

## SUSTAINABLE GREEN BUILDING ENVIRONMENT

**BHARATI S. SHETE<sup>1</sup> & JANHAVI SONAR<sup>2</sup>**

<sup>1</sup>Assistant Professor, Department of Civil Engineering, Dr. Sau. Kamaltai Gawai  
Institute of Engineering & Technology, Darapur, Amravati, Maharashtra, India

<sup>2</sup>Deogiri College of Engineering & Technology, Aurangabad, Maharashtra, India

### ABSTRACT

Construction industry is one of the industry which uses largest quantities of natural resources throughout its life span. That is starting from construction, site selection and land use and after completion, water bodies, lighting, ventilation, maintenance etc. In each of these cases we are using natural resources but nowadays these resources are diminishing rapidly and it's the time to go for the sustainable development that is to preserve these natural resources for our future generations. In order to conserve all these natural resources here comes the concept of green building.

Generally, the green building is considered to be an environmental component, as the green building materials are manufactured from local eco-sources, i.e. environmentally friendly materials, which are then used to make an eco-construction subject to an eco-design that provides a healthy habitat built on the cultural and architectural heritage in construction while ensuring conservation of natural resources. This ensures disassembling the building components and materials, after a determined building lifetime, to environmentally friendly materials that can be either re-used or recycled. During their lifecycle, the green buildings minimize the use of resources (energy and water); reduce the harmful impact on the ecology, and provide better indoor environment.

Sustainability was defined nearly thirty years ago as 'progress that serves the needs of the present without compromising the ability of future generations to meet their own needs'. Today, population growth, finite resources and recognition of climate pattern anomalies possibly resultant from resource depletion and fossil fuel combustion gases are motivating architects, builders, designers and owners to demand products that use resources wisely. This social consciousness and the financial reality of increasing energy costs has dramatically shortened payback periods for investment in sustainable alternatives, so that, put simply, it pays to be green.

So in this paper author discusses in detail that what is the green building and what is the difference between green bldg. and ordinary bldg. what are the objectives to go for green building? How to achieve these concept? And what are the measures or how we came to know that our construction is going towards green building concept.

**KEYWORDS:** Green Building, Natural Resources, Energy, Water Use, Sustainability