



# Sustainable Development: An Introduction

Internship Series

**Volume-I: Sustainable Development:  
An Introduction**

## Acknowledgements

<b>Project Team</b>	: Madhavi Joshi, Shailaja Ravindranath, Gopal Kumar Jain and Keren Nazareth
<b>Research &amp; Compilation</b>	: Aparna Susarla and Keren Nazareth
<b>Comments</b>	: Madhavi Joshi, Gopal Kumar Jain, Shivani Jain & Kunal Patel
<b>Production</b>	: D.M. Thumber
<b>Design &amp; Layouts</b>	: Mahendra Dadhania
<b>Illustrations</b>	: Hemal Solanki

© 2007, Centre for Environment Education

ISBN: 978-81-89587-22-5

This publication may be reproduced in whole or in part and in any form for educational or non-profit purposes without special permission from the copyright holder, provided acknowledgment of the source is made. Centre for Environment Education (CEE), the South Asia Youth Environment Network (SAYEN) Secretariat and Swiss Agency for Development & Cooperation (SDC) would appreciate receiving a copy of any publication that uses this publication as a source. No use of this publication may be made for resale or for any other commercial purpose whatsoever without prior permission in writing from the Centre for Environment Education.

This publication has been compiled from a range of previously printed literature and the internet has been a very large resource for this compilation. We would like to acknowledge all the sources from where our information has been referenced or compiled.

### Disclaimer

The contents of this volume do not necessarily reflect the views or policies of CEE, SAYEN or SDC. The designations employed and the presentations do not imply the expressions of any opinion whatsoever on the part of SDC or CEE concerning the legal status of any country, territory, city or area authority, or concerning the delimitation of its frontiers or boundaries.

# Content

<b>About the Document</b>	<b>4</b>
<b>Introduction</b>	<b>5</b>
<b>Models of Sustainable Development</b>	<b>12</b>
i) Three Pillar Basic Model	12
ii) The Egg of Sustainability	13
iii) Atkisson’s Pyramid Model	13
iv) Prism of Sustainability	15
v) The Amoeba Model	15
<b>Indicators of Sustainable Development</b>	<b>16</b>
<b>Principles of Sustainable Development</b>	<b>20</b>
i) Bellagio Principles	20
ii) Principles defining Sustainable Development	21
iii) Earth Charter Principles	21
<b>Key Issues and Priorities for Sustainable Development</b>	<b>23</b>
<b>International Commitment towards Sustainable Development</b>	<b>25</b>
<b>Annexure: Sustainable Development Timeline</b>	<b>30</b>
<b>Acronyms</b>	<b>33</b>
<b>Glossary</b>	<b>34</b>
<b>References</b>	<b>36</b>

# About the Document

This volume is a unit of the Internship Series developed as a part of the International Internships conducted by CEE, the SAYEN Secretariat and supported by SDC. This volume is targeted to youth in South Asia and will act as a guideline on Sustainable Development for beginners.

Young people today, constitute an important group within the society and the habits developed now will play a decisive role in the future. Their decisions will exercise a growing influence on all the sections of the society. Hence they deserve special attention.

The document deals with the intricate links between environment and development and the importance of Sustainable Development .It will provoke you as a beginner to start looking at the links between the various spheres of development in the context of Sustainable Development. Some activities and stories have been included that will help explore the concerns, issues and efforts related to the same. Different perspectives have been incorporated to enable the reader to find relative answers to the questions regarding environment and development.

Some of the major efforts undertaken by the Heads of the Countries across the world and the milestones during the journey towards achieving Sustainable Development have also been highlighted.

This is an effort to facilitate the readers to understand and contribute to progress towards Sustainable Development.

## **Objective**

The objective of the document is to improve the understanding of Sustainable Development and the various concepts related to Sustainable development. It also highlights the emergence of Sustainable Development over a period of time.

# Introduction

## **The story of a Paradise Squandered!**

Long, long ago on a little island (about 20 square kilometers) named Karu, people lived happily. Their island had everything they needed- food, water, shelter, magnificently spreading trees for fresh air, shade, animals, birds and ocean full of fish.

Two hundred years ago, an English sailor discovered Karu and called it Pleasant Island. Another century passed before an expedition was carried out to Karu. Discovering that the island had one of the richest piles of phosphate rock on the globe, for most of next century, millions of tons of phosphate was mined and shipped to other countries. The population on the island included 7000 Karuan natives and another 3000 imported workers.

Karu has only one road around the island, but an average Karuan family has at least two vehicles. They possess all electronic gadgets for their convenience including microwave ovens, stereo equipment and multiple televisions per family.

Nine out of every ten Karuans are obese and average young men weigh more than 135 kilos. This is because their native food was replaced by imported foods, subsidized by the government. Meat brought from another country more than 3200 kilometers away is cheaper in Karu than it is in that country.

Karuans receive their housing, power supply, water, telephones, education and medical services free of cost or at a nominal charge. The tiny island has two hospitals, and Karuans needing specialist treatment are flown to other countries at the expense of the government.

Today Karuans even import fish! Due to the change in the eating habits, the health of the people on the island is being affected. The average life span of a Karuan is expected to be about 55 years. Diseases like hypertension, heart disease and diabetes are very common.

Where does all this wealth come from? The Phosphate. Of course!

Then what is the problem?

The phosphate supply could run out before the next century. The government is now desperately searching for phosphate reserves even as the interior of the island lies ravaged by mining. They even plan to demolish the President's residence in their search. Karuans continue to tear their island apart, live and spend as if there is no tomorrow. At this rate, there may be no one on the plundered island.

What kind of development do you think is going on in the island? Is it going in the right path? What do you think has gone wrong in the island of Karu?

### Let's explore more on this!!!

'Development', generally, is measured in the form of economic growth that contributes to a nation's wealth. As seen in the example above, it was a narrowly defined 'income' or 'wealth and prosperity' based view of the government of Karu regarding the export of Phosphate from their island. But did this lead to the development of the people on the island?

*What exactly do we understand by Development? Are there any other factors contributing to development?*

The only parameter used to measure the development of the community was taken to be the Gross Domestic Product (GDP). It had its advantages but on the other hand, it had certain limitations also.

*What are these limitations?*

We have realised that it is not the country's wealth alone but the welfare of its people also, that is equally important.

The major limitation of using GDP as an indicator of development in this case was that it did not consider the standard of living and human well being.

#### **Gross Domestic Product (GDP)**

The GDP measures the amount of money being spent in a country. The more money being spent, the higher the GDP and the better the overall economic well-being is assumed to be.

It is regardless of the effect of any activity on the community's social and environmental health. GDP can go up even when overall community health goes down.

**For example**, when there is a ten-car pileup on the highway, the GDP goes up because of the money spent on medical, money spent on medical fees and repair costs. On the other hand, if ten people decide not to buy cars and instead walk to work, their health and wealth may increase but the GDP goes down.

Hence, with the changing scenario, our concerns and commitments have also changed. It was realised that, if one wanted to prevent the rapid destruction of life systems, the development paradigm had to change.

We thus moved ahead beyond the concept of development, from 'growth' to 'growth plus equity' whereby social justice, equality of opportunity and access for all the people in country's prosperity are the major concern.

With this concept of development in mind, two things become very evident

- Development involves continuous growth.
- It is concerned with human and environmental well being.

In the context of development, we have come across terms such as 'Standard of living' or 'Quality of Life'. What do they mean? How are they related to development?

Let's take an activity.

### **Making Your Wish List**

Assume yourself in four different roles (representing different sets of people) given below. You have to make five different wishes to have a better quality of life. The only condition in this case, being, you should not ask for more money.

If you were the following, what would you wish for? Write them.

- Poor farmer in a village
- Slum dweller in a large city
- Housewife in a middle-income colony
- Youth graduating from college in a city

Are there any similarities in the wishes made by each individual or are they all different?

Is it possible to put economic value to all the wishes made?

Do these wishes indicate that while economic growth may ensure a better standard of living, it may not necessarily lead to a better quality of life?



Standard of living refers to the consumption of goods and services by an individual. It relates directly to the economic development whereas the well-being or quality of life of a population refers to a combination of attributes that provide physical, mental, spiritual and social well-being.

### **Do the development decisions impact the environment?**

#### **Half a Story**

ABCL is a large factory that supplies chemicals to many industries in the state. More than 5,000 workers are employed in the unit. Waste water from ABCL finds its way into the nearby river. Villagers living downstream have been protesting that this has ruined their agricultural lands, has been responsible for cattle deaths and has also caused skin diseases. The pollution control authorities have recommended that the factory should be closed down but the workers union protests that if the factory closes down, they will lose their livelihoods.

### **Why should we integrate environmental concerns with development concerns?**

Some of the most possible outcomes of this story could be as follows-

- The PCA (Pollution Control Authority) closing down ABCL. This would cause thousands of workers ending up jobless.
- ABCL continues. But this way we would be allowing our environment to deteriorate, ultimately leading to a decline in the quality of human life.

The start of this debate about the Development and Environment is usually attributed to Rachel Carson and her book *Silent Spring* published in 1962.

Decades later people realized that environment and development needed to be seen together. Development requires extensive use of natural resources and all the basic resources required for living come from the Earth.

In the above story, do you think ‘**Clean Development Mechanisms**’ would be a viable outcome? How would that impact the workers in the factory? Would the farmers whose farms receive the waste water and the community agree to this solution?

These kind of questions emerge from the understanding that development will be long term if it is sustainable.

“Development that meets the needs of the present without compromising the ability of future generations to meet their own needs”

**Brundtland Report (1987) ‘Our Common Future’**

Different people with different perspectives have come up with various definitions of Sustainable Development (about 35 of them).Some of the well known definitions are as follows:

**Sustainable Development (SD)** implies economic growth together with the protection of environmental quality, each reinforcing the other. Sustainable Development, thus, is maintaining a balance between the human need to improve lifestyles and feeling of well-being on one hand, and preserving natural resources and ecosystems, on which we and future generations depend

**SD may also be defined as .**

“To improve the quality of life while living within the carrying capacity of ecosystems”  
**IUCN (The World Conservation Union), 1991**

Thus, Sustainable development does not focus solely on environmental issues. More broadly, it encompasses the three general policy areas namely economy, environment and society.

The Swiss ‘Monitoring of Sustainable Development Project’ MONET (BFS, BUWAL & ARE) in 2001, proposed the following definition:

‘Sustainable development means ensuring dignified living conditions with regard to human rights by creating and maintaining the widest possible range of options for freely defining life plans. The principle of fairness among and between present and future generations should be taken into account in the use of environmental, economic and social resources.

Putting these needs into practice entails comprehensive protection of bio-diversity in terms of ecosystem, species and genetic diversity, all of which are the vital foundations of life.’

**MONET , 2001**

There’s another definition given by the famous Robert Prescott Allen, who has founded and chaired several influential IUCN-The World Conservation Union projects and has 18 years experience evaluating and advising development strategies on four continents.

Sustainability is just another way of saying “the good life” as a combination of (a) a high level of human well-being, and (b) the high level of ecosystem well-being that supports it.

**Allen Prescott**

The main features that all the above definitions have (either explicitly or implicitly) are as follows:

- A desirable human condition : a society that people want to sustain because it meets their needs
- A enduring ecosystem condition: an ecosystem that maintains its capacity to support human life and others
- A balance between present and future generations; and within the present generation.

## **Few terms related to SD**

### **Sustainable Growth**

Is it possible to have a Sustainable growth?

For growth we need resources and the rate of depletion of resources cannot be matched with the regenerating capacity of earth, as it is finite, not-growing and materially closed. Therefore, Sustainable growth is an impossible theorem!

### **Sustainable Consumption (SC)**

This is about finding workable solutions to social and environmental imbalances through a more responsible behaviour. In particular, sustainable consumption is related to production and distribution, use and disposal of products and services and provides the means to rethink our lifecycle. The aim is to ensure that the basic needs of the entire global community are met, excess is reduced and environmental damage is avoided.

Most definitions of SC have the following common features

- Satisfying human needs
- Favouring a good quality of life through decent standards of living
- Sharing resources between rich and poor
- Acting with concern for future generations
- Looking at the 'cradle-to-grave' impact when consuming.
- Minimizing resource use, waste and pollution

The concept of SC is complex and its definition is sometimes hard to pin down! For more info on this, log on to the following:

[www.unep.org/sustain](http://www.unep.org/sustain)

[www.unesco.org/education/tisf/theme](http://www.unesco.org/education/tisf/theme).

### **Sustainability**

Sustainability is the action oriented variant of Sustainable Development. There are some principles of sustainability which include the following-

- Protecting Nature
- Thinking long-term
- Understanding systems within which we live
- Recognizing limits
- Practicing fairness
- Embracing creativity.

### **Humans consume 40 percent more than Earth can Sustain**

A report of United Nations Environment Programme- ' Global Environmental Outlook-4' released in 2007 , has warned that the consumption levels are fast depleting world resources as regeneration has been outpaced by what humans are burning up.

The study, involving more than 1,400 scientists, found that human consumption had far outstripped available resources. Each person on Earth now requires a third more land to supply his or her needs than the planet can supply, it finds.

Meanwhile, biodiversity is seriously threatened by the impact of human activities: 30 per cent of amphibians, 23 per cent of mammals and 12 per cent of birds are under threat of extinction, while one in 10 of the world's large rivers run dry every year before they reach the sea.

#### **In numbers:**

- 45 thousand square miles of forest are lost across the world each year
- 60 per cent of the world's major rivers have been dammed or diverted
- 34 per cent: the amount by which the world's population has grown in the last 20 years
- 75 thousand people a year are killed by natural disasters
- 50 per cent: The percentage by which populations of fresh fish have declined in 20 years
- 20 per cent: How much the energy requirements of developed countries such as the United States have increased in the period

Source: Global Environment Outlook 2007



# Models for Sustainable Development

Moving towards sustainable development presents tremendous challenges. Man has all the tools necessary for achieving it. However we tend to forget that in order to survive, we need to adapt to nature and not vice-versa.

We need to develop the ability to make a choice which respects the relationship between the three “Es” – economy, ecology and equality. If all the three “e’s” are incorporated in the national goals of countries then it would be possible to develop a sustainable society.

Models help us understanding the concepts of Sustainability better. Achieving SD thus, requires more effective, open, and productive association among the people themselves. Models help us gather, share, and analyse information; they help coordinating work; and educate and train professionals, policymakers, and the public in general.

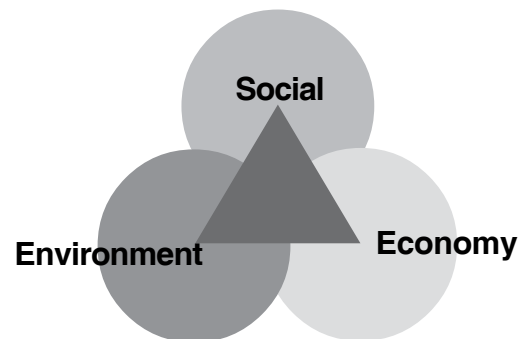
The following are some of the constructive models for understanding SD.

## Three Pillar Basic Model

This is one of the most well-known models created using the three dimensions -Economy, Environment and Society.

The diagram shows three interlocking circles with the triangle of environmental (conservation), economic (growth), and social (equity) dimensions. Sustainable Development is modelled on these three pillars. This model is called ‘three pillars’ or ‘three circles model’. It is based considering the society, but does not explicitly take into account ‘human quality of life’.

## Dimension of Sustainability



## The Egg of Sustainability

The ‘Egg of Sustainability’ model was designed in 1994 by the International Union for the Conservation of Nature, IUCN (cf. Guijt & Moiseev 2001).

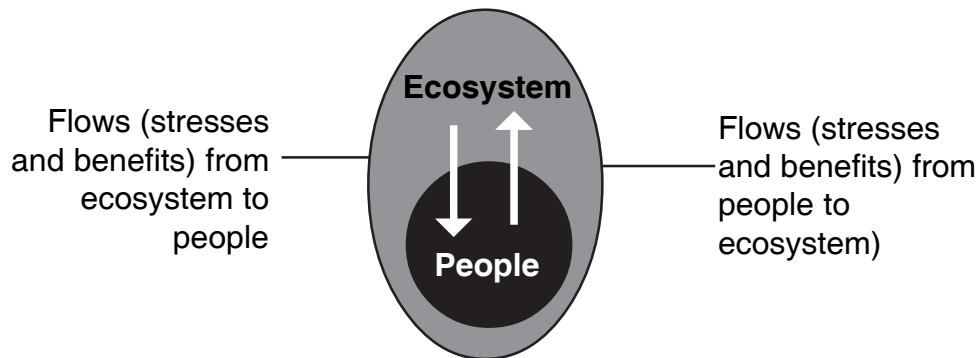
It illustrates the relationship between people and ecosystem as one circle inside another, like the yolk of an egg. This implies that people are within the ecosystem, and that ultimately one is entirely dependent upon the other. Just as an egg is good only if both the white and yolk are good, so a society is well and sustainable only if both, people and the eco-system, are well.

Social and economical development can only take place if the environment offers the necessary resources: raw materials, space for new production sites and jobs, constitutional qualities (recreation, health etc.). Ecosystem is therefore to be regarded as a super coordinated system to the other dimensions of the triangle or prism models: social, economical, and institutional. These latter can only prosper if they adapt themselves to the limits of environmental carrying capacity.

Thus according to this model:

**sustainable development = human well-being + ecosystem well-being**

### The Egg of Sustainability



IUCN's egg of sustainability (Source: IDRC 1997)

**Let's try and understand some processes that can lead to Sustainable Development:**

### Atkisson's Pyramid Model

The Atkisson Pyramid process supports and accelerates the progress from identifying the vision of sustainability, through analysis and brainstorming and agreements on a credible plan of action. The Structure of the Pyramid guides through the process of first building a firm base of understanding, searching for and collecting relevant information and ideas, and then focusing and narrowing down to what is important, effective, doable, and something that everyone can agree in.

The Atkisson's Pyramid is a blue print for the SD process. Its five steps or levels include:

- Level 1: Indicators- Measuring the trend
- Level 2: Systems- Making the connections
- Level 3: Innovations- Ideas that Make a Difference
- Level 4: Strategies: From Idea to Reality
- Level 5: Agreements: From Workshop to Real World

This model is designed to help groups of 20-40 people move quickly up the sustainability learning curve, from basic principles and frameworks, to systems analysis, to innovative strategies for action. Along the way, groups practice cross-sectoral teamwork, make linkages, generate dozens of new ideas, and work toward an "Agreement" which is a set of actions they agree to follow through within the real world.

This can be understood better with the example described here.

**Let's consider one component of the pyramid- Environment**

If the vision is to "Maximize the use of available resources in order to improve the quality of life of people", the possible indicators could be

- Loss of forest cover
- No. of trees cut down in Urban Areas
- No. of Polluting Industries being shut down

Taking an indicator, say number of polluting industries shut down, the following systems could be connected to it

- Population
- Livelihood
- Corruption

Considering Corruption as a major system, the following innovations could be suggested in curbing down the problem

- Promote Right to Information
- High rewards for those people found not to be taking bribes

The strategies for implementing these innovative ideas could include

- Promoting laws which would generate fear of bribery
- Donation receipts should have Utilization certificates

And finally promoting laws which would generate fear of bribery could be the Action.

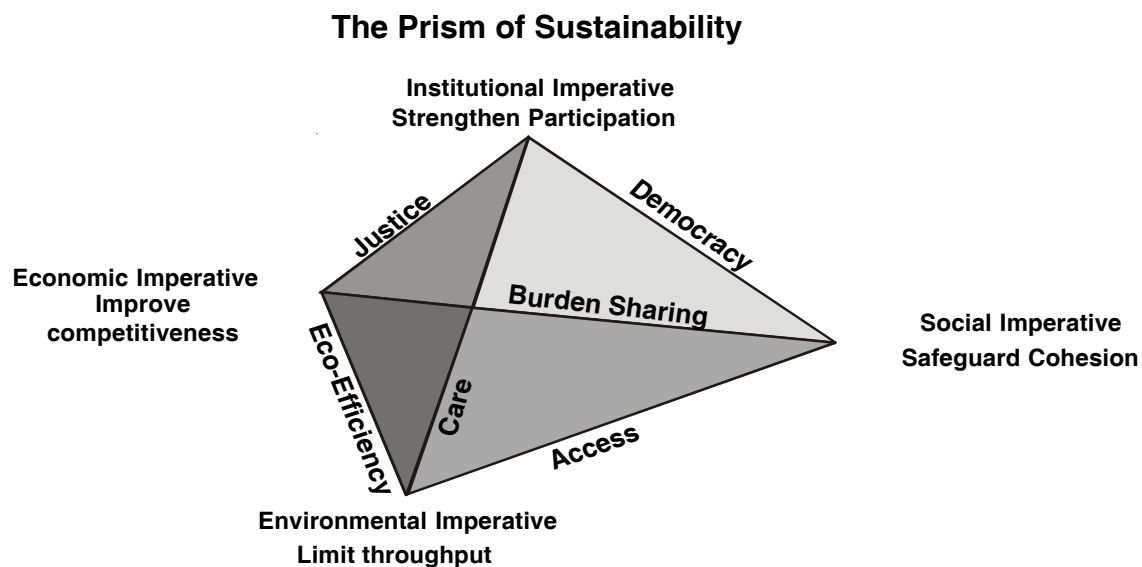
The same process can be carried out for the other two components- Society and Economy and then we can come up with the Agreement by making interlinkages between all the three components.

## Prism of Sustainability

This model was developed by the German Wuppertal Institute and defines SD with the help of four components - economy, environment, society and institution.

In this model the inter-linkages such as care, access, democracy and eco-efficiency need to be looked at closely as they show the relation between the dimensions which could translate and influence policy. In each dimension of the prism, there are imperatives (as norms for action). Indicators are used to measure how far one has actually come in comparison to the overall vision of SD.

This is described in the following diagram.



Kain (2000, p. 25) had however criticized this prism, arguing that ‘the economic dimension tends to include assets emanating from all four dimensions, thus, adding confusion to the description and analysis’.

## The Amoeba Model

The Amoeba Approach is a model used to visually assess a system’s condition relative to an optimal condition. The model is circular with the various indicators positioned around the outside. Lines radiate from the centre to the indicators, on a continuum from unsustainable (in the center) to sustainable (the outside of the circle). A circle would indicate the optimum conditions.

This type of model allows simultaneous assessment of different indicators, and easy comparison between components of the system. “The Amoeba Model” is a powerful technique for accelerating the innovation process and training to be far more effective in achieving SD.

# Indicators of Sustainable Development

An indicator helps understand where we are, which way we are going and how far we are from our goal. It alerts us to a problem before it gets too bad and helps recognize solutions to fix the problem.

Indicators of SD are different from traditional indicators of economic, social, and environmental progress. Traditional indicators such as unemployment rate or GDP growth, stockholder profits, asthma rates, and water quality measure changes in one part of a community as if they were entirely independent of the other parts. SD indicators on the other hand, reflect the reality that the three different segments are very tightly interconnected.

Thus, the indicators of SD point to an issue or condition. The following are certain characteristics that all the SD indicators have in common:

- Alert a problem before it gets too bad
- Helps recognize what needs to be done to fix the problem
- Build clarity and accountability
- Reflect a sense of purpose
- Illustrate relationships
- Show trends

Such multidimensional SD indicators that possess all these characteristics and show the links among a community's economy, environment, and society are described below:

- **Gross National Happiness (GNH)**
- **Human Development Index (HDI)**
- **Ecological Footprint (EF)**
- **The Happy Planet Index (HPI)**

## **Gross National Happiness (GNH)**

Gross National Happiness (GNH) is an attempt to define quality of life in a more holistic and psychological terms than Gross National Product.

*The term was coined by Bhutan's King Jigme Singye Wangchuck in 1972.*

It serves as a unifying vision for the Five Year planning process and all the derived planning documents that guide the economic and development plans of Bhutan.

While conventional development models stress economic growth as the ultimate objective, GNH is based on the assertion that true development of human society takes place when material and spiritual development occur side by side to complement and reinforce each other.

The four pillars of GNH are the promotion of equitable and sustainable socio-economic development, preservation and promotion of cultural values, conservation of the natural environment, and establishment of good governance.

## **Human Development Index (HDI)**

The Human Development Index (HDI) is the measure of life expectancy, literacy, education, and standard of living for countries worldwide. It is a standard means of measuring well-being, especially child welfare. It is used to determine and indicate whether a country is a developed, developing, or underdeveloped country and also to measure the impact of economic policies on quality of life.

*The index was developed in 1990 by Indian Nobel prize winner Amartya Sen, Pakistani economist Mahbub ul Haq, with help from Gustav Ranis of Yale University and Lord Meghnad Desai of the London School of Economics and has been used since then by the United Nations Development Programme in its annual Human Development Report.*

The HDI measures the average achievements in a country in three basic dimensions of human development:

1. A long and healthy life, as measured by life expectancy at birth.
2. Knowledge, as measured by the adult literacy rate (with two-thirds weightage) and the combined primary, secondary, and tertiary gross enrolment ratio (with one-third weightage).
3. A decent standard of living, as measured by the log of gross domestic product (GDP) per capita at purchasing power parity (PPP) in USD.

The United Nations Human Development Report (HDR)-1997 indicates that India is at the bottom of Human Development Index with a ranking of 138, just one step ahead of Pakistan but far below Sri Lanka (91), China (108), Maldives (111), Myanmar (131) in South-Asian region.

The report for 2006 showed stagnation in world HDI, as the continued improvement of developed countries was offset by a general decline of the developing world. Countries in Sub-Saharan Africa and South Asia showed an important decline in HDI, in comparison with 2005's report.

## Ecological Footprint(EF)

Ecological Footprint (EF) compares human consumption of natural resources with Earth's ecological capacity to regenerate them.

*The term “ecological footprint” was coined in 1992 by William Rees, a professor at the University of British Columbia in Vancouver, Canada. The ecological footprint concept and calculation method was further developed as the PhD dissertation of Mathis Wackernagel under Prof. Rees at UBC from 1990-1994. In early 1996, Wackernagel and Rees published *Our Ecological Footprint: Reducing Human Impact on the Earth*.*

Wackernagel and Rees originally estimated that the available biological capacity for the 6 billion people on Earth at that time was about 1.3 hectares per person.

EF is an estimate of the amount of biologically productive land and sea area needed to regenerate the resources human population consumes and to absorb the corresponding waste, given prevailing technology and current understanding. Using this assessment, it is possible to estimate how many planet Earths it would take to support humanity if everybody lived a given lifestyle.

Per capita EF is a means of comparing consumption and lifestyles, and check this against nature's ability to provide for this consumption.

In 2003, the average biologically productive area per person worldwide was approximately 1.8 global hectares (gha) per capita. The US footprint per capita was 9.6 gha, and that of Switzerland was 5.1 gha per person, whilst China's was 1.6 gha per person.

### Calculate Your Ecological Footprint

<http://www.mec.ca/coop/communit/meccomm/ecofoot.htm>

## The Happy Planet Index (HPI)

The Happy Planet Index (HPI) is an index of human well-being and environmental impact. The index challenges other well-established indices such as Gross Domestic Product (GDP) and the Human Development Index (HDI).

*It was introduced by the New Economics Foundation (NEF), in July 2006.*

The HPI is based on the principle that most people want to live long and fulfilling lives, and the country which is doing the best is the one that allows its citizens to do so, whilst avoiding infringing on the opportunity of future people and people in other countries to do the same.

The Happy Planet Index is an innovative measure that shows the ecological efficiency with which human well-being is delivered. It is the first ever index to combine environmental impact with human well-being. Each country's HPI value is a function of its average life satisfaction, life expectancy at birth, and ecological footprint per capita. Analysing its results could help us to move towards a world where we can all live good lives without costing the earth.

The Index doesn't reveal the 'happiest' country in the world. It shows the relative efficiency with which nations convert the planet's natural resources into long and happy lives for their citizens. The nations that score well show that achieving, long, happy lives without over-utilising the resources is possible.

The best scoring country in 2006 is the island state of Vanuatu, followed by Colombia and Costa Rica, while Burundi, Swaziland and Zimbabwe form the bottom of the list.

**Calculate Your HPI**

<http://www.itint.co.uk/hpisurvey/>



# Principles of Sustainable Development:

The principles of SD refer to abstract rules or guidelines that one can apply in order to achieve SD. Various sets of principles of sustainable development have been proposed in the past decades. Some of the widely established sets of principles are listed as follows:

- Bellagio Principles: Guidelines for the Practical Assessment of Progress Toward Sustainable Development (Indicators)
- Principles defining Sustainable Development
- Earth Charter / The Earth Charter Consultation

## **Bellagio Principles**

*The Bellagio Principles were created by the International Institute of Sustainable development, Canada in collaboration with experts from around the world in 1996.*

These principles are meant to be guidelines to start and improve assessment activities of non-government organizations, corporations, community groups, governments and International institutions. Overarching principles were sought that would provide a link between theory and practice.

These principles deal with **four** aspects of assessing progress toward sustainable development.

**Aspect 1** deals with the starting point of any assessment - establishing a vision of sustainable development and clear goals that provide a practical definition of that vision in terms that are meaningful for the decision-maker.

**Aspect 2** covers principles 2 to 5 deal with the content of any assessment and the need to merge a sense of the overall system with a practical focus on current priority issues.

**Aspect 3** deals with principles 6 through 8 on key issues of the process of assessment,

**While Aspect 4** involves principles 9 and 10 focusing on the necessity of establishing a continuing capacity for assessment.

## Principles Defining Sustainable Development

*Source: OSEM (Ontario Society of Environmental Management) Newsletter, 1989, cited in Nelson, J.G. and H. Edsvik. 1990. Sustainable development, conservation strategies, and heritage. Alternatives 16 (4): 62-71.*

1. Sustainable development requires the promotion of values that encourage consumption standards that are within the bounds of the ecologically possible and to which all can reasonably aspire.
2. Meeting essential needs depends in part on achieving full growth potential, and sustainable development clearly requires economic growth in places where such needs are not being met.
3. Though the issue is not merely one of population size but the distribution of resources, sustainable development can only be pursued if demographic developments are in harmony with the changing productive potential of the ecosystem.
4. Sustainable development must not endanger the natural systems that support life on Earth; the atmosphere, the waters, the soils, and living beings.
5. Growth has no set limits in terms of population or resource use beyond which lies ecological disaster but ultimate limits there are, and sustainability requires that long before these are reached the world must ensure equitable access to the constrained resources and re-orient technological efforts to relieve the pressure.
6. Most renewable resources are part of a complex and interlinked ecosystem and maximal sustained yield must be defined after taking into account system-wide effects of exploitation.
7. Sustainable development requires that the rate of depletion of non-renewable resources should foreclose as few options as possible.
8. Sustainable development requires the conservation of plant and animal species.
9. Sustainable development requires that the adverse impacts on the quality of air, water and other natural elements are minimized so as to sustain the ecosystem's overall integrity.

## The Earth Charter Principles

*The Earth Charter Principles had been in development since the year 1997, completed in March 2000 and launched in The Hague, Netherlands, on 29 June 2000. These Principles have since then been formally endorsed by organizations, including the UNESCO Conference of Member States, the World Conservation Union of IUCN, national government ministries, national and international associations of universities, and hundreds of cities and towns across the world.*

The Earth Charter principles cover various aspects such as environmental responsibility, peaceful coexistence and respect for life, democracy, and justice. They include:

- Respect Earth and life in all its diversity.
- Care for the community of life with understanding, compassion, and love.
- Build democratic societies that are just, participatory, sustainable, and peaceful.
- Secure Earth's bounty and beauty for present and future generations.
- Ecological Integrity - four principles addressing Earth's ecological systems and biological diversity, a preventive and precautionary approach as the best method of ecological protection, and compassionate treatment of all living beings
- Social and Economic Justice - five principles addressing patterns of consumption and production, human rights, community well-being, human development, poverty, spiritual well-being, and the dissemination of ecological knowledge.
- Democracy, Nonviolence and Peace - principles addressing access to information, participatory decision making, accountability in governance, gender equality, cooperation, and formal education and lifelong learning.

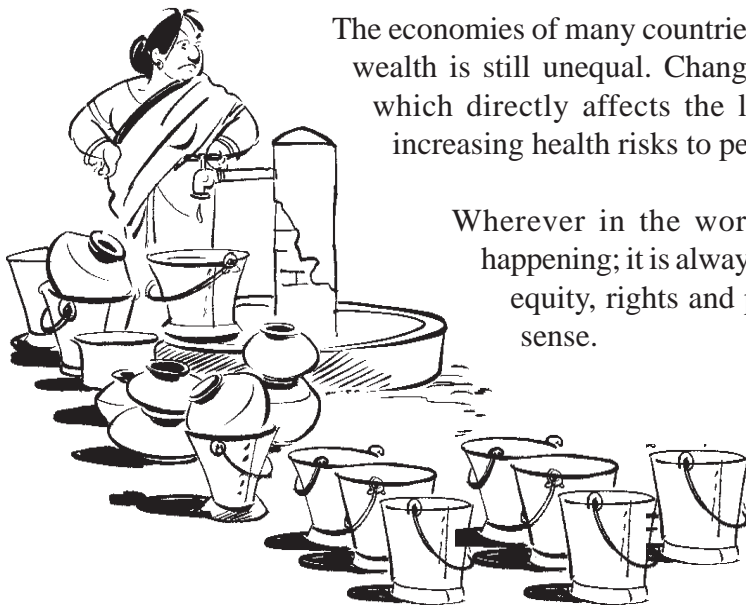


# Key Issues and Priorities for Sustainable Development

Over the past decade the world has woken up to the fast depleting non-renewable resources, loss of biodiversity, land degradation, increasing air pollution, ozone depletion, fast disappearing glaciers, polluted fresh water sources, sea erosion of land, nuclear waste, electronic waste, increasing deforestation, unchecked/unplanned development, and more large scale, sudden on-set disasters.

## FACT SHEET

- 53 per cent of all land in South Asia is suffering from desertification
- 7 of the 17 mega diversity nations in the world which collectively claim more the two-thirds of the global biological resources are in Asia
- More than 80 per cent of coral reefs in Southeast Asia were at risk with 50 per cent of these at high risk; similarly 54 per cent of the reefs in the Indian Ocean are at high risk
- It has been estimated that Central Asia was in the highest level of water stress (85 per cent) followed by South Asia (48 per cent), Northeast Asia (27 per cent) and Southeast Asia (9 per cent)
- In the year 2005 the South Asian region had an economic growth rate of 8.7 per cent.
- 32 per cent of the regional population in South Asia lives in extreme poverty



The economies of many countries are booming but the distribution of wealth is still unequal. Changing trends in consumption patterns which directly affects the lifestyle of people has also led to increasing health risks to people of all ages.

Wherever in the world, environmental degradation is happening; it is always linked to questions of social justice, equity, rights and people's quality of life in its widest sense.

It was almost 75 years ago that Mahatma Gandhi had said:

“God forbid that India should ever take to industrialism after the manner of West. The economic imperialism of a single, tiny nation is today keeping the world in chains. If an entire nation of 300 million (India’s population then) took to similar economic exploitation, it would strip the world bare like locusts.”

In the document ‘Sustainable Development Priorities for South Asia’ published by UNEP three related dimensions have been identified:

- a) Countries with equal income distribution, greater civil liberties, political rights and higher literacy levels tend to have higher environmental quality.
- b) Environmental problems bear down disproportionately on the poor.
- c) Emphasis on the need to ensure a better quality of life for all, now and into the future, in a just and equitable manner while living within the limits of supporting ecosystems.

The priorities which have been underlined for the South Asia Region include Eliminating Poverty and Creating Human Security, Conserving the Natural Resource Endowments, Securing the Economic Base and Strengthening Institutional Systems.

For more information on the status of these priorities, visit

<http://www.unescap.org/unis/press/2007/oct/g38.asp>

# International Commitment Towards Sustainable Development

## **Stockholm Conference<sup>1</sup>**

The Stockholm Conference, also known as The United Nations Conference on the Human Environment was held in Stockholm, Sweden from 5 to 16 June 1972. It considered the need for a common outlook and principles to inspire and guide the people of the world for the preservation and enhancement of the human environment.

The Conference approved establishment of the United Nations Environment Programme (UNEP) to provide continued leadership and coordination of environmental action.

## **The Brundtland Commission<sup>2</sup>**

The World Commission on Environment and Development (WCED), was convened by the United Nations in 1983. Chaired by Ms. Gro Harlem Brundtland, it was also called the Brundtland Commission. The commission was created to address the growing concern “about the accelerating deterioration of the human environment and natural resources and the consequences of that deterioration for economic and social development.” The UN General Assembly recognized that environmental problems were global in nature and determined that it was in the common interest of all nations to establish policies for sustainable development.

The Report of the Brundtland Commission, *Our Common Future*, was published by Oxford University Press in 1987.

## **Earth Summit<sup>3</sup>**

The United Nations Conference on Environment and Development, also known as the Earth Summit was held in Rio de Janeiro, Brazil from June 3 to June 14, 1992. In this conference, about 178 governments participated, including the heads of 118 States or Governments.

The Commission on Sustainable Development (CSD) was created in December 1992 to ensure effective follow-up of UNCED, to monitor and report on implementation of the agreements at the local, national, regional and international levels.

Five agreements were signed during the conference. These are listed as follows:

- The *Framework Convention on Climate Change* that introduced measures designed to reduce the threat of global warming.
- The *Convention on Biological Diversity* which put forward proposals aimed at preserving the Earth's biological diversity through the protection of species and ecosystems.
- *Agenda 21* – this was an action plan, aimed at introducing sustainable development, which it is hoped would guide government policies throughout the world over the forthcoming decades.
- The *Rio Declaration* includes 27 principles which was believed would guide action on development and the environment.
- Finally, the *Forest Principles* emphasizing the right of states to exploit their own forest resources while advocating general principles of sustainable forest management.

**Agenda 21** is a comprehensive plan of action to be taken globally, nationally and locally by organizations of the United Nations System, Governments, and Major Groups in every area in which human impacts on the environment. The number 21 refers to the 21st century.

There are 40 chapters in Agenda 21, divided into four sections. They are as follows:

Section I: Social and Economic Dimensions

Section II: Conservation and Management of Resources for Development

Section III: Strengthening the Role of Major Groups

Section IV: Means of Implementation

In particular, Chapter 25 of Agenda 21 talks about the Children and Youth in Sustainable Development. Chapter 36 deals with Promoting Education, Public Awareness and Training.

The full implementation of Agenda 21, the Programme for Further Implementation of Agenda 21 and the Commitments to the Rio principles, were strongly reaffirmed at the **World Summit on Sustainable Development (WSSD)** held in Johannesburg, South Africa from 26 August to 4 September 2002.

### **Millennium Development Goals (MDGs)<sup>4</sup>**

The Millennium Development Goals are goals that 192 United Nations member states have agreed to try to achieve by the year 2015.

The MDGs were officially established at the Millennium Summit in 2000, where 189 world leaders adopted the United Nations Millennium Declaration.

The 8 MDGs that were particularly promoted in the years following the Millennium Summit break down into 18 quantifiable targets that are measured by 48 indicators. These include:

- Goal 1: Eradicate extreme poverty and hunger
- Goal 2: Achieve universal primary education
- Goal 3: Promote gender equality and empower women
- Goal 4: Reduce child mortality
- Goal 5: Improve maternal health
- Goal 6: Combat HIV/AIDS, malaria and other diseases
- Goal 7: Ensure environmental sustainability
- Goal 8: Develop a Global Partnership for Development

#### **STATUS OF MDGs in ASIA and PACIFIC**

According to the report – “**The Millennium Development Goals: Progress in Asia and the Pacific 2007**”,

**Asia and the Pacific accounts for about 65 per cent of the world’s underweight children.**

The region’s overall maternal mortality ratio, at over 300 per 100,000 live births, is more than 30 per cent higher than in Latin America and the Caribbean.

Over 560 million people in rural areas lack access to improved water sources; over 1.5 billion people are living without basic sanitation facilities, nearly three-quarters of the global total.

The report also warns that environmental pressures – arising from land degradation, poor water management, rising pollution in urban areas, CO<sub>2</sub> emission contributing to climate change and other factors could push more people into poverty.

<http://www.unescap.org/unis/press/2007/oct/g38.asp>

#### **Implementation of the MDGs**

- In 2001, the Road Map towards the implementation of the United Nations Millennium Declaration was presented, outlining potential strategies for action designed to meet the goals and commitments of the Millennium Declaration.
- In 2002, the annual report focused on progress made in the prevention of armed conflict and the treatment and prevention of diseases, including HIV/AIDS and Malaria.
- In 2003, emphasis was placed on strategies for development and strategies for sustainable development.
- In 2004, it was on bridging the digital divide and curbing transnational crime.
- In 2005, the comprehensive five-yearly report on progress toward achieving the MDGs was prepared. The report reviews the implementation of decisions taken at the international conferences, progress on HIV/AIDS and financing for sustainable development.

#### **SAARC Development Goals (SDGs)<sup>5</sup>**

The South Asian Association for Regional Cooperation (SAARC) was established on December 8, 1985 by the Heads of State or Government of Bangladesh, Bhutan, India, Maldives, Nepal,

Pakistan and Sri Lanka. It provides a platform for the people of South Asia to work together in a spirit of friendship, trust and understanding. It aims to accelerate the process of economic and social development in Member States.

At the Thirteenth SAARC Summit, held in Bangladesh in January 2006, the SAARC Heads of State and Governments adopted the SAARC Development Goals (SDGs) for the period of 5 years from 2007 to 2012. The SDGs centre on 22 goals in four areas that include Livelihood, Health, Education and Environment to fight against poverty:

In addition to this SAARC mandate, two sources have inspired and guided the preparation of the SDGs: firstly, the regional imperative for galvanizing a popular imagination which allows zero tolerance for a continuation of the inhumanity of poverty, and secondly, the international imperative of achieving the Millennium Development Goals (MDGs) by 2015.

## **Education for All<sup>6</sup>**

The Education for All movement took off at the World Conference on Education for All in 1990. Representatives from 155 countries and 150 organizations pledged to provide education for all by the year 2000 at this Conference held at Jomtien, Thailand.

Since then, governments, non-governmental organizations, civil society, bilateral and multilateral donor agencies and the media have taken up the cause of providing basic education for all children, youth and adults.

In 1990, The Education for All decade culminated at the World Education Forum (April 2000, Dakar, Senegal) which adopted the Dakar Framework for Action *Education for All: Meeting Our Collective Commitments*. This document commits governments to achieving quality basic education for all by 2015, with particular emphasis on girls' schooling and a pledge from donor countries and institutions that "no country seriously committed to basic education will be thwarted in the achievement of this goal by lack of resources.

## **United Nations Literacy Decade (UNLD)**

The United Nations General Assembly has declared that the period from 2003 to 2012 will be known as the United Nations Literacy Decade (UNLD).

UNESCO's action for UNLD will be to support member states in implementing the International Plan of Action to help create a literate environment for all, girls and boys, adolescents and young people, women and men in both developing and developed countries.

## **UN Decade For Sustainable Development<sup>7</sup>**

United Nations General Assembly in its 57th Session in December 2002, proclaimed the Decade of Education for Sustainable Development for the period 2005 – 2014 with UNESCO as its lead agency.

The goal of the UNDESD is to integrate the principles, values, and practices of sustainable development into all aspects of education and learning for all sections of the society.

The UN DESD seeks to:

- (a) Incorporate quantitative and qualitative ESD indicators into on-going monitoring and evaluation of Education for All (EFA) and the UN Literacy Decade;
- (b) Monitor the progress of activities undertaken by UN agencies, Governments and NGOs in observance of the Decade and facilitate implementation and follow-up;
- (c) Evaluate the achievement of measurable results in realising the aims and objectives of the Decade, particularly in regard to the integration of ESD in national educational policies, programmes and systems; and
- (d) Make recommendations to further promote ESD based on results and lessons learnt from the Decade.

It was envisaged that regions and nations will create plans, strategic approaches, and timetables on the basis of the framework provided by the International Implementation Scheme of DESD. This educational effort will encourage changes in behaviour that will create a more sustainable future in terms of environmental integrity, economic viability, and a just society for present and future generations.

# Annexure

## **Sustainable Development Timeline<sup>8</sup>**

### **1962 - Rachel Carson publishes, “Silent Spring”**

For the first time the earth’s capacity to absorb chemicals was questioned.

### **1963 - International Biological Programme initiated by nations around the world**

It was a 10 year study to analyze environmental damage through biological and ecological mechanisms, which laid the foundation for a science-based environmentalism.

### **1972 - United Nations Conference on Human Environment held in Stockholm**

It provided the first international recognition of environmental issues. The concept of sustainable development was debated in great detail. The conference led to the establishment of numerous national environmental protection agencies and the United Nations Environment Programme (UNEP). [www.unep.org](http://www.unep.org)

### **1972 - Club of Rome publishes “Limits to Growth”.**

The report predicted the dire consequences if growth was not slowed down. [www.clubofrome.org](http://www.clubofrome.org)

### **1977 - Tbilisi Declaration**

The world’s first intergovernmental conference on environmental education was organized by the United Nations Education, Scientific, and Cultural Organization (UNESCO) in cooperation with the U.N. Environment Programme (UNEP) and was convened in Tbilisi, Georgia (USSR).

### **1980 - World Conservation Strategy released by IUCN.**

The strategy defines development as “the modification of the biosphere and the application of human, financial, living and non-living resources to satisfy human needs and improve the quality of human life”. The main agents of habitat destruction were identified as poverty, population pressure, social inequity and the terms of trade. [www.iucn.org](http://www.iucn.org)

### **1983 - World Commission on Environment and Development**

Chaired by Norwegian Prime Minister Gro Harlem Brundtland, it is also called the Brundtland Commission. It worked for three years to weave together a report on social, economic, cultural, and environmental issues.

### **1987 – Brundtland Commission Report**

The Report of the Brundtland Commission, *Our Common Future*, was published by Oxford University Press in 1987. It deals with sustainable development and the change of politics needed for achieving that. The definition of this term was given in the report.

### **1988 – Inter-governmental Panel on Climate Change established**

It was established with three working groups to assess the most up-to-date scientific, technical and socio-economic research in the field of climate change. [www.ipcc.ch](http://www.ipcc.ch)

### **1990 - World Conference on Education for All**

The Education for All movement took off at the World Conference on Education for All in 1990. Since then, governments, non-governmental organizations, civil society, bilateral and multilateral donor agencies and the media have taken up the cause of providing basic education for all children, youth and adults.

### **1992 –U.N. Conference on Environment and Development (UNCED)**

**Held in Rio de Janeiro**, It is commonly known as the Earth Summit. It resulted in the publication of Agenda 21, the Convention on Biological Diversity, the Framework Convention on Climate Change, the Rio Declaration, and a statement of non-binding Forest Principles. [www.unep.org/unep/partners/un/unced/home.htm](http://www.unep.org/unep/partners/un/unced/home.htm)

### **1993- World Conference on Human Rights:**

Governments re-affirmed their international commitments to all human rights. Appointment of the first UN High Commissioner for Human Rights took place. [www.unhchr.ch](http://www.unhchr.ch)

### **1995- World Trade Organization (WTO)**

The establishment of WTO resulted in the formal recognition of trade, environment and development linkages. [www.wto.org](http://www.wto.org)

### **1999- Launch of the first Global Sustainability Index**

It led to tracking leading corporate sustainability practices worldwide. Called the Dow Jones Sustainability Group Indexes, the tool provides guidance to investors looking for profitable companies that follow sustainable development principles. [www.sustainabilityindex.com](http://www.sustainabilityindex.com)

### **2000- UN Millennium Summit and the MDGs**

The largest-ever gathering of world leaders agreed to a set of time bound and measurable goals for combating poverty, hunger, disease, illiteracy, environmental degradation and discrimination against women, now known as the Millennium Development Goals, to be achieved by 2015. [www.un.org/millenniumgoals](http://www.un.org/millenniumgoals)

### **2001- Fourth Ministerial Conference of the World Trade Organization held in Doha, Qatar,**

It recognized the environment and development concerns in the final Declaration. NGOs and the WTO agreed to re-interpret the Agreement on Intellectual Property Rights regarding access to medicines and public health. [www.ictsd.org/ministerial/doha](http://www.ictsd.org/ministerial/doha)

### **2002- World Summit on Sustainable Development**

Held in Johannesburg, the conference marked 10 years since UNCED. In a climate of frustration at the lack of government progress, the Summit promotes “partnerships” as a non-negotiated approach to sustainability. [www.johannesburgsummit.org](http://www.johannesburgsummit.org)

### **2005- Kyoto Protocol enters into force.**

The protocol legally binds the developed country ‘Parties’ to goals for greenhouse gas emission reductions, and establishing the Clean Development Mechanisms for developing countries. [www.iisd.ca/process/climate\\_atm-fcccintro.htm](http://www.iisd.ca/process/climate_atm-fcccintro.htm)

### **2006- Stern Report**

The report makes the convincing economic case that the costs of inaction on climate change will be up to 20 times greater than measures required to address the issue today.

[www.hmtreasury.gov.uk](http://www.hmtreasury.gov.uk)

### **2007- The Nobel Peace Prize**

The Norwegian Nobel Committee decided that the Nobel Peace Prize for 2007 is to be shared, between the Intergovernmental Panel on Climate Change (IPCC) and Albert Arnold (Al) Gore Jr. for their efforts to build up and disseminate greater knowledge about man-made climate change, and to lay the foundations for the measures that are needed to counteract such change.

[http://nobelprize.org/nobel\\_prizes/peace/laureates/2007/press.html](http://nobelprize.org/nobel_prizes/peace/laureates/2007/press.html)

### **2007- Fourth International Conference on Environmental Education**

The Fourth International Conference on Environment Education (ICEE) co-sponsored by UNESCO and UNEP and is being organized by the Government of India in Ahmedabad from 26 November to 28 November 2007. Being held during the United Nations Decade of Education for Sustainable Development (DESD 2005-2014), the Conference will look at how EE and ESD can partner and strengthen each other towards building a sustainable future.

# Acronyms

<b>AIDS</b>	Acquired Immune Deficiency Syndrome
<b>CDM</b>	Clean Development Mechanisms
<b>CEE</b>	Centre for Environment Education
<b>CSD</b>	Commission on Sustainable Development
<b>EC</b>	Earth Charter
<b>EF</b>	Ecological Footprint
<b>EFA</b>	Education For All
<b>ESD</b>	Education for Sustainable Development
<b>GDP</b>	Gross Domestic Product
<b>GNH</b>	Gross National Happiness
<b>HDI</b>	Human Development Index
<b>HIV</b>	Human Immunodeficiency Virus
<b>HPI</b>	Happy Planet Index
<b>MDGs</b>	Millennium Development Goals
<b>MONET</b>	Swiss ‘Monitoring of Sustainable Development Project’
<b>NEF</b>	New Economics Foundation
<b>OSEM</b>	Ontario Society of Environmental Management
<b>PCA</b>	Pollution Control Authority
<b>PPP</b>	Purchasing Power Parity
<b>SAARC</b>	South Asian Association for Regional Cooperation
<b>SC</b>	Sustainable Consumption
<b>SD</b>	Sustainable Development
<b>SDC</b>	Swiss Agency for Development and Cooperation
<b>SDGs</b>	SAARC Development Goals
<b>SG</b>	Sustainable Growth
<b>UN</b>	United Nations
<b>UNFCCC</b>	United Nations Framework Convention on Climate Change
<b>UNCED</b>	United Nations Conference on Environment and Development
<b>UNCHE</b>	United Nations Conference on the Human Environment
<b>UNDESD</b>	UN Decade of Education for Sustainable Development
<b>UNEP</b>	United Nations Environment Programme
<b>UNESCO</b>	United Nations Educational Scientific and Cultural Organization.
<b>UNLD</b>	UN Literacy Decade
<b>WCED</b>	World Commission on Environment and Development
<b>WSSD</b>	World Summit on Sustainable Development

# Glossary

**Clean Development Mechanism:**<sup>9</sup> It is an arrangement under the Kyoto Protocol allowing industrialised countries with a greenhouse gas reduction commitment to invest in projects that reduce emissions in developing countries as an alternative to more expensive emission reductions in their own countries.

**Conservation:** It is the careful utilization of a natural resource in order to prevent depletion.

**Deforestation:**<sup>10</sup> It is the conversion of forested areas to non-forest land for use such as arable land, pasture, urban use, logged area, or wasteland. It refers to the removal or destruction of significant areas of forest cover resulting in a degraded environment with reduced biodiversity.

**Democracy:**<sup>11</sup> It is a government by the people in which the supreme power is vested in the people and exercised directly by them or by their elected agents under a free electoral system.

**Demography:** It is the statistical study of all populations.

**Eco-efficiency:**<sup>12</sup> aims at breaking the link (decoupling) between economic growth and environmental degradation and use of natural resources.

**Ecology:** This (from Greek oikos, “household”; and logos, “knowledge”) is the scientific study of systems of living organisms and the interactions among organisms and between the organisms and their environment.

**Economy:** It is the system of human activities related to the production, distribution, exchange, and consumption of goods and services of a country or other area.

**Equity:** It is the quality of being fair or impartial; fairness;

**Gross Enrolment Ratio:**<sup>13</sup> It is a statistical measure used in the education sector and by the UN. It gives an indication of the level of education from kindergarten to postgraduate education. Also known as Gross enrolment index (GEI)

**Institutional System:**<sup>14</sup> It is one in which need is accepted as a normal part of social life. Welfare is provided for the population as a whole, in the same way as public services like roads or schools might be. In an institutional system, welfare is not just for the poor: it is for everyone.

**Kyoto Protocol:** It is an agreement made under the United Nations Framework Convention on Climate Change. Countries that ratify this protocol commit to reduce their emissions of carbon dioxide and five other greenhouse gases, or engage in emissions trading if they maintain or increase emissions of these gases.

**Life Expectancy:** It is a statistical measure of the average length of survival of a living being.

**Literacy:** It is the ability to read and write, or the ability to use language to read, write, listen, and speak.

**Non-Renewable Resources:** It is a natural resource that cannot be re-made, re-grown or regenerated on a scale comparative to its consumption e.g fossil fuels such as Coal, Petroleum and Natural Gas.

**Poverty:**<sup>15</sup> It is a condition in which a person or community is deprived of, and or lacks the essentials for a minimum standard of well-being and life.

**Purchasing Power Parity:**<sup>16</sup> It is a theory which states that exchange rates between currencies are in equilibrium when their purchasing power is the same in each of the two countries. This means that the exchange rate between two countries should equal the ratio of the two countries' price level of a fixed basket of goods and services.

**Renewable Resources:**<sup>17</sup> It is a natural resource that can be replenished by natural processes at a rate comparable to its rate of consumption by humans or other users e.g resources such as solar radiation, tides, and wind.

**Social Justice:**<sup>18</sup> It is about preventing human rights abuses and ensuring adherence to international law. It focuses on issues of minority groups, women's and children's issues, war crimes and crimes against humanity, including genocide.

# References

- Brundtland Commission definition- Brundtland, G. H., et al. 1987, Our Common Future: Report of the World Commission on Environment and Development, Oxford University Press
- Towards a Green Future, A Trainer's Manual on Education for Sustainable Development, Green School Series, Centre for Environment Education (CEE), Ahmedabad, 1999.
- Environment and Development; Traditions, Concerns and Efforts in India, National Report to UNCED, Ministry of Environment and Forests, Government of India, 1992.
- Youth Xchange; Towards Sustainable Lifestyle, the Guide; training kit on responsible consumption; UNESCO-UNEP, 2002
- Decade of Education for Sustainable Development, Taking it Forward Together, Inputs from the International Conference ' Education for a Sustainable Future' Centre for Environment Education, Ahmedabad, India, 2005.
- Understanding Sustainable Development, Module-II, Green Teacher Series, CEE and COL, 2005.
- Amoeba Model Diagram [http://www.landfood.ubc.ca/courses/agsc/450/project/files/studentwebsites2003/Group11/amoeba\\_model.htm](http://www.landfood.ubc.ca/courses/agsc/450/project/files/studentwebsites2003/Group11/amoeba_model.htm)

## End notes

<sup>2</sup> [http://en.wikipedia.org/wiki/Brundtland Commission](http://en.wikipedia.org/wiki/Brundtland_Commission)

<sup>3</sup> <http://www.un.org/esa/sustdev/documents/agenda21/english/agenda21toc.htm>

<sup>4</sup> [http://en.wikipedia.org/wiki/Millennium Development Goals](http://en.wikipedia.org/wiki/Millennium_Development_Goals)

<sup>5</sup> <http://www.shrdc-isb.org.pk/Report/SDG-WorkshopReport1.pdf>

<sup>6</sup> [www.unesco.org/education/efa/ed\\_for\\_all](http://www.unesco.org/education/efa/ed_for_all)

<sup>7</sup> <http://portal.unesco.org/education>

<sup>8</sup> [http://www.iisd.org/pdf/2006/sd\\_timeline\\_2006.pdf](http://www.iisd.org/pdf/2006/sd_timeline_2006.pdf)

<sup>9</sup> [http://en.wikipedia.org/wiki/Clean Development Mechanism](http://en.wikipedia.org/wiki/Clean_Development_Mechanism)

<sup>10</sup> <http://en.wikipedia.org/wiki/Deforestation>

<sup>11</sup> <http://usinfo.state.gov/products/pubs/whatsdem/whatdm2.htm>

<sup>12</sup> <http://195.218.114.18/Envirocentre2005/downloads/ECOWEB1.pdf>

<sup>13</sup> [en.wikipedia.org/wiki/Gross enrollment ratio](http://en.wikipedia.org/wiki/Gross_enrollment_ratio)

<sup>14</sup> <http://www2.rgu.ac.uk/publicpolicy/introduction/socpolf.htm>

<sup>15</sup> <http://en.wikipedia.org/wiki/Poverty>

<sup>16</sup> <http://fx.sauder.ubc.ca/PPP.html>

<sup>17</sup> [http://en.wikipedia.org/wiki/Renewable resource](http://en.wikipedia.org/wiki/Renewable_resource)

<sup>18</sup> [http://www.onlinedemocracy.ca/fear\\_less/social%20justice/definition.html](http://www.onlinedemocracy.ca/fear_less/social%20justice/definition.html)

### **Centre for Environment Education (CEE)**

The Centre for Environment Education (CEE) was established in August 1984 as a Centre of Excellence supported by the Ministry of Environment and Forests, Government of India, and affiliated to the Nehru Foundation for Development (NFD). CEE's primary objective is to improve public awareness and understanding of environmental issues with a view to promote the conservation and wise use of nature and natural resources. To this end, CEE not only creates expertise in the field of environmental education, but also develops innovative programmes and educational materials, testing them for validity and effectiveness. These programmes and materials are designed flexibly to permit suitable adaptation for use across the country.

### **South Asia Youth Environment Network (SAYEN)**

South Asia Youth Environment Network (SAYEN – [www.sayen.org](http://www.sayen.org)) was set up in July 2002. Supported by the UNEP Asia and the Pacific, SAYEN is linked to TUNZA, UNEP's strategy for children and youth. CEE hosts the Secretariat SAYEN, which has membership from all the SAARC countries. One-two organizations in each of the SAARC countries have been identified as the National Focal Points (NFPs) for the network. The number of SAYEN members in each country ranges from 20 to 100 with over 1500 youth organizations, individual, national and international agencies including Government in the region associated with SAYEN. NFPs facilitate SAYEN activities in their respective countries.

### **Centre for Environment Education (CEE)**

The Centre for Environment Education (CEE) was established in August 1984 as a Centre of Excellence supported by the Ministry of Environment and Forests, Government of India, and affiliated to the Nehru Foundation for Development (NFD). CEE's primary objective is to improve public awareness and understanding of environmental issues with a view to promote the conservation and wise use of nature and natural resources. To this end, CEE not only creates expertise in the field of environmental education, but also develops innovative programmes and educational materials, testing them for validity and effectiveness. These programmes and materials are designed flexibly to permit suitable adaptation for use across the country.

### **South Asia Youth Environment Network (SAYEN)**

South Asia Youth Environment Network (SAYEN – [www.sayen.org](http://www.sayen.org)) was set up in July 2002. Supported by the UNEP Asia and the Pacific, SAYEN is linked to TUNZA, UNEP's strategy for children and youth. CEE hosts the Secretariat of SAYEN, which has membership from all the SAARC countries. One-two organizations in each of the SAARC countries have been identified as the National Focal Points (NFPs) for the network. The number of SAYEN members in each country ranges from 20 to 100 with over 1500 youth organizations, individual, national and international agencies including Government in the region associated with SAYEN. NFPs facilitate SAYEN activities in their respective countries.



# CEE

Centre for Environment Education

Thaltej Tekra, Ahmedabad-380054, Gujarat, India

Tel: +91 79 26858002 Fax: +91 79 26858010

[www.ceeindia.org](http://www.ceeindia.org)