In brief...

**Plenary Session 2**
**India in a Global Context**

**Chairperson** Mr Jairam Ramesh  
**Keynote speaker** Mr Montek Singh Ahluwalia  
**Speakers** Mr Suman Bery • Ms Preety Bhandari  
  • Mr Michael F Carter • Dr Prodipto Ghosh  
  • Dr Parthasarathy Shome

Despite a rising growth rate and flourishing markets, India ranks lower than many other developing countries in public service delivery. India spends about 7% of its gross domestic product on public health; with 2% of the spending coming from the public sector and 5% from the private sector, the government’s under-investment is evident.

The session’s primary concerns were pricing and other economic incentives for sustainability; the need to increase public investment in education and health, and decentralized delivery. Price plays a major role in decision-making; farmers will not treat resources as scarce until they are appropriately priced.

To enhance primary education, the Indian government has imposed a cess of 2% on all taxes, thus accumulating about 1 billion dollars, which is fed back to this sector. The importance of community participation is manifested in numerous micro-level successes in education, health, and sanitation, and these can be replicated on the macro level through institutional changes such as delivery decentralization. Constitutional amendments do empower administrative units but revenue needs to be mobilized at these levels.

To fight the poverty–environmental degradation nexus, poverty alleviation and environmental conservation measures must be synergized, particularly by conferring legal rights to eco-resources and reinstating the traditional rights of tribal communities. The impacts of climate change on agriculture, health, and biodiversity are also important and must be addressed.

Intense political competition may actually benefit environmental sustainability. Political parties now recognize that promises of free power and free water no longer ensure success. Pricing environmental goods according to scarcity is imperative for sustainability.

**Ministerial Session 2**
**Sectoral Linkages in Attaining Sustainability**

**Chairperson** Mr Børge Brende  
**Speakers** Mr Pekka Haavisto • Ms Lindiwe Hendricks • Mr A Raja • Mr Digvijay Singh  
  • Mr P L B A van Geel

The Johannesburg Summit established the MDGs (Millennium Development Goals)—time-bound targets detailing who would achieve what by when. However, the MDGs cannot be achieved until stakeholders in different sectors (water, health, education, etc.) collaborate. The key to achieving the MDGs is to create resource linkages across donor agencies, developed nations, and developing nations. Developed countries should fulfil their obligations so that enough resources are available to developing countries.

A major impediment to sustainability is institutional multiplicity at various levels of government. The irony of India’s situation is
that achievements of the 20th century (industrialization, communication, etc.) have become concerns for the 21st century (wasteful consumption, increased population growth, etc.). An integrated inter-ministerial framework with clearly defined responsibilities, authority, and accountability is imperative.

Though economic growth is essential for sustainability, it cannot occur without social issues such as poverty alleviation being addressed. Increasing investment in the energy sector is one step towards poverty eradication. The paradox today is that while the poor have no access to energy, the rich – with increased access to energy – pose a serious threat to the climate. At times, national priorities can conflict with global objectives. For example, poverty alleviation policies may ignore possible impacts on global climate.

**PLENARY SESSION 3**  
**WATER SUPPLY, HEALTH, AND HYGIENE**

*Chairperson* Gourisankar Ghosh  
*Speakers* Mr Bill Alexander  •  Mr Warren Evans  
•  Mr Sanjiv Gupta  •  Dr Leena Srivastava

Water supply, health, and hygiene are key to ensuring health benefits to communities. There is a need to enhance the current approach to water and sanitation programmes to one that looks beyond delivering a service and seeks to create an impact on the community. There is a need to empower local institutions and ensure community ownership of water supply and sanitation schemes. The government’s role must shift from implementation to facilitation and regulation, i.e. helping the community manage its own water supplies.

The MDGs (Millennium Development Goals) relating to child mortality and water supply and sanitation are interlinked; investments in water and sanitation would go a long way in achieving the other goal. The MDGs are not ends in themselves but opportunities to formulate integrated frameworks of regulation, economic and financial management, and partnerships. The objective is to create enabling environments for community-based decision-making.

To achieve desired health benefits and service levels, all stakeholders must forge partnerships to provide safe and equitable water supply and sanitation services to all sections of society. Public–private partnerships would play key roles in achieving these.

The key issues in the drinking water sector are decreased freshwater availability, deteriorating environmental conditions, regional imbalances in water availability, inadequate and low-quality service coverage, and poor cost recovery. A two-pronged approach would work: first, watershed management with interventions designed at a village/micro-watershed level based on a scientific evaluation of environmental and socio-economic information; second, good governance through community participation aimed at demand-driven decentralization of services. Independent regulation must be evolved to ensure equitable distribution of services.

Technological solutions aimed at safe water quality include individual treatment options, water kiosks (decentralized treatment), dual piping, and monitoring. To ensure the success of any water and sanitation programme, awareness about the potential benefits in terms of improved health must be generated among the community.

**KEYNOTE ADDRESS**  
**THE GREENHOUSE EFFECT AND ITS CLIMATIC CONSEQUENCES**

*Chairperson* Mr C Dasgupta  
*Speaker* Nobel Laureate Prof. F Sherwood Rowland, Donald Bren Research Professor of Chemistry and Earth System Science, University of California, USA

Besides gases like nitrogen and oxygen, the atmosphere comprises GHGs (greenhouse gases) such as carbon dioxide and water vapour that absorb outgoing infrared radiation. Observations in 1958 showed record-breaking trends of increases in carbon dioxide concentrations that have almost doubled since. Measurements of various samples collected in 1978 showed high concentrations of methane. Subsequent measurements in 1986 showed substantial increase in methane concentration from 1.6 parts per million to 1.75 parts per million by volume.
The natural greenhouse effect results in an earth warmer by 32 °C. In the absence of this phenomenon, the earth’s temperature would be –18 °C. Positive feedback mechanisms include greater temperature rise leading to increased water vapour concentrations, trapping more infrared radiation. Every one degree temperature rise leads to a 6% rise in atmospheric water vapour. Scientists have measured gas bubbles trapped in glacial ice, revealing increases in GHG concentrations.

The First Assessment Report of the Intergovernmental Panel on Climate Change in 1990 stated that unequivocal detection of enhanced greenhouse effect is not likely for a decade or more. However, the Second Assessment Report (1995) suggested a discernible human influence on global climate.

Warming due to doubled carbon dioxide concentration will not be uniform; effects will be greater in the Arctic region. Indications are changes in migratory patterns, glacial retreat, and increased wildfires. Impacts are likely to be grave with sea-level rise, changed global circulation patterns, and temperature hikes at high latitudes.

**PLENARY SESSION 4**

**RURAL ENERGIZATION FOR POVERTY ALLEVIATION**

*Chairperson* Mr Deepak S Parekh

*Speakers* Mr I H Rehman • Dr Lutz Mez

• Dr Joe Madiath • Mr Steven D Smith

• Dr John C Wall

Beginning on an optimistic note, the session acknowledged that poverty alleviation is evident in the declining global percentage of people earning less than a dollar a day: from 30% in the early 1990s to 23% by the end of the decade. Rural people must determine their minimum threshold of quality of life by getting involved in the planning process for development. Concrete needs assessment is also mandatory, as it is to bear in mind people’s needs while formulating projects or programmes. Industries, NGOs, research organizations, and policy-makers must form a consortium for technology application to rural electrification.

Rural electrification is the seed of development, for it directly affects livelihoods. Proper energization facilitates income generation. Primary reasons for low rural electrification are high costs of grid extension and low levels of purchasing power and consumption. Community-level decentralized energy options - such as micro hydro and solar, facilitated through micro-financing - would be effective solutions. Other challenges are high reliance on bio-fuels and absence of clean, sustainable energy sources. Renewable energy technologies offer a long-term solution. They should be small-scale, clean, sustainable, locally available, and locally serviceable. Tricky issues such as tariff setting and connection policies should be addressed.

There is a need to change rural energy interventions from a programme mode to one that is market-oriented. Problems of energy access and building soft skills must be addressed. Energy interventions should be integrated across all sectors and taken up in a mission mode, just like water issues. Also, rural energy interventions must focus more on livelihood and productive uses rather than consumptive uses.

**DINNER ADDRESS**

*Chairperson* Mr Sandeep Dikshit

*Dinner address* Dr Karan Singh, Hon’ble Member of Parliament, India

Dr Karan Singh, referring to the title of the summit, namely ‘Beyond Universal Goals: steering development towards global sustainability’, reiterated the MDGs (Millennium Development Goals). He mentioned that universal primary education and empowerment of women are the key to sustainable development as these relate to many development goals and help achieve those goals.

Dr Singh also suggested that burgeoning population being the root cause of unsustainability, there should be renewed thrust on family planning.

He also drew attention to upcoming challenges such as AIDS, the enormity of which the countries in Asia and Africa are yet to realize.

On the last MDG, namely ‘Global Partnership for Development’, Dr Singh said that there can be two models of global partnership, world as a family and world as a market. He
Dr Singh ended on a reassuring note, saying that we have enough resources available with us but we need to make the right choices and use our resources wisely and intelligently to achieve sustainability.

As they said it . . .

Globally there are 30 million households with illiterate mothers and with lack of water and sanitation facilities. Half of these households are in India.

*Mr Warren Evans, Director of Environment, The World Bank*

The key challenge is of managing a sizeable investment because we have a high level of costs and because water consumption does not pay in itself.

*Dr Leena Srivastava, Executive Director, TERI, New Delhi*

Global warming is not expected to be uniform; it will be more in the North.

*Nobel Laureate Prof. F Sherwood Rowland, Donald Bren Research Professor of Chemistry and Earth System Science, University of California, USA*

The environmental policy problem is how to allocate scarce resources between the public and private in a balanced way.

*Dr Prodipto Ghosh, Secretary, Ministry of Environment and Forests, New Delhi*

How can you meet the education target if young women are looking for water in one half of the day and for wood in the other half?

*Mr Børge Brende, Hon’ble Minister for Trade and Industry, Norway*

Social development is linked with poverty alleviation, job creation, and economic growth. There can be no sustainability without economic growth.

*Ms Lindiwe Hendricks, Hon’ble Deputy Minister of Trade and Industry, Government of South Africa*

On 16 February, the Kyoto Protocol comes into effect. It is a giant leap for man but a small step for mankind. It is essential but not enough.

*Mr P L B A van Geel, Cabinet Level, State Secretary, Ministry of Housing, Spatial Planning and the Environment, The Netherlands*

We should demonstrate the difference sustainable development can make in underdeveloped countries.

*Mr Pekka Haavisto, Chairman, UNEP Post-conflict Assessment Unit and former Minister for Environment and Development Cooperation, Government of Finland*