



Cost-economics of Eco-Housing and Financing Opportunities

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Outline

- Economic growth in India and housing
- Growing housing sector in India
- Cost indices of housing construction
- That “additional” for Eco-Housing
- Benefits to the stakeholders - Policies
- Financing dilemma
- Opportunities – international experiences

Economic growth in India and housing

- Average growth in GDP is between 6 to 7%
- Mortgage finance market in India is less than 2% of GDP
- Huge gap in housing provided in the rural sector (addressed in the current budget); in urban sector, # housing projects have been increasing by more than 25% a year
- Higher stress on municipal corporations to provide for water, solid waste management and sewerage infrastructure

Growing housing sector in India

- In large cities and townships, at any given time, minimum 100 projects are under implementation
- Increasing demand for branded development – typical flat size is 1000 sq. ft.
- Highest growth seen in Pune, Bangalore, Hyderabad – cities that can define urban sprawl!

Cost indices of housing construction

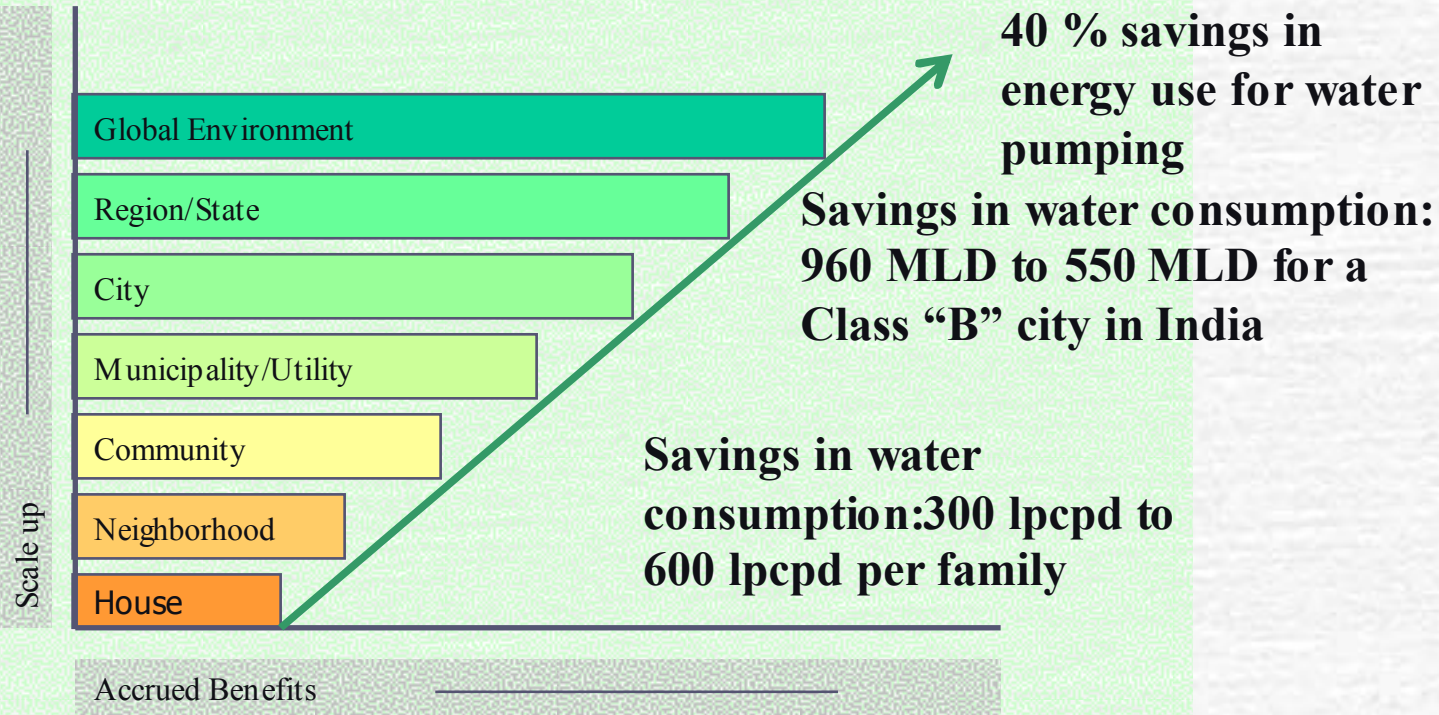
- Average construction cost in cities like Pune, Mumbai and Delhi is Rs.400- 800 per sq. ft (selling price ranges from Rs. 1500-2000 in Pune to Rs. 3,000-20,000 in Mumbai)
- 60 % cost towards structure and rest towards plumbing and electrical

Impact = Population X Resources/Population X Pollution/Resources

That “additional” for Eco-Housing

- ☞ Most popular practices adopted today:
 - Rainwater harvesting
 - Sewage recycling
 - Solid-waste management
 - Energy efficient lighting, appliances and exterior material like glass
 - Efficient use of energy in common areas
- ☞ Expected cost hike in the range of Rs. 50 to 70 per sq. ft of construction cost

Benefits to the stakeholders



Increasing Accrued Benefits of Eco-Housing

Increasing benefits with engagement of expanding value chain

Benefits to the stakeholders

☛ To home-owners

- Reduced electricity and water charges
- Reduced monthly maintenance charges
- Higher life-cycle for plumbing and electrical equipment

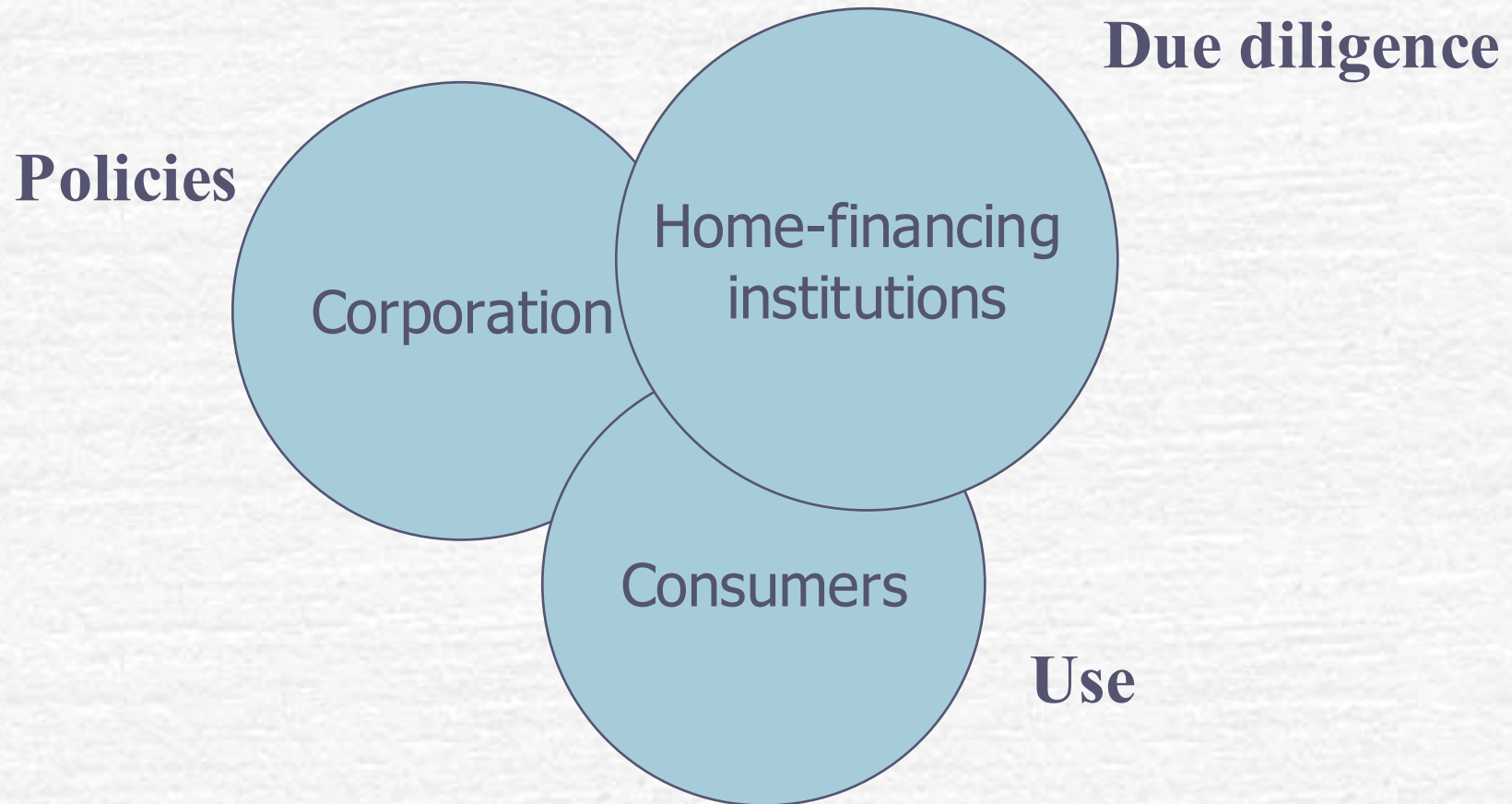
☛ To municipal corporations/utilities

- Reduced costs of water supply and electricity subsidies
- Reduced expenses on sewage treatment and solid waste management

Benefits to the stakeholders

- To home-financing institutions
 - Ability to recover more (increase in net disposable income for home-owners)
 - Additional branding of mortgage products
 - Higher life-cycle of housing financed – beneficial in re-financing
 - Meet Corporate Social Responsibility

Collaboration among the stakeholders



Market Transformation towards Eco-Housing



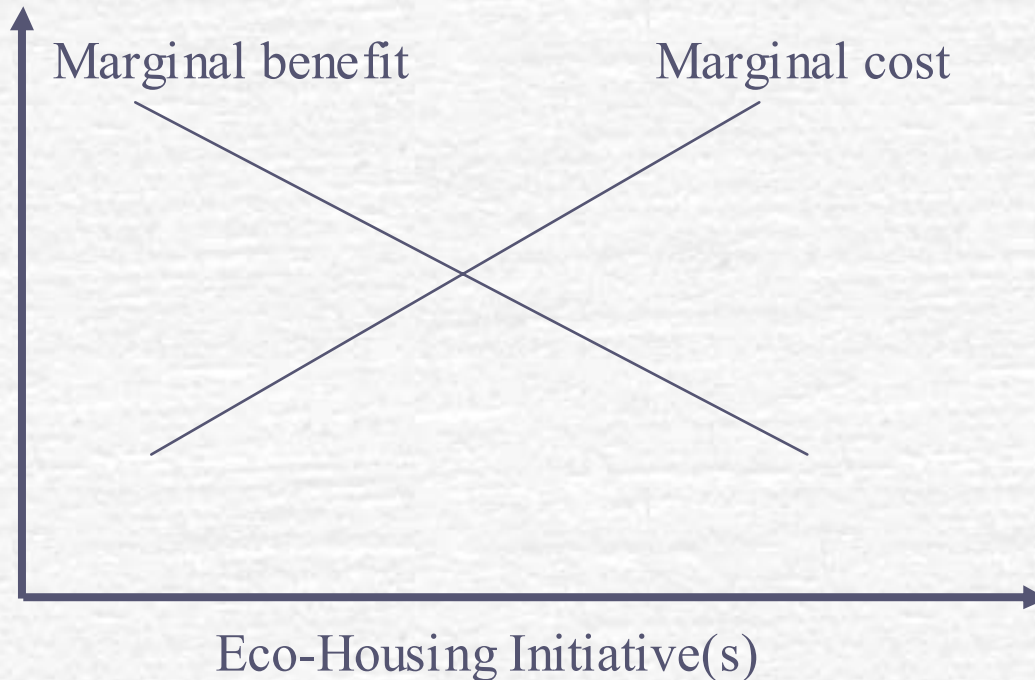
Financing dilemma

- Home financing market dynamics
 - Highly competitive, especially after the entry of banking sector
 - Changing interest rates – average 11.5% in 2000 to 7.5% in 2003-04
 - With higher inflation rates envisaged, fear of increased rate in the current year, increasing debate on fixed v/s floating rates

	SBI	HDFC	ICICI Bank	Notes
Up to 5 yrs	8.00	8	7.75	Source: ET (August 31, 2004) HDFC rates for < Rs. 10 Lakhs; All rates fixed rates
Up to 15 yrs	8.75	8	7.75	
Up to 20 yrs	9.00	8	7.75	
Above 20 yrs	NA	8	8.50	

Financing dilemma

- Real question to answer is who takes the burden?



Opportunities – international experiences

Energy efficient mortgages

- FANIE MAE, USA – supports branding of homes certified under the “Home Energy Rating System”
- The Co-operative Bank in UK offers Green Mortgages, offers a preferential rate lower than its standard variable rate
- Norwich & Peterborough Building Society offers a 1% discount on SVR for four years
- Ecology Building Society offers a 0.5% discount over SVR

Opportunities – India FIs

- ☛ Branding by financing institutions – proposed ways
 - Adopt certification of new development, bring Eco-Housing principles while lending to the builders/developers
 - Co-marketing of energy efficient housing with builders and architects
 - Support specific projects targeting housing development in key cities
 - Support specific retrofit projects



Thank you

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