



Editorial

The Myth of Green Building **Sunita Narain/October 15th, 2014**

There is no question that India and other parts of the still-under-construction world must build green. The building sector is a major contributor to climate change and local environmental destruction because of construction materials used; energy expended for lighting, heating and cooling; and water consumption and waste discharge. This is the threat. There is an opportunity as well. Most of India is still unbuilt—over 70 per cent of the building stock is yet to be constructed—so unlike the rest of the already developed world, India can build anew in efficient and sustainable manner. But how?

This is an issue that has been troubling us at the Centre for Science and Environment. Over the past few years the idea of green buildings has gained popularity—everybody, it would seem, has turned a new leaf. Across the country large and small constructions are advertised as the greenest of green. To prove that they are indeed environment-friendly, the business of certification has also grown. There are agencies that now rate and award stars to individual buildings based on certain parameters. Many state governments are making these same standards of “greenness” mandatory. Some are even providing incentives, like exemptions on property tax, to those buildings that qualify as environment-friendly.

All this is important but do we know what green means?

When we began asking this question, what surprised us was the hostility with which it was received. Nobody wanted the new God to be questioned. Nobody wanted to be asked something as simple as what the post-commissioning performance of a green building was. We realised that the interests—of architects, builders, auditors and certifiers—in this new industry were already entrenched. It was a cozy club and nobody was keen to give us entry.

We dug in our heels. Buildings are the key to a cleaner and greener future. The building sector uses, already, some 40 per cent of the country’s electricity generation. So, every effort made to reduce energy intensity of buildings will go a long way. We wanted to know what was happening and what more could be done to reduce the material-use footprint and emissions of every construction.

What we discovered is not a convenient truth. My colleagues have put together a book, *Building Sense: Beyond the Green Façade of Sustainable Habitat*, to bust some myths and explore alternative approaches. What they find is as follows.

First, the general approach is to build wrongly and then “fit” in the green features. For instance, glass-enveloped buildings are certified green, simply because they install double or triple insulating glass or five-star air-conditioners to cool places that were first heated up deliberately.

Secondly, rating systems are being pushed through government and municipal schemes without any evidence that green-certified buildings are actually working. Data on the performance of the green buildings after they have been commissioned was, till very recently, not disclosed. So, even though rating agencies say that green-certified buildings save between 30 per cent and 50 per cent of the energy and reduce water consumption by 20-30 per cent, they have no corroborating data.

Thirdly, all these so-called green technologies end up hiking costs to the extent that buildings become unaffordable to most. What India needs are building standards that are appropriate and cost-effective. Green architecture should not be a barrier to inclusive growth.

This is where old knowledge has a role to play. Traditional architecture is based on the principle of “localising” buildings so that they can optimise natural elements and be efficient in resource use. This “science and art” of engineers for nature needs to be infused with the new material knowledge of modern architecture.

Many architects, engineers and builders are innovating with this old-new science. That’s how the knowledge and practice of affordable and sustainable buildings will evolve. But big builders will adopt it only if and when the façade of green buildings is lifted. This is what we hope to do.