

# Risk Reorganization and Hazard Assessment in the Development of Ocean Harbour Construction Using Qualitative Method

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**Abstract:** *The construction industry of India is passing through a very challenging phase. Heavy infra structuring like Ports, Roads & Highway for logistics and transportation, Dam construction for water reserving and irrigation, Airports extension, Urban transportation like Metros, Bus Transport system Flyover poised to grow exponentially within last 15 years. This situation leads to excellent opportunities for the construction industry in terms of business opportunity. In today's dynamic business landscape, technology and innovation projects play a key role in creating competitive advantages for the Construction companies like TATA Projects Ltd, Italian Thailand Development Cementation India Ltd, HCC Ltd, Larsen & Turbo India Ltd, Afcons Infrastructures Ltd etc. Port & Harbors are the basic infra for the logistics and transportation of goods for international trade. India peninsular the sixteenth largest maritime country of the world surrounded by Bay of Bengal and Indian Ocean.*

*The largest number of injuries occurs in the construction industry has compared to other industries. Many projects are often hampered by underperformance. This indicates the lack of risk management we manage the projects. Thus, reducing the accidents and determining the risks are extremely important. On the other hand, it is impossible to have any projects without risks. Thus, it is much more essential to have an effective risk management rather than trying to eliminate the existing risk. These factors have guided this study to focus on understanding the way risk assessment is performed in the construction projects.*

*A detailed study was carried out to understand the causes of accidents, preventive measures, and development of safe work environment. This paper aims to list-out the hazards & then taking the suitable safety measures/precautions to minimize the hazards. To achieve this aim, the frequency, likelihood and severity of hazards from the most common activities in construction of harbor berth, are assessed. The data for this study were collected by quantitative approach applying semi-structuring interviews with various interviewees holding different roles in the project within a port birth constructions.*

**Keywords:** Hazards, risk, Harbour, construction, severity, accidents, near miss, injury, mock drill, training, Piling, Diaphragm wall, Dredging, Drowning, Safety, Electrical, Mechanical, Barge, Training, Fire etc.