DEVELOPING SUSTAINABLE CITIES: THE NEED FOR INNOVATIVE APPROACHES

Dr. Asanga Gunawansa
Asst. Professor
Department of Building
School of Design and Environment
National University of Singapore

Associate Member, Executive Committee
Asia Pacific Centre for Environmental Law

Issues Covered

- **What is Sustainable Development?**

- **Sustainable Development Challenges**

- **Key Features of a Sustainable City**

- **Sustainable Development Governance**

- **Innovative Approaches**

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What is Sustainable Development?

- The standard definition of SD comes from the **Brundtland Commission** (<u>Our Common Future, The UN Commission on Economic Development, 1987</u>):

"Development that meets the <u>needs of the present,</u> without compromising the <u>ability of future generations to meet their own needs.</u>"

- **This is the most widely used and popular definition.**

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What is Sustainable Development?

- **The full definition of the Brundtland Commission, seldom quoted, continues**:

  *"It (**SD**) contains within it two key concepts: the concept of "needs", __in particular the essential needs of the world's poor, to which overriding priority should be given__; and the idea of __limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs__."*

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Sustainable Development Challenges

- **UN Conference on the Human Environment (Stockholm 1972)** , sought to help Governments rethink **economic development** and find ways to **halt the destruction of irreplaceable natural resources** and **pollution** of the planet.

- The concept of **SD** started receiving a lot of attention after the **United Nations Conference on Environment and Development** (**Earth Summit, Rio de Janeiro 1992**).

- **The World Summit on Sustainable Development** which was held in Johannesburg in 2002 (**Rio+10**) identified several key aims for **SD**:

  - Reducing the number of people without access to clean water from 1 billion to 500 million by 2015.

  - To halve the number of people without proper sanitation to 1.2 billion.

  - To increase the use of sustainable energy sources.

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UN Millennium Development Goals (2001)

Sustainable Development Challenges

UN Millennium Development Goals (2001)

- **Goal 1-** Eradicate Extreme Poverty and Hunger

  - Target 1A - Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day.

  - Target 1B - Achieve full and productive employment and decent work for all, including women and young people.

  - Target 1C - Halve, between 1990 and 2015, the proportion of people who suffer from hunger.

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Sustainable Development Challenges

Reality check - Some quick facts

- Approximately 1.4 billion people live on US$1.25 or less a day.

- Approximately 10 million die every year of hunger and hunger-related diseases.

- Rising food prices may push 100 million people deeper into poverty.

- However, fewer children below five are undernourished (down from 33% in 1990 to 26% in 2006).

  [Source: http://www.un.org/millenniumgoals/]

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Sustainable Development Challenges

Three key challenges:

1. Overpopulation in the developing world.

   – The developing world has 80% of the world's population and consumes 20% of its resources.

2. Overconsumption in the developed world.

   – The developed world has 20% of the world's population and consumes 80% of its resources.

3. **Striking a balance between competing challenges**

   – E.g. Conflict between dealing with Climate Change and Eradicating Poverty

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Population Growth and Scarce Resources

- According to the UN World population that was 2.5 billion in 1950, and 4.4 billion in 1980, rose to 6 billion in 2000.

- **World population is projected to grow to about 8 billion in 2025.**

- In 2050, the projected world population is 9.3 – 11 billion in 2050.

- **Almost all future population growth will occur in the developing world, mainly in Asia.**

- **This increased population, combined with higher standards of living, will pose enormous strains on land, water, energy and other natural resources.**

- **What actions are required?**

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Sustainable Development Challenges

- Sustainable Development is not only about protecting the environment and dealing with climate change.

- It requires us to find solutions to other development needs of people. These include:

  - Economic development

  - Health and sanitation

  - Education

  - Equality

  - Rights of Children

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Building Ecocities is Great

"Lilipad, a floating ecopolis for climate refugees", a conceptual design by Vincent Callebaut Architect. For more information on the project see: http://vincent.callebaut.org/page1-img-lilypad.html

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Some countries need to deal with these

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Sustainable Development should be for all

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The Challenge for States - Cost of Transition ?

Urban Slums

Green Apartments

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What is a Sustainable City?

- A sustainable city should enhance the **economic**, **social**, and **environmental** well-being of current and future generations.

- These three can complement each other through effective and efficient policy making.

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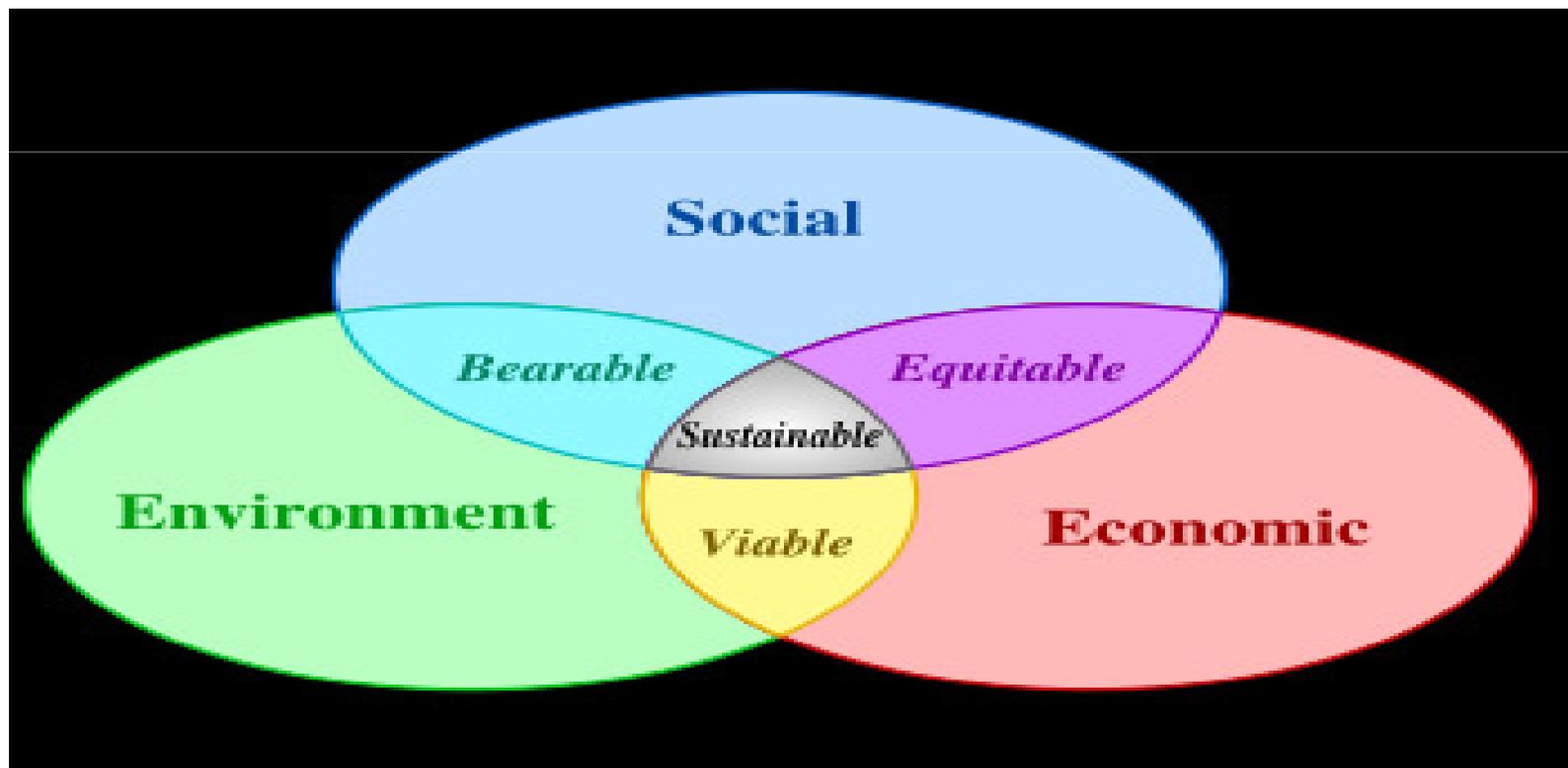
What is a Sustainable City?

Important considerations:

- Population growth.

- In 30 years, 80% of the world's urban population will live in developing countries

- In 30 years, 70% of the world's population will live in cities

- In 2015 there will be 22 megacities, each with more than 10 mill. Inhabitants

The Point

- **City planning will be decisive for sustainable energy consumption, controlling adverse environmental impacts and boosting economic development.**

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Approaches

- Top down as well as bottom up approach is needed

- Common but differential responsibility

- Leave no room for forgotten communities

- Identification of resources, needs and limitations

- Benchmarks

- Performance monitoring

- Regulations, laws, rules and guidelines

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What Should States Do?

| Basic SD Concepts	Required Action
The duty of States to ensure sustainable development	•Promote responsible production and consumption. •Respect for ecosystem support capacity. •R&D of alternative resources.
The principle of equity and the eradication of poverty	•Social equity and solidarity. •Policies that cater to the needs of the present whilst saving the world for the future. •CSR to play a role.
The principle of common but differentiated responsibilities.	•Bilateral and regional partnerships and cooperation. •Technology transfer.
The principle of the precautionary approach	•Precaution is better than cure

What Should States Do?

SD Principles	Required Action
Polluter pays	•Establish laws and policies that promote environmental remediation. •Impose green taxes
Public participation, access to information and to justice	•Educate the public. •Establish efficient and effcetive pricing mechanisms for utilities. •Establish minimum needs and required subsidies. •Enabling participation and commitment (organise public cooperative societies to invest in green cities). •Enable access to knowledge.

What Should States Do?

Basic SD Principles	Required Action
Balancing the often competing SD demands (e.g. economic development vs. environmental preservation)	•Establishing a legal and policy environment in which competing SD demands could be balanced.
Some SD demands have no national borders (e.g. climate change)	•Accept responsibility and take necessary mitigatory measures and adaptation initiatives.
Financing for SD	•Rethinking PFI and PPP with community participation (PP&CP) •Green Financing. •Informal Economies and Local Barter. •Home and Community Agriculture.

The choices we make today will decide our future
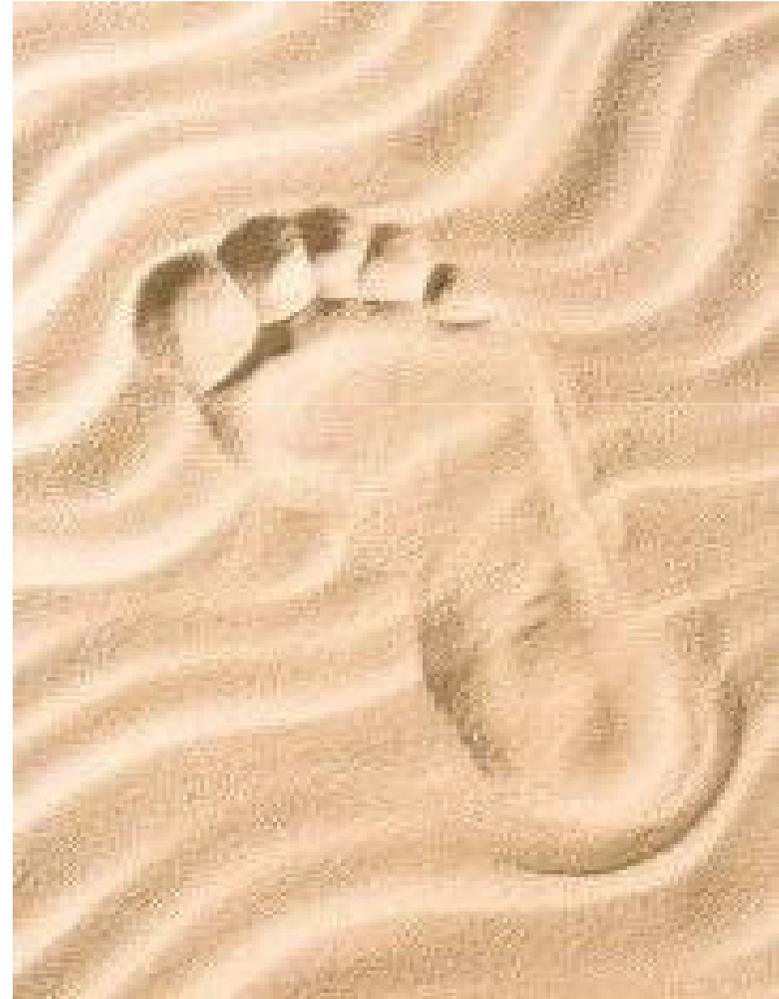
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Yes we can…

- *"Future generation is the most important thing."*
  ~ Confucius

- *"Treat the Earth well. It was not given to you by your parents. It was loaned to you by your children"*
  ~ Kenyan Proverb

- *"Not one drop of water shall reach the sea without first serving man"* –

   ~ Parakrama Bahu the Great (1153-1186)