



Mario Seneviratne

MD, Green Technologies

LEED faculty member and LEED mentor, US Green Building Council

HOW relevant was your presentation at the conference to Muscat?

THE subject I spoke about was about 'Green Buildings.' Green buildings are those, which save energy, water, natural resources and have a good indoor environmental quality. There is a system of doing these buildings and we are trying to have this system implemented by way of motivation or rules and regula-

We have forgotten the planet

tions or choice. I spoke about the LEED rating system, which is a set of guidelines on how to make such buildings.

Oman has been very sustainable in its building industry for a long time. You have a lot of good quality buildings coming up here. But, it's time to monitor it now to make such initiatives consistent. So we're trying to promote a system of making good, environmentally friendly buildings, monitoring and measuring such initiatives and carrying on with that process.

How would green building initiatives fit into an existing city?

IT IS, indeed, difficult to come into an existing building and try to make it a green building. You don't have to really tear it down to bring in changes, you could introduce water saving fixtures or energy saving lighting fixtures, you can improve the air-conditioning system, etc. So, you can implement certain features that are used in green buildings. I'd like to bring in the analogy of a diet programme: if you are 55 years of age you cannot change your eating habits completely or start running six kilometers to keep fit. But, you can surely introduce some changes in diet and take up exercise in a small way. In the same way, though green building initiatives are primarily meant for new constructions, you can definitely introduce energy-saving, water saving features, use of environment-friendly materials for interiors, carpets/upholstery, etc. in an existing building. But, one has to make it financially viable for an existing building.

Most existing cities in the world are already built and done, so would not such green initiatives only bring in a superficial change?

TODAY, you can say that 99 percent of the buildings in existing cities are done. But, in another 100 years, you'll have another 99 percent done. So, we're trying to address the problem that upcoming new constructions would bring in. We are concerned with two aspects - refurbishing existing buildings on environment-friendly

terms and creating new green buildings, it's a process.

Would demolition and rebuilding of existing sections of a city be a weird idea?

THAT is not possible. You usually demolish a building if it is structurally unsafe or if it violates environmental/health norms. Demolition of buildings involves wastage of lot of energy. It also involves heavy costs. So, demolition and reconstruction has to be studied very scientifically to make it an economical proposition. There are three components in sustainability - people, planet and profits. So, one has to have an integrated approach in this 'triple bottomline' so that one component is not neglected when addressing the other two. We have forgotten the 'planet' for a long time while concentrating on 'people' and 'profit' and now we are trying to lay emphasis on the 'planet' component.

Would rebuilding initiatives not uphold sustainability as a long-term goal by which cities could be rebuilt for the generations to come rather than to facilitate those currently living in them?

I DON'T think so. If you consider some parts of southern India, you do have new cities built on the sustainability principle. So, you have to create new cities and repair the existing ones, not wipe out existing cities to make them futuristic.

What do you think about Oman's low-rise town planning?

LOW-RISE building themselves protect the environment by being less energy-efficient than towers as you see in neighbouring countries. I am not a town planner, I am an engineer and a builder but, from an environmental point of view, I think, 5-10 floors is best suited for buildings in a city to keep the running costs low.

I come very often to Muscat from the UAE and I feel very good about what I see around. There is a sense of peace and one does feel relaxed while moving around.

A city's footprint goes beyond

WHAT is your definition of sustainable development?

SUSTAINABLE development is a development that allows the needs of this generation to proceed without compromising the needs and aspirations of future generations. That translates into ensuring that our consumption of energy, water, natural resources and so on is all done in a manner that it allows future generations to have access to these resources. It also means, that the consequences of our activities are not polluting in a way that will degrade the environment that future generations will inherit.

Do you see sustainability as a long-term goal or something that's targeted at 50 years ahead?

IT WOULD be nice to achieve sustainable development in the next 50 years but the reality is that it will always remain a goal, something to aspire towards, but, I doubt, we will ever fully achieve it because conditions are always changing. What I mean by this is that the number of people on the planet and their pattern of consumption is continually changing and yet our resources are finite. This means that today's definition of sustainability will be different to what sustainability in 50 years from now will mean. And, it is impossible to be certain what that definition will be because we cannot be certain of future conditions.

Are current day town planners looking at just 50 years ahead so that they can themselves see the fruits of their initiatives?

I THINK of sustainable development as a journey with a destination that is constantly moving, depending on how far

you've already travelled on your journey. The urban planners of today have the tools and have the technology to build more sustainable urban developments which may be an improvement on the immediate past but that not necessarily be the perfect solution.

How many eco cities or sustainable cities are there in the world?

THE question suggests the presence of non-sustainable cities and sustainable cities and nothing in between. But, the reality is that there is a spectrum from poor practice resulting in pollution, inefficient use of water and energy at one end of the spectrum to a much more efficient system that's non- or less-polluting, that provides a pleasant environment to live in, etc. So, it's a grey scale, not a black and white scale. Clearly all cities fall along the spectrum somewhere, with some ranking higher than others.

Is not Calgary in Canada considered the 'topmost eco city' of the world?

IT MIGHT be but there is no such thing as a fully-sustainable city. In my opinion, the food that is required to sustain a population is grown in an area beyond that, the clean air that flows through that city and flushes the pollution away comes from beyond the city boundaries in the surrounding agricultural zone, the fresh water that feeds the city has its origin in the watersheds beyond that, so where does one draw a boundary on the city? The indicators or ways of measuring sustainability used to score the sustainability of cities provide a measure but probably over-simplify the situation considerably.



Simon C. Wilson

Technical Director, Five Oceans Environmental Services LLC

Is it possible to revive existing cities by providing agricultural plots and renewable energy sources within each city?

I DOUBT that a city will ever be able to produce all the food that it needs within its boundaries. But, urban farms and green roofs are possible ways of doing that, not just for food security but also in terms of well-being, energy reduction, etc. But, to consider a city in isolation is not a concept that really works because that city has a footprint that goes well beyond its geographic boundaries.