



Environmental Clearances for High Rise Buildings

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Abstract : *Rapid industrialization and population explosion has led to the migration of peoples from villages to cities which increase human settlement in world's growing cities and towns. This generates several issues with regard to the environment. Environmental Impact Assessment (EIA) is becoming a very important study before commissioning of any project plan or development in our country. In order to study either its beneficial or harmful effect; evaluation of any project through EIA has become a must; Indian construction industry is rapidly growing at a rate of 9.2% as against the world average of 5.5%. Undertaking EIA for construction industry and improving site management can reduce environmental impacts both on and off site. Several agencies use procedures for EIA of construction projects which might result in significant environmental impacts. The EIA study is necessary to prepare a detailed account of environmental impact of the proposed activity so that appropriate actions could be taken.*

An attempt has been made in this project report to study environmental clearances required for high rise building construction project using checklist analysis methodology. The study focuses on various parameters such as shadow analysis, wind analysis, zoning, water quality and nearest sensitive zones (coastal zoning). The plan attempts to define the project in a whole manner and suggest possible mitigation measures for development. The project report argues that through early planning before the start of the project as well as through all phases of the project's development, if environmental concerns are considered simultaneously with other technical and economic criteria, it may be possible to develop the housing projects with the protection of natural resources of that area.

Keywords-Environment Impact Assessment(EIA), Screening, Scoping, Environmental Clearance(EC),Mitigation

I. INTRODUCTION

Infrastructure development has adverse impact on environment. Environment attributes such as air, water, soil, noise, hydrology, natural drainage, land-use pattern, demography and socio-economy of the area are affected. With an economic growth rate of 7.9%, India is fast seen emerging as a major global business giant. With 53 cities with populations in excess of 1 million, and more cities joining the list, investments in urban infrastructure are projected to be higher than ever before. Great population densities and increased land prices created a demand for high rise buildings. The gross built-up area added to commercial and residential spaces was about 40.8 million square meters in 2004-05; the trends show a sustained growth of 10% over the coming years. But the Construction activities in India have been pursued without giving much attention on environmental issues. This has

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resulted in pressure on its finite natural resources, besides creating impacts on human health and environment. Unplanned and unsustainable urban development has led to severe environmental pressures. The green cover, ground water resources have been forced to give way to the rapidly developing urban centres. Modern buildings built in our cities have high levels of energy consumption because of requirements of air conditioning and lighting. Environmental clearance is a tool applied to identify potential parameters, to assess impacts due to project activities and apply mitigation measures to recover them. The main objective of this report is to study about the environmental clearances required for high rise buildings around the world.

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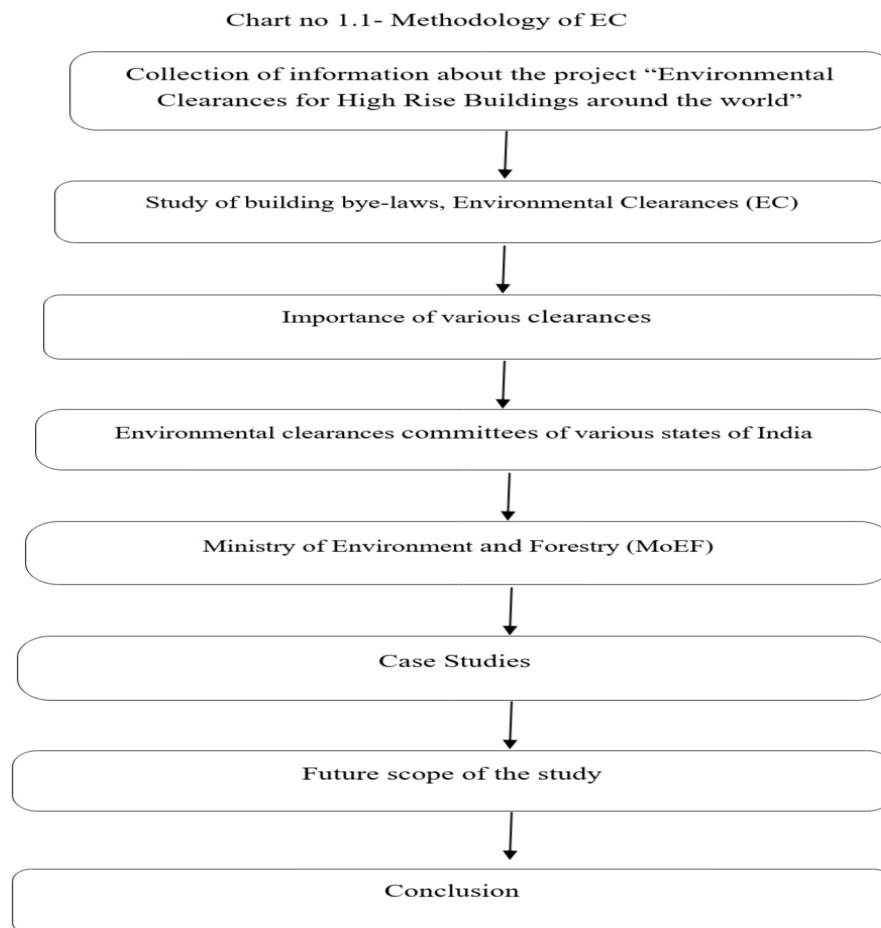
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Due to rapid industrialization and population explosion the migration of peoples from villages to cities has increased human settlementn world's growing cities and towns. This generates several issues with regard to the environment. Construction activities in India have been carried on without giving much attention on environmental issues. This has resulted in pressure on its finite natural resources, besides creating impacts on human health and well-being

To deal with such problems, this report has focused on various parameters such as shadow analysis, wind analysis, zoning, water and air quality and coastal regulation zoning. Case Study of high -rising structure in Malabar hill, division of Altamount Road has further helped us by knowing the exact Situations and problems occurring for EC in various ways. During natural calamities such as Earthquakes, Tsunami etc., the structure has to resist natural forces like Seismic, Wind, etc. Thus, while designing the structure we should consider these forc and Obtain prior permission. In order to protect our nature and to put a stop on illegal construction in urban and coastal areas, the study of environmental clearances is necessary

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