



landscape

architecture

DIGITAL VERSION ALSO AVAILABLE

SEEING THE UNSEEN



41

2013/14

इकतालीस

SWIMMING POOLS • RAINWATER



Samir Mathur

RATING THE RATING SYSTEMS

The genesis and growth of Green Rating systems is important to understanding and critiquing them. They were basically formulated to put a check on uncontrolled use of resources – land and water, all are related to landscape construction. Every truth about green is a matter of interpretation, like any language that you use, be it Hindi, English, or any other. It conveys different meaning in different contexts. It is true that rating systems depend more on the design elements and energy calculations to reach certain figures and numbers rather than actual working of the building. So, for the last few years it has been able to generate its own exclusive and elite “green industry” of green products, specialized glazing, vertical green walls, construction materials etc.

The rating systems with their limited scope should not be regarded something more than just a basic framework for sustainable development, that also which is evolving with each passing day.

The Green Rating movement, and LEED Rating System in particular,

originated from USA. It therefore has a strong American-centric bias and its goes out to solve problem related to resource intensive countries rather than developing countries, and there is a big difference between the two. In the US one can find air conditioned environments even in the economically weaker section housing developments whereas in India there is no such thing. So, to achieve the credit, you first aircondition a space and then remove the conditioning and you get credits. But in case like in India, if there is no air conditioning at all to start with, there is no provision to get credits. There is no base line for such construction. In USA due to the high ceiling heights of 3 metres and above and local climate conditions, the optimum temperature is taken as 24 degree Celsius, whereas here, in India we can manage with low heights of 2.4 2.7 metres and an optimum temperature of 27 degree Celsius.

At the same time the average US building is highly water and energy intensive and has a certain level of basic threshold of construction which is very high, while this is not the case in India. So

one can say that the LEED Rating System is not ideally compatible to rate Green Buildings in India.

The first Indian rating system TERI GRIHA came into being in 2007, and while it was a good move, it needs to evolve further. In many cases, we have the same set of professionals who facilitate projects to get the rating and at the same time assess the building documentation for green credits, leading to a conflict of interest. When LEED AP professionals came in picture, their job was to span the gap between the rating system and the actual construction. However, like environmental consultants, many times these professionals do your documentation work and at the same time are part of the committee which assesses your project for LEED credits, leading to the same conflict of interest. We need to have two separate groups of people to bring credibility to the system. The documentation needs to be checked by some experts of sustainability sitting outside the credit giving agency, and this needs to take place at various levels.

Another important point is that the rating systems are not at all suitable for smaller towns. Many parameters are related directly to municipal bye-laws like set back areas, areas of openings, ventilation, and orientation, floor-area-ratio etc. In absence of evolved building bye laws, these parameters don't work in smaller towns and cities. So you see most of the green rated buildings in metros and big cities.

It is a costly affair to get a building LEED rated. So you see very few government buildings that accomplish this. Moreover, it is very important for the rating systems of India to be region and culture specific keeping in view the geographic and cultural background of such a diverse country. We have same set of guidelines for development for Alibaug which is semi urban as we do for a core urban metropolis like Mumbai. There are no rating systems for large scale developments, for example for housing, commercial areas, and industrial landuses. The existing rating systems only work for individual developments.

We now also have National Building Code Energy Efficiency Guidelines, which will be soon notified. They have a strong Indian context. They will be mandatory to follow during all building construction and so we will have some real sustainable development. Personally, I have great hopes for it. Also, the Comptroller Auditor General is in a process of introducing energy audits for all government buildings which—if notified—will be mandatory. Both these steps will give a boost to the real green movement in the construction industry.

Green Landscape Rating System by the Indian Green Building Council (IGBC) is more specific to landscape architecture, which is another good move. It has landscape architects on its advisory panel, which should bring more value and credibility to it. It will also need to evolve with time. The design section appears to be quite detailed but the post construction sec-



tion should have more weight. In green projects, standardization in plant palettes is increasingly evident in order to meet various parameters. There is no measure of landscape richness in such ratings. IGBC should associate with the Indian Society of Landscape Architects (ISOLA), Forest Research Institute (FRI), Botanical Survey of India (BSI), as well as local naturalists and ecologists to provide a contextual framework for its rating system.

One can say that all Green Rating systems presently being used in India are still evolving, and it may take another decade or so before they become stable in terms of criteria against which to design a project to.

Landscape architect **Samir Mathur** can be reached at studio@integraldesigns.in