

Speech (#1 of 2) by **Dr Steffen Lehmann**, UNESCO Chair in Sustainable Urban Development for Asia and the Pacific, presented at the ***Mauritius... Ile Durable Workshop***, 20<sup>th</sup> March 2009

## **'Setting the Scene'**

Honourable Ministers, Excellencies, Distinguished Ladies and Gentlemen,

Firstly, I would like to complement the organisers, the various Ministries and the Board of Investment, for getting us all together here today, and for putting up such an excellent event.

I will only speak very briefly now, as I will have the opportunity to give a longer address at 10:00am, on Green Buildings and Cities.

I am here to submit that there is a wealth of information available in various scientific reports, for instance in the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), a large part of which has still not received adequate attention and precise understanding. Hence, impacts of Climate Change are still seen as distant and undefined. But science has given us precise answers and robust conclusions, and there is a sense of urgency.

From the latest IPCC Report, the Stern Report, and several other scientific sources, we know now a lot about the serious impacts of Climate Change, which would accrue as a result of inaction. We also know the nature of worldwide implications caused by Climate Change. Some examples of these impacts are:

- Small islands, whether located in the tropics or higher latitudes, have characteristics which make them especially vulnerable to the effects of Climate Change, sea level rise and extreme events.
- In some countries of Africa, yields from rain-fed agriculture could be reduced by 50% by 2020. At the local level, many people are likely to suffer additional losses to their livelihoods when Climate Change and variability occur together with other stresses, such as conflict.

Our collective record of mitigation of greenhouse gas (GHG) emissions has not been very inspiring. Global greenhouse gas emissions have grown, of course, since pre-industrial times, but there has been an increase of 70% between 1970 and 2004. Hence, the record of global action at mitigation has been very weak, even though the UN Framework Convention on Climate Change (UNFCCC) was agreed on in 1992.

If global mean temperature increase is to be stabilized between 2.0 to 2.4°Celsius, then CO<sub>2</sub> emissions must peak by 2015.

However, we need to consider whether the effort to limit increase in global mean temperature to about 2 degrees Celsius would be adequate because sea level rise due to thermal expansion alone would be between 0.4 to 1.4 meters.

Add to this the melting of ice bodies, and we would have serious effects of sea level rise on low lying coastal areas and small islands.

My plea to this audience is to please listen to and reflect on the voice of science, and please act with determination and a sense of urgency. The United Nations do not prescribe any specific action, as there are various ways we can take action, but action is a must. Business as usual is not good enough anymore.

Development on the beautiful Island of Mauritius must happen along the principles of 'international best practice' in urban design and architecture.

This means that every development, every building has to be energy-efficient, using the best know-how to avoid the wasting of energy, water and materials.

We have seen the start of a peaceful cultural revolution, where all our standards in architecture and urban design are getting transformed.

Mauritius is part of a larger system, and part of a globalized world. We cannot look at Mauritius as an isolated case. Similar developments are happening now everywhere and only an internationally coordinated, combined effort will be strong enough to combat Climate Change.

There was already a series of UN-led initiatives, such as the *Barbados Programme of Action (1994)*, and *The Mauritius Strategy (2005)*. The forthcoming *Copenhagen Climate Summit* in December this year will need all our attention, with the hope that a global agreement for the post-Kyoto era can be achieved.

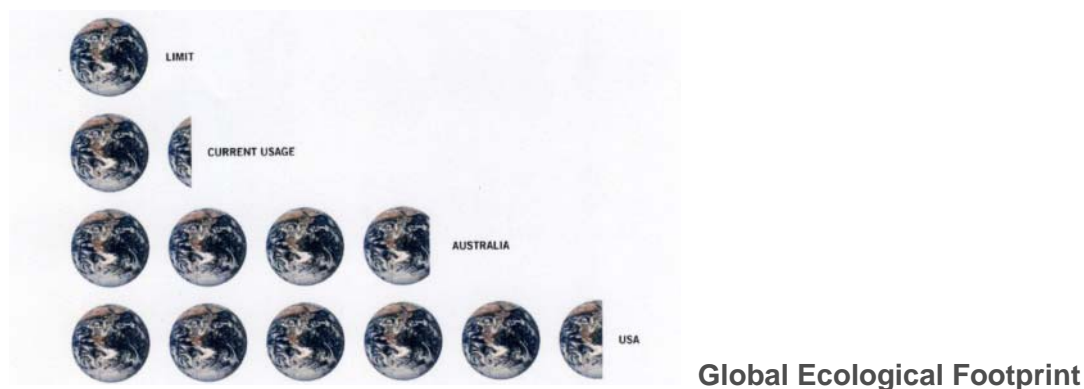


Fig: The amount of land needed to meet our demand for resources. We are consuming already more resources than the planet can replace.

So, what are the benefits of green sustainable architecture?

I will speak about this more in detail in my 10:00am presentation and present some examples. This presentation is entitled: 'What we can do'.

For now, I would like to conclude and wishing you all an enjoyable and informative Workshop.

Thank you for your attention.