It is a great privilege for us to have His Excellency the Prime Minister of France, Mr Jean-Pierre Raffarin in our midst along with other high dignitaries, and for us to meet here in Paris, a city which for centuries has been the cradle of intellectual dynamism. I have unfortunately lost my very inadequate facility with the French language, but from the translation of several seminal works, which I have read, I have conceived enormous respect for the outstanding French thinkers and practitioners of the last two centuries. Who, for instance, can ignore the pioneering work of Jules Dupuit, the illustrious French engineer-economist of the 19th century? His work on flood management and in the vast area of public utility economics continues to remain relevant more than a century and a half after it was published. We need similar pioneers today, who could apply their knowledge to the study of climate change in all its aspects of universal relevance.

Paris as a city and France as a nation stand out as the prime movers in restructuring a humane new world that arose out of the cruel and devastating ruin of the Second World War. It is that same spirit of constructive creativity that we hope will also show us the way out of the threat of human interference with the world's climate system. We all remember the stirring address of President Jacques Chirac at the Conference of the Parties at the Hague where he said “Today, we stand confronted with our responsibilities. Are we going to allow our emissions to go on growing even though the IPCC has alerted us to their consequences? Are we going to allow the gap between rich and poor to grow ever wider, with the former adapting their activities at the expense of colossal defensive investments while the latter have no choice but to submit, for want of the means to modify their practise and policies? Once again, the question is: Do we want to control and regulate the process of globalisation in order to make it fairer and more human?” Perhaps even more important was the role of France in getting far reaching and practical agreement on targets for action at the WSSD in Johannesburg. The objectives of sustainable development are largely convergent with actions required in mitigating and adapting to the onset of climate change. President Chirac said in Johannesburg, "First, climate change. Human activity started it. It threatens us with a planetary tragedy. Now is no longer the time for an "every country for itself" attitude. A solemn call should go out from Johannesburg to all the countries in the world, especially the leading industrialised countries, to ratify and apply the Kyoto Protocol. Climate warming is still reversible. Heavy would be the responsibility of those who refused to fight it.”

The Third Assessment Report (TAR) of the IPCC clearly states that the risks associated with climate change have the potential to undermine progress towards sustainable development, such as, damages from extreme climate events, water shortage and degraded water quality, food supply disruptions and hunger, land degradation, and diminished human health. Human society has necessarily to be concerned with the impacts of its actions on all elements of nature, which indeed determine the very survival of every species on this planet. I come from an ancient society in which nature was seen as central to human existence and the primacy of nature in defining human activity fully accepted. While we as human beings concern ourselves essentially with the direct effects of climate change on our lives, we need to assess with greater rigour the impacts of climate change on ecosystems, on biodiversity, on wildlife, on water and soil, because all of these would soon impact on human existence as well. It is against the background of comprehensive impacts of climate change only that we would be able to evaluate the options that we, as a global society, must pursue for mitigation actions. Given the fact that adaptation measures would be inevitable for several decades and beyond, our assessments would have to integrate adaptation measures with mitigation activities to define a comprehensive set of options. We would endeavour to keep this objective in focus in the Fourth Assessment Report of the IPCC. We would also work very closely with the secretariat of the UNFCCC and the subsidiary bodies of the Convention, responding as faithfully and effectively as possible to their needs and priorities.

Different nations and different parts of the globe display different levels of vulnerability to climate change. It is our prime responsibility to assess these local vulnerabilities and specific impacts of climate change as accurately as possible. However, the IPCC as a body can only assess all aspects of climate change to an extent that derives from the availability of published and peer reviewed knowledge existing in the literature for different parts of the world. My colleagues in the IPCC and I accept this challenge and would do our utmost to address it. And, of course, in doing so, we would also have to pay special attention to those regions of the world where the negative impacts of climate change are expected to be the most severe. Hence, it is imperative that sponsorship of climate change research be expanded substantially both in the volume of effort to be undertaken and in geographic spread, so that much greater research is undertaken in the developing countries and the poor regions of the world.
The TAR states that developing countries tend to be more vulnerable to climate change than developed countries. Developing countries are expected to suffer more adverse impacts than developed countries. It also mentions that particularly vulnerable would be regions including deltaic areas, low-lying small island states and many arid regions where drought and water availability is problematic even without climate change. The adverse effects of climate change certainly need to be measured in biophysical terms, but what would ultimately guide societal action would be a proper and reliable assessment of socio-economic impacts. This, in my view, is an area where much more needs to be done. It is commendable that scientists and researchers from most disciplines covering various aspects of climate change have been extremely active in this field over the past two decades or so, but unfortunately, social scientists have not shown the same level of involvement in studying climate change related subjects. It is my personal hope that till the time material for the Fourth Assessment Report remains digestible, we would have made some advances in this area.

The International Association for Energy Economics (IAEE) organizes a major international conference every year. In the 10th annual conference held in Luxembourg in June 1988, the then President of the Association stated, "One area where our profession needs to make a much stronger entry than it has thus far is in the field of energy-environment interface issues … Not only are direct environmental effects of energy, such as air and water pollution and acid rain, serious enough to merit attention, but there is also now a definite basis for concern over the effects of energy use and production on the global climate … We can postpone a deeper interest in the subject only at the risk of a continuing insularity and myopia. Climate changes are already resulting in serious problems between the tropics in the form of frequent droughts and floods …" Has much happened in the past 15 years to allay these concerns?

The person who spoke these words stands before you today, disappointed but not dismayed. I still hope that the social sciences will take climate change into their research agendas on an expanded basis. The world and the IPCC need their intellectual contributions on a substantial scale. In general, good science and the collective efforts of the IPCC community suitably conveyed to policy makers and the public can bring understanding, hope and action in this new century. That is why we are in Paris today, for it can be said:

"Je suis convaincu que Paris, la ville lumière par excellence, saura éclairer nos débats et guider nos pas."

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