

A FIVE-YEAR OVERVIEW OF EGYPT'S CRUDE OIL PRODUCTION

By Amina Hussein

Egypt has a long history as an oil-producing nation. Exploration first started in 1860, leading to the country's first oil discovery, the Gemsa field - which was discovered around 140 years ago. Having first pumped oil in 1910, it has now become the largest oil producer in Africa that is not part of the Organization of Petroleum Exporting Countries (OPEC).

Most of Egypt's crude comes from the Western Desert and the Gulf of Suez, while the remainder comes from the Eastern Desert and Sinai regions. The Mediterranean, Nile Delta, and Upper Egypt regions combined do not exceed 2% of the country's total annual production.

The Gulf of Suez area has supported oil production in Egypt since the 1960s; however, most of its fields are now mature. Since 2000, the Western Desert has emerged as the country's key oil-producing region and has compensated a large part of the declining production from the Gulf of Suez.

Egypt's crude oil production is supported by its developed infrastructure, low production costs, and relatively large volumes of both onshore and offshore fields. This report analyses the country's oil output from 2013 to 2017.

EGYPT'S TOTAL PRODUCTION OF CRUDE OIL

Egypt produced around 211.33 million barrels of crude oil each year between 2013 and 2017. Production peaked at 222 million barrels in 2015, before falling to its lowest level of 200.13 million barrels in 2017.

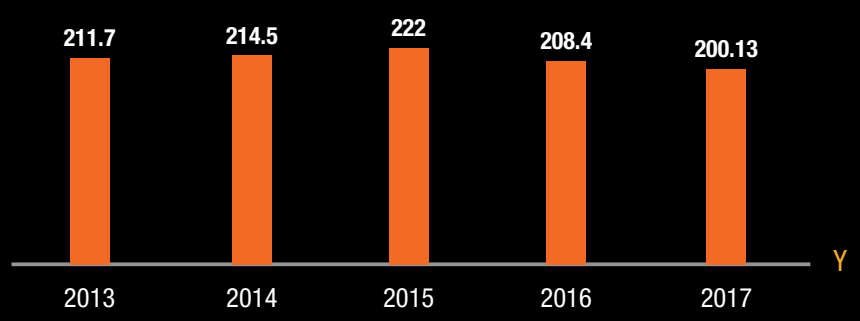
The decline in the production between 2015 and 2017 was driven by a combination of factors: the decrease of atmospheric pressure, the increase of sand movement, and the increase of water produced from the wells, which is caused by an aging reservoir.

A report by the Egyptian General Petroleum Company (EGPC) also admitted that the delay of development projects contributed to the falling output.

KEY PRODUCTION AREAS

Figures show that between 2013 and 2017 the Western Desert produced the most crude oil on average, followed by the Gulf of Suez. The Eastern Desert and Sinai contributed the least, with both regions sharing relatively similar average annual production.

EGYPT'S TOTAL CRUDE OIL PRODUCTION (2013-2017) MILLION BARRELS



Source: EGPC

WESTERN DESERT

From 2013 to 2017, the Western Desert witnessed a steadily increasing trend. It moved from representing 50.2% of Egypt's crude oil production in 2013 to 54.7% in 2017. The region produced an annual average of 111.64 million barrels during the comparison period, accounting for an average of 52.8% of Egypt's total annual production. In 2015, the Western Desert experienced a production peak of 118.76 million barrels. On the other hand, output was lowest in 2013, producing an average of 106.23 million barrels.

Oil companies have given increasing amounts of attention to the Western Desert. In the past few years, the Western Desert witnessed a series of major oil discoveries, including new fields in the Faghur, Shushan, Alamein, and Matruh basins.

GULF OF SUEZ

The Gulf of Suez's large mature fields are now less productive than before, having operated for 40 years. Production witnessed a continuous decline between 2014 and 2016, decreasing from a peak of 51.48 million barrels in 2014 to 45.72 million barrels in 2014. On average, the production of crude oil coming from the Gulf of Suez represents 23.1% of Egypt's total production over the comparison period.

EASTERN DESERT

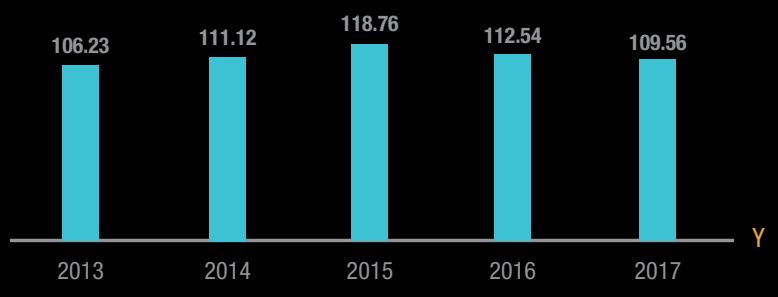
From 2013 to 2017, the average crude oil production in the Eastern Desert accounted for 11.7% of Egypt's annual production. However, the annual average fell 3.8% over the period. From 2013 to 2016, production declined by 28%. In 2013, the production reached 29.12 million barrels and declined to 21.02 million barrels in 2016.

In 2017, production increased again in a sign of the developments taking place in the area. Mohsen El-Noby, chairman of the General Petroleum Company (GPC), said during the company's general assembly in January 2018 that two oil fields were discovered in fiscal year (FY) 2017/18.

SINAI

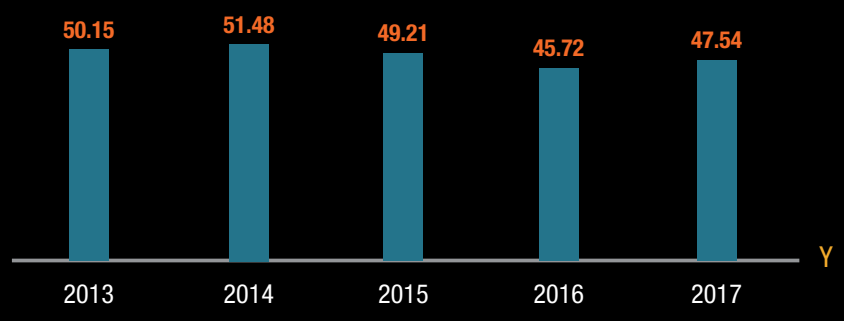
Like the Eastern Desert, the Sinai region have experienced a slow decline in production, falling from 25.23 million barrels in 2013 to 19.40 million barrels in 2017. It peaked at 25.40 million barrels in 2015. Over the analyzed period, Sinai's share in crude oil domestic production declined from 11.9% to 9.7%. The region contributed with an average share of 11% to Egypt's crude oil total production, equivalent to 23.03 million barrels per year (b/y).

WESTERN DESERT'S CRUDE OIL PRODUCTION (2013-2017) MILLION BARRELS



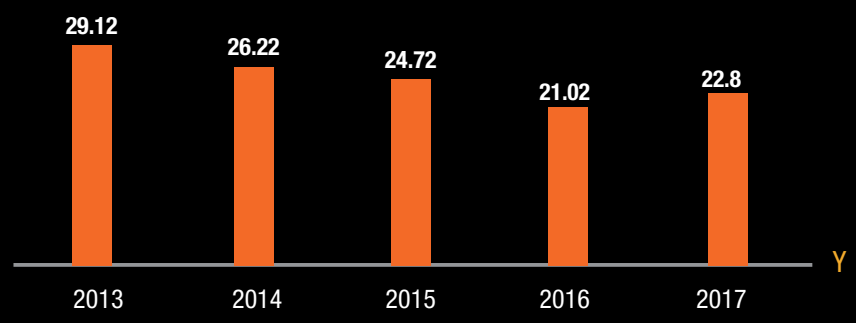
Source: EGPC & EGAS

GULF OF SUEZ'S CRUDE OIL PRODUCTION (2013-2017) MILLION BARRELS



Source: EGPC

EASTERN DESERT'S CRUDE OIL PRODUCTION (2013-2017) MILLION BARRELS



Source: EGPC

TARGETING PRODUCTION INCREASE

The Egyptian crude production has recently witnessed a decreasing trend. This declining trend combined with an increasing domestic consumption of oil products resulted in a consumption- production gap that must be narrowed down. Based on this, the government is following different paths to narrow this gap, including rationalizing energy subsidies and increasing crude production.

The government's plan to increase its domestic production of crude oil and narrow this gap is supported by the crude discoveries recorded annually, especially in FY 2012/13 - when it recorded 57 discoveries. However, this number declined recently as only 24 discoveries were announced in FY 2015/16. This motivated the Egyptian government to focus on the exploration activities and offer bid rounds.

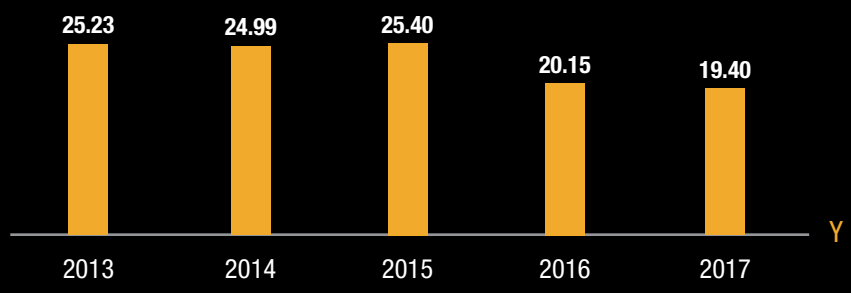
Recently, the Ministry of Petroleum and Mineral Resources (MoP) announced a new agreement to drill seven oil wells in the East Bahariya concession in the Western Desert with $9 million investments and a signature grant worth $30 million. Moreover, in September 2017, GPC announced its latest exploration tender in the Eastern Desert. Concessions offered in the bid round included Wadi Dara and West Gharib.

To increase the opportunities, the state is not only supporting exploration in the most known producing regions, but also tends to highlight the less known frontier areas, such as the Red Sea and Upper Egypt.

The MoP announced, during the second half of 2018, that two bid rounds will be held in Blocks A and B in the Red Sea, each covering 20,000 sq km. The agreements are expected to be signed with the winners by the first quarter of 2019. Similarly, Ganope will offer Block C in the Red Sea.

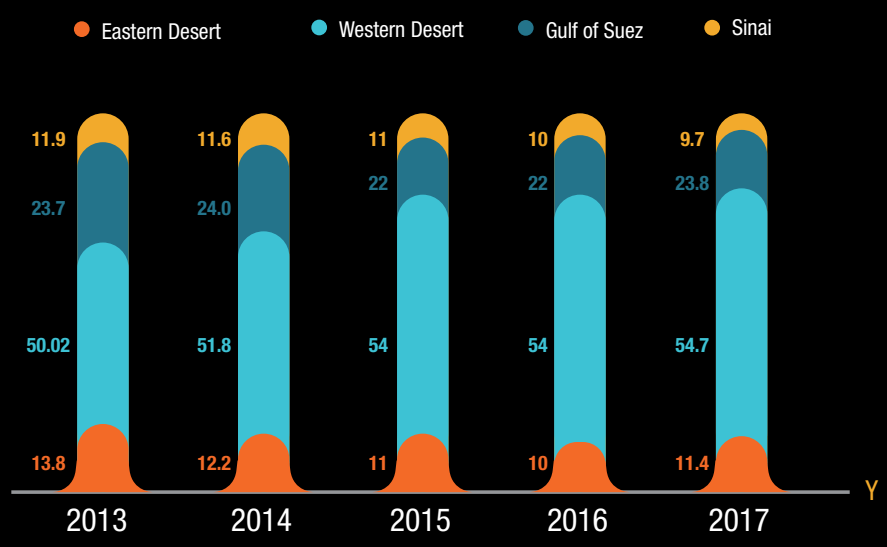
The MoP is hoping to announce at least one bid round in the Red Sea every year starting in 2020, according to various media reports quoting minister of petroleum, Eng. Tarek El Molla.

SINAI'S CRUDE OIL PRODUCTION (2013-2017) MILLION BARRELS



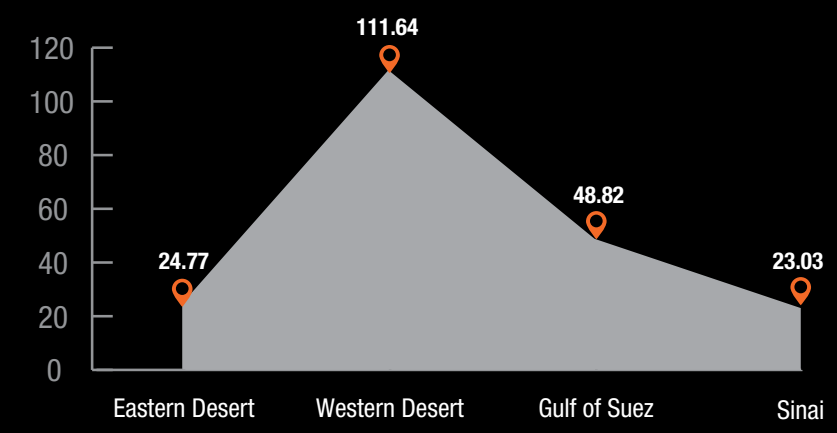
Source: EGPC

KEY AREAS SHARE IN CRUDE OIL PRODUCTION (2013-2017) %



Source: Calculations Based on EGPC Data

CRUDE OIL ANNUAL AVERAGE PRODUCTION BY AREA MILLION BARRELS



Source: Calculations Based on EGPC Data