



**HSPCB**



**SEIAA Haryana**



**SEARCH Foundation**

**Brief Report on  
Workshop-cum-Conference on  
“Green Building: Striding towards Environment  
Protection & Clearance”  
June 04, 2016, Red Bishop Tourist Resort, Panchkula, Haryana**

**On the eve of  
World Environment Day  
(Theme: Join the race to make the world a better place)**

**Organised by  
State Level Environment Impact Assessment Authority (SEIAA), Haryana  
Haryana State Pollution Control Board (HSPCB)**

**Co- Organised by  
SEARCH Foundation, New Delhi**



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## Introduction

Consequent to globalization and liberalization of the Indian Economy, there has been a new found prosperity all over the country. This has also led to boom in real estate development. The country is currently experiencing a spurt in construction activities. **Highways, Overbridges, Under passes, Malls, SEZs, Housing Complexes** are coming up in various parts of the country. This is putting strain on the environment and the ecology. Vast areas, which were under cultivation earlier, are turning into concrete jungles. The concept of environment friendly or “green” buildings has not really picked up in the country. The shift from conventional construction to “**green construction**” is yet to materialise. This is basically due to cost considerations as well as lack of dissemination of knowledge with respect to its technology, technique and materials. It is well acknowledged that buildings consume major part of energy in construction and maintenance. They are responsible for about 25-40 % of energy consumption, 30-40 % of material resource consumption, 30-40 % of waste production and 30-40 % of the greenhouse gas released globally. Inefficient and improper garbage disposal systems, shortage of water and other civic services are imposing unbearable burden on urban and city life.

## Green Buildings

Green design principles are universal. Green Buildings aims to provide optimum design solutions effectively emulating all of the natural systems and conditions. Most of the GB (Green Building) rating systems touch on the same chord i.e. “Conservation of Resources”. An indigenized version of the LEED (Leadership in Energy and Environment Design) rating system is prevalent in India. LEED India Rating System has been adopted by CII-IGBC (Confederation of Indian Industries- Indian Green Building Council), Hyderabad. TERI (The Energy & Resources Institute) has evolved its own rating system called GRIHA (Green Rating for Integrated Habitat Assessment) with support from Ministry of New and Renewable Energy (MNRE), Government of India which stresses on a holistic approach for shared responsibilities and accountability towards improved energy performance. This system has now been endorsed by Government of India.

## Workshop-cum-Conference

In order to promote the “**green philosophy**”, amongst stakeholders viz. builders, buyers, service providers and the sanctioning authorities and enhance their commitment towards nature for preservation, maintenance and sustaining environment and ecology, **State Level Environment Impact Assessment Authority (SEIAA), Haryana and Haryana State Pollution Control Board (HSPCB)** along with **SEARCH Foundation** organized a one day Workshop-cum-Conference on the topic “Green Building: Striding Towards Environment Protection & Clearance” at Red Bishop Tourist Resort, Sector-1, Panchkula on June 04, 2016 (the eve of World Environment Day).

The aims/ objectives of the Workshop-cum-Conference were to:

- Support the creation of a set of principles and planning tools for green buildings
- Set clear targets to achieve the fast adoption of green buildings in India, including high targets for carbon neutral or net zero energy buildings, together with effective performance monitoring to track progress towards achieving these targets
- Promote dissemination of knowledge of Green Buildings
- Facilitate a fast track Environmental Clearance (EC) with effective solutions to the problems faced by the stakeholders in the process
- Strengthen Corporate Environment and Social Responsibility (CESR) practices of corporates by developing guidelines for creation of Nodal/Sub Nodal centre at district level on environment and social management based on the *Janam Bhoomi- Karam Bhoomi* concept

## Technical Sessions

The Workshop-cum-Conference was accordingly divided in three technical sessions as follows:

<b>Technical Session 1</b>	<ul style="list-style-type: none"><li>• <b>Way forward towards smooth environment clearance regime</b></li></ul>
<b>Technical Session 2</b>	<ul style="list-style-type: none"><li>• <b>Encouraging adoption of green building practices</b></li><li>• <b>Major aspects involved during Environment Clearance appraisal process</b></li></ul>
<b>Technical Session 3</b>	<ul style="list-style-type: none"><li>• <b>CESR Guidelines Review</b></li><li>• <b>Block level initiatives and subsequent discussion on Janam Bhoomi - Karam Bhoomi</b></li></ul>

The Workshop-cum-Conference was addressed by leading experts and authorities on various aspects. The subjects covered, included major aspects involved during Environment Clearance (EC) appraisal process and encouraging adoption of Green Building practices. There was a separate session dedicated towards CESR. A proposal on creation of Nodal/ Sub Nodal centres for Environment & Social Management at District/ Block level was presented.

## Exhibition

There was an exhibitors section at the venue of the Workshop-cum-Conference where sustainable models were exhibited for better management of natural resources. A number of working models were displayed which included:

- ❖ An Organic Waste Converter - EXCEL Industries Ltd.
- ❖ Sewerage Treatment Plant, RO Systems, Rain Water Harvesting - Thermax Ltd.
- ❖ Effluent Treatment Plant - Maruti Suzuki Ltd.
- ❖ Solar Power Systems - Inter Solar Systems (P) Ltd.
- ❖ Green Materials - HAREDA



## Participation

The Workshop-cum-Conference was attended by

- Authorities from Central Pollution Control Board (CPCB), various State Pollution Control Boards (SPCBs) and Department of Environment, Government of Haryana
- Expert Appraisal Committee members, Ministry of Environment, Forest & Climate Change, Government of India (EAC, MoEF & CC)
- SEIAA/SEAC Members, Govt. of Haryana (State Level Environmental Impact Assessment Authority/ State Expert Appraisal Committee, Government of Haryana) and SEAC members and dignitaries from various other states
- Professionals and Experts including academicians
- SEIAA/SEAC Members from Various others States.
- Builders/ Architects/ Environment Consultants



## Programme Schedule & Highlignhts

### Inaugural Session

- ❖ Welcome Address – Member Secretary, SEIAA
- ❖ Launching of :
  - Online Web Portal for EC Clearence
  - Guidelines for creation of Nodal/ Sub-Nodal centres in Haryana for Environment and Social Management
- ❖ Inaugural Address by Hon'ble Chief Minister of Haryana
- ❖ Address by:
  - DG, DoE & Member Secy., SEIAA, Haryana
  - Chairman, HSPCB
  - Chairman, SEIAA, Haryana
  - Chairman, EAC (Infra), MoEF&CC, GoI
  - Joint Secretary, MoEF&CC, GoI
  - Chairman, Haryana Chamber of Commerce & Industry
  - MLA, Panchkula


### Highlights:

- Hon'ble Chief Minister of Haryana, Shri Manohar Lal, inaugurated the event and participated in the Plantation drive.
- Hon'ble Chief Minister launched Online Web Portal for Environment Clearance (EC) and released a Guiding Document for the creation of Nodal/Sub-Nodal Centers for environment and social management in the State of Haryana (Janam Bhoomi – Karam Bhoomi Concept).
- He emphasised on a balanced development regime- the concept of 3 R's – Reduce, Reuse and Recycle.
- Considering the overall benefits to the State, the Government may consider suitable scheme to encourage Green Buildings in Haryana.
- Panchkula MLA, Shri Gian Chand Gupta laid strong stress on Protection of Environment.
- Shri Anil Razdan IAS, Chairman, EAC (Infra-2), MoEF&CC informed of zero energy green buildings and their pivotal role in managing resources by the Building & Construction Industry on a sustainable basis.
- Shri M. K. Singh IAS, Joint Seecretary, MoEF&CC empahised on need for expediting environment clearance in a time bound manner.
- Shri Bharat Bhushan, Chairman, SEIAA, Haryana suggested that Green Buildings may be given FAR incentive in the state to encourage activties in this area. He further stated that Environment Department is proposing integration of CESR (Corporate Environment and Social Responsibility) with EC.





Technical Sessions	
Session-I	<b>Environment Clearance (EC) &amp; Compliances</b> ❖ Way forward towards smooth environment clearance regime
<b>Highlights:</b> <ul style="list-style-type: none"><li>• The galloping process of urbanization will take urban population from 27.5% in 2001 to 40% in 2020.</li><li>• Urban areas with little vegetation can experience higher temperatures up to seven degrees than those with tree cover.</li><li>• Properly planted trees can cut heating and cooling costs by as much as 12% and reduce overall power demand in Urban Areas.</li><li>• ‘Green Buildings’ is a decisive step in the right direction encouraging conservation of resources, preservation of environment and reduction of pollution.</li><li>• SEIAA/SEAC may focus on thrust areas of environmental sustainability including waste water treatment, recycling &amp; reuse, ground water recharge, solid waste management etc. during construction and post construction phases.</li><li>• Efforts to be directed to pursue timebound environment clearances.</li></ul>	
Session- II	<b>Green Building</b> ❖ Encouraging adoption of green building practices
<b>Highlights:</b> <ul style="list-style-type: none"><li>• Available natural resources are under increasing pressure due to population growth, industrial development and climate change.</li><li>• Buildings fulfil our primary need for shelter. Thus consumption of resources in the construction is unavoidable. However, this consumption process has to be wise, judicious and non-wasteful.</li><li>• United Nations Framework– Convention on Climate Change states that urban areas are responsible for 70% of global energy consumption and CO2 emission. By 2030, 82 billion sqm (an area equal to 60% of total stock of world) will be built; By 2050 the building sector needs to achieve Zero carbon built environment.</li><li>• Water scarcity has been identified as one of the main constraint for social and economic development in developing countries like India.</li><li>• Increased urbanization is driving an increase in per capita water consumption in towns and cities. Wastewater has increased significantly. In absence of proper measures for treatment and management, the existing freshwater reserves are being polluted.</li></ul>	



<ul style="list-style-type: none"> <li>Water resource management in building construction and operation has a long way to go - commencing with mapping of the resources and deployment of sustainable technologies including rain water harvesting.</li> <li>Similar to the carbon footprint of a green building, a water footprint for the building construction industry needs to be developed to promote sustainable management of natural resources.</li> <li>In the wake of the Workshop-cum-Conference, the Government of Haryana also has come up with the approval of Haryana Green Building Code 2016* to sustainably manage the resources. The same says about increase in permissible Floor Area Ratio (FAR) for following sustainable norms in the Building &amp; Construction Sector.</li> </ul>	
<p>Session- III</p> <p><b>Corporate Environment &amp; Social Responsibility (CESR)</b></p> <ul style="list-style-type: none"> <li>❖ CESR Guidelines Review</li> <li>❖ Block level initiatives and subsequent discussion on Janam Bhoomi - Karam Bhoomi</li> </ul>	
<p><b>Highlights:</b></p> <ul style="list-style-type: none"> <li>CESR goes beyond compliance and engages in initiatives that further social good beyond the interests of the enterprise.</li> <li>The Companies Act, 2013 has brought this to the forefront towards enhancing inclusiveness in the socio-economic development process of the country.</li> <li>The CESR guiding document proposes creating Nodal/Sub-Nodal Centres at District/Block level on environment and social management in Haryana incorporating the concept of Janam Bhoomi - Karam Bhoomi.</li> <li>Environment and Social Development initiatives should focus on involvement of the local community.</li> <li>District/ Block level government support could be prime drivers of CESR programmes.</li> </ul>	

\*<https://www.huda.gov.in/News%20%20Updates/The%20Haryana%20Building%20Code%202016.pdf>

The event had the blessings and support of many eminent authorities and luminaries actively involved in the propogation of the concepts of sustainable development and preservation of environment. We place on record our thanks & gratitude to the following dignitaries:

- Shri Manohar Lal, Hon'ble Chief Minister, Haryana
- Shri Gian Chand Gupta, M.L.A, Panchkula, Haryana
- Shri Anil Razdan, IAS, Chairman, EAC (Infra), MoEF&CC, GOI
- Shri M.K. Singh, IAS, Joint Secretary, (Impact Assessment), MoEF&CC, Govt. of India
- Shri Bharat Bhushan, IAS, Chairman, SEIAA, Haryana
- Shri S. N. Roy IAS, Principal Secretary, Dept. of Environment & Chairman, HSPCB
- Shri S.K. Goyal, IAS, Member Secretary, SEIAA & DG, Dept. of Environment, Haryana
- Shri G. R. Goyat, Chairman, SEAC, Haryana
- Prof. M.S. Khan, Chairman, SEAC, U.P.



- Shri S. Narayanan, IFS, Member Secretary, HSPCB
- Dr. P. B. Rastogi, Former Advisor to the Govt. of India, MoEF&CC
- Shri Vishnu Goyal, Chairman, President, Haryana Chamber of Commerce and Industry
- Dr. Punit Ghai, Member, SEIAA, Haryana
- Shri Raj Kumar Sapra, IFS, Member, SEAC, Haryana
- Shri S.C. Mann, Member, SEAC, Haryana
- Shri Hitender Singh, Member, SEAC, Haryana
- Shri A. K. Bhatia, Member, SEAC, Haryana
- Dr. S. N. Mishra, Member, SEAC, Haryana
- Shri R. S. Rana, Former Member, SEAC, Haryana
- Shri Azad Singh Hooda, Former Member, SEAC, Haryana
- Shri Jit Kumar Gupta, Co-Chairman, IGBC Chandigarh Chapter
- Dr. S. N Singh, Member, SEAC, UP
- Dr. S. C. Brahmachari, Member, SEAC, UP
- Shri Amit Lunia, Member, SEAC, Rajasthan
- Shri Sudhir Saksena, Former Head, Performance Management & Socio Economy, EIL (MoPNG) and Convener, SEARCH Foundation
- Shri Sanjay G. Ubale, MD, TATA Realty & Infrastructure Ltd.
- Shri Prakash Patil, Vice President, TATA Realty & Infrastructure Ltd.
- Shri Karun Singh, Project Manager, TATA Realty & Infrastructure Ltd.
- Shri Vachan Singh, Director, TATA Housing Development Corporation
- Shri Anil Khera, GM, TATA Housing Development Corporation
- Shri Umesh Goel, GM, TATA Housing Development Corporation
- Shri Rajeev Jha, DGM, Godrej Properties
- Shri R.C. Bakshi, Chief Advisor, DLF Ltd
- Prof. V. Subramaniam, JNU
- Prof. A. L. Ramanathan, JNU
- Prof. B.P. Murthy, JNU ..... & many more dignitaries..



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