

A New Alliance? Geospatial Analysis of Russian Influence in Egypt

Thursday, October 23, 2025 1:40 PM (20 minutes)

In recent years, Egypt's relationship with Russia has strengthened significantly, particularly since the presidency of Abdel Fattah el-Sisi in 2014. This alliance, marked by military cooperation and strategic investments, signals a shift in Egypt's foreign policy as it seeks to diversify international partnerships beyond traditional allies like the United States. Russia's involvement in key sectors, especially energy and military development, has played a central role in this transformation, focusing on high-profile projects such as the El Dabaa Nuclear Power Plant and the Zohr Gas Field.

We aim to use ArcGIS to explore the geospatial relationships between Russian investments and Egypt's energy infrastructure, specifically in the Mediterranean region. We focused on key locations such as the El Dabaa Nuclear Power Plant, the Zohr Gas Field, and critical Mediterranean ports. These locations are integral to Russia's broader geopolitical strategy, as they provide access to vital energy resources and trade routes, while also helping Egypt secure a more stable energy future.

Geospatial data from satellite imagery and trade network analysis reveals that Russian investments have significantly increased in these areas, contributing to both Egypt's energy independence and Russia's influence in the region. Analysis of the El Dabaa project, which is primarily financed by a Russian loan, indicates that this nuclear power plant will play a pivotal role in diversifying Egypt's energy mix, reducing its reliance on fossil fuels, and improving its position as an energy provider in the region.

Furthermore, data analysis from 2015-2020 shows that Russian collaboration in Egypt's energy sector, including the Zohr Gas Field and other oil and gas reserves, has not only strengthened economic ties but also enhanced Russia's geopolitical influence, providing access to critical resources and strategic trade routes like the Suez Canal. The increased presence of Russian firms in these sectors suggests a long-term shift in Egypt's international alliances and energy policies.

Our results reveal the growing economic and geopolitical interdependence between Egypt and Russia, with implications for energy security, regional power dynamics, and international trade routes. This type of GIS analysis could be applied to other regions experiencing similar shifts in international relations, providing valuable insights for policymakers and researchers monitoring the geopolitical landscape.

Is there a SINGLE day you are unavailable to present?

Is there a time of day you are unavailable to present?

Organized Session Details

Author: LONG, Shamari (Harris-Stowe State University)

Co-author: Dr WILLS, Freddie (Harris-Stowe State University)

Presenter: LONG, Shamari (Harris-Stowe State University)

Session Classification: Student Poster Competition

Track Classification: Energy