



## A Systematic Review for the Implementation of Risk Management within Construction of Mega Housing Projects

**Mohamed Nabawy**

*School of the Built Environment and Architecture, London South Bank University, 103 Borough Road, London, SE1 0AA, UK*

*Department of Civil Engineering, The British University in Egypt, Misr-Ismalia Road, El-Shorouk City 11837, Cairo, Egypt*

**Charles Egbu**

*School of the Built Environment and Architecture, London South Bank University, 103 Borough Road, London, SE1 0AA, UK*

**Maged Morcos**

*Department of Civil Engineering, The British University in Egypt, Misr-Ismalia Road, El-Shorouk City 11837, Cairo, Egypt*

Contact: [Nabawy.moh@gmail.com](mailto:Nabawy.moh@gmail.com)

### Abstract

Recent years have seen an increase in the number of Mega housing Projects around the world. This increase was to cater for increased population growth, increased urbanisation, scarcity of land, and due to changes in the way we work and live. This trend is likely to continue for a while. Mega housing projects are characterized by their high construction budget, complexity, and their benefits to the society. Mega housing projects, however, raise a number of different challenges and complexities, which need consideration in order to successfully deliver them within cost, time and specified quality parameters. The paper addresses the main construction challenges and opportunities of mega housing projects. Furthermore, consideration is given to the human resources (HR) challenges and opportunities, as well as the efficiency of risk management processes throughout the construction of mega housing projects. Different Case studies are analysed, and a risk register for the successful delivery of mega housing projects in construction is proffered. Conclusions for the benefit of contractors, policymakers, and academics are documented, together with selected recommendations around "value-add" from effective risk management of new mega housing projects.

**Keywords:** Mega Housing Projects, Challenges, Opportunities, Risk Register, Project Management, Construction, Construction Success.