



11th Conference of the Parties to the United Nations Framework Convention on Climate Change and 1st Conference of the Parties serving as Meeting of the Parties to the Kyoto Protocol

Address by Dr R K Pachauri, Chairman of the Intergovernmental Panel on Climate Change (IPCC) at the High Level Segment

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At this juncture while the Conference of the Parties is engaged in framing actions that would meet the challenge posed by past and future climate change, it would be relevant to highlight some major findings put forward in the Third Assessment Report (TAR) of the IPCC.

- The Earth's climate system has demonstrably changed on both global and regional scales since the pre-industrial era, and there is new and stronger evidence that most of the warming observed over the last 50 years is attributable to human activities.
- Observed changes in regional climate have affected many physical and biological systems, and there are preliminary indications that social and economic systems have also been affected.
- Projections using the SRES emissions scenarios based on a range of climate models point to an increase in globally averaged surface temperature of 1.4 to 5.8° C over the period 1990 to 2100. This is about two to ten times larger than the central value of observed warming over the 20th century, and the projected rate of warming is very likely to be without precedent during at least the last 10,000 years, based on paleo-climate data.
- The severity of the adverse impacts will be larger for greater cumulative emissions of greenhouse gases and associated changes in climate.
- There are many opportunities, including technological options, to reduce near-term emissions. Technical progress relevant to the potential for greenhouse gas emission reductions has been faster than anticipated.
- Reducing emissions of greenhouse gases to stabilize their atmospheric concentrations would lessen the pressures on natural and human systems from climate change and reduce damages caused by climate change. Both the pathways to stabilization and the stabilization levels themselves are key determinants of mitigation costs.
- The greater the reductions in emissions and the earlier they are introduced, the smaller and slower the projected changes. There would be attendant economic benefits flowing from early action.
- Adaptation is a necessary strategy at all scales to complement climate change mitigation efforts. Together these two sets of actions can contribute to meeting the objectives of sustainable development.
- Greater and more rapid climate change would pose greater challenges for adaptation and carry with it greater risks of damages than would lesser levels and slower rates of change.

May I refer to ongoing work in SBSTA on scientific, technical and socioeconomic aspects of mitigation and the five-year programme of work of SBSTA on impacts and vulnerability and adaptation to climate change. In that context it is submitted that there is a wealth of information contained in the TAR that should be used for this purpose.

I would also like to refer to another stream of work managed by the IPCC which provides data sets, climate related and other scenarios as well as other material, such as guidelines for using scenarios and which aims to facilitate impacts and adaptation research in developing countries, details of which are under consideration.

- The work of the Panel towards the completion of the Fourth Assessment Report (AR4) is proceeding as scheduled, and it is planned that this entire task would be completed in 2007 before this august body meets for COP-13. The assessment that would have been accomplished at that stage would consist of the reports of the three Working Groups of the IPCC and a Synthesis Report.
- The AR4 will contain additional and updated information as against the TAR. It will address some specific cross-cutting themes, which cover, in addition to other issues, scientific and technical aspects of Article 2 of the Convention and a greater focus on the assessment of regional vulnerability and impacts and the assessment of adaptation strategies.
- It is hoped that this work would be facilitated by significant follow up research beyond the TAR, which was initiated by various organizations (such as the UNEP/GEF AIACC project) on topics and in regions where inadequate information was available at the time of the TAR. IPCC is looking forward to assessing the results of this research in its AR4.
- In addition, may I also bring to the attention of this distinguished conference that during 2005 two Special Reports have been completed, dealing respectively with "Safeguarding the Ozone Layer and the Global Climate System" and "Carbon Dioxide Capture and Storage"

Both these reports provide a comprehensive assessment of policy options in these areas of importance to decision-making. Both reports highlight mitigation options as part of an overall mitigation portfolio.

- The development of scenarios of future emissions and socioeconomic conditions is important for assessment of future climate change, including assessment of vulnerability and impacts and for the development of mitigation and adaptation strategies. The IPCC agreed in its last session that a new set of scenarios will be needed well before a possible Fifth Assessment Report

of the IPCC. It is envisaged that the Panel will play a coordinating and facilitating role in the development of such new scenarios. The IPCC also recognizes that it is important for emission scenarios to span a wide range of socio-economic and emissions outcomes, with the explicit underpinning of socio-economic drivers, which would make them most suitable for assessment of impacts, vulnerability, adaptation and mitigation.

■ In this brief statement I have tried to highlight the important elements of the IPCC's assessment in the TAR as they relate to the themes under discussion in this COP and its subsidiary bodies; progress made with the AR4; and some limited but timely work taken in hand for a possible AR5. It is hoped that this gathering will continue to focus on and be guided by the assessment work of the IPCC – work that we are privileged to perform by bringing together the world's best experts and scientists on an ongoing basis to serve you and to serve the interests of the human race and all life on this planet.