of externalities comes from economics theory, and refers to external influences or outcomes in an economic transaction. While economists aim to 'frame' economic transactions by limiting the number of externalities, social scientists take an interest in externalities, and examine their influence and importance for economic transactions and social life more broadly. By

looking at the externalities enabled by the current price setting system of Ghana's petroleum products, it's possible to understand how petroleum price enables profitable networks in the industry, and hence becomes an important part of the politics of petrol. While some of these networks are elite -- as, for example, networks around profits in oil trading – other practices, like smuggling, provide a broader base of beneficiaries, and demonstrate the ways petroleum pricing facilitates and enriches livelihood along the borders.

First, I examine how oil trading became particularly profitable when the NPA began to use European benchmarks to determine ex-refinery price. BDCs procuring cheaper petroleum products are able to earn considerably more than the intended profit margin on petroleum products. Second, I turn from elite industry practices to taxi drivers in Tema and Accra that have found an opportunity in converting their vehicles to drive on Liquefied Petroleum Gas (LPG). LPG is one of the few petroleum products in Ghana, along with premix fuel for fishing boats, which remained subsided by the government. Struggling with increasing petrol prices, these taxi-drivers were taking advantage of the LPG subsidy that they perceived as a much needed handout from the government. Finally, I attend to smuggling in Paga. Smuggling of petrol and diesel was an important part of the economic activity in the border town. Smuggling networks have developed over time and have become profitable due to subsidies on petroleum products. Ghana has had considerable cheaper fuel than neighboring countries. While the phasing out of subsidies has reduced its profitability, smuggling is still a widespread economic activity in Paga. Several new filling stations had been built in Paga, since the reform, and formal filling stations and the Unified Petroleum Price Fund (UPPF) were providing the mechanisms necessary for informal smuggling to continue.

In sum, these practices were profitable due to the current petroleum pricing system in Ghana – and for some people hampered the increasing cost of the removal of subsidies. The profitable practices represented ways in which people could part-take in petrol politics, and build a livelihood from the current pricing system. These networks, much like the dormancy of petroleum infrastructure, provided a wider base of participation for Ghanaian entrepreneurs to benefit from petrol politics.

Oil Trading: Elite Accumulation

The world of oil trading is opaque, internationally and in Ghana. Both Oil Trading Companies (OTCs) and their customers, the Bulk Distributing Companies (BDCs), were unwilling to discuss the financial arrangements of oil trading with me. However, a few things were clear and accessible without the companies having to expose their trading secrets. The NPA sets the profit margin for the importation of petroleum products. As such, this margin is available through the PPBU. The profit margin for BDCs is calculated against an international benchmark based on the price of cargo imported from Europe. This benchmark is integrated into the PPBU as ex-refinery price. The Ghanaian BDCs can increase their profit margins if they manage to buy cheaper petroleum products than the benchmark ex-refinery price provided by the NPA. During my internship at NPA in 2012, a senior NPA bureaucrat explained that the NPA does not have access to the price that the BDC purchases petroleum products for. Hence, they were using the international standard recommended by the IMF. He further added, "As they [the BDCs] are not complaining, we suspect that the price is good for them".

As I have mentioned, multinational oil companies have controlled sub-African downstream markets in the past, operating as integrated oil companies with control of the entire value chain, from oil extraction to the filling station. The trend is changing, and from 2008 onwards, multinational oil companies like Chevron, Exxon, Shell and others (Total excluded) have been divesting from both oil trading and downstream industries. Traditional (mainly Swiss) commodity trading companies like Vitol, Transfigura, Mercuria, Glencore and Gunvor have emerged to fill the gap. These are the companies mainly supplying Ghanaian BDCs.

A Public Eye report, Dirty Diesel (2016, pp. 67-73), has investigated the relationships between Ghanaian BDCs and Swiss oil trading companies, uncovering profitable practices for both parties. The BDCs investigated in the report were trading with commodity companies Glencore, Vitol and Transfigura. The report suggests that commodity trading companies buy shares in Ghanaian BDCs and use them as trading partners. Several of these commodity companies have purchased filling stations in Ghana and therefore have a control over the downstream value chain. The added capital to the Ghanaian BDCs, makes the BDCs able to expand

storage and distribution of petroleum products in Ghana, demonstrated by the fact that several of the private depots at THIA are owned by Ghanaian BDCs with links to Swiss commodity companies. This organisational arrangement is not uncommon in the industry, but the type of trade it enables is highly profitable, and problematic.

In order to make additional money on the profit margin set by the NPA, OTCs and BDCs are trading in dirty fuel. West Africa is one of only a few parts of the world left with weak standards and regulations on imported fuel. The regulation is particularly weak when it comes to the amount of sulphur allowed in the petroleum products. While the European standard permits a sulphur level of 10ppm for petrol and diesel, the Ghanaian standard permits 5000 ppm for petrol and diesel. These permissive standards are capitalised upon by OTCs and BDCs, which use a common industry practice of blending fuels. However, in this case, OTCs and BDC are blending harmful (and cheap) fuels into petrol and diesel for the Ghanaian market to increase the volume and the profit margin.

At any refinery, various types of petroleum products are cooked, and various qualities of the product are separated for sale. Some of the product will be low quality, and classified as almost waste. Because it is expensive to recycle or discharge this low quality, high sulphur product, it is sold cheaply. While the low quality product does deteriorate the quality of other products if it is mixed with them, it is still viable as fuel. The blending of fuel stocks most often happens at sea in petroleum tankers, and according the Public Eye report, for the West African region, this blending happens in Togolese waters. This is the lucrative business that OTCs and Ghanaian BDCs have tapped into. As their companies grow, OTCs have acquired increased refining capacity in the ARA-region (Amsterdam-Rotterdam-Antwerp), as well as in Ghana's downstream industry. Transfigura now operates as an integrated oil company in the downstream, as an OTC, with stakes in the Ghanaian BDC Chase Petroleum, as well as operating their Puma filling stations. Similarly, Glencore has stakes in the Ghanaian BDC Fuel Trade, and they have recently acquired the formerly Ghanaian-owned OMC, UBI.

¹⁰ This is also the case for Angola, South Africa, and Democratic Republic of Congo (Dirty Diesel, 2016, p. 36).

To keep this business model going, it is key that the Ghanaian government allow fuel standards in Ghana to remain at a low level. The Chambers of BDCs have been lobbying for this continuation, and successfully fought against a lowering of the standards from 5000 ppm to 3000 ppm in 2012 (Ibrahim, 2016). After the release of the Public Eye report, which showed the correlation between dirty fuel, particulate matter in the air in West African cities, and the increase of respiratory diseases, the discussion regarding Ghana's sulphur levels was brought up again (Citifm, 2016). Ghana, Nigeria, Benin, Togo and Ivory Coast agreed to lower the level of sulphur allowed in their fuels to 3000ppm (Ross, 2016). While this policy is an improvement, OTCs and BDCs will continue to profit from blending techniques that provide fuel as close to the limit as possible.

Ghanaian BDCs, and particularly the handful of them that import around 90 per cent of the market demand in Ghana, are part of the political elite. This position creates strong incentives to leave the petroleum product import regulations at its current status quo. The opacity of their operations – not even the NPA knows the prices at which BDCs purchase from OTCs – lead to widespread public and industry suspicion about their arrangements and profits. In my interviews with them, depot workers confirmed a shift in the quality of imported fuels, by describing how frequently they have to change filters at the depot; but they avoided talking about what they knew regarding the financial arrangements around these new fuels.

My industry informants ascertained that oil trading was part of the 'politics' of the downstream petroleum industry. The display of wealth by BDC representatives was remarkable for the industry, and Sumaila and others ascribed this to their political connections. While petrol entrepreneurs operating OMCs or other businesses downplayed their monetary success, my informants echoed the sentiment, unapologetically stated by Emmanuel at TOR, "You don't have to hide from the government when you are the government". The statement was a reflection of a longer conversation I had with Emmanuel regarding the role of the BDCs, but more importantly how he (and many others in the industry) were certain that most BDCs were owned by people with close ties to the government. Some of the political connections were obvious, with previous politically appointed managers of TOR operating a BDC, while others were based on rumours. Nevertheless, the oil trading

was profitable, and the practice of trading dirty fuel was likely to continue according to my informants, as it was part of the 'politics' of the industry. Moreover, profitable oil trading was made possible by the benchmark set by the NPA and the lack of transparency on the part of the OTCs and BDCs.

Liquefied Petroleum Gas (LPG)

Moving from elite oil trading to urban workers, the use of Liquefied Petroleum Gas (LPG) among taxi drivers in Tema and Accra showcases another practice in which petroleum pricing enables a beneficial economic network for a group of people. An extended taxi-journey illustrates some of the tensions involved in this practice. I had been visiting some friends in Accra, and was heading back to Tema in a taxi when the driver asked if we could stop on the way to fill the tank. I agreed, and we drove for ten extra minutes on a rough road around Tema Community One before arriving at a white-mortared compound: a gas station.

At the entrance there was a sign that said, 'No Gas'. We entered and got out of the car. There were a few other people hanging around, and it did not look anything like a filling station, apart from a gas tank in the corner. The driver opened the boot and told me to keep away. He took the nozzle from the single tank in the corner, and started filling into the back of his car. The 'No Gas' sign clearly meant that there was not much gas left, but that people with the right connections could still have some.

A young man took interest in me and we started chatting. When I asked him what he was doing there, he said he had left his taxi for a couple of days, and was just hanging out at the station. "There is not much gas around," he said. He explained that many taxis in Accra and Tema had changed to using LPG as fuel for their cars. When I asked why this was the case, he explained that the gas would last for much longer and that it was much cheaper than petrol.

Back in the taxi, I asked the driver if he was aware of the fact that LPG was cheap because it was subsidised by the government and supposed to be for domestic use. He explained his viewpoint, which was that if there was product, the government should be happy that someone was purchasing. "You cannot decide who will buy," he exclaimed. Wanting to push him a little further, I suggested that because of the

subsidies the government was actually losing money on the gas, while the gas was not being used as intended. I continued to ask him about the size of his tank, and whether it would not amount to the demand of quite a few households. Having had enough of the provocative foreigner in the car, he could no longer contain his fury,

You do not know how life in Ghana is! Everything is getting more expensive. Since I came to Accra and started driving this taxi, the price of petrol has just gone up. Every month they increase the price. You are talking about the women in the villages cooking with charcoal, yes it is bad, but they are used to that. Who sends them money to cook with? Who buys them things? You have to work. You work harder and harder for less and less money – meantime everything is more expensive.

The taxi driver's reaction gave me pause. I was acquainted with many other taxi drivers in Tema, and I knew how the rise in petrol prices was cutting into their profits. To talk about subsidies in terms of national development with them was disingenuous. It was not that they did not understand the logic behind such subsidies, or the ways in which their fraudulent use of gas undermined that logic. They were fully aware of the situation, but legitimised it by pointing out that while they could not afford petrol, women could always buy charcoal for cooking. From their point of view, this argument made sense. The emergence of an informal economy for LPG responded to obvious economic calculations — not in order to take advantage of a petroleum subsidy at someone else's expense, but rather in order to make use of the resources available within the given, increasingly rough, urban environment.

Second-hand cars are imported mainly from Europe and Japan, and Ghanaian mechanics fitted the engines to run on LPG. While the initial investment for fitting the engine was quite expensive – around Ghc 1000 – relatively successful taxi drivers in Accra and Tema would regain that amount on the difference between petrol and gas prices after a couple of months. One of my regular taxi drivers explained:

I got my car from Germany. My friend, a mechanic, refitted it for me. Now I buy gas instead of petrol. Gas is cheaper; it is just sometimes we wait for a long time before it comes. This way, we pay the mechanic, we create business. Some people say we steal because we use that product, but we pay the price – we do not steal. It is for sale at the station [...].

As long as it was available and the drivers paid the right price for the gas, they did not have any problem utilising a subsidised product that was targeted at someone else. They considered themselves poor and hardworking, and therefore felt they had as much right as anyone else to take advantage of the resources available, subsidised or not. The LPG economy was not hidden, and was sometimes used as evidence for the argument that subsidies ought to be removed from petroleum products (Ampofo, 2010; Laan et al., 2010). However, LPG continued to be cross-subsidised, and urban stations in Tema and Accra continued to get supplies in order to serve their (taxi) customers. Sumaila reflected on it in this way:

Prices of petrol went up, but they continue to offer this cheap gas. Ghanaians are not stupid. They will find a way to make use of whatever they have. Now they [the government] are stuck with it because taxi drivers are noisemakers – and they are all here in Accra – there is too much at stake.

Sumaila touched upon an important point, with which several taxi drivers agreed when I asked. The use of LPG provided economic relief, and as long as the subsidy remained in place, taxi drivers and their unions were not likely to complain too loudly about the increase in petrol prices. "It is a trade-off, that is how politics work," one driver at a taxi-rank told me, while another one chipped in, "It's not a secret that we use gas, they [the government] know every detail." After several of these conversations in taxis and at taxi stations, it was clear that many taxi drivers felt that the LPG subsidy was a handout to them and that they were players in petrol politics. When the petrol prices kept increasing, LPG subsidies were a way to accommodate them and their grievances. The long queues of taxis at gas stations throughout Accra and Tema confirmed that this practice was not an as 'underground' economy, marking it instead as a tolerated and widely accepted practice — one described by taxi drivers, industry informants and others as 'politics', one of many practices that make up the politics of petrol.

Both the use of LPG and oil trading can be seen as economic practices forged out of petroleum pricing system. However, the world of urban taxi-drivers is substantially different to that of oil-traders. While taxi-drivers have adapted to increasingly harsher economic realities, oil traders have social and political capital to run financial business enterprises – these two groups of people were not the same. Taxi-drivers

would talk about 'oil-people' that benefitted from subsidies, and while it was not clear who they referred to, they justified their use of LPG as only part of a larger system of petrol politics. Their utilization of LPG was not comparable to what they perceived other people to gain in profit from similar arrangements. However, the two groups did rely on the same pricing system which was subject to interrogation or change by the government. In both cases, the continuations of the profitable practices were referred to as 'politics'. In this case, what was political about these practices was that they were allowed to continue, even if it was public knowledge that they were taking advantage of the weak regulatory system. The final example in this chapter brings together multiple groups of people that benefitted from the price setting through smuggling practices in Paga.

Smuggling

Finally, I turn my attention to smuggling, a very profitable economic activity along Ghana's borders. Smuggling appears as a logical economic network to emerge out of petroleum pricing; the lower the price, the more profit to be made on smuggling. Due to the UPPF and previous large scale fuel subsidies, large smuggling networks have developed in Paga. The reform of the industry has led to a mushrooming of filling stations at the border, which makes smuggling activity extremely visible. In the final section of this chapter, I examine smuggling of petrol in Paga as it contributes to the politics of petrol. I argue that smuggling networks have emerged out of advantageous petroleum prices, and have become part of the wider network of 'politics' in the region.

Paga is one of the towns on Ghana's border with Burkina Faso, in the Upper East Region. Located approximately 40 kilometres from the regional capital of Bolgatanga, it had a population of about 20 000 people during the time of my fieldwork. The township had 18 filling stations and another five under construction. The filling stations were more than the number of permanent cars in the town. While there were a lot of motorbikes around, and some tractors for agriculture, there was no doubt that the filling stations at this border town were serving other locations than Paga itself.



Image 6.5: Paga at the Ghanaian Border with Burkina Faso. Google Maps (2016).

During my stay in Bolgatanga I went to Paga a couple of days a week, together with my research assistant. We would drive our motorbikes to the border, chat with the border officials and visit our friends in the no-man's land. My research assistant would head back to Bolgatanga and I would spend the day at a filling station. I would not stay in Paga overnight, because the locals in Paga and my friends in Bolgatanga considered it unsafe. While they were unclear on what aspect of my safety would be in danger, I got the feeling that it was more of an inconvenience to them having me around than actually a question of safety. A few weeks before leaving Bolgatanga and Paga for a new field site, I had an unexpected visitor at my house in Bolgatanga. A young man that I did not recognize put to me, at my front door, that "if we see you again in Paga, crocodiles will chop [eat] you."

A few days earlier I had spent a day with Gifty, a young filling station attendant at one of the local filling stations in Paga. I had confided in her about a conversation I had had with one of the border officials. I had been asking the border official whether he was not afraid to lose his job if he was caught facilitating the smuggling of petrol. He had laughed at my question and said that he had no reason to be afraid. For weeks, I had worked up the courage to ask the border officials about the

smuggling directly, and it puzzled me that he had answered my question with such ease. Gifty explained, "It is part of their job, that is how it is. If you are a border official and you try to stop it, you will be in trouble." I took some notes down, while thinking out loud that if the border officials were involved in the smuggling networks, it would indeed make the rumours about smuggling supporting political election campaigns more plausible. I made some drawings in my notebook, but it was only after a few minutes that I realised that Gifty had gone completely quiet and was staring at me as if I had done something wrong. When I left Paga that day, Gifty embraced me and told me that she had enjoyed our time together. I concurred and said I would stop by the station to check on her when I returned next week. She did not reply.

It seemed that my theories on the ramification of smuggling in Paga had raised a red flag. What followed was a total shut down of my access to the town. Although Gifty became my friend through hours of chatting at the filling station, her job and livelihood relied on the rapid cross border smuggling that kept all the filling stations operating. I would not normally share my data or reflections with her, but the ease with which smuggling was conducted in Paga and discussed among the people I met normalised the otherwise illegal practice. I had let my guard down. Her complete disappearance from my life afterwards gave me the strong suspicion that she had told someone about the conversation.

From time to time, border officials would tell me that all the filling station were there because of poor access to petroleum products in Burkina Faso and Mali, and therefore, tanker drivers with commodities from the port in Tema needed to fill up before crossing the border. Although truck transport was an important part of the business for filling stations in Paga, few people bothered themselves with disguising the fact that they sold petrol and diesel for cross-border smuggling. During the day, I would see a few tankers coming to the filling stations, as well as some motorbikes. Sale for the smuggling happened in the late evening or at night. A filling station manager, explained it like this:

They come during the evening and discuss with you. They tell you how much they need and what will be the arrangements. You understand, because it is at night we need security. So there will be someone on guard. Maybe police or someone else. So they come later. And you serve them.

Trying to understand if these people were organised, I asked, how do you know they are buying for smuggling purposes? He smiled and stated,

My friend, this is Paga. You buy in the night and you will take it to Burkina – my job is to serve them. Anyway, I don't know, they could be drinking it [he laughs]. And they are even people I know. Not anyone can come, like someone would go to Bolga and buy. In Paga, I know who I am selling to.

In other words, cross-border smuggling in Paga was organised through groups and networks. These groups were not fixed, or set in stone, but operated as social groups that provided reciprocal protection and profit. The groups relied on a wide set of actors, from young boys to politicians. At the very bottom of the hierarchy were boys, who were recruited from local schools. They were the ones conducting most of the small-scale smuggling, carrying jerry cans of petrol over the border on foot in nearby villages. Although it was seen as a very tough line of work, it was very profitable for those who were able to do it. A lot of boys and young men from Paga had either done it or had a brother or a cousin who had been involved. As there was a lack of employment opportunities in Paga –and none that paid the amount that smuggling did – it became a preferred method of making a living for many people.

In addition to the small boys, filling station managers played a key role in the network of smuggling groups. There would be a number of filling stations in one group, which enabled the group to secure access to fuel in case one station ran out of product. Some of the older filling stations in Paga were owned by families, and had been operating under different brand names for decades. However, most filling station managers were local big-men in Paga. They had the necessary network to operate smuggling operations by drawing on their extended families for labour and monetary capacity to engage wider social and political networks for access and protection.

Other than the labour and the suppliers (young men and filling station managers), there were keepers of the border (border officials) and the matter of security (police). Another filling station manager explained it to me thus:

The police will assist you for a small fee. The same goes for the police at the border [border officials]. If you arrange it with them, they cannot come and arrest you for smuggling. It is better to do it with them [police and border officials]. We have the same guys every time, unless something [happens], and we have to make it work with someone else. But, we always prefer the same guys so we are safe.

I asked the filling station owner what would happen if someone else, who was not involved in the smuggling operations, came to control this area – such as, for example, a policeman from Bolgatanga. He replied,

Yes! That is it. It is why it is good to work with them [border officials and police]. They have the contacts to Accra. If anything happens, like sometimes on the Burkina side or someone new at the border – they cannot make trouble for us. We are ok when we are working together, and everyone gets something to eat.

The filling station manager was referring to a network of safety that expanded well beyond the immediate every day activity of the border business – the 'political' security. Because of the illegal nature of smuggling in Ghana, my informants felt that they needed high-level political protection. They described this protection as linked to someone in a position of power. This person would be able to protect them if the government suddenly decided to crack down on smuggling. It was while discussing these details that my research assistant mentioned to a filling station manager that he had heard rumours that the profit from smuggling would find its way to national elections campaigns. While this was confirmed in other interviews in Paga, this particular filling station manager smiled and said "no comment".

On a trip to Burkina Faso with my research assistant, it became obvious that the villages and towns between Paga and Ouagadougou relied on the informal sale of petrol from Ghana. We visited several sales points, which were typically a rack of bottles along the road with homemade painted signs giving the names of international oil companies such as Shell and Total. Both colour and smell indicated that the product was diluted or adulterated – which correlated with what we had

heard from our interviews in Paga. In order to make more money on the cross-border smuggling, the product from Ghana was diluted, mostly with water.

The price of petroleum products played a key role in facilitating cross-border smuggling, one of the most active economic undertakings in the town. During the times of high prices on petroleum products, smuggling would endure, but the number of people and profits involved would decrease. The villages in Burkina Faso across the border from Paga relied on the supply from Ghana, and the trade fuelled the black market of currency exchange between the West African CFA franc and Ghana cedi on the border, providing livelihoods for an additional group of people.

During one of my shifts at the filling station in South Yikene, just outside of Bolgatanaga, two young men came up to my pump and asked for the manager. I told them he was in the office and directed them to the only small building at the station. They parked their car and went in to see him. As they seem to be having a friendly chat, I went over to see what they were talking about. The two men had come from Paga to arrange to buy some petrol in the evening. What I had taken to be a mere exchange of pleasantries, banter or greetings at the pump, was actually an attempt to negotiate the price of petrol for smuggling. The two men wanted to buy a large amount of petrol, at night, for the purpose of cross-border smuggling, and wanted a discounted price from our filling station manager. While recognising the substantial purchase the men would conduct, the manager continued to state that he did not have the power to make such deals, and that they would have to call the head office of Naagamni with such a request. The men left without calling the head office or placing an order, and they did not return. When I asked the filling station manager about the situation later, he stated:

These people have no shame. They come to ask for cheap product. Eeeeeish. How? You cannot just ask for it like that. I pretended as if I was not in charge. The price is the same for everyone. They are even making more [in cross-border smuggling]! Oh, how? They should go ask Mahama for cheap product, he will tell them to shut up. Eeeish. Cheap product for smuggling? How?

The filling station manager was clearly upset. He was from the region, and knew how smugglers were profiting on the cross-border petrol trade. He found it immoral that a Ghanaian already benefiting from profitable networks in the petroleum industry would ask for a discount on the price. According to him, the price of petrol was set by the state and cannot be negotiated by anyone. It had a low price due to the transport subsidies that the government were providing and while many people were making additional money from diluting or smuggling, it was simply not acceptable to ask for a lower price at the filling station. He was further annoyed that the two men thought that such simple market principles applied to his filling station. They had pointed out that the area seemed quiet, and that their purchase would be the biggest one in his week. Therefore, because the demand was low, he should lower his price, if ever so slightly, for them to buy at his station. "Clearly", the manager said "they do not appreciate and understand the 'politics' that we are working with".

In Bolgatanga, as well as in Paga, my informants spoke to me about smuggling and politics. In Bolgatanga rumours were rife, and everyone had something to say about the cross-border smuggling of petrol and its links to political life. In Paga, people were more reluctant to talk politics, though they were not disguising the actual smuggling; and some of my interviews with people who worked within the smuggler networks in Paga were carried out in Bolgatanga, as they said they preferred not to be seen with me in Paga. Nevertheless, as described by my informants, the cross-border smuggling of petrol in Paga was linked to politics in three separate ways.

First, there was the internal organisation of smuggling networks, which were held together by local big men. I would have had to spend considerably more time in Paga in order to analyse these networks in a meaningful way, tracing their connections to the town's families, geography and socioeconomic networks. Naagamni had a filling station in Bawku, another border-town in the same region. Explaining to me why Naagamni had not built a filling station in Paga, and had no plans to, Sumaila explained:

Paga is complicated. You have to know someone there who can be your manager. It is not like elsewhere, you can build a filling station and move some of your guys to operate. Our filling station in Bawku makes most profit outside of Accra. I could not just move Suwaid [manager in Bolgatanga] to work there [in Paga]. We have Mohammed [manager in Bawku] there because he is local [...]. He knows how to operate there.

Secondly, my informants talked about politics in terms of political figures being involved in the smuggling networks. These involvements were through relationships where local big men were either part of a political party, or had other relationships to someone who could offer them protection in case there was a crack-down on smuggling. A small number of filling station managers in Bolgatanga said that filling stations in Paga were fuelling election campaigns, and therefore were 'untouchable'. This type of 'politics' was the more intangible category that everyone talked about, but for which no one was able to provide any solid evidence. Nevertheless, it was an important part of 'politics' that people ascribed to smuggling activity.

Finally, and perhaps more importantly, there were 'politics' utilised as an explanation for why cross-border smuggling was such a large and visible economic activity in Paga, in spite of its illegality. 'Politics' in this instance was used to described how the government avoided controlling areas like Paga (unlike Ashanti Region, Chapter Five), as it was considered a 'political' good to do so. Smuggling of petroleum products from filling stations in Paga facilitated local employment and economic activity, which may or may not contribute funding to political parties, but which certainly contribute to political and social networks in the Paga. Closing down opportunities for smuggling would have been detrimental to the population of Paga and surrounding areas. It would have led to protests, and likely impacted on the electoral voting outcome. A filling station manager in Paga summed it up neatly:

You don't want to be the president that stops [smuggling] activity at the border. It will finish you. You will not be elected again. Politics is on our side. Apart from fuel, what is working in Paga? Nothing. This is how we know that we can continue.

The filling station manager underscored what most of my informants referred to when they talked about politics and smuggling: the sense of security in 'politics' due to the fact that economic activity connected to the smuggling of fuel was ingrained in social and political networks. Like LPG-run taxis, smuggling was a visible and

publicly known economic activity. With rising fuel prices, it was further justified among my informants as people 'had to make a living'.

Conclusion

The most powerful and pervasive idea in Ghana was that the price of petroleum products was 'political'. Petroleum pricing was tied directly to the government, or the president, and was part of a social contract in which the government had the opportunity to regulate the price of fuel according to the overall economic conditions in Ghana. Over the years, the use of fuel subsidies created a public understanding that fuel prices were morally charged, and that economic market dynamics could only account for the price of fuel to a certain extent. Many Ghanaians cast these concerns in terms of 'harm' and 'care' in the relationship between the state and its citizens. The price of petroleum products remains high on the political agenda – and has been key in election campaigns since the early 2000s.

Industry informants found that the inconsistent use of the APPPF was increasing the politicization of petroleum pricing. The involvement of the IMF in policy implementation and in recommending additional taxes was making petroleum pricing unpredictable. This unpredictability was referred to as an intensification of 'politics', which after the reform figured in a sphere between the strategy of the government, the needs of citizens, and pressure from the IMF. Transparency measures implemented as part of the reform gave a preview of how the price was built up, but a lack of transparency in the management of revenue from taxes and levies included in the PPBU became a new site of political contestation.

By examining some of the economic networks that petroleum pricing in Ghana enables or encourages, we can see how petroleum pricing becomes political beyond the official pump price. Oil trading, LPG fuel use in taxis, and smuggling all offer examples of how different groups can benefit from the price regime, and how they are all entangled in a web of political justifications around local, regional and national political projects. Entangled in social and political relationships through trade and the consumption of petroleum products, 'politics' still remain key for these economic activities to prevail.

Chapter Seven The National Fuel Shortage of 2014

Introduction

Ghana's largest fuel shortage during my fieldwork happened from mid-June to mid-July 2014 - while I was in the hospital, fighting a case of viral encephalitis (an infection of the brain). What followed was a few weeks of personal and industry crisis jumbled together, as my fieldwork came to a close. This final chapter examines the fuel shortage through the data I gathered, to the best of my abilities, from my hospital bed. My spatial confinement in the hospital, and my search for information through visitors, newspapers, phone calls and other means, was strikingly reminiscent of my data collection experiences elsewhere in the industry. Rumours were the order of the day, leaving me to question the degree of legitimacy of various pieces of information, and to speculate on what would happen next. At a time of fuel shortage, the uncertainty was intensified in the absences of fuel nationally. My informants, who normally had explanations or at least partial information about the industry, were experiencing the same kind of uncertainty. Relationships were challenged, and therefore brought to light, as they required additional work to be maintained.

The 2005 reform of Ghana's downstream industry had led to the construction of many new filling stations across the country. The new petrol entrepreneurs operated a fair share of these filling stations, and while most of them did not have access to petroleum products during the shortage, some of them did. These petrol entrepreneurs were able to access petroleum products through relationships that they had built in the industry, through purchasing and everyday business tactics. These entrepreneurs foresaw shortages, and run their companies accordingly. The shortage showcased the strength of some private sector entrepreneurs, which sustained the flow of petrol to places that were previously excluded during shortages in Ghana.

Thus far, I have examined the importance of maintaining the broadest possible accessibility of petroleum products for the people of Ghana. Steady flow of petroleum products has been key to the politics of petrol. The shortage represented a

crisis for the nation, and emerged as a political battlefield between the government and various industry actors. As we saw in Chapters two and three, BDCs had become the sole supplier of petroleum products for the Ghanaian market. The national petroleum shortage of 2014 highlighted the variety of BDCs in Ghana and exacerbated a tense relationship between some of the new BDCs and the government regarding the payment of subsidies and the attribution of blame for the shortage.

This Chapter examines this tension between the entrance of new petrol entrepreneurs and the continued importance of government control of the downstream petroleum industry. The importance of continued flow of petroleum products for the government in Ghana impacted the way that social relationships were forged and maintained among private entrepreneurs. I examine the shortage as it materialised and impacted informants and a persistent effort by the government and others to claim that the shortage was 'artificial'. I further examine the strategies of private entrepreneurs during the shortage, and finally look at the aftermath of the shortage – with the creation of new companies in the industry.

Crisis: Shortages and Informal markets

On the 15th of June 2014, I was admitted to Tamale Teaching hospital with a long list of diseases. My insurance company had sent an ambulance to pick me up in Buipe, and I was swiftly lodged in the VIP ward on the back of my unlimited medical expense insurance. The problem that my insurance company could not control, with their 'do what it takes'-policy, was the fuel shortage that had been looming in Ghana for months. As I knew these developments closely, I asked to be transported to a private hospital in Accra, close to the airport, in case I needed to leave the country for medical treatment. At the same time, after all, we were in the midst of the Ebola outbreak in West Africa. The fuel shortage had already affected the supply of aviation fuel for the domestic market in Ghana. As such, I was forced to spend a week in Tamale before I could be transported to Accra in a medical aircraft. When I finally arrived in Accra, the shortage I was fleeing in Tamale had materialised in the capital. I was taken to one of the best medical facilities in Accra, in the Airport Residential Area, but even there, access to doctors was unstable due to the fuel shortage. Medical doctors came every other day, blaming their absence on the fuel shortage.

My condition stabilised somewhat, and, combined with the developments of the fuel shortage, I was tempted to stay in Ghana while receiving treatment. Regardless of my confinement to a hospital bed, the information I received about the shortage while hospitalised in Accra was surprisingly constant. Every single day, Sumaila would come and visit me at the hospital. He brought me a sandwich from Chase (one of the BDCs fast food chains) and the latest update on the shortage and the industry. Several other people came to visit me at the hospital, such as Raphael, my faithful taxi driver, who told me stories from the filling stations where he was searching for fuel. Issah had been sent to Accra after being laid off from his post in Buipe. Friends and informants kept me updated, as they all knew that what was a very frustrating inconvenience for most people, was of high interest to me.

At this stage of my fieldwork, my bribing skills had developed exponentially, alongside my knowledge of the petroleum industry. As such, I was able to get all the newspapers every morning from the orderly who was cleaning my hospital room. My doctor in the hospital removed my notebook and my pen, as my hand was turning blue from the pressure of writing combined with the intravenous cannula in my hand. Finally, after negotiating with the doctor in charge, he changed the cannula to my left hand and gave me back my stationery. In return, he received two jerry cans of petrol, to which I had access through Naagamni, and a promise that I would bring him codliver oil from Norway next time I visited Ghana. Due to the drug haze in which I spent most of my days, and my limited mobility during the shortage, I asked my key informants to keep daily diaries of all things petrol-related, so that I could get a sense of what was happening outside of the hospital walls.

On my second evening in the hospital in Accra, I watched the evening news on television. The news reports were saying that Accra was 'dry', and that people were queuing at the filling stations for hours without being able to buy any petrol. I called informants in Tamale, Kumasi and Takoradi, and they explained that the situation in those places was the same. Smaller places like Buipe and Bolgatanga still had some petrol and diesel, but were quickly emptied out as customers from the other areas were willing to make the drive to fill up their tanks and jerry-cans. In a matter of a few days, there was no petroleum product left in Ghana's filling stations.

The shortage paralysed most public transport, shut down institutions like schools and hospitals and inhibited people's everyday routines. The shortage was covered widely in the media, with constant updates in online newspapers, radio and television. The long queues at filling stations sometimes devolved into violence between customers asserting their place in the queue. For most people, cars and other motor vehicles were parked, and life events that required mobility – and thus fuel – were put on hold. One could only wait for the shortage to pass.

My informants attributed the crisis in Accra to the strict control of the sale of petroleum products in the capital, and the large number of official filling stations that had replaced a previously-thriving black market. Abena, a teaching assistant at the University of Ghana who I met with frequently, wrote the following entry in her petrol-diary, reflecting the complete lack of informal sale in Accra:

Today my father asked me to take the car and search for petrol. We have funeral arrangements for the weekend. I first drove to the Total station close to A&C mall. There was nothing there. I kept driving past filling station after filling station and had to return to the house in order not to waste the small amount that we had in our car. [...] I was hoping to find some petrol at the road side, previously when filling stations run out you would be able to buy from the road-side.

The 2005 reform facilitated an expansion of filling stations in Ghana. In Accra, the growth of filling stations and the formalisation of the industry meant that informal markets were almost completely curbed. People carrying jerry cans around were stopped by strangers on the street, violent confrontations at filling station pumps were frequent, and only the very privileged few had access to petroleum products. In traditional Ghanaian fashion, a catch phrase connecting the situation to the president went viral on radio shows and social media. A Mahama-gallon became known as a gallon of petrol during shortage, only accessible to the well-connected. This provided yet another example of how people tied the access of petroleum products directly to the president.

In the north, however, informal sale was still a competitive form of trade, and saw heightened demand as shortages were more frequent and filling stations further apart. While villages and smaller towns in the south often ran out of petrol, they were closer to larger markets such as Accra, Takoradi and Kumasi – where the filling

stations were abundant, and the flow of people and product was constant. In the north, the situation was different, with the majority of filling stations in Tamale and Bolgatanga – quite far apart themselves, and even further away from most villages and towns in the north. During my fieldwork in Buipe and Bolgatanga, I experienced a few shortages, but they only lasted for a day or two. The informal markets of fuel were still facilitating trade, and hence the product was more widely available from small informal outlets. It worked as a buffer for times when the filling stations were affected by an industry shortage.

Informal sales would increase during shortages, with people selling from jerry cans down the road from the filling station or at the market. It was also common to see young boys walking around with bottles filled with petrol. The woman in the picture below sold petrol to motorbikes just twenty minutes out of Bolgatanga town. The dynamics of informal sale and shortages therefore varied a lot from place to place, with a few common trends and differences between the North and the South, and between villages and towns closer and further away from major trading routes and markets.



Image 7.0: Informal Sale of Petroleum Products. Author (2014).

Raphael came to the hospital with several stories from the shortage. He worked as a taxi driver and a dressmaker, and said he had been queuing for hours outside of a local filling station in Accra. He heard a rumour that one of the Shell stations downtown would receive product later in the night. He used his last fuel to drive downtown, and he waited until 2am. He and a handful of others were served. He was not sure why they would serve at night, but assumed it was because there were less people and it was relatively quiet at the pump. After filling his tank and driving home, his taxi broke down. He wondered whether it had to do with the quality of the petrol he had received, but he could not be sure. Nevertheless, the breakdown of the car was very unfortunate, since it was his only motor vehicle and he had promised to pick someone up at the airport the next day. He managed to get a friend's car to drive to the airport, but they ran out of petrol on the way. With no sale of petrol around, Raphael had to walk back home, siphon the petrol out of his own car, and bring it to

his friend's car. The whole affair delayed them for five hours, and he had his doubts about whether the person whom he was supposed to pick up at the airport would call him again.

The industry crisis was impacting consumers all over Ghana and the discussion of petrol politics was never far away. While some areas still had available product due to the continuation of informal markets after the reform, large cities were completely 'dry'. The Mahama-gallon was becoming a catch phrase in the media and elsewhere and the lack of swift solutions to shortage became problematic. The reason for the shortage, as well as the type of shortage is discussed next as it led to a public conflict between the BDCs and the government.

'Artificial Shortage': Filling stations owners' useful scapegoats

In the early days of the shortage, the media reports – especially from government-owned media institutions – were claiming that the shortage was 'artificial'. By 'artificial', they meant that there were petroleum products available in Ghana, but that filling station owners, anticipating a price hike, were claiming to be sold out of product only to sell their product at a higher price the following week. This practice was of course illegal, but common, and it was difficult for the NPA to control. 'Artificial shortages' was something that the Ghanaian public was used to with the regular change in petroleum prices, and the government therefore tried to pin the blame for the shortage on the industry – specifically targeting the popular image of corrupt and greedy filling station owners (Naatogmah, 2014; Nonor et al., 2014). This particular story circulated on TV and radio, as well as online newspapers, for a few days, before it became blatantly obvious that there were no petroleum products available at all.

There were other, minor, shortages of fuel during my fieldwork in Ghana. To avoid public scrutiny, government officials used similar tactics as the one above to explain the shortage and gain some time in the critical waiting period. During one of these minor shortages in Accra, an NPA official stated to one of the newspapers that the shortage was due to transportation difficulties. He explained that most trucks were in the north to offload product, and that the distances involved and time taken in

loading would lead to a shortage of product on the market. As soon as the trucks were back from the north, he claimed, the product would be accessible again.

At the time of this particular shortage, I was stationed at the Naagamni office in THIA. There, I observed the BDC representatives struggling to obtain Letters of Credit (LC) to make the importation of petroleum products possible. They were trying to make deals with OMCs to pre-sell the product the BDCs were importing, while simultaneously working on political connections to improve their bank status. The petroleum product subsidies and foreign exchange losses had caused the BDCs to build up large overdrafts. These overdrafts were supposed to be paid by the government, but when the payments did not come, the survival of the banks was threatened – and they had to deny the BDCs new LCs to safeguard themselves.

An LC is a payment confirmation from the buyer's bank to the seller. The LC provides a guarantee to the seller that the agreed upon amount will be paid by the bank as soon as conditions and/or deadlines are met. In the oil and gas industry, LCs are often required to guarantee payment. They were used, for example, when BDCs imported petroleum products in bulk from Oil Trading Companies, or when Tema Oil Refinery imported crude oil for refining. Further down the value chain, LCs were not always necessary – as in trading between BDCs and OMCs, and between OMCs and individual retail outlets. In these instances, depending on company policy, the product was paid for upfront or with different credit schemes.

BDCs were completely reliant on LCs to procure petroleum products from the international market. The BDCs had only intermittent access to funds from the government –such as subsidies and foreign exchange losses funds – and therefore the banks were more cautious in their LC services. This uneven arrangement meant that those BDCs that were able to access funds from the government regularly were those who could count on LCs from the banks. Uncertainty regarding payments from the government to the BDCs – especially given that government could hold back funds for months at a time – forced the BDCs to reach out elsewhere to make their financial wheels turn. Successful OMCs became the solution.

It was these unstable payments from the government that caused the BDCs, through the Chamber of BDCs and its outspoken leader Senyo Hosi, to issue several warnings to the government and the public that a severe fuel shortage was looming (Kunateh, 2014a; Ghana Web, 2014a). Several news articles were published in the months ahead of the shortage explaining that the government had failed to support the industry in two ways. According to the Chamber of BDCs, the government was enforcing subsidies on petroleum products that were not returned to the BDCs. Additionally, the BDCs were suffering foreign exchange losses due to the declining value of the Ghanaian cedi. The enforcement of subsidies and purchasing in US dollars and reselling in Ghana cedi made it financially difficult for the BDCs that were in debt with their banks and no longer able to import petroleum products.

We saw in the previous chapter how subsidies were added and removed according to domestic political circumstances. While these changes were detrimental to companies trading in petroleum products, the depreciation of the Ghanaian cedi caused just as many financial difficulties, according to the BDCs. The law required that petroleum product be purchased in US dollars and resold in local currency, meaning that BDCs often incurred foreign exchange losses that, according to them, became a threat to their survival. The Bank of Ghana (2014) reported that the cedi had depreciated 22.9 per cent in the first six months of 2014, following a yearlong substantial depreciation of the cedi in 2013 against the US dollar.

This depreciation placed the BDCs in a precarious situation. With the exception of Chase and Cirrus, Ghanaian BDCs were not asset-rich. They consisted of small business units, operating from rented offices and rented storage tanks for their petroleum products. Some of them were also subsidiaries of larger commodity companies (as we saw Chapter Six). However, most BDCs established after the reform -- again, with few exceptions –were vulnerable to restrictions from the banks or the government's withholding of refunds. While the shortage had more to do with Government – BDC relations than with OMCs and their managing teams at filling stations, filling stations managers still provided useful scapegoats at the time of shortage. On a local radio station, Senyo Hosi blamed some of the shortage on the filling station owners that he accused of hoarding the fuel:

You can't do that to your own people. What kind of state are we trying to grow? We want to try to commercially milk the people. When you see people suffering, you still want to hoard. I don't think that person deserves to be called a Ghanaian. (Frimpong, 2014, p.1)

The call for patriotism and morality – aimed above at filling station owners –was used as an attempt to reinforce the legitimacy of the BDCs' claims. BDCs normally benefitted from state arrangements, an industry tension we have seen frequently throughout this thesis. The moral question of mismanagement of the system causing harm to all Ghanaians could be aimed at an easy target. Traditionally, filling station owners have a reputation in Ghana for causing 'artificial' shortages, and this narrative could be supported without bringing attention to the role of the BDCs themselves.

The length of the shortage in 2014 demonstrated how subsidies and currency depreciation could paralyse the industry and affect all the BDCs in their ability to import petroleum products. In a bid to avoid public scrutiny, the BDCs joined forces with the government in blaming the filling stations owners for the fuel shortage. As the shortage continued, it became clear that filling stations owners were in fact not hoarding fuel in an anticipation of price hike. In an attempt to recover the funds that kept them from importing, the BDCs eventually reversed their strategy of blaming filling station owners and targeted the government instead. What followed was a public display of arguments between the government and the BDCs, one that BDCs arguably won in the short-term, but one that the government retaliated in the long run.

Negotiating the Shortages: BDCs Showing Muscles

While the Government-BDC financial arrangements were the primary cause of the shortage, a public display of blaming and shaming unfolded in the Ghanaian media. Senyo Hosi, claimed that the government owed the BDCs a total of USD 1.5 billion. The government claimed that the debt was not realistic. Hosi explained that the petroleum products were available on the international market, and that some was even on the shores of Ghana. But, because of the financial difficulties faced by the BDCs, the BDCs were not able to pay their international suppliers. The reason that

the BDCs could not buy petroleum products was because the banks were hesitant to give them an LC when the BDCs already had huge debts with the bank. Hosi attributed this situation to the government's practices in the industry. He further complained that the subsidies should have been removed, and was asking for more consistency when it came to petroleum pricing, stating:

I have no problem with government's decision to subsidise but if you want to subsidise, back it with funds. If you can't back it, please probably look for a more creative way to subsidise, subsiding *en bloc* is not the most prudent thing to do (Frimpong, 2014, p.3).

Senyo Hosi was referring to the fact that all petroleum products were subsidised in Ghana, and not just the pro-poor ones such as Kerosene and LPG. The total debt of the BDCs were not just putting them out of business, but, according to Hosi, had a major effect on society. He was quoted stating:

You [the government] run away from the payment of the debt today, the industry collapses and it doesn't collapse alone because the money doesn't belong to us, it's almost all going back to the banks and if they are not getting and they are also collapsing, it's also going to ripple down even to my grandmother in the village. It's not an option anybody should even think of because the implications are beyond the BDCs (Frimpong, 2014, p.2).

Hosi's criticism of the government came focused on the long-term inconsistency on the part of the government, and the policy of subsidising petroleum products while being unable to fund these subsidies. While the operations of the BDCs could be profitable and low-risk, thanks to the arrangements set out by the government, the inconsistency in implementing these arrangements created serious disruptions. Through spokespeople like Hosi, BDCs were asserting their role in the industry – most of them being on the brink of bankruptcy – in part to avoid blame for the shortage and broad public scepticism around their purpose.

As the shortage drew on, the BDCs and Senyo Hosi sought to show their muscles every time someone tried to pin blame on them. The government kept saying that the BDCs' claims were false. A radio show hosted a politician that said that if the companies did not stop their behaviour, and they did not like the arrangements set out in Ghana, they could go elsewhere to conduct their business. My informants from BDCs and OMCs referenced this statement long after the shortage was over. They considered the threat outrageous. Moreover, the threat clearly marked the

conflict between the government and the BDCs, and their tactics to blame filling stations owners were no longer effective.

Rumours started to circulate about how the government was planning to deal with the strength of the BDCs. For over a week, the BDCs had been openly criticising the government's management of the industry – and news articles and radio shows were starting to talk about the management of the cedi, the impact of subsidies, and the fact that the government had to start paying its bills to the companies. The media storm was not in favour of the government and its approach to handling the shortage. According to the rumours, the government would utilise the revamped BOST for importation and storage of petroleum products, making many of the BDCs redundant. Sumaila suggested to me that the threat sounded credible enough to push BDCs to change their strategy and try to negotiate a solution with the government.

The blame game went on for a few more days, and the government announced that they would appoint a committee in order to investigate whether the claims that the BDCs were making were legitimate. Whether the situation was actually so chaotic that the government itself did not know how much money it owed the BDCs, or whether this was a scheme to buy time to put together sufficient money, was unclear. However, after a few days, reports came that the government had paid out *some* of the money they owed the BDCs (approximately 60 million cedi), and that the shortage would be solved as soon as possible (Osam, 2014).

Shortly after the first pay out, another report came that the government had paid some more money, and that they would continue to pay until the claims were covered, according to the committee's investigations (Kunateh, 2014b). While the BDCs were not satisfied with the amount paid, they did not seek attention in the media as they had previously; the rumour was that they just wanted things to go back to normal – that is, for the industry to operate again. And subsequently it did, with a few new BDCs joining in the following months, and another tax added to petroleum products in 2016 to recover the currency exchange losses.

The public display of blaming in the media demonstrated the BDCs ability to shame the government for the management of the sector, questioning the widespread assumption that BDCs were run by NDC party members. While BDCs and their operation normally were difficult to gain information on, they were on full display during the shortage, in a bid to force the government to pay funds promised. Their efforts did yield result, as the government started releasing funds to the BDCs. I will return to the aftermath of the shortage after examining how the shortage became useful in examining relationships between private entrepreneurs in the industry.

Consolidating Relationships

The media-storm during the shortage focused largely on two things: the fact that there was not any fuel at filling stations and whose fault it was. In the industry, of course, the lack of petroleum products was also deeply disruptive. Some of the BDCs were on the brink of shutting down. At one point during the shortage, when it looked gloomy for the BDCs who were not able to import any product, extreme measures were taken. Sumaila went to visit Ebony Oil and Gas and found their offices completely cleaned out of furniture, computers and stationery. There was no one in the office, and when he called Lesley, one of the Ebony workers which I will come back to in detail, she told him that they were ready to leave the country if they did not get any product in the coming days. Because the company had no assets, operating from rented office buildings with a tank farm that was still a drawing on a piece of paper, they were only left with the exit option. Several banks were now demanding the repayment of debt that had accumulated from subsidies and exchange losses. With no petroleum product to sell, they had no possibility of making money – and instead made plans to leave the country.

As mentioned above, the 2014 shortage was a critical time for BDCs in Ghana's downstream industry. It was, of course, also a critical time for Sumaila and other petrol entrepreneurs managing OMCs. Without petroleum product to purchase and with filling stations emptying out, there was not much for many of them to do besides wait for the situation to normalise. However, some of the BDCs were able to get petroleum products during the shortage, highlighting the crucial role of personal relationships forged during the everyday operations of the industry.

The wealthiest OMCs, the European multinationals, proved to have the capital to buy from BDCs without a credit scheme. This arrangement, direct purchasing, decreased

the turnaround time for the BDCs involved, and a few of them were therefore able to import petroleum products on the back of these special arrangements. Total and Shell, competing intensely¹¹ with each other during the shortage, between them bought the entire product in bulk as soon as it arrived in Ghana. They were therefore in control of the product that was released into the market for the first week. According to my informants in these companies, they supplied stations in Accra in accordance with instructions from the government. The ongoing withdrawal of multinationals from Ghana's downstream industry, however, limited the amount of product that was imported through these companies, and these companies alone could not balance the effects of the shortage.

The Ghanaian OMCs and their filling stations were left without any other option than to wait for the shortage to be over. A few OMCs managed to get a hold of a small amount of product, due to the loyalty and relationships that were continuously worked on in the industry. These relationships, illustrated by the case of Naagamni, were created and maintained in everyday operations, specifically in order to survive times of crisis. While a national shortage was uncommon in Ghana, it was neither surprising nor unexpected for people who knew the industry intimately. Everyday business strategies therefore had to include strategies for times of shortage. The work of building relationships was therefore carefully calculated to fit the downstream environment.

In conducting the everyday business of purchasing petroleum products, the BDCs had to compete over the successful OMCs (examined in Chapter Three). There was more petroleum product to be sold than trustworthy and affluent OMCs to purchase. Therefore, Naagamni and a handful of other OMCs could choose to buy from any BDC. While the price generally remained the same, offers of gifts from the many BDCs made it an attractive arrangement for OMCs that were turning around product quickly and making repayments accordingly.

When providing me with my initial training at Naagamni, Sumaila stressed several times that "buying anyhow" was not a good practice in Ghana's current business

¹¹ Local representatives of these companies were competing. For the headquarters of both Total and Shell this shortage was not of any significance, as downstream markets constitute a declining share of their profits.

climate. "Buying anyhow" referred to always going for the cheapest priced product, without considering who the seller was. He explained that for the OMCs, the most important asset you had upwards in the industry was your purchasing power. If you used this purchasing power, only considering the best price, you had given away your money cheaply, and lost your most important tool. If you divided your purchasing power thinly and unevenly, for personal gains, you would end up without any proper relationships. According to Sumaila, you could gather some new watches or maybe even a car, but building a business empire could not be achieved through this strategy. The likelihood of getting scammed was also lurking, especially when dealing with new companies with which you did not entertain any personal relationships.

By consistently ordering from one or a few BDCs, the BDCs would feel obliged to sell product to your company during a shortage. As the shortage was only temporary, the BDCs would go back to competing for the best OMCs. They were therefore not in a position to avoid returning the favour to their most faithful OMCs. Even if a multinational company offered them a cash-trade, there were considerations regarding the furture to be made and relationships to honour. I will continue to use the relationship between Naagamni Oil and Ebony Oil and Gas to demonstrate how these relationships were cultivated.

Ebony Oil and Gas was a BDC that Naagamni had close connections with, and their bankruptcy would impact the networks of entrepreneurs that figured within their sphere of business – including Sumaila. As such, it was a rather unsettling experience for Sumaila when their offices were cleaned out and Lesley was saying that they were about to leave the country. Shortly after, however, the situation changed for Ebony, as they were able to get some product. With the product finally in storage, in the midst of a shortage, they were able to start operating again. Their distribution of the petroleum products led to a fascinating display of industry networks and obligations.

One Sunday afternoon, Sumaila came to the hospital dressed in his finest clothes. I asked him jokingly if he had been to church. He replied that it was no joke, and that he had been to Light House Chapel in East Legon. Knowing Sumaila's contempt for

the charismatic churches, I knew I had to probe into his reasons for visiting one in the middle of a fuel shortage. I asked whether he was making a point about wastage, by spending his petrol and time in such a place:

Monique, you know I would never go there. It is a God forsaken place. But Lesley goes there. I had to go to church to talk to her. I need to be loading by tomorrow. The product has made me go to church, for me it is crisis now. I was even waiting outside like a small boy. Crisis.

While some people were on the brink of fleeing the country, others were taking advantage of the fuel shortage to strengthen their position in the petroleum market. A few companies were in a stronger position than others to survive or strengthen their reputation during the fuel shortage. Due to the severity of the shortage, no company gained any monetary benefit. While capital could give you certain advantages, it was the relationships that were cultivated before the shortage that could give you advantages at the time of crisis. The importance of personal relationships in the industry explains Sumaila's efforts to get in touch with Lesley on a Sunday morning. The crisis put relationships to the test, and relational work was necessary to ensure that business obligations were adhered to. Sumaila's visit to Lesley's church demonstrated his personal sacrifice reaching out to Lesley at a place that was deeply important to her.

In order to ensure continuous product availability, several of the Naagamni staff had developed close relationships with the staff at Ebony Oil and Gas. At the top of the hierarchy was the friendship between Sumaila and Ebony's boss John. In establishing his company, John sought guidance from Sumaila on the workings of the industry. To help John kick-start his company, Sumaila promised to order a certain amount of petroleum products from John every month. This amount would guarantee John a small profit in the start-up phase of the very competitive industry. Their cooperation continued as both Naagamni and Ebony grew.

The single most important exchange that occurred between the two companies was Sumaila's former employee, Lesley. Lesley was a bright young woman with a good understanding of the industry, and rumoured to be extremely sharp in her ways of doing business. By providing Ebony and John with Lesley (who also gained a car in her change of employment as a bonus), the reciprocal relationship between the two

companies was sealed. Sumaila provided John with the ultimate asset to do business in the industry, on which John's success and profit was based.

Sumaila always made the point that letting go of Lesley, who was his best employee, was a sacrifice – albeit a calculated one that had paid off and that would continue to serve him well in the future. The exchange intensified the friendship between the two entrepreneurs, who were now bound in reciprocal business ties. These ties were somewhat fluid and the performance of friendship still had to be maintained, such as during the shortage. However, the reference point of Lesley could always be called upon in Sumaila's favour.

It was no coincidence that Lesley was such a valuable asset to both John and Sumaila. Like some of her female colleagues in the industry, she was intelligent and socially savvy. She knew the ins and outs of the industry, and she had connections both upwards in the NPA and ministries, and downwards with OMCs and retailers. Apart from her knowledge of how the industry operated, she knew how to flatter and push the right buttons for the newly-established petrol entrepreneurs. Without giving anything away, she would flatter their egos while simultaneously signing important deals. She was constantly keeping in touch with her clients over the phone, and making sure they stuck to the promises they had given her. Her most common opening line to her constantly ringing phone was "how are you my darling?" – and while Lesley was single by choice, she said that the absence of a wedding ring on her finger was crucial to her successful career.

A week into the shortage, Ebony had managed to secure a bulk purchase of petrol and diesel. This product is what led Sumaila to a charismatic church on a Sunday morning. As a young entrepreneur in a difficult business climate, he preferred a personalised management style. He liked to make sure he conducted all agreements by himself within the shortest available time, maintaining the friendships on which he built his business. Sumaila did not fully trust that Ebony would sell him their entire product base unless he discussed it with them in person. He explained:

Business here can be very costly because the only way you can be sure of something is to do it yourself. Lesley cannot lie to my face, but she can be pressured to lie over the phone. But I am the one who trained her, so her loyalty should lie with me. If she sees my face she will not forget.

In his everyday operations, Sumaila only purchased petroleum products from a handful of BDCs. These were the companies that he could rely on during the shortage. He built strong personal relationships with these companies, like the one he had with John, and therefore had more to draw on than economic transactions. With this successful business strategy, Sumaila was able to obtain a certain amount of petroleum products (approx. 100 000 litres) during the shortage. The next section examines how he used this product to build his reputation and honour his obligations elsewhere, always keeping the next stage of business in mind.

Northern Priorities and Distribution

The day following his trip to the charismatic church, Sumaila came to my hospital room with a smile on his face. Thinking he finally had some product, I asked him why he was so cheerful. He smiled widely and brought my notebook and pen over to the hospital bed. He said he had received some interesting phone calls that morning. An employee of a BDC had confided in him. Sumaila explained:

The president's office had called them with instructions not to sell product to people who will take it outside of Accra. The people of Accra is giving Mahama [a] whahala [headache], he needs to calm them [the people of Accra and media] down.

I asked whether this was something Sumaila should be happy about, considering that most of his filling stations were in the north, and only a few BDCs felt obliged and had agreed to sell him product if they received any. He said,

It does not affect me. Maybe [company name taken out] wanted to sell to someone else for a bribe, but they have to sell to me for the right price. That is our friendship. I will keep some in Accra to sell to my contacts and for the company. I am happy because it shows you how it works, what forces we are up against trying to do our business. Mahama is even a northerner and he does not want me to take the product to the north. Politics.

For Sumaila, the Accra petrol market was not his primary concern. In a way similar to his approach to managing purchasing power, he was strategic with how and where

he sold petroleum products during the shortage. Contrary to government instruction, Sumaila sent petroleum products to the north. And while the presidential office had called the BDCs with instructions, the company's alliance with Sumaila and Naagamni trumped these instructions. In the midst of the shortage, and while multinational companies absorbed most of the petroleum products and supplied them to consumers in Accra, Sumaila sent the majority of his product to the north. He claimed this choice was strategic for his business, as the north was where he had built his company and was where he would continue to rely on patronage from consumers.

When probing Sumaila further on his strategy, it turned out it was not just business strategy, but also kin obligations that required him to prioritise his northern stations over the more profitable southern ones. His family and business networks were mostly in Tamale, the largest city in the northern region. These were the people who had helped him grow his company, and to whom he owed gratitude. This gratitude translated normally as gifts and money, and investment in schools and mosques. At the time of the shortage, the product could be sold at any station, but by transporting it to the north, Sumaila showed his commitment to a place that was hardly ever prioritised, economically and politically, by Ghana's leadership. By providing the product, he showed gratitude on a new level.

Through a combination of strategy and obligation, then, Sumaila used the shortage to his advantage to reinforce his company's reputation in Tamale. The majority of OMCs focused on the large markets – Accra, Kumasi, Takoradi and industrial areas – because of high levels of demand, the potential for rapid sale of product, and instructions from the government. These factors did not include the markets in the north. Sumaila supplied all of his stations in Tamale, and apart from a few thousand litres at another local station, his was the only supply that circulated in Tamale during the time of the shortage.

The supply for petroleum products left Sumaila in control of the whole of the northern region, which experienced the same shortage as the markets in the south, apart from some degree of protection from the various informal markets. Naagamni started serving the long queues. People travelled from Wa, Bolgatanga, and Yendi to

buy fuel at Naagamni filling stations in Tamale. The wide coverage gave Naagamni a good reputation, which spread widely, and rewarded Sumaila's efforts as the only entrepreneur to bring substantial amounts of petrol to the north. Further, Sumaila told his filling station attendants strictly to sell the product at the official price, as he did not want any rumours to circulate that he was making profit off the backs of the people in Tamale.

Jane Guyer (2004, 103) has demonstrated how shortages of fuel in Nigeria can lead to socially acceptable manipulation of prices bounded in normative understandings of the social hierarchy. In contrast, Moses Amoah (2011, 3) suggests that the current problem of fuel shortages in Northern Ghana has been caused by 'middle men' who hoard and sell petroleum products at exorbitant prices. Sumaila's strategy in Tamale countered both of these suggestions, bringing equal prices and quantities to those who visited his stations, while attempting to avoid selling to middlemen. This strategy was used to build Sumaila's reputation, something that was highly important in the competitive downstream industry.

Sumaila also provided a few thousand litres to his home village of Gambaga to make sure his closest kin and connections were not affected by the shortage. While this incurred an extra cost, and did not make much sense in terms of business and market demands, it demonstrated Sumaila's commitment to honour his kin relations. These relations had been crucial in setting up his company, particularly with securing land and labour. In the same fashion as Sumaila expected the CEO of Ebony, John, to demonstrate his committed friendship in the import and purchasing part of the industry, Sumaila knew he had to provide the same service in the retailing section.

Supplying Tamale was not straightforward. There had been no petroleum product for a week, and people were queuing at the stations that they thought were most likely to get product first. According to the attendants keeping diaries, most people who were queuing were commercial drivers and people who were queuing to buy for others. The atmosphere was tense, and while most queuing went on without any trouble, there were some instances of fighting when people tried to jump the line. A small batch of product was delivered to a Naagamni filling station in central Tamale, and while the attendants got away without any serious harm, the desperate queue of

people broke out fighting over access to the pump. Three customers had been served before someone in the back of the line claimed that number four belonged further back in the queue. This claim sparked heated discussion, which led to people taking the matter into their own hands and forcing their way to the pump. The upheaval damaged one of the pumps and sent two people to the hospital. The station had to shut down its service, and increase security.



Picture 7.1: Naagamni Filling Station in Tamale during the Shortage. Author (2014).

After this incident, and clearly upset that his pump had been damaged, Sumaila posted soldiers at all his filling stations in Tamale. The soldiers were able to keep the situation in the filling stations non-violent and protected the equipment. The use of soldiers had positive effects for Naagamni's image in Tamale. Not only did people think it was safe to wait in line at the station, contrary to the stations where the police were deployed, but it showed that Naagamni had the capacity to hire soldiers, which normally required money and connections. Sumaila's connections to the army were

mainly through a nephew that he had funded through training and schooling. The nephew was now serving in the army, and was in debt to Sumaila for his help. Reciprocity ties gave Sumaila the right to ask for his nephew's help, who in return also asked his colleagues in the army to join him.

Apart from security, Sumaila further ordered his filling station attendants not to sell petrol or diesel to people in jerry cans, buckets and/or bottles. He gave them clear instructions that people should only fill the tanks of cars and motorbikes. By prioritising vehicles, he was able to serve more people directly, instead of fuelling informal markets. Suamila hoped that this form of selling would please a larger amount of customers, who would feel individually obliged to Naagamni, and hopefully come back to the same station or another Naagamni station when the shortage was over. By avoiding sale in jerry cans, Sumaila contributed to minimising the product on the black market, which he thought undermined his business efforts. He explained that buying in jerry cans and selling it in other places for a higher price was normal during a shortage, it was something he had done himself at a young age. By restricting the black market, people had to visit Naagamni stations to see who was providing the petrol. He wanted people to have a personal relationship to his company. Sumaila also wanted his customers to see that he provided petroleum products in Tamale during the shortage at the official price. Providing the official price was supposed to give people the impression that the company cared. The company cared about the north and about development. They were northerners, and the 'politics' of the south was of no concern. This approach, Sumaila hoped, would encourage people to develop a personal relationship to the Naagamni brand, as they had gone through efforts to bring petroleum products at a difficult time.

Back in Accra, Sumaila did his fair share of pleasing officials and other connections in the industry. The little amount of product that he had was divided between business partners, ministers and his 'special friends' in the NPA. A senior manager, who was influential in giving me access to the institution for my internship back in 2012, had been very helpful in speeding up the bureaucratic process of licencing Sumaila's new filling stations. She called him one day when he was visiting me, asking how the situation was on the ground. He told me after the call that he was surprised at how someone in NPA could be so ignorant of what was going on in the

filling stations. In the end he blamed himself for providing her with petrol for her car so she did not have to worry about the shortage.

The shortage did not create new connections within the industry for Sumaila and Naagami, but it allowed him to strengthen the ties that he already had. As he was convinced the shortage was not the last of its kind, he strategised for the next shortage, based on his relative success in the current one. He mentioned, among other things, that he would keep more petroleum product in Accra, and sell smaller amounts to people in order to please more of his contacts in the NPA. Moreover, he was satisfied with the image building he had been able to conduct in Tamale. While the company was not operating as normal and making the same money it would have without the shortage, it provided a space for other beneficial relationship-building and image-building activities to take place.

Personal relationships play a major part in everyday business in the downstream petroleum industry. This section has shown how these relationships were crucial, and were tested, during the weathering of the crisis. The shortage demonstrated how petrol entrepreneurs are dependent on strong personal relationships and how these relationships are showing small but significant changes in access to petroleum products. Interestingly, the strength of their relationships was emerging partly due to the government's involvement in the industry and the need for these companies to operate without political party-affiliation.

When the Dust Settles: The Aftermath of the Shortage

The changes brought about by the 2005 reform of Ghana's downstream petroleum industry became clearest during the national fuel shortage of 2014. While the government tried to keep petroleum products in Accra, the movement of petroleum products traced and built links of obligation and support among BDCs, OMCs and wider social spheres. The final section of this chapter will examine the aftermath of the shortage, and specifically the government's attempts to regain control of the downstream petroleum industry.

As we have seen, the task of importation of petroleum products was moved from the government to private companies as part of the 2005 'deregulation' reform of the

downstream industry (Chapter Three). These private import companies, the BDCs, were given licences to import and store petroleum products across Ghana. However, at this early stage in the reform, these companies did not have the capacity – and/or will – to build storage space. They failed to build tank farms and only operated as importers, making them legally and financially vulnerable due to their noncompliance with the industry requirements. The BDCs grew in number over the years, and quickly circumvented the need for domestic refining, or importation by state-owned companies. This arrangement meant that the government was able to adhere to the conditions and recommendations made by the IMF, capping spending on Tema Oil Refinery and liberalising the petroleum industry. While the government removed its direct spending on importation, it was still supplying the industry through other funds. Importation was now through private companies whose bottomline still depended on the government in decisive ways; and as a result, the BDCs had a precarious relationship with the government. They were dependent on the payment of subsidies and highly vulnerable to foreign exchange losses, a challenge that continued also after the shortage (Nyavo, 2015; Acquah, 2014).

This practice was also used when the TOR or other government institutions were in charge of importation. In an interview with a bank employee, I was told that the shift from providing LCs to the government to providing them to BDCs made a number of banks withdraw from servicing downstream petroleum because of the enhanced risk. While banks had trouble with the government and payments for the TOR in the past, the fact that the loan was being made to the state provided a sense of security. Dealing with private companies, the banks did not feel the same sense of security. As they rightfully pointed out, a private person could just flee the country, and the banks would have no means to recover their losses. They were therefore more reluctant to give out LCs to BDCs that could not prove assets or sufficient track record of income – requirements that were especially challenging for the youngest BDCs in the industry.

The criticism directed towards the government and general disobedience by the industry during the shortage did not go unpunished. In the aftermath of the shortage, a few new BDCs were registered and started operating. One of these was GO Energy,

which became the sole supplier to the state-owned OMC Goil. As already noted, Goil was the largest OMC in Ghana, and many BDCs suffered from not being able to supply petroleum products to Goil. GO Energy was a subsidiary of Goil, and the industry actors viewed the move as a measure from the government to gain more control over the importation of petroleum products, while at the same time punishing the BDCs. The establishment of GO Energy meant that Ebony Oil and Gas, for instance, had to rely further on the patronage of Naagamani. While there were no repercussions for Ebony if they sold to companies like Naagamni, or for Naagamni if they brought the product to the north, both nonetheless felt that the establishment of GO Energy had punished them. What previously had been an open industry, where useful private networks could emerge, now included BDCs with obvious connections to the government eliminating profitable parts of the market. The establishment of GO Energy made a clearer divide between those who saw themselves as private entrepreneurs, and those the entrepreneurs viewed as political patrons operating businesses on behalf of the government. This divide was to some extent already existing in the industry, but the establishment of Go Energy reinstated the divide. Networking and co-operation with these government-led businesses was viewed as equally undesirable as taking part in government contracts. Private entrepreneurs, like Sumaila, knew that direct government involvement could have catastrophic consequences for their companies if there was change in government.

Among the players in the industry, there was talk about 'tighter political control' in order to avoid further public criticism in case of a new shortage. As the debt owed to the BDCs, as well as UPPF debt owed to OMCs, was still not settled, most people I talked to after the shortage stated that they would not be surprised if there was another shortage in the near future. They claimed, however, that the shortage would not be of the same magnitude or nature as the national shortage of 2014, due to the establishment of new, more 'pro-government' BDCs. The government had managed to reorganise and in case of a new shortage they could now import though companies like GO Energy and distribute through Goil. The government had further successfully warned the industry about publicly criticising their management of industry funds.

For companies like Ebony and Naagamni, the aftermath of the shortage was a time of caution and anticipation. Would the government deliver on its threat to start using BOST for transportation? Which contracts would GO Energy take over? The entrepreneurs strengthened their relationships during and after the shortage as a response to changes evident in the industry, but had to tread carefully so that their alliances were not too obvious to the government. Sumaila explained that in the downstream business environment, alliances and personal relationships had to be strong but invisible, trustworthy but non-threatening. While only remarkably visible during the shortage, the connection between Ebony and Naagamni was something both companies preferred to keep secret from other companies in everyday operations.

Conclusion

Following the reform of Ghana's downstream petroleum industry, fuel shortages were less common. The construction of new filling stations produced small depots for petroleum products across the country, which worked as a buffer for any lack of import – for a few days, at least. However, as I have examined in this chapter, the industry was still vulnerable to shortages, and when they happened, they created crises just as damaging as shortages in the past. In Accra and other major cities, shortages were further elevated by the way that the new filling stations had curbed a previously thriving black market.

Prior to the reform, the government would import petroleum products with the help of LCs from Ghanaian banks. Due to subsidies and foreign exchange losses, petroleum accounts became difficult to service, and Ghanaian banks were on the brink of bankruptcy at their expense. With the reform of the industry, BDCs were introduced to take the financial burden off the Ghanaian government in the importation of petroleum products and crude oil. However, the products continued to be subsidised, and foreign exchange losses that the government would cover for its own corporations continued to be covered for the BDCs. This arrangement made operating BDCs very profitable, but it also made them dependent on the government's goodwill in implementing these profitable policies. In 2014, the

government withheld payment for several months, and when a shortage materialised, the BDCs found themselves without any other option than to speak out. The aftermath of the shortage was widely believed to be the consequence of allowing that disagreement to play out in the media.

The aftermath of the shortage, in which new BDCs tightly linked to the government emerged, demonstrated the continued importance of the uninterrupted flow of petroleum and state control of the industry. The shortage further demonstrated that changes in the industry as a result of reform became problematic for the government, which felt a need to implement certain measures to avoid the same situation reoccurring. The political significance of petroleum products for the government, where a shortage is morally tainted and signifies a 'political failure'. The crisis that the shortage represented – for people, industries and the nation – unravelled further insights into the politics of petrol on an organisation level.

The shortage demonstrated the importance of personal relationships in the private sector. Everyday purchasing and business tactics relied on strengthening personal relationships that could be drawn upon in times of crisis. The fact that the importance of these relationships only became visible to me during the shortage showcased how meticulously Sumaila and others worked on camouflaging them. Downplaying these relationships in everyday work was not meant to disguise them from me, but was a result of the environment and atmosphere in which uncertainty regarding domestic capitalist ventures might be perceived by the government. Similarly to what I demonstrated in Chapter Three regarding the importance of private entrepreneurs' avoidance of state contracts, this chapter has shown how petrol entrepreneurs further disguise their private sector co-operations to avoid scrutiny.

The reform of the industry and the introduction of entrepreneurs such as Sumaila have led to interesting changes in the downstream industry. Prior to reform, the northern regions would not have access to petroleum products on the scale that Naagamni provided during shortages. Sumaila's business tactics during the reform showcased the ways in which he aims to create a strong relationship between his brand and his customers. Building on his loyalty to the north and providing equal services and prices that were available in the south of Ghana. His provision of petrol

to Tamale and his home village Gambaga was undertaken to honour the help he had received in both places while building his business. His strong sense of obligation to places and people was what he tried to recreate between his company and his customers.

Conclusion

Introduction

This thesis has explored how people involved in Ghana's downstream petroleum industry negotiate political, economic and social realities during newly-initiated oil and gas production and neoliberal reform. The discovery of oil and gas in Ghana led to sharp growth in the domestic petroleum industry, and the 2005 'deregulation' reform provided an accessible arena in which petrol-entrepreneurs new and old could take part. In turn, they reshaped an industry that had been dominated by multinational companies and the state. The reform of the downstream industry offers an avenue by which to examine the multiple continuities and transformations of petrol politics in Ghana, as they impacted state-industry relations, infrastructure, and intimate relationships.

In this concluding chapter, I return to some of my informants' experiences after my fieldwork in 2013-2014, as well as the election of 2016. This thesis is the story of an industry in a specific time period; as time and politics change, so does the dynamic petroleum industry and so does the story. Here, I provide a recap of my arguments regarding the politics of petrol, and their potential contributions to the study of petroleum in Africa. I further draw together my findings in the analysis of the reform of Ghana's downstream industry. Finally, I return to the subject I started with: the upstream and downstream divide, so pervasive in industry and scholarship that it has been almost naturalised in our understanding of the petroleum industry.

Returning to the Industry

After the petroleum shortage of 2014, and the semi-dramatic end of my fieldwork in Ghana, I found myself reflecting on how important fuel had become for my medical treatment. A few weeks of personal and petrol-political crisis gave me a new appreciation of the importance of fuel in everyday life – and of the effects of uncertainty regarding access and price of fuel when it matters the most. I returned to Ghana a few months later. I went back to Buipe to explain that the ambulance that had picked me up had not meant, as it normally meant, that I was dying or already

dead. I went to pay respects, and conclude my deal with the doctor in Accra, to whom I still owed cod liver oil in return for my stationary. But most of all, the reason I returned to Ghana after the spectacle of leaving the country with a serious disease, was to get back to the politics of petrol, for the sake of the writing process: to remember that the shortage and sickness was only one of many experiences in which petroleum products made itself political in everyday life.

I have returned to Ghana several times since my fieldwork came to a close. As such, I have been privileged to follow developments in my informants' lives and at my field sites intermittently. The downstream petroleum industry in Ghana continues to develop; new companies have entered the industry, others have merged, industry regulations have been updated and new personalities have emerged. Tema Oil Refinery frequently makes headlines, most recently for an explosion that halted operations in early 2017 (Allotey, 2017). The refinery was otherwise running smoothly in run-up to the 2016 Presidential election. The restructuring exercise of state-owned BOST ran into considerable trouble in 2015, when BOST workers accused the management team of BOST for looting US\$ 55 million from the company through the Nigerian company TSL. An audit report from Earnest and Young found large financial discrepancies, and the workers stated that the training they were supposed to receive from TSL had not materialised (Ghana web, 2015a). There was another filling station exploded in December 2016 at Labadi in Accra. While not of the same magnitude as the explosion at Circle (Chapter Five), the incident left a number of casualties, and again stirred a debate about safety in the industry (Ansah and Shaibu, 2016).

Issah, the tomato-planting BDC-representative in Buipe (Chapter Four), was laid off from his work while I was still in Ghana (Chapter Seven). He moved to Accra, where he worked for an OMC for a few months. Returning to Buipe in December 2016, I met Issah again. This time, he was working for a new BDC that had managed to rent storage space at Buipe petroleum storage depot, and was planning to start operating from Buipe in early 2017. They were not giving him a salary yet, but he expected to be formally employed when they started operations. Buipe depot had started operations again by 2016 (receiving petroleum products by trucks) but only one company had been distributing petroleum products from the depot. That company

was Go Energy, the company that was established after the petroleum shortage (Chapter Seven); and was perceived by my informants as an attempt by the government to take greater control of the downstream sector.

Both Issah's work situation and Tema Oil Refinery's (TOR) re-emergence remind us of some of the key features of the politics of petrol, which my chapters have illustrated. 'Politics' in the downstream industry change, and individual strategies take these changes into account. Waiting at both TOR and in Buipe was not just based on lack of opportunities elsewhere, but an awareness of how 'politics' could turn from excluding one's workplace to including it. While there were some trucks back in Buipe and TOR was refining again, people were hesitant in their optimism, and anticipated further change. The 2016 December election saw a change in government. The NPP won the election with 53.85 per cent. Nana Akuffo Addo was the new president of Ghana. For the industry, this meant a period of 'transition', with a change in key institutions such as the NPA, but also for state corporations such as TOR and BOST.

The change in political power was on the minds of most of my informants during my visit in 2016/2017. Since my fieldwork in 2013-2014, Sumaila had opened several new filling stations, most of them along the road from Accra to Tamale. He had continued to expand his network in the industry, according to his tried and tested strategy, slowly building relationships with people he could trust. For Sumaila, the change in government was expected and welcomed. Like many others of my informants in the industry, he felt that the "NDC was not good for the economy," referring mainly to the depreciation of the cedi – which impacted the import of commodities such as petrol pumps. A number of new taxes on the industry and financial services were making business more expensive, and irregularities in electricity supply and price increases on utilities saw many Ghanaians asking for change in political leadership. I planned to meet up with Sumaila during my December 2016 visit, but he simply could not find the time – he told me over the phone that he was "busy with the transition." When I enquired what that meant, he replied as expected, that he was working on his friendships and networks.

NPA statistics for 2017 show a decrease in the number of companies active in the downstream industry after the time of my fieldwork. We can ascribe the decline to various factors. First of all, the national shortage of 2014 caused several companies to forfeit their operations, particularly BDCs. Secondly, moving towards the Presidential election in 2016, and given the constraints facing the economy and a declining Ghanaian currency, investment and start-up companies were perceived as particularly risk-prone. And finally, some informants talked about a 'lack of interest' in the petroleum industry, correlated to low commodity prices and higher capital requirements for start-up. The downstream industry simply did not have the same attraction as it had at the start of the decade. This lack of attraction also derives from the exponential growth that has occurred: the downstream industry has turned from a field of opportunities to a competitive, oversaturated market in some parts of the country.

The Politics of Petrol

The politics of petrol in Ghana is part of a wider political project in which the state provides petroleum products to the citizens, at an acceptable social price. Petroleum product subsidies create avenues by which people from all walks of life can benefit economically. The removal of general fuel subsidies in the 2000s went hand in hand with access to the industry for Ghanaian entrepreneurs, through OMCs and BDCs. The price increases have met significant public opposition and petroleum pricing still evokes a moral economy that refers to the state-citizen relationship. The 'politics' of petrol price were seen as negotiable. Moreover, there were still ways in which fuel subsidies were benefitting a wide range of people: through the Unified Petroleum Price Fund (UPPF), oil trading, smuggling and remaining LPG and premix subsidies.

The ways in which petroleum products were made political was amply demonstrated by the operation or non-operation of the downstream industry's petroleum infrastructure. It is useful to recount Timothy Mitchell's (2011, p. 42) argument that petroleum infrastructure minimises the negotiating power of citizens in relation to the state, and that through securitised zones and pipelines, "oil has altered the mechanics of democracy." The Ghanaian government owned sufficient operational

infrastructure to refine and distribute petroleum products from Tema in the south to Bolgatanga in the North. The periodic dormancy of these operations, keeping people expectant through referring to maintenance, was part of the 'politics' of petrol. The dormancy of the refinery meant that BDCs could import the total market share of petroleum products. The dormancy of the pipeline meant that petroleum products could trickle down along the road to informal markets, and that truck owners could take advantage of the UPPF.

My study of the petroleum industry in Ghana adds nuance to the current debates on oil and development in African studies. It does not support the established scholarship that suggests that the presence of petroleum revenues leads to a less democratic society and regresses development (i.e. Sachs and Warner, 2001; Collier and Hoeffler, 2004; Ross, 2012); nor can it be read to support recent scholarship that suggests that 'local content policies' are making hydrocarbon resources more likely to generate development (Heilbrunn, 2014; Ovadia, 2014). I suggest that closer attention to these industries from the vantage of everyday lived experience gives us a clearer perspective on the role of petroleum in societies and political systems. I believe this perspective can be sought by using anthropological tools to study work places in particular, which offers new insights into the working of an otherwise secretive industry (Shever, 2010; Appel, 2012). I have argued that petroleum products in Ghana are entangled in Ghanaian 'politics' in multiple, complex ways, and therefore provide practices and opportunities in which people can partake to shape the industry. While not without hierarchies of beneficiaries, the politics of petrol in Ghana provide multiple avenues for people to benefit from petrol politics.

Reform

To analyse the 2005 reform of Ghana's downstream petroleum industry, I took inspiration from Brenda Chalfin and Elena Shever. Chalfin's work demonstrates how neoliberal reform at the port of Tema repositioned the state to gain new significance in the neoliberal political economy. She demonstrates how state regulation carried out by customs officials reveals ways in which to understand state performance and significance in the shaping and outcomes of reform. Contrary to the intentions of

neoliberal reform, which are designed to make the state a mere regulator of markets, Chalfin shows how institutions and places remerge as engines of state production, and become arbiters of neoliberal privatisation and multinational investment (Chalfin, 2010, p. 581). Also addressing the state's new role in neoliberal reform, Shever's work looks more closely at intimate kin relationships through which the petroleum industry in Argentina has come to operate. She demonstrates how kin relationships re-emerge and remained key to survival in the privatised Argentinian context. My work supports Chalfin's thesis that the state in Ghana remains a key economic and political actor throughout reform. There is, however, room for change in the industry, and this potential is best seen through looking at intimate relationships between petrol entrepreneurs.

Privatisation has been key to the deregulation reform in Ghana, as has the removal of petroleum product subsidies. Both objectives can be qualified as partially successful. However, the fact that private companies are importing and distributing petroleum products in Ghana does not mean that the state has withdrawn from the industry. State corporations such as Tema Oil Refinery and BOST remain important state assets that can be mobilised as needed. State-owned Goil is the largest Ghanaian OMC, and Go Energy was created as a state-owned BDC. Furthermore, it was somewhat difficult to determine where the government stopped and private sector began – demonstrating the crucial role that the state retains in distributing the highly political commodity.

The Ghanaian government established the National Petroleum Authority (NPA) in order to regulate the expansion of the industry, and to diminish public outcry around the removal of subsidies. The NPA embodied the good governance platform in its quest for accountability, efficiency and transparency – neoliberalism's technopolitical triumvirate (see Chalfin 2010, p. 233). Throughout the chapters of this thesis, I have examined how NPA representatives undertake detailed consideration of political circumstances in their workplace, and how the use of an independent regulator has further politicised the industry from the standpoint of entrepreneurs and civil society organisations. The inconsistent implementation of automatic pricing formula from the NPA demonstrated the continued political significance of pricing for the state, particularly at election time. As such, the NPA was an institution that

had fragmented and uneven access to regulating the industry, which was a secondary concern to the multiple 'politics' of petrol.

The chapters above have further demonstrated that the political strategies of new petrol entrepreneurs (Chapter Three), who rely heavily on social networks and kin relations to operate in the private market. The reform of Ghana's industry could only be analysed by looking at state practices and the response to these practices on the part of private entrepreneurs. By following these entrepreneurs and their investments in social relationships outside the realm of the state, the substantive changes that followed the reform start to appear. Sumaila was one of these entrepreneurs, having come from the Northern Region and based his businesses largely in Tamale and other towns in the north. He, and a few others, provided stable access to fuel in the north, even at the time of national shortage (Chapter Seven). This stability marks a significant change for a region that previously struggled with fuel shortages and its effects.

Upstream - downstream

My introduction started off by emphasising the series of expectations generated by the discovery of oil and gas in 2007, and the rapid development and production start of the Jubilee Field in 2010. The exponential growth that followed in Ghana's downstream petroleum industry has been perhaps the most visible and clear link that binds the two industries together – that is, if we see them as separate industries in the first place. Ghana has been extracting from the Salt-pond Field since the 1970, as well as conducting traditional 'downstream operations' such as refining and distribution at the same time. However, it was only with the discovery of the Jubilee Field that Ghana's petroleum industry was separated and distinctively referred to in terms of upstream and downstream sectors.

With the entrance of the Jubilee partners and the Jubilee project, there was a change in the language used in media platforms, from government officials, in reports and by the Jubilee partners. The Jubilee Field was not part of what was established in Ghana, it was *new*; it created a new industry, separate from the already-established petroleum industry. What followed was the set-up of workshops in the new oil-city,

Takoradi, the establishment of new institutions such as the Petroleum Commission, and a gradual shift in prestige, until the most desirable workplace became the upstream petroleum industry. International companies headed the new industry, and its exclusivity was clear.

During a talk at the annual Oil and Gas Summit in Accra in 2013, I listened to a speaker from the British High Commission answering a few heated questions from young Ghanaians in the audience. A number of job-seeking Ghanaians had turned up to the summit, and as recipients of government or private scholarships (GNPC and Tullow Oil have large scholarship schemes), these youngsters were asking for the opportunities in the oil industry that everyone had been talking about just a few years before. The response from the British diplomat echoed a consensus that had been built up: one does not simply get a job in the upstream industry. The British diplomat gave a longer speech about how the upstream industry did not require a huge work force, but technical and specialised knowledge for a few expert jobs.

The first place the upstream-downstream divide came to matter in my fieldwork was at Tema Oil Refinery (Chapter Two). Everything about the Jubilee Field and Jubilee oil had been given heightened importance. When Tullow Oil claimed that the refinery was not able to refine Jubilee oil in 2011, there were not many questions from journalists or politicians. After all, the refinery was a state-owned corporation, which was assumed to lack the necessary technical prowess as a result of mismanagement and lack of maintenance. The Jubilee oil, on the other hand was of high quality, not suitable for a local African refinery. The distinction was made clear between the new, international- and expert-led Jubilee venture, and the old, local and corrupt refinery.

The Circle explosion and consequent patrolling of filling stations in the Ashanti region led to the examination of a key feature of the global petroleum industry: safety. I have argued that the vast difference between safety in upstream and downstream industries is a result of a continuous processes of differentiating the two sectors – reinforcing global inequalities of labour between upstream and downstream. The lack of safety at Ghanaian filling stations often led to further conversations about inequalities between workers in the upstream and downstream. Safety and salary

reflected and further fuelled the distinction between upstream and downstream. Upstream was a workplace worthy of protecting human life and profit, entangled in a web of international companies and workforces. Downstream was the less profitable end of the industry, local in all its forms, and while it had massive importance to Ghanaians – as shown throughout this thesis – it did not matter to the Jubilee partners.

Fernando Coronil's (1997) study of the Venezuelan state and its use of 'oil magic' is useful to draw upon again in interrogating this upstream-downstream divide. The illusion of magic, where crude oil is turned into oil money, still prevails in policy as much as in scholarly research, and hampers critical investigation into industry dynamics and divisions. There is a need to investigate the production chain, flows of capital, people and social categories. Oil is perhaps the foremost global commodity, and it fuels our modern society. The politics of this commodity, often dressed in economic garb, produce labour conditions and discrimination throughout the value chain. The continued ignorance of production networks enables the deepening of categories such as upstream and downstream. These divides produce and maintain inequalities in workplaces in the petroleum industry, as well as being reflective of north-south global relations.

Conclusion

The twists and turns in the story of the downstream industry told in this thesis do not offer a simple or linear explanation of the transformation undergone during reform; but they highlight continuities and realignments in the politics of petrol. I have argued that the downstream industry provides avenues for people to take advantage of practices and products, and that the 'politics' of petrol is part and parcel of petroleum products entanglement with the Ghanaian democracy. This politics of petrol was simultaneously inclusive and exclusive, with a productive ambiguity in which 'politics' embodied both tangible and less-tangible categories of political influence, which were open to change. We have seen these dynamics in fuel subsidies and taxes, in the production of petroleum products at Tema Oil Refinery, in distribution through pipelines and storage depots, and in the policing of safety regulations and illegal activities.

Appendix 1:Petroleum Price Build Up per 20th November 2014

PETROLEUM PRODUCTS PRICE BUILD-UP EFFECTIVE NOVEMBER 20, 2014										
		PRICES IN GHANA PESEWAS						PREMIX		
Ca h	PREMION	KERDSENE (DOMESTIC)	KEROSENE (MINES) -	CAS GIL	MGO LOCAL	RFO	LPG	PREMIX	UMFIED	
EX-REFINERY PRICE	228,5748	235,7659	235.7659	229,5910	232,4215	161,6312	237,1006	125.5108	215,7469	
EXCISE DUTY	2.7810	1,0075	1.0375	1,8010	0,2945	3,2094	0,7248		2,7800	
TOR DEAT RECOVERY LEVY	8,0000			3,0000	3,0300	4,0000	5.0000		8,0000	
ROAD FUND	7,3231			7,3231			۸.	-1	7,3231	
ENERGY FUND	0.0500	0,0500	0,0500	0.6510		0.0500			0,0500	
EXPLORATION	0,1000	0,1020	0,1000	0.1010	0.1000	0.1000		0,1000	0.1000	
CROSS-SUBSIDY LEVY	5,0000	-4,8440	-4,8449	-2.6087	-6,2287	-1,3937	-18,4042	-0.3608	5,0000	
PRIMARY DISTRIBUTION MARGIN	8,5000	0,5010	6,5000	6,5020						
BOST MARGIN	-/-5,0000	3,0020	3,6000	3.0020				×.		
FUEL MARKING MARGIN	1,0000	1,000	1,0000	1,0000	1,000			1,0000	1,0000	
TEOFFOOT	2094311	2 243,6016	249.60es	264,6724	230,5171	157.00	224,6210	125 2400	240.00	
SPECIAL PETROLEUM TAX	45,9081	121 ~ 42,6315	42.6315 -	44,5677	40.3528		39,2737	9	42,0020	
UPPF	9,0000	10,0000	10,0000	9,0000	9,6600		10,0000	9,0000		
MARKETERS MARGIN	12,6200	12,8200	12,6200	12,6200	12.8200	1 4	8,1500	12.5200		
DEALERS (RETAILERS/OPERATORS) MARGIN	5,9400	8,9400	8,9400	8,9400	8,9400		6,3850	8,9400	3	
LPG FILLING PLANT / Premtx/MGOLocal Admin Costs				20.0	0,3000		4,7753	0,3000		
DISTRIBUTION COMPENSATION MARGIN		i - I					1,0000	100	790	
PROMOTION MARGIN	at 2	7,0000	7,00,00					Sec. 150	/	
NOICATIVE MAX MUM PRICE (EX-PUMP PRICE)	319,10	125.00	22.00	310,60	302.00		294.00	157.00	262 00	
All Prices in Ghana Pesewas Per Litre except LPG in Gliphig EXPORT PRICES OF PETROLEUM PRODUC		SVEMBER 20, 2014	GAS OL 10 Tre Mile	GAS OL TO THE MINES	¥ en			gajor ==		
EX-REFINERY PRICE	92.00	98,00	94.00	94.00						
EXPORT DUTY	2.00	2.00								
TOTAL	94.00	100,00	94,00	94.00						
*TAXES/LEVIES & MARGINS APPLICABLE TO GASOIL	TO THE MINES & RIG (EX	CLUDING UPPF)								
COMPONENT	Gas oil to Rig - (GHp/Lt)	Gas oil (Mines) - (GHpiLt)								
TOR DEBT RECOVERY LEVY	1,6000	9,6000 8,0000								-
ROAD FUND	7.3231	7,3231								
ENERGY FUND	9.0510	9,0500								
EXPLORATION CROSS-SUBSIDY LEVY	9,1000	2,1000 -2,6987								
PRIMARY DISTRIBUTION MARGIN	8,5000	9,5000								61
BOST MARGIN FUEL MARKING MARGIN	1,000	3.0000								
SPECIAL PETROLEUM TAX	44.5677	44,5077								
MARKETERS MARGIN DEALERS (RETALERSHOPERATORS) MARGIN	12 8200 8 9400									
DEPARTMENT OF THE PROPERTY OF	8,9400	# 94(O)								

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