



World Sustainable Development Summit 2018

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Session: 'Transforming Habitats'

Human habitats, with their complex fabric, form the core of the quest to sustainability. The ever expanding habitats are continuously being weaved with various factors such as transportation issues, water struggles, energy crisis, innovations, waste management and so on. Much has been said about these highly relevant issues. We now stand on the tipping point from where we can go towards a greener, cleaner future or risk slipping in the downward spiral to destruction.

It is estimated that more than two-third of India's Infrastructure for 2030 is yet to be built and various factors play an integral role in achieving sustainability in this proposed development. This is an era of new technologies and fast paced development, which makes it essential for the construction industry to continuously innovate and create. Our buildings can only fight the onslaught of rapid urbanization if they evolve.

Human comforts cannot be ignored as they are the ultimately end users. Heating, ventilation and air-conditioning (HVAC) systems play a vital part in ensuring the required comfort levels of residents inside building environments. However, most modern cooling equipment consume high levels of electrical power, thus increasing energy consumption rates in buildings. The UN Intergovernmental Panel on Climate Change, projects that demand for air conditioning in emerging-market economies will have a significant impact on energy use worldwide, jumping from about 300 terawatt-hours in the year 2000 to more than 10,000 in 2100. Following the Kigali commitment, by the Government of India on reducing its HFC based refrigerants from applications while increasing the energy efficiency of appliances in this transition, creates a win-win situation, resulting in lower electricity demand and reduced greenhouse gas emissions.

Clean water is another limited resource affecting us. Although most of the planet is covered in water, it is salt water essentially which could only be consumed after undergoing desalination, which is an expensive process. Occurrences such as droughts further limit access to clean and fresh water, meaning people need to take steps to reduce water use and save as much water as possible. With the fast paced urbanization on going in our country, the water sources often get polluted or depleted at an alarming pace. Relatively large temporal and spatial variation in rainfall also makes the availability of water highly unpredictable. The need to use monsoon water fully, in view of the falling groundwater levels has been expressed many a times. The integral contribution of the local communities ensures a sense of ownership for water as a resource. A joint effort is required from all levels of government and local communities to promote water conservation in agriculture, industries, domestic purposes etc. Water, being a state subject in India, makes the initiatives and strategies implemented at state level essential.

Change and innovation are necessary to ensure that the drive to sustainability is unhindered and evolves continuously. The opportunities and possibilities for change through innovation have never been this abundant. A lot of start-ups focusing on environment, waste, water, construction etc. have evolved in India to address a wide range of issues. These organizations focus on problems at grassroots level with decentralized approach.

All these initiatives take care of the environmental and social side of sustainability. However, economy is the driver behind all the factors. Businesses have to consider their finances for so many purposes, ranging from survival in bad times to bolstering the next success in good ones. Sustainability also goes hand in hand with ample financing for all the ideas and implementation. So “green financing” has to complete the triangle of sustainability to ensure successful implementation of all solutions.

In addition, public policies fuel the country’s developmental path by ensuring wide spread adoption by the practitioners working in the field. Policy is instrumental in shaping any country and its development. Any initiative taken up by the government flourishes within the policy framework. In the light of the imminent severe energy shortage, it’s become imperative to discuss and develop policy tools to ensure fair and sustainable usage of energy. India has a strong and diverse policy framework in place, which is conducive with our sustainability goals. However, inter-departmental, inter-state cooperation is a challenge which must be overcome for achieving integrated and systematic implementation.

India has always followed a path of sustainable lifestyle based on the principals of ‘need based consumption’. We can only go back to our roots and achieve the goal of “housing for all” only when the habitats evolve with end to end transport connectivity, availability of clean water to all, integration of latest technology in the buildings, continuous innovation, and integration and implementation of policies.

This session aims to bring together experts working on various issues at the urban level, to discuss the various facets of urban sustainability in our habitats and find solutions to the challenges faced.