

Chapter 15

Oil and Gas Discoveries in Kenya: Important Global Exploration and Production Value Chain Lessons for the Society

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ABSTRACT

This chapter introduces the key constituent activities of the oil and gas industry and aims to outline the core benefits that the recent oil and gas discoveries in Kenya herald to the country's expectant population. It describes and analyzes the global oil and gas industry with a focus on its strategic, financial, and business aspects. It also identifies the opportunities for participation in the industry value chain through which the oil and gas revenues can be of benefit to the Kenyan people. However, the study's focus is on the creation of social value at the community or country level rather than on private shareholder value. Moreover, the chapter only examines upstream activities—that is, exploration and production—even though the implications might also apply to midstream and downstream activities.

INTRODUCTION

The objective of this chapter is to highlight how Oil and Gas, as a new resource bequeathed to the Kenyan society can be used to bring economic and social transformation to the country and people. Thus, the industry dynamics, key constituent activities of the Oil and Gas industry, and value chain opportunities that can benefit the country are explained.

The chapter is organized into five sections, explaining: the history of exploration in Kenya, the industry-community interface, global industry dynamics and stakeholders, the oil and gas value chain, and implications for the future.

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HISTORY AND HIGHLIGHTS OF EXPLORATION ACTIVITIES IN KENYA

According to the National Oil Corporation of Kenya (nd) there are four principal exploration basins in Kenya: the Lamu Basin, the Anza Basin, the Mandera Basin, and the Tertiary Rift Basin. The exploration basins are split into 46 blocks, out of which 39 are licensed to 22 different operators, including one block that is reserved for the National Oil Corporation of Kenya.

Oil exploration in Kenya began in the 1950s, with the first well being drilled in 1960. British Petroleum and Shell began exploring in Kenya in 1954 in the Lamu Embayment, where they drilled 10 wells. None of the wells were fully evaluated or completed for production, despite several indications of oil staining and untested zones with gas shows. In the following decades, limited exploration yielded nothing.

There has been a renewed and intensified interest in the Kenyan upstream oil and gas (O&G) sector following discoveries of O&G deposits in the country in the last few years and further spurred by earlier similar discoveries in neighboring East African community partner states Uganda and Tanzania.

Currently, the Ministry of Energy and the National Oil Corporation of Kenya are mandated to negotiate and sign contracts on behalf of the Kenyan government with international oil exploration investors to participate in the O&G exploration in Kenya. The terms and conditions of petroleum exploration contracts are subject to negotiation and are governed by:

- The Petroleum (Exploration and Production) Act Cap 308 1986 revised edition.
- The Petroleum (Exploration and Production) Regulations.
- The Income Tax (Amendment) Act made to specify the fiscal regime applicable to petroleum operations.

In addition to the five production sharing contracts (PSCs) that the Kenyan government has entered into with Tullow Oil and its partners for exploration in the Tertiary Rift Basin, the government has also entered into PSCs under which exploration is taking place in the Lamu and Anza basins (Ministry of Energy and Petroleum, 2016). There has been a good deal of transactional activity surrounding these PSCs in recent years, with several new ones lined up. For example, in February 2016, Africa Oil ceded a part of its interest to Maersk Oil of Denmark in a transaction referred to as a “farm in,” which is a positive sign, as it signals the entry of a major player in the field apart from just the independents (Maersk Oil, 2016). At the same time, Pancontinental Oil & Gas of Australia and its joint venture partner PTT Exploration and Production Company of Thailand withdrew from Block L10A in the Lamu Basin offshore, where oil had already been discovered, citing high operational costs. Pancontinental held 18.75% interest and PTT held 31.25% interest, leaving the only remaining operator, BG Group, with a 100% stake (Irungu, 2015).

Following exploration activity in recent years, the Ministry of Energy and Petroleum (2016) has indicated that the four basins- that is Lamu, Anza, Mandera and Tertiary Rift have yielded different results. In the Lamu Basin, 20 wells have been dug, out of which 10 indicated traces and out of these 2 discoveries have been made. One with gas and another one with oil. 6 wells in the basin were however declared dry wells. In Anza basin, 17 wells were dug and 9 of them had some show, but only 1 discovery has been made and in total 7 wells were regarded as dry and abandoned. The Tertiary Rift is where the largest number of wells have been dug, that is, 35 in total. Out of these, 4 wells had shown traces. There were also 9 exploration discoveries in this basin. One was found with oil and gas and another one was found dry. The Mandera Basin meanwhile has not provided any positive results. 2 wells were dug but were considered dry even though one of them has just oil seep.

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