

“Valuation of Buildings with Greenness Perspective”

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Key words: Education; Engineering survey; Professional practice; Quantity surveying; Valuation;

SUMMARY

India has progressed since independence (15th August 1947), through two important revolutions viz: Green Revolution and White Revolution. The green revolution was meant to grow more food so that everyone would have stomach full food. The white revolution was implemented from 1980 to increase growth of milk and its products so that everyone may get healthy food. Green building materials consumes less energy associated with the excavation, extraction, transport, processing of virgin materials. Therefore "a green building is one which uses less water, optimizes energy efficiency, conserves natural resources, generates less waste and provides healthier spaces for occupants, as compared to a conventional building." Major benefits of Green Buildings include: • Energy savings to the tune of 40-50 % • Water savings to the tune of 20-30% • Intangible benefits which includes: enhanced ventilation, better views and day lighting which significantly improves the productivity of the occupants • Green corporate image and commitment of environmental protection A number of green building professional articles and studies emphasize the importance of greenness cost analysis to explain the cost benefits, however, there is little evidence whether it is actually being performed, and to what degree the studies undertaken are influencing project stakeholders. The objectives of this research paper are: i) To explore existing greenness criteria and modify them for determination of market value of different buildings. ii) To identify green building materials and products to conserve natural resources, besides being cost effective, energy efficient etc. iii) To promote green building practice in the country. The authors have developed a mathematical model on the basis of LEED Ratings laid down by USGBC to determine market value of buildings without ignoring its greenness aspects. In present practice the valuers' do not include greenness factors in their valuation reports meant for Investment, Bank finance or Capital gains purposes etc. The model will be of great help to architects and valuers to account for greenness aspects while determining the market values of buildings. **KEY WORDS-** Green building materials, LEED, LCC, Greenness assessment model