

EIA and Sustainable Buildings

What Ails EIA for Building and Construction Projects ?



Sakshi C. Dasgupta

Sustainable Building Programme, CSE

source: www.visualphotos.com



Buildings and Construction Projects

- Discussion on EIA and Buildings is Unique
- Environment Impact Assessment (EIA) is generally associated with industries, mining, hydropower, thermal plants etc.
- They are the more visible sectors in EIA
- The debate on EIA rarely features building projects and is generally the odd one out



Buildings Sector less Visible because..

- Regulatory Approach reflects this attitude
- Civil society still take up Building sector Issues
- For other sectors NGOs, people's organizations are actively Campaigning
- But there is little understanding about building sector impacts and pressures

Realization is Setting in...



- We are beginning to see the reactions and voices by the neighborhoods and communities
- People are now up in arms against projects that threaten their land, resources and existence
- E.g. Lavasa, Commonwealth Games Village, greater Noida (Bhatta parsaul), Vasant Kunj Ridge Malls, Mangar Bani
- That is the reason CSE's Sustainable Building Unit decided to take this up



What Buildings have done to our Cities ?

Gurgaon, Haryana, India

Google Earth - Gurgaon

Image © 2008 DigitalGlobe

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77° 01' 04.41" E

Eye alt 2.12 km

Google Earth - Bengaluru

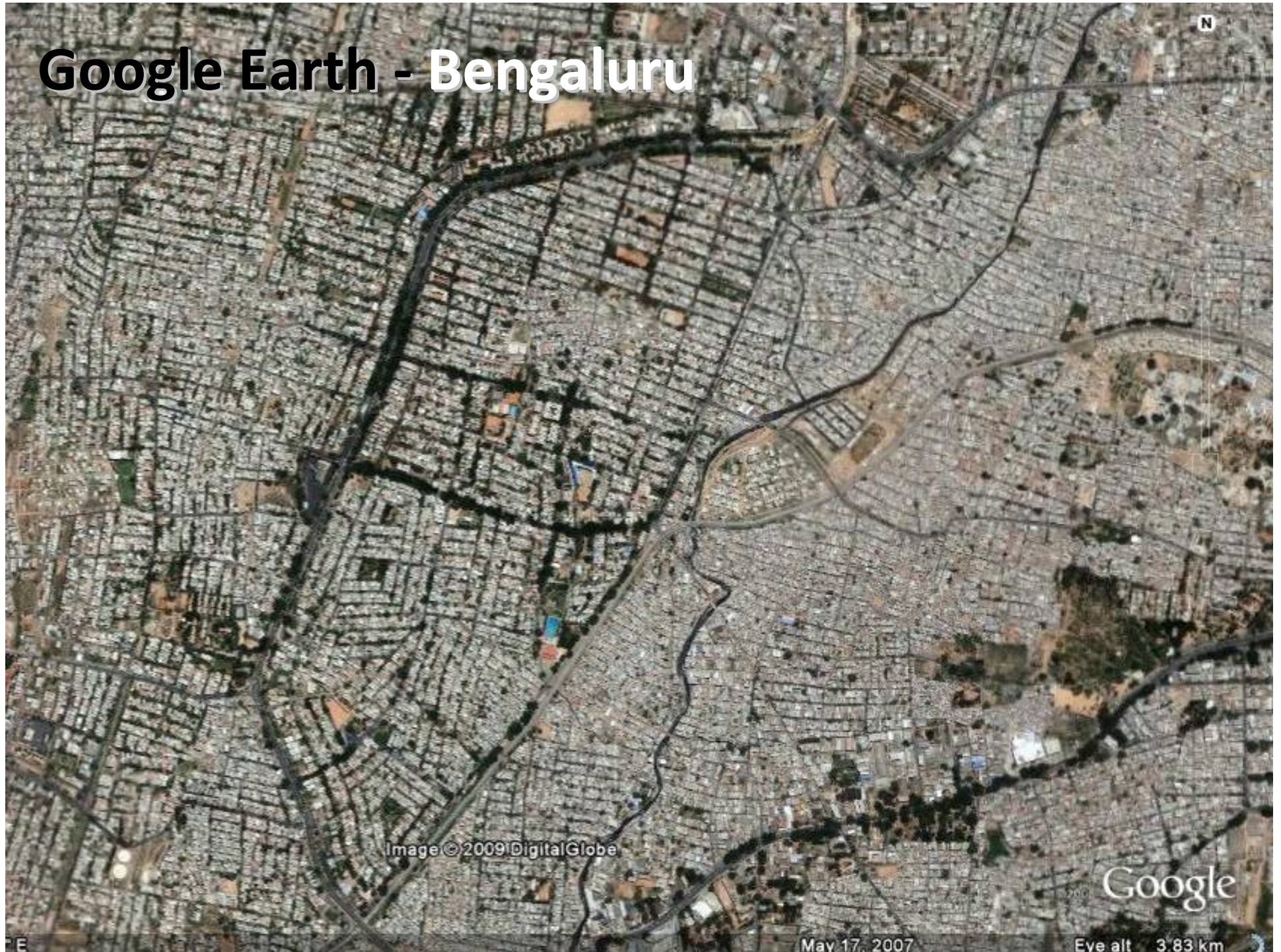


Image © 2009 DigitalGlobe

Google

May 17, 2007

Eye alt 3.83 km

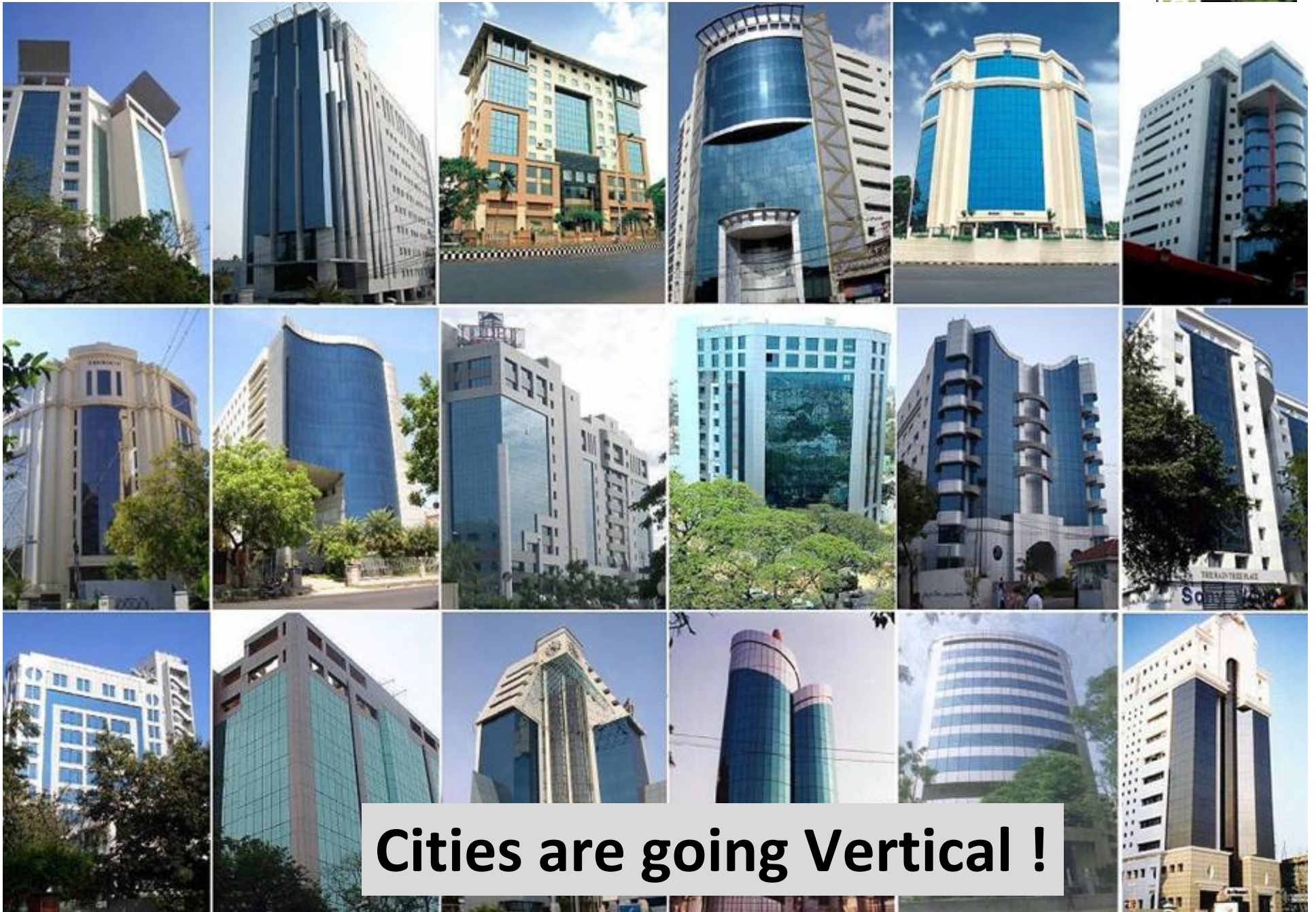
Google Earth - Hyderabad

Cities are becoming Dense !

Image © 2011 DigitalGlobe
Image © 2011 GeoEye

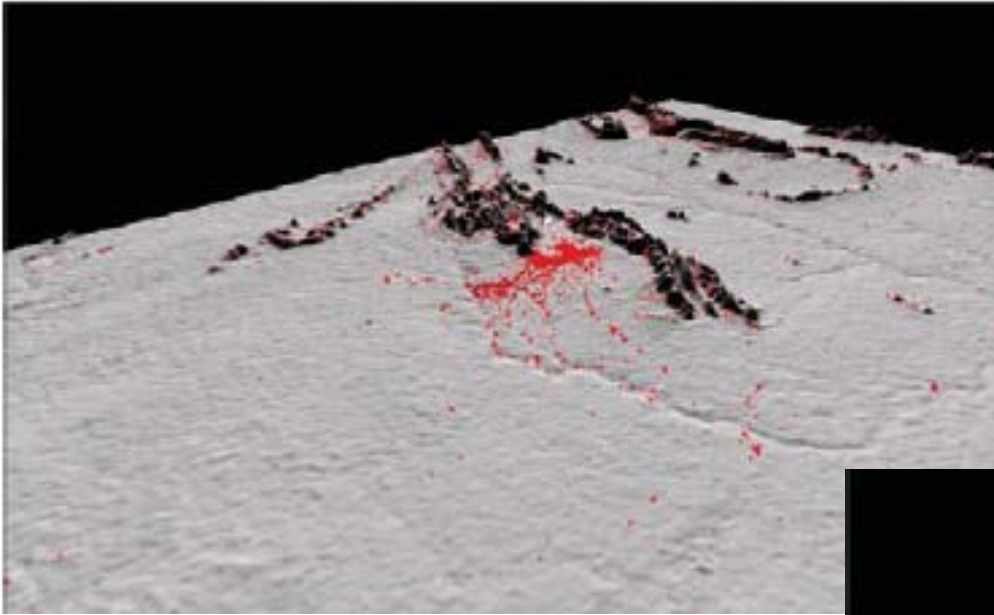
17°21'16.24" N 78°28'56.02" E elev 1676 ft



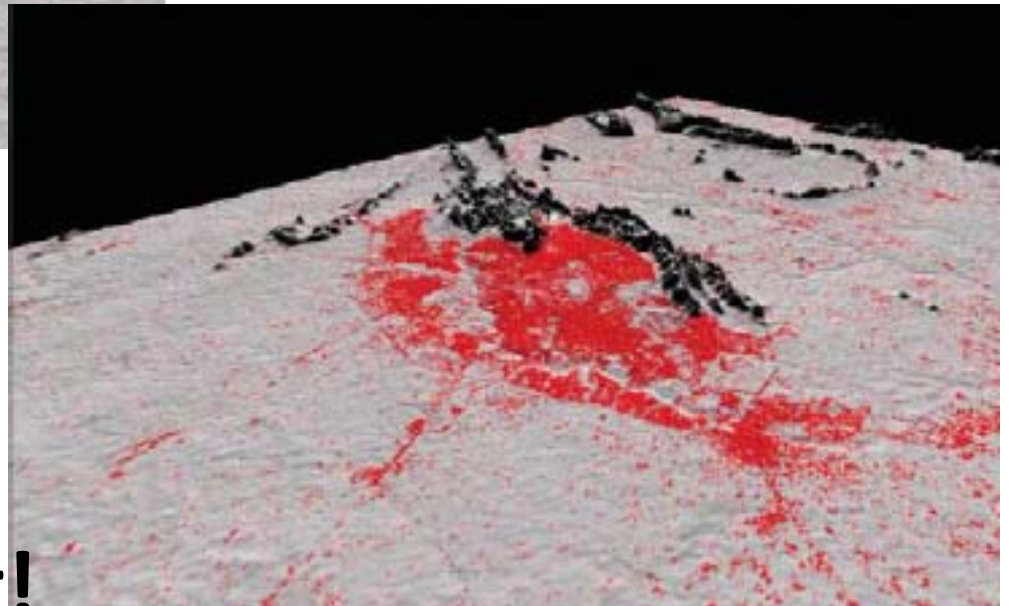


Cities are going Vertical !

Urban Growth in Jaipur



1975



Cities are Expanding!

Source: <http://sapiens.revues.org/932>

2008



Buildings - Vikas Community, Auroville
Source: CSE



Buildings- DLF city Gateway tower, Gurgaon
Source: 24x7bangalore.blogspot.com

Cities are changing Construction Styles!

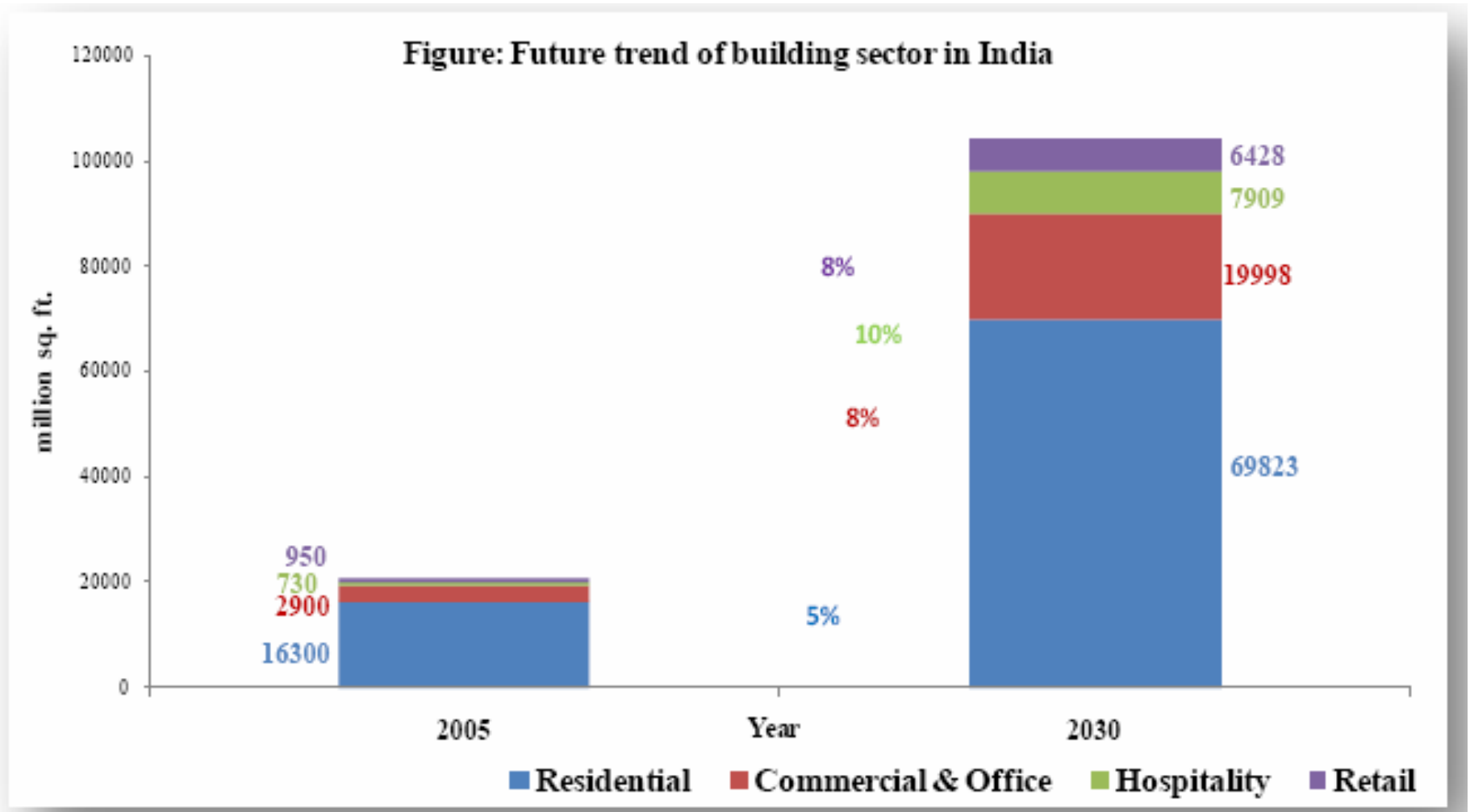
Buildings are a BIG Concern



- They consume more than 30% of Energy
- About 20% of Water
- Responsible for 30 % of Waste Generation
- Consume about 30% of Raw Material
- Responsible for about 40% of CO2 Emissions



Majority Building Stock Yet to Come



Source: Environmental Design solutions 2010/CW

Therefore EIA becomes Crucial, but



- We seriously need to see whether EIA is working and delivering ?
- **Environmental Clearance for building sector is for Namesake, Weak and Ineffective**
- Mere Formality of form 1 and 1A
- No Detailed Study, Assessment or Real Post Project Monitoring
- Implementation issues common to other sectors for which EIA is required

But some Specific Issues



- **Site Selection-** Site Location and Sensitivity Criteria not part of EC Review
- **Post Facto clearances:** Projects that never took clearance being granted post facto EC after construction and even operation
- **Build without consent:** There are no effective mechanisms to ascertain whether actual construction has started prior to the EC
- **Loophole in Project Classification:** MoEF yet to issue guidelines for townships projects' detailed EIA
- **Master plans need to have an EIA but not the Case**
 - e.g Mangar Bani



Specific Issues

- **Public Consultations:** MoEF's 2005 draft notification had public hearing clause, but was never incorporated in the 2006 Notification.
- **Subjective and Futile Rating for Proposal Documents:** Committees accorded ratings like gold, silver etc. to the reports; could be used by proponents for their projects promotion.
- **No Benchmarking-** Water, Energy allocation is not against benchmarks. So monitoring against what?

Specific Issues



- **Prior approvals without consent:** EC has been accorded to projects even prior to them receiving NOCs from local authorities
- **Environmental Clearance beyond area's Carrying Capacity**
- **Inconsistent and Contradictory Information**
- **Error in Estimation**
- **Cosmetic Conservation**
- **'COPY -PASTE' Job by Consultants**
- **Non Compliance in Critical EC Conditions**
- **Metering for Monitoring Missing**
- **Alignment with other building regulations – ECBC, NBC ???**
- **EC letters, Compliance Reports not Public on MoEF website**



NO BENCHMARK

CSE reviewed 51 'Minutes of the Meetings' Haryana's SEAC, 2008- 2009

- 2% of the total residential projects had actually stated 135 lpcd (CPHEEO)
- 22% projects had per capita water consumption >150 lpcd
- Variation 48- 226 lpcd
- 47% have lpcd 50-100
- Either these buildings are highly water efficient or these are unsubstantiated estimates

COPY PASTE

3 meeting of Haryana SEAC had absolute similar water requirements and wastewater generation. EC conditions were exactly similar.

But their built up areas are different, ranging from 19,000 - 1,48,000 sq mt

ECs IN WATER STRESSED AREAS

- 5th meeting of the Haryana SEAC held in March 2009 have granted EC to 3 projects from DLF despite recognizing water scarcity in the area
- Project falls in the 24 villages notified by the CGWA
- CGWA bans exploitation of groundwater in such areas
- HUDA will not be able to supply water to this project in 3 years



Mockery of EC

Proposed Residential colony 'estate one' Ludhiana Punjab - Contradictions.

- Form 1 states the total domestic water requirement as 902 KLD
- **Project water requirement has three different values in form 1 and 1A**

Bestech India's proposed IT-Complex, Parkview Business Tower, Gurgaon.

- Water requirement stated 1048 KLD
- Wastewater generated 330 KLD (only 30% will be wastewater generated)
- STP capacity 400 KLD
- **Thumb rule of 80 % - WW should be around 838 KLD, STP very low capacity**

Aditya Infracon in Jasola Delhi

- Claimed built up area was 19,991 sq mt.
- **Inspections revealed built up area was 20,323 sq mt.**
- Consent for withdrawal 120 KLD, withdrawing 230 KLD

Visible Non-Compliance to EC Conditions



Green belt ???



- **Not more than 40% glass in buildings**
- **No Surface Parking**



Problem Mindset ???

MoEF's EIA process views that as opposed to other Project Categories buildings should be cleared on the basis of form 1/ 1A and don't require detailed EIA Process because their impact on the environment is low.

But really, Buildings are waste creators as well as waste wasters!

What is the stand of Real Estate industry?



The Confederation of Real Estate Developers Association of India (CREDAI) proclaims

Real Estate Industry sees themselves as VICTIMS !

- **The only waste produced by purely residential, commercial retail projects is human waste**
- Environmental clearance process is tedious and herculean process; **needs to be discontinued with immediate effect**
- **Further leniency in the EIA process for building projects**
- Supported MoEF's proposal to relax the area criteria from 20,000 to 50,000 sqm
- **Wants EC's monitoring reports to be removed as it doesn't serve any purpose**
- Wants clearances by the planning authority at the planning approval stage, thus urban local bodies to provide clearances

MoEF Clueless on EC of Building and Construction projects



- Information shared by MoEF with CSE under RTI is minimal and partial.
- Further it took MoEF far more than a month to respond to the two RTIs filed by CSE.
- It makes mockery of the appraisal process as evident in the wide gap between information.
- See the RTIs filed by CSE and their responses by the MoEF on CSE website, [Conspiracy of Silence](http://cseindia.org/content/conspiracy-silence)
(<http://cseindia.org/content/conspiracy-silence>)



What CSE asked from MoEF?

List of Building 8(a) and Township 8(b) Projects reviewed and Cleared under the EIA Notification 2006

- **List of projects that applied for EC**
- **List of projects that got EC with location, Project Proponent, year of clearance, built up area, stated water and energy consumption**
- **Status of Compliance reports- Regularity**
- **List of Post Facto Clearances**



What MoEF replied

- *“No compilation of such information is readily available with the Ministry.”*
- *“Not possible to provide this information as it is spread out and any effort in this regard would disproportionately divert the resources of public authority”*
- The question is whether the compilation of building projects cleared by MoEF along with their basic details is wastage of public funds?
- If MoEF which is responsible for EC to projects does not have the information then who has it?

MoEF's Response to CSE's RTI



Conspiracy of Silence

S. No	Year	Projects that Applied for EC to MoEF
1	2006	785
2	2007	1235
3	2008	393
4	2009	53
5	2010	67
6	2011	181

S. No	Year	Projects Cleared by MoEF
1	2006	175
2	2007	640
3	2008	487
4	2009	101
5	2010	59
6	2011	52

- It seems that MoEF has grossly underestimated the building projects that have applied or have been granted EC since 2006.
- Partial data available only for a few states indicate that the buildings that come for EC runs into thousands a year with huge area coverage.
- But, only in one state of Haryana, *about 927 building projects have been reviewed for environmental clearance between 2008-2011*



So what are we saying then?

- **Master plans/Zonal plans to have rigorous EIA**
- **Public consultation to be included for high impact projects like townships, area development projects**
- **Regular and Stringent Post Construction Monitoring**
- **Absolutely NO Post Facto Clearances**
- **Selection of Site to be considered in the EIA process**
- **Improve Quality of Information, transparency and Public disclosure**
- **Issue guidelines for EIA for township projects to have detailed EIA**
- **Energy and Water Audits mandatory post operation**



So what are we saying then?

- **Enhance Capacity and promote coordination**
- **Introduce benchmarking of resource consumption**
- **Availability to determine Allocation- Carrying Capacity**
- **Harmonise Environmental Clearance with ECBC and National Building Code**



Thanks