

GREEN BUILDINGS GAIN GROUND

India is well positioned to emerge as one of the world leaders in green buildings

Dr Prem Jain

The Green Building Movement in India spearheaded by The Indian Green Building Council (IGBC) is a part of CII - Sohrabji Godrej Green Business Center. The council was formed in 2001 with 31 members to usher a green building revolution in India and to facilitate India to emerge as one of the world's leaders in green buildings by 2010.

The appearance of a green building is similar to that of other buildings; however the difference is in the approach, which revolves around a concern for extending the life span of natural resources and providing human comfort, safety and productivity. Today many people are attracted towards green buildings because they consume at least 40 - 50

% less energy and about 20 - 30 % less water than a conventional building. This comes at an incremental cost of about 5 - 8 % which gets paid back in about 3 - 5 years time. Over and above this, working in an environment with access to daylight is a soothing effect on the mind as the productivity of people who have access to day light is at least 12 - 15 % higher.

The cost of creating green buildings is slightly higher than that of conventional buildings. The incremental cost is always relative and it also depends on the extent of eco - friend-

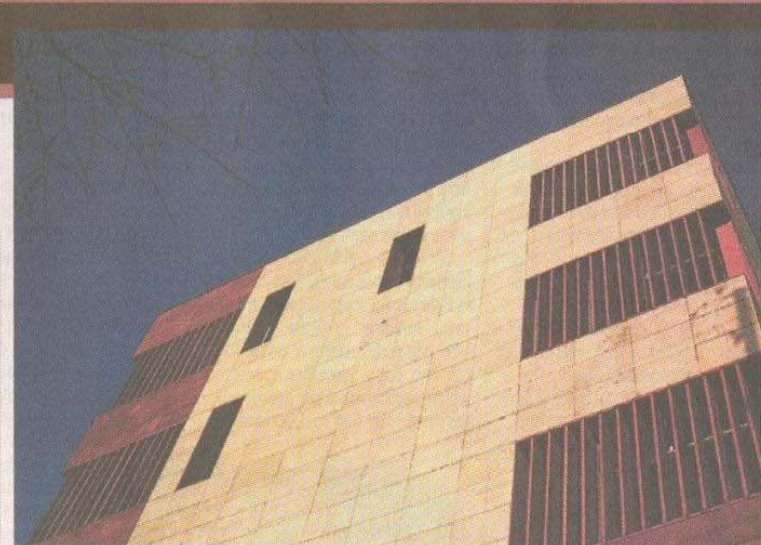
ly features already considered during design. The incremental cost would definitely appear small if the

baseline design is already at a certain level of good eco - design. However, it would definitely appear to be huge

if the base design has not considered green principles. One can also look at the incremental cost in relation to the life cycle cost. This kind of approach is extremely revealing as who knows if buildings would last for a span of 50, 60 or 100 years. Over its life cycle, the operating cost would work out to 80 - 85% while the incremental cost which is a one-time cost

is only about 8 - 10 %. Despite this there is definitely a market potential for green buildings, as today a lot of stakeholders are demanding green buildings from consultants and architects.

This has definitely resulted in an increased demand for green building materials and products. Many new materials and services have been introduced as a result of this movement such as high performance glass, wall and roof insulation, low VOC paint, eco - friendly chemicals, waterless urinals, CO2 sensors etc. Today the market potential for green building material and equipment is estimated to touch about Rs. 15,000 crores by 2010. And as mentioned before there is a gradual change in the mindsets of stakeholders. Earlier, there was a gen-



eral perception that materials with recycled content were inferior in quality, however this view is now gradually changing. And now with time the cost of green building material and equipment too is slowly showing a decreasing trend. For instance, waterless urinals, which would cost around Rs. 14,000 in 2001 are today available at Rs. 6000. The costs of many other

materials are also likely to show a decreasing trend as the movement accelerates.

Thus with the growing awareness on green buildings, the movement is well poised to reach greater heights. And as more green building activities are being initiated to further green the movement, the country is well positioned to emerge as one of the world leaders in green buildings.

FOCAL POINT

- ▶ The appearance of a green building is similar to that of other buildings; what is different is the approach to the project
- ▶ This revolves around the concern for extending the life span of natural resources, while at the same time providing comfort, safety and productivity
- ▶ Many people are attracted towards green buildings because they consume at least 40-50 per cent less energy and 20-30 per cent less water than conventional buildings

Dr. Prem Jain is the founder and the chairman of Spectral Services Consultants Pvt. Ltd., which has designed services systems for five Platinum Rated Green Buildings accredited by LEED (USA). They are currently designing services for a large number of green buildings throughout the country.