Some issues related to the future of the IPCC

1. A review of the past

With the completion of the Fourth Assessment Report, the IPCC would reach a standing and a record, which clearly distinguishes this organization as a unique scientific enterprise spanning the universe of scientific excellence and influence of knowledge on public policy. Some important lessons and conclusions that can be drawn from the two decades of IPCC's existence are:

The structure of the IPCC and the processes and practices that it has established have proved extremely successful not only in attracting some of the best talent available in the world for carrying out assessments of all aspects of climate change but also in being able to address the needs of policymakers for appropriate information, comprehensive scientific assessments and scientific analysis. The IPCC has also completed a number of methodological reports, including the greenhouse gas inventory guidelines produced by the Task Force on Inventories, that have been used widely especially by the UNFCCC Parties. In combining the efforts of the scientific community with government scrutiny the IPCC has provided a rationale for scientists to respond in all respects for meeting the needs of policymakers. At the same time, the scrutiny and approval by policymakers give the scientific output of the IPCC a credibility and validity that is perhaps unparalleled in any other scientific effort carried out in fields linked with public policy. The principles governing IPCC work clearly lay down the process to be followed in supporting this aspect of IPCC's functioning. It is relevant to observe that the requirements of consensus have been met to a surprising extent, even though there is provision in the principles for recording differences of views¹.

The focus of the Panel and the comprehensive assessment that it carries out by relying on peer reviewed literature is one of the major strengths of the IPCC, and over a period of time this has certainly motivated researchers both at the individual and institutional levels to undertake research activities that advance the frontiers of knowledge. It is not unusual for researchers to seek and receive research funding on the grounds that their work would feed the requirements of the IPCC. Hence, the work of the Panel has had a major capacity building dimension that should not be minimized.

An important element of IPCC's effectiveness has been its ability to convey its findings to the public through the media and other means. Needless to say media interest in the IPCC's work is a function of the credibility of the organization, but it is clearly the result also of an increasingly proactive outreach strategy to enhance the value, acceptance and effectiveness of the outputs produced by the IPCC.

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¹ The IPCC principles state "in taking decisions, and approving, adopting and accepting reports, the Panel, its Working Groups and any Task Forces shall use all best endeavours to reach consensus. If consensus is judged by the relevant body not possible: (a) for decisions on procedural issues, these shall be decided according to the General Regulations of the WMO; (b) for approval, adoption and acceptance of reports, differing views shall be explained and, upon request, recorded. Differing views on matters of a scientific, technical or socio-economic nature shall, as appropriate in the context, be represented in the scientific, technical or socio-economic document concerned. Differences of views on matters of policy or procedure shall, as appropriate in the context, be recorded in the Report of the Session".

2. <u>Do we need any change?</u>

- 2.1 In view of IPCC's remarkable record of addressing policy relevant issues related to climate change through rigorous scientific assessment, the natural conclusion would be to say that nothing needs to change. But since we are living in a rapidly changing world not only would the IPCC itself need to come up with new approaches for accomplishing its various tasks, but even the needs of the policy community would continue to change appreciably with (1) the spread of knowledge, (2) new perceptions on the impacts of climate change and (3) new opportunities and changing costs of mitigation, but also in the light of changes in the global regime for tackling this challenge. There is, therefore, a continuing need to look at future prospects and possibilities that should provide the basis on which the IPCC itself may consider some modifications and refinements in its functioning.
- 2.2 While considering possible changes it has to be remembered that the Panel has to adhere to the "principles governing IPCC Work" and the procedures contained in the Appendices to those Principles, which have stood the test of time and have been refined through the history of the organization. These principles and procedures should cut across the entire organization and the activities of the IPCC without any distinction or differentiation including the functioning of the Working Groups and Task Forces. However, the products that the IPCC works on could have significant differentiation based on their content and overall purpose.
- 2.3 It is also required that the principles governing the functioning of the IPCC be reviewed at least every five years. The last review was carried out in November 2003. Hence, before the new Bureau takes office it would be essential for a review of the principles to be carried out since it may otherwise not be possible to complete this task before the end of 2008. Hence, it would be essential for a detailed evaluation of the principles to be carried out by a Task Group that could be set up at the 28th Session of the IPCC to be held at Budapest.
- 2.4 The IPCC currently carries out its assessment of climate change through the organization of three Working Groups which broadly deal with the following specific areas.
 - 2.4.1 Working Group I assesses the physical science aspects of the climate system and climate change.
 - 2.4.2 Working Group II assesses the scientific, technical, environmental, economic and social aspects of the impacts of climate change, the vulnerability of various natural and human systems to these impacts and adaptation to climate change.
 - 2.4.3 Working Group III assesses all aspects of mitigation of climate change.
- 2.5 Each of the Working Groups has been preparing individual assessments in its respective area of activity. In addition, however, the IPCC also produces a Synthesis Report which derives the knowledge and findings contained in the Working Group Reports and synthesizes this information in a policy relevant manner as the final output from a specific assessment cycle.

2.6 IPCC has also established a credible record of producing special reports, methodology reports and technical papers, which focus on some specific aspects of climate change and related areas.

3. <u>Drivers of required change in the future</u>

- 3.1 This is an appropriate moment to consider the possibility of some changes in the structure of the IPCC and the various outputs that it produces. These changes, if at all should essentially be in the nature of refinements to what has already been established and not necessarily any major departure from either the process by which the IPCC functions or the products that it develops and produces. The factors that require understanding to bring about some change in the future are:
 - 3.1.1 Public perceptions and knowledge related to climate policies: The public is now much better informed about the scientific basis and scientific nature of climate change. There has been an obvious explosion in awareness in recent months brought about by various factors in which the three Working Group Reports of the AR4 have contributed substantially. With this level of awareness, there is now a greater demand for a higher level of policy relevance in the work of the IPCC, which could provide policymakers a robust scientific basis for action.
 - With the growing awareness about climate change has also come much greater 3.1.2 interest in the fundamentals of sustainable development, and larger issues which focus on the depletion and degradation of natural resources and ecosystems across the globe. Future assessments by the IPCC will be required to focus in more concrete ways on various aspects of sustainable development. A shift in the framework to be developed and used at least for the work of Working Groups II and III towards various aspects of sustainable development will, therefore, be warranted, while maintaining the comprehensive nature of IPCC assessments. During the periods when both the Third and the Fourth Assessments were being carried out, considerable emphasis was placed on the connection between climate change and sustainable development. However, the general view of several governments as well as scientists who worked on the two sets of reports is that this subject has not been dealt with adequately. Perhaps this subject needs some analysis attention both in respect of what could have been done in the Third and Fourth Assessment Reports, and what may be important to do in the future.
 - 3.1.3 As a consequence of these changes there would be need to place much greater importance on the economic aspects of climate change. The universal interest in the Stern Review related to the economics of climate change is as much a clear pointer to the demand for information on this subject as it is a clear indicator that the IPCC has not addressed fully this aspect in its assessments. Future assessments would need to focus much more adequately on the economic aspects of climate change, derived largely from the scientific work of Working Groups II and III. It would, therefore, be useful for a small group to carry out an assessment of the Working Group Reports which form part of the Fourth Assessment to identify wherein the economic dimensions of the assessments should have been stronger. A decision on the establishment of such a group could be taken in IPCC-XXVIII.

Another area where substantial work needs to be done by the research community to provide adequate inputs for the IPCC is in respect of the regional aspects of climate change. Unfortunately, there are several parts of the world where research is almost non-existent when it comes to assessment of local impacts of climate change and where lack of observational data hampers assessment and research. The IPCC by itself cannot address this gap, but there may be need for an initiative similar to the AIACC which could help in promoting more focused research on impacts of climate change in specific regions of the world, particularly involving the developing countries. It may be useful for the IPCC to organize a workshop or expert meeting involving relevant organizations and entities, which could assist in coming up with a desired programme of action which may help to fill the needs of research on impacts of climate change in different parts of the world. The output from such a workshop could then be presented to appropriate organizations that may be able to support a programme of appropriate activities. However, the role of the IPCC in any such initiative should be only that of a facilitator. Such a meeting could also provide some direction on how regional aspects could be covered in greater detail in future IPCC assessment reports.

4. Future outputs of the IPCC

- 4.1 If the Panel decides to launch a Fifth Assessment Report (AR5), then some refinements and changes may be warranted involving additional work over what has been carried out in the past. The major elements of a Fifth Assessment Report and the cycle of activities to be carried out by the next Bureau of the IPCC should involve:
 - 4.1.1 Three Working Group Reports more or less on the same lines as what was followed in the AR4. The Panel could, of course, bring about specific refinements in the terms of reference of the working groups. For instance, in defining the contents of a particular report a two step procedure may be desirable, in which the first step could develop the main focus and structure of the report and then the contents could be defined precisely. Given the success of the Task Force on Inventories, the TFI should continue to implement its plan for the future of the National Greenhouse Gas Inventory Programme as may be approved by the Panel.
 - 4.1.2 Several suggestions have been put forward by the scientific and professional community in recent months, which seem to favour a set of focused special reports rather than a comprehensive assessment of the type that has been produced in the past. If, in keeping with these suggestions, the major part of the output of a cycle of assessments is to be in the nature of special reports, then a comprehensive assessment perhaps would not be required in the usual 5-6 years cycle that has been followed in recent years. In that event, a set of carefully identified special reports could be produced within the 5-6 year timeframe and then a comprehensive assessment carried out every two cycles. But a period spanning two cycles, i.e. 10-12 years seems rather long. It is for the Panel to decide whether the current cycle of 5-6 years for a comprehensive assessment be continued or such an assessment be done over two cycles, with an appropriate number of special reports during the term of each successive Bureau. Even though a comprehensive assessment is a time consuming and large-scale effort, its value is indisputable. My own preference, therefore,

would be for recommending the current system of a comprehensive assessment every 5-6 years, but with special reports on specific subjects to be carried out early in the first three years of the term of a Bureau. These special reports would also provide a useful input for the concurrent comprehensive assessment. For this and other reasons the existing Working Groups structure should be retained even for the purpose of special reports, some of which would be multi-Working Group endeavours in any case. An appropriate coordinating arrangement, perhaps involving a Vice Chair of the IPCC may assist in multi Working Group activities and outputs.

- 4.1.3 As mentioned above there appears to be a widespread demand for production of some special reports during the next cycle. In case a decision is taken to produce a special report on renewables this should be completed well before the closure of inputs for the Working Group III Report of the AR5, because the assessment on renewable energy technologies should form an important part of the Working Group III Report of the AR5. There have been several proposals floating around on topics for special reports such as those dealing with climate change and disasters, impacts and adaptation; climate change and soil quality; etc. The Panel should deliberate on these early in the next cycle of assessment. During the 20th Session of the IPCC in Paris in 2002 the framework and set of criteria to be followed for establishing priorities related to Special Reports, Methodology Reports and Technical Papers for the period of the AR4 were agreed on. It may be desirable to continue with this framework and criteria, unless of course the Panel decides otherwise at some future date.
- 4.1.4 The IPCC should also produce technical papers on specific subjects as is the case with the current effort for producing a technical paper on climate change and water. In the past there have been requests for a special report on sustainable development and climate change. In order to fulfill this felt need there may be some benefit in carrying out a study of the economic of climate change with special emphasis on sustainable development, which would take into account the externalities imposed by the impacts of climate change and how these deviate from sustainable development. Also important is the assessment of mitigation measures in the context of such development. It may be useful to prepare a technical paper on the subject, which would simultaneously help in the scoping of a possible Fifth Assessment Report that could more effectively cover this subject.
- 4.1.5 The innovation of a Synthesis Report which is short and crisp as introduced in the AR4 is perhaps worth pursuing in the AR5 as well. A Synthesis Report would be even more useful even if the assessment cycle concentrates largely on the production of special reports and not a comprehensive assessment as has been followed traditionally. The SYR is by its very nature a policy relevant document, and if policymakers are to make the best use of it, they would necessarily need something brief and simple that is devoid of technical language and concepts. The page limit of 30 pages as specified for the AR4 is perhaps a good framework for production of Synthesis Reports in the future as well.

- 5. <u>Organizational issues related to the functioning of the next Bureau</u>
 - This can be seen as appropriate because the current size and composition ensures adequate geographical balance as well as functional effectiveness related to the structure of the three Working Groups. However, some changes may help the functioning of the IPCC, which would lead to some minor alterations in the structure of the Bureau. These changes are suggested as follows:
 - 5.1.1 The Bureau should consist of 29 members which would include the Chair, two Vice Chairs and six Co-Chairs of the three Working Groups, and the TFI Cochairs. It would be essential to ensure that the expertise of the Working Group Vice-Chairs covers subjects that deal with economic and sustainable development issues as well as conventional areas of scientific assessment of climate change. Ideally, a Vice Chair each from both Working Groups II and III could be assigned this responsibility on the basis of expertise. This clearly requires, therefore, that at least one Vice Chair in these two Working Groups respectively should have substantial expertise on economic issues. The balance 18 members of the Bureau should include six members each for the three Working Groups.
 - 5.1.2 The reason for suggesting two Vice-Chairs rather than three is to ensure that the Vice Chairs are provided with specific tasks and responsibilities that would enhance the effectiveness of the IPCC. The two Vice Chairs could assist the Chair effectively by being assigned two groups of responsibilities which need not be bifurcated on a rigid basis. From time to time the Vice Chairs could assist the Chair in outreach activities, particularly by responding to requests for speeches and talks at various events and forums round the world. For specific purposes the Vice Chairs could focus on matters of coordination between different Working Groups, particularly if the proposal to produce outputs in the form of special reports is accepted. There would also be issues related to cross cutting themes where the Vice Chairs could help greatly in adequate treatment of these themes across Working Groups.
 - Further, there is a need for strengthening the IPCC Secretariat. Given the 5.1.3 expansion of activities, including technical assistance for the Task Group on economics, other task groups, and the Vice Chairs, which involve greater coordination with the world outside, the Secretariat requires staffing with one more professional with a scientific background apart from the Secretary and Deputy Secretary. It is expected that the forthcoming years will require a substantial amount of outreach by the IPCC, particularly in the nature of participation in various events and presentations and talks in seminars and conferences etc. As mentioned above the Vice Chairs could assist the Chair in carrying out this function to ensure that the IPCC does not lose appropriate opportunities because of lack of capacity at the top level. Of course, there will be several occasions where other Bureau members could be requested to assist with outreach activities, depending on operational convenience. But all such activities would require support from the Secretariat which is not possible currently due to lack of adequate capacity.

- 5.1.4 There is also need for some revision of practices and administrative procedures particularly in respect of travel rules applicable to participants in IPCC activities from developing countries and economies in transition. Current procedures have often caused considerable difficulties and hardships, and these need to be changed.
- 5.1.5 In respect of other practices and procedures, the IPCC has been served well by past tradition and systems, but perhaps some of these need to be discussed before we launch the next cycle of assessments and before the next Bureau comes into office.

6. <u>Next steps</u>

- 6.1 The purpose of this document is essentially to stimulate thinking and come up with a plan for the future of the IPCC. This document will be revised on the basis of submissions to be made by governments and authors of the AR4 as outlined in the covering letter accompanying this document.
- 6.2 While comments would be very valuable on every section of this preliminary document, in particular comments are invited on:
 - 6.2.1 The issue of a comprehensive assessment during each cycle vs. special reports on a regular basis and a comprehensive assessment every two cycles.
 - 6.2.2 Organizational issues and the structure of the Bureau as well as any changes in procedures and practices in the functioning of the Panel.