MOVING FORWARD ON ADAPTATION:
A BIG CHALLENGE AND MANY OPPORTUNITES.

IN SESSION WORKSHOP ON ADAPTATION

Five-year programme of work of the Subsidiary body for scientific, technological and socio-economic aspects of impacts of, and vulnerability and adaptation to, climate change.

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Mr. Chairman, Distinguished Delegates, friends and colleagues,

It is a great pleasure and an honor for me to have been invited to contribute to your deliberations today on impacts, vulnerability, and adaptation to climate change. This is a critical moment in the history of the UNFCCC. Decision 1/CP.10 taken in Buenos Aires in December 2004 calls upon the SBSTA to develop a five-year structured programme of work. I want to show two things. One is the great magnitude of the adaptation challenge. The second is a vision of the opportunities and the modalities that can be used to meet the challenge.

I wish to acknowledge the many supporters and critics who have helped me to try and clarify my thoughts. But I am solely responsible for what I have to say and I do not represent any government or any organization.

In addressing this subject I have chosen five topics. These are:

1. The Adaptation Challenge itself. I will say briefly what it is.

2. The broad Objectives for Adaptation.

3. The Wider Context for our work, or work Outside the Convention.

4. The SBSTA five year work programme itself.

5. Modalities. How it might be done.

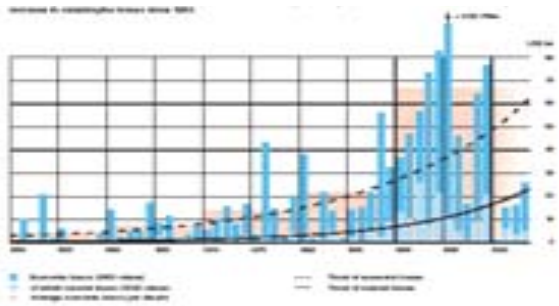
And then brief summary and conclusions.

1. The Adaptation Challenge itself.

I want to explain what is called the Adaptation deficit.

And explain why all countries developing and developed have to be involved in adaptation for themselves as well as together.

Then I want to say a few words about the story or the history of climate and development and mention the successes as well as the failures.



This well known graph from Munich Reinsurance shows the global rise in losses from natural disasters for the past few decades. Both insured and uninsured losses have been rising rapidly in constant monetary terms. These rising losses reflect a failure to adapt well enough to current climate variability and extremes. To what extent there might be a climate change signal in these losses is a matter of some debate. It is clear however that they are largely due to the growth of population; to the increase in material wealth in some places and the existence of persistent poverty in others. They are also due to the invasion by human settlements of hazardous localities on flood plains, steep slopes, and exposed coastal zones among others. This can be a form of maladaptation or maladaptive development, especially where adequate standards of construction are not met or where forecasting and warning systems are lacking or do not reach those at risk.

Too often these conditions are not met. Failure to adapt adequately to existing climate risks, largely accounts for the adaptation deficit. Controlling and eliminating this deficit in the course of development is a necessary (but not sufficient) step in the longer run project of adapting to climate change. Development decisions that do not properly consider current climate risks are adding to the costs and increasing the deficit. As climate change accelerates the adaptation deficit has the potential to rise much higher, unless a serious programme of adaptation is implemented. Of course, increased disasters are not the only potential impacts of climate

change. The slower and progressive deterioration of the natural resource base that occurs with climate change is equally if not more important. But disasters make things more visible and can be used as an indicator of other vulnerabilities.

It has often been asserted that the least developed countries and the poorest people in all countries are the most vulnerable to climate change. This view has been widely endorsed and accepted by IPCC among others. But I would also like to point out that from a strictly economic point of view the absolute economic losses from climate change impacts are likely to be much higher in the developed countries and in rapidly growing economies.

In the same way that present day natural disasters cause greater economic losses in developed countries because a wealthier society has more property to lose, so too will the economic losses from impacts of climate change be greater. At the same time more of the losses in developed countries are covered by insurance and the capacity to adapt and absorb the losses is also greater. This suggests two conclusions. First, adaptation is not just a matter for developing countries. All countries will need to improve and apply their adaptive capacity. Secondly this means that there is a great opportunity for collaboration. Such collaboration should extend over the full array of the scientific, technical, and socio-economic aspects of adaptation. This also means cooperation in the policy and development process. Integrating climate change adaptation into the development process in a way that is compatible with the UNFCCC is itself a major challenge.

Despite the evident failure in recent decades to adapt sufficiently to climate variability and extremes, over the longer historical perspective adaptation has been enormously successful. Different societies in different places have learned to cope with climate risks and to adapt. This successful and positive use of climatic resources also continues today. We are fortunate to live in a world of expanding trade and growing opportunities and increasingly we benefit not only from our own climate but from the climate of others half a world away. The fact that I can eat bananas and mangoes for breakfast in Toronto, (food products not normally or yet associated with the climate of Canada!) and that people in many countries eat bread and pasta made from Canadian wheat is testimony to the ways in which we enjoy the benefits of production based upon each other's climates and climatic resources. Adaptation to a changing climate is important for local peoples and local

livelihoods, and it is also important for world trade and economic development and prosperity. So while much adaptation activity is locally based when it is done effectively the benefits can be spread much more widely.

The record of successful adaptation in the past is a source of confidence and optimism that today's adaptation challenge can be met. The growth of the adaptation deficit shows that the challenge is not an easy one. This brings me to the matter of objectives.

2. OBJECTIVES.

Objectives can be addressed at two levels. There are the overall objectives of meeting the adaptation challenge. And then there are the objectives of the SBSTA work programme. So what is the challenge and how can SBSTA contribute to meeting it?

At the general level one simply stated objective is to reduce present and future losses from climate variability and change. Can we accept as a global objective the stabilization of the adaptation deficit and its reduction by 50% over an agreed length of time?

At the more specific level of the SBSTA work programme the objectives might be to contribute to the control of the adaptation deficit by promoting and facilitating adaptation, and by inviting research and studies to find ways of spreading and sharing risks.

Another objective is the integration of adaptation and climate risk management into national strategies, policies, and measures throughout the development process. How can SBSTA best contribute to the promotion and facilitation of this process?

These objectives constitute a very large task, and one that is beyond the capacity of the Convention acting alone. So my suggestion is that the SBSTA

and the COP might find new ways to encourage and facilitate work by others while keeping a watching brief and monitoring progress. Let me elaborate this thought by reference to the wider context of adaptation.

3. The Wider Context

Understanding of adaptation in the UNFCCC and in IPCC is still in its early stages of development. It has frequently been dealt with in very broad general terms, and at a theoretical level. In practical terms much adaptation is a responsibility of professionals and managers organized by sectors. These professionals have been coping with climate variability and extremes for a long time, although they have generally not used the word "adaptation" to describe what they do. Thus engineers, architects and physical planners are concerned with design, quality of construction and location of housing, infrastructure, and human settlements. Agronomists and other specialists provide information relevant to adaptation in agriculture. Water management draws upon the skills and expert knowledge of many specialists from economists to hydrologists and engineers. These kinds of specialists and the organizations in which they work from local, to national, to international, have much to contribute to the thinking and rethinking about adaptation. In many instances they are already at work in their own professional and scientific associations trying to assess what climate change means for them and how to take account of it in their daily practice.

Let us look at the topics listed in Decision 1/ CP.10 and the adaptation domains or sectors in which they might be addressed.

This enables me to illustrate the very wide scope of the adaptation problem.

I then want to ask what it is appropriate and reasonable to do inside the Convention process and what can be done in the wider context.

This brings me to consider the role of partnerships and cooperation.

I have shown here the four topics listed in Decision 1/CP.10 namely

- methodolgies, data and modeling

- vulnerability assessments

- adaptation planning, measures and actions

- integration into sustainable development

and there are others not listed.

and I have listed 7 major sectors or domains.

Table 1. The Matrix. Topics (Decision 1/CP.10) and Domains or Sectors

	TOPICS				
ADAPTATION SECTOR OR DOMAIN	**Methodologies, data, and modeling**	**Vulnerability assessments**	**Adaptation planning, measures and actions**	**Integration into sustainable development**	**Others (implementation through SBI)**
Water management					
Agriculture					
Human Health					
Biodiversity (natural ecosystems)					
Coastal Zone Management					
Infrastructure & Settlements					
Financial services (insurance)					

The matrix shows 35 cells. And it could easily be much larger. Not all the issues that might be identified are shown but only those listed in decision 1/CP 10. Not all the domains or sectors are listed. We can immediately see that developing a coherent programme is a big challenge. That is why it might be wise to consider a phased programme with an initial stage that can be subsequently modified in the light of new knowledge and experience and

information on what is being done elsewhere. Adaptation in agriculture is not the same as adaptation in public health. Data requirements and modeling are very different and so are the vulnerabilities. It is not time to stop trying to swallow adaptation whole and divide it into more bite-size pieces? And to do this in cooperation with others who bring specialized knowledge and experience?

This is sufficient to demonstrate the very large scope of adaptation. In many of these cells activities are taking place. Some have specifically initiated by the Convention and SBSTA. There are many others.

For example the 16 or so international agricultural research institutes under the CGIAR (Consultative Group on International Agricultural Research) are beginning to work on climate change impacts and agriculture and forestry. This work might be recognized and encouraged by SBSTA. I am confident that CGIAR would be happy if invited to cooperate with the UNFCCC process.

Similarly a number of public and private organizations are beginning to work on climate insurance. These include such diverse bodies as the Swiss and Munich Reinsurance Companies, the Robo Bank in the Netherlands, the World Bank, UNEP, and others. Here again awareness of what is happening outside the Convention process itself is important to the way in which SBSTA shapes its own programme of work. Consideration might be given on how to develop partnerships or cooperation with these activities.

Looking at the cells of the matrix you can no doubt think of many other potential partners. What I am suggesting here is not a narrowing of the vision of SBSTA and the Convention. On the contrary I am suggesting that SBSTA might move to higher ground and inform itself and the world community by taking stock of what is happening elsewhere, identifying achievements and gaps, and encouraging and promoting work by others. This might readily be done by the simple strategy of inviting other bodies to show what they are doing, and inviting them to do more to fill the gaps which you can identify, and asking the Secretariat to facilitate this.

1. The SBSTA Work programme.

Turning to look at adaptation within the Convention and specifically in SBSTA it is instructive to look at what as been achieved in the establishment of a regime for mitigation and to ask what this suggests for adaptation. This leads me to suggest the need for coherence, flexibility and a phased approach, as well as the development of links to actors outside the Convention.

It can be seen that over the past ten years a clear and more or less coherent regime has been developed for mitigation. Such a regime has yet to emerge for adaptation. Yet it is now recognized that adaptation has an important role to play together with mitigation. Adaptation and mitigation are very different. No coherent regime for adaptation should try to replicate what has been done for mitigation. Nevertheless it is instructive to look at the status of both.

Table 2. Mitigation and Adaptation

Mitigation	Adaptation
Clear objectives (emissions reduction and sequestration)	**? Reduce the adaptation deficit? Share and insure losses?**
Clearly defined	**? Operational definition?**
Specified baseline (1990 emissions)	**? Adaptation baseline**
Agreed targets and schedules (Kyoto)	**? Progress in adaptation**
Clear funding regime, market approach .	**? Options to market adaptation**
Funding incentives specified (CDM etc)	**? Adaptation Development Mechanism?**
Agreed measures for evaluation	**? How to evaluate?**
Specific legal instrument (Kyoto)	**?**

This table is not intended to imply that a coherent and focused adaptation regime should blindly follow that established for mitigation. Adaptation is a very different process. But the comparison does point to the relatively undeveloped state of the current adaptation regime and the need to think through the problem of creating a more coherent approach. As long as adaptation remains poorly defined, and with no adequate measures of performance or ways of assessing progress, it cannot be expected to attract the serious attention of finance ministries and economic development agencies in any country.

Do we need and what would be clear objectives for adaptation? Is the IPCC definition too broad or is it sufficient for your needs? Do we need an adaptation baseline or its equivalent? What about targets, funding (but this is not a SBSTA question), and Adaptation Development Mechanism, agreed measures for evaluation and a specific legal instrument?

Consideration of both the Matrix and the status of adaptation inside the Convention process makes it apparent that the work programme that you are developing needs to address some very specific questions within SBSTA and also to create the flexibility for working with others. This brings me to the question of modalities.

5 Modalities

As Parties have suggested in their submissions there are a number of tasks including the exchange of information and experience; improvement and dissemination of data, methods, models, tools, and review of existing knowledge and identification of gaps. The modalities for delivering these activities and information have included workshops, expert meetings and syntheses of findings. In my personal view these modalities have not so far provided sufficient opportunity for the more creative ways of collective thinking through the problems posed by the need for adaptation.

Might there be some new ways of doing business? It is not my role to make specific proposals, but perhaps you will allow me, for purposes of illustration to suggest a sort of modality that might be helpful.

I have already mentioned work going on elsewhere in agriculture and in climate insurance. It seems appropriate to me for SBSTA to find ways of taking stock of these activities or inviting others to do so. What I have in mind is not just an inventory, but an exercise in creative thinking that could on the basis of current knowledge more ahead to formulate a limited number of options for the Parties to consider. Each option would be backed up by detailed studies highlighting its strengths and weakness. Such an exercise would not be prescriptive. It would leave it open to SBSTA to accept all or part on none of the suggestions. It would leave possible choices and many details to be worked out by the Parties. The important point is that the Parties would have some substantial and organized assessment of possibilities on which to base their negotiations. This has happened to some degree on the mitigation side. It has yet to happen for adaptation. Such a modality, if developed could also demonstrate the benefits of a clear focus on a specific issue, while contributing to coherence and flexibility in the work of SBSTA and involving a range of partners both public and private.

Conclusions

I wish to thank you for giving me the opportunity to provide some reflections on the task before you, and to suggest something of the broader context in which the Adaptation Work Programme is being developed. For some time now Parties at a succession of the COPs have been speaking of the need for more serious attention to adaptation. Perhaps my remarks are a little on the visionary side, but they are inspired by a recognition that there is much to do on adaptation. My suggestions include a call for a coherent view; flexibility; a phased approach; efforts to recognize and understand the current adaptation deficit; a clearer set of objectives for adaptation; finding ways in which progress and performance by all countries can be measured; the development of partnerships with agencies and professional groups beyond the Convention, and how to integrate climate risk into development. These challenges might involve the use of an experimental approach to the development of new modalities, taking stock and being creative. Let me end where I began. The challenge of adaptation is very big, but the opportunities are there, and the challenge can be met if we have the will. I wish you every success in your deliberations.

Let me offer a closing thought:

Do not tell people what to do. Tell them what it is expected they will achieve, and you will be surprised by their ingenuity.

What we are expected to achieve is successful adaptation to climate change, in the future and NOW.