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Item 3 of the provisional agenda Scientific, technical and socio-economic aspects of impacts of, and vulnerability and adaptation to, climate change

Views on the five-year programme of work of the Subsidiary Body for Scientific and Technological Advice on the scientific, technical and socio-economic aspects of impacts of, and vulnerability and adaptation to, climate change

Submissions from Parties

Addendum

1. In addition to the 11 submissions contained in document FCCC/SBSTA/2005/MISC.3, two further submissions have been received.

2. In accordance with the procedure for miscellaneous documents, these submissions are reproduced^{*} in the language in which they were received and without formal editing.

FCCC/SBSTA/2005/MISC.3/Add.1

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^{*} These submissions have been electronically imported in order to make them available on electronic systems, including the World Wide Web. The secretariat has made every effort to ensure the correct reproduction of the texts as submitted.

CONTENTS

	Page

1.	AUSTRALIA (Submission received 22 April 2005)	3
2.	JAPAN (Submission received 15 April 2005)	5

PAPER NO. 1: AUSTRALIA

Submission by Australia

Views on a structured five-year programme of work on the scientific, technical and socio-economic aspects of impacts, vulnerability and adaptation to climate change

Introduction

Adaptation to the unavoidable impacts climate change and its integration with sustainable development are of importance to all Parties. Australia recognises the desire of Parties to plan and undertake appropriate adaptation responses, and therefore looks forward to the elaboration and implementation of a five-year programme of work that will assist all Parties in their efforts.

Overarching Principles

In developing a programme of work, it is important that the SBSTA is mindful of previous COP decisions and activities across the SBI and SBSTA agendas related to adaptation, particularly those elements that are yet to be implemented. Early in this process, it would be important to articulate and prioritise these outstanding actions.

It is important that the SBSTA focus on the aspects of adaptation to which the UNFCCC, as a multilateral institution, can make the most useful contribution. It is also important that the SBSTA not duplicate the activities of other organisations, including those involved in developing and implementing national sustainable development strategies.

The programme of work must also be both soundly based on the best currently available information, and have the capacity to respond to new information as it becomes available. For example, it should incorporate opportunities to assess new scientific and socio-economic information, incorporate lessons learned and identify knowledge gaps and strategies to address them. In particular, it needs to be recognised that during the five-year period covered by the programme of work, National Adaptation Programmes of Action and National Communications will provide new and additional information on impacts, vulnerability and adaptation at a country level. The Fourth Assessment Report of the IPCC will also provide invaluable information and analyses at global and regional levels.

Methodologies, data and modeling

Countries will experience the effects of climate change in different ways and the application of methodologies for assessing vulnerability and managing risk at a local level will need to vary according to national circumstances. However, this does not mean that all adaptation methodologies must be developed locally. Parties can benefit from opportunities to share information on methodologies and to explore their applicability more broadly.

In particular, Parties would benefit from sharing knowledge about approaches and methodologies that assist in evaluating the benefits and costs of adaptation measures.

Vulnerability assessments

National Communications and National Adaptation Programmes of Action provide a wealth of information on the assessed vulnerability of Parties that will be of value in targeting and prioritising adaptation responses. The ongoing collation and reporting of up to date and comprehensive information through National Communications must therefore be a priority for all Parties. The SBSTA could look to the Consultative Group of Experts on non-Annex I National Communications to provide a report on

experience gained in preparing vulnerability and adaptation assessments in non-Annex I National Communications.

The sharing of information on tools and approaches for risk assessment, using the vulnerability assessments provided in National Communications and scientific information on climate change, would also be of benefit to Parties.

Adaptation planning, measures and actions

The COP has recognised, through paragraph 4 of decision 1/CP.10 and paragraph 2 of decision 5/CP.7, that we need to ensure that any adaptation actions undertaken are the right actions. Actions not based on a sound assessment of scientific and socio-economic information and a well-planned risk management approach may be of no use or may significantly exceed requirements (and thus waste limited resources) or, worse still, may even be counter productive.

Because each country's experience of climate change impacts will be different, so too will their adaptation responses be different. However, it is likely to be possible to develop a menu of workable adaptation responses. These should, wherever possible, maximise the use of multiple-benefit adaptation measures.

For its part, Australia is developing its adaptation strategy *through its National Climate Change Adaptation Programme*. Australia believes that experiences gained through this programme would be of benefit to Parties embarking on a similar process, and would welcome an opportunity to share these experiences and to learn from other Parties and organisations.

Parties may also benefit from an opportunity to learn from the experiences of non-Party organisations in developing adaptation responses or incorporating adaptation into sustainable development actions. Australia proposes that the SBSTA invite Parties and other organisations to submit information on their work on adaptation planning, measures and actions. Information in these submissions could form the basis of sectoral case studies prepared by the secretariat.

Integration into sustainable development

Sustainable development must incorporate, by definition, a holistic and scientifically based understanding of the regional and local impacts of climate change, and of practical and effective mitigation and adaptation responses.

To enable the integration of climate change considerations into sustainable development strategies, whole of government approaches are needed. In particular, it is important that the future effects of climate change are appropriately taken into account by mainstream development agencies and recipient countries as they plan and implement all development projects. Parties would benefit from an opportunity to share information on their experiences in doing so, including in using methodologies for assessing the costs and benefits of adaptation.

PAPER NO. 2: JAPAN

Submission by the Government of Japan Views on the Five-year Programme of Work of the SBSTA on the Scientific, Technical and Socio-economic Aspects of Impacts, Vulnerability and Adaptation to Climate Change

This submission is in response to the decision 1/CP.10. Japan welcomes this opportunity to share the views on the five-year programme of work of the SBSTA on the scientific, technical and socio-economic aspects of impacts, vulnerability and adaptation to climate change.

1. Introduction

The government of Japan finds it timely to initiate discussions on the five-year programme of work at the SBSTA 22. Climate change is one of the most important environmental issues which affect the human survival, given that its impacts will be far-reaching and irreversible. The most critical measure against climate change is to implement mitigation measures by reducing greenhouse gas emissions and by increasing its absorption. However, it takes a long time for greenhouse gas emissions to be substantially reduced and for the atmospheric concentration of greenhouse gas to be stabilized. It seems inevitable that the world will face a certain degree of adverse impacts, and some of them could be grave. Therefore, it is necessary to counteract certain damages inflicted by climate change by implementing adaptation measures that could be complementary to mitigation measures. It is important both for developed and developing countries to plan how to implement adaptation measures.

2. Elements at the deliberation of the five-year programme of work

What is to be achieved

It is of utmost importance that Parties should first agree on the purpose, or what is to be achieved, through implementing the five-year programme of work. Japan proposes that the programme should aim at the following: reviewing existing knowledge, ideas, and policies and measures on adaptation, even though they are currently limited in their scope; identifying what we know and what we do not to acquire satisfactory knowledge on this area; and undertaking concrete actions.

<u>Roadmap</u>

It is necessary to prepare separate roadmaps for each of major elements in the five-year programme of work agreed in the decision 1/CP.10, namely methodologies, data and modeling, vulnerability assessments, adaptation planning, measures and actions and the integration into the sustainable development.

Installing the infrastructure

As equally important as setting the roadmap is deliberating on the infrastructure, or the implementing system, to carry out the specific tasks set forth in the roadmap. Japan proposes that a regional monitoring system be set up to assess the impacts of climate change (more details are in the following pages).

Step by step implementation of the programme of work

Prioritizing the tasks

Among the major elements of the five-year programme of work, Japan regards methodologies, data, modeling and vulnerability assessments as most essential ones, because they form the basis of implementation and development of adaptation planning. Parties should first share information and experiences on these issues, to work on methodologies, data and modeling and vulnerability assessments, and then implement adaptation plans and other measures.

Timetable

Japan proposes that Parties initiate discussions at SBSTA22 (May 2005), agree on the contents of the five-year programme of work by SBSTA 25 (November 2006) and launch the programme of work at SBSTA 26 (May 2007). At SBSTA 35 (November 2011), Parties shall report and review the outcome of the programme of work, and deliberate on the possible next steps (details of proposed timetable is attached at the end of this submission).

Focus of the discussion and the continuation of in-session workshops

To prevent the discussion from dispersing, each SBSTA shall deal with and focus on only one item of the major elements of the five-year programme of work in 1/CP.10 (methodologies, data and modeling; vulnerability assessments; adaptation planning; measures and actions; and the integration into the sustainable development). Such a focused discussion on each item should take place at the in-session workshop as in the past. As for the modality, experts from both developed and developing countries shall present case studies for each item, and Parties will freely exchange views inspired by these case studies.

Midterm review of the programme of work

Japan proposes, for the effective implementation of the programme, to conduct a midterm review at SBSTA 30 (May 2009), with a view to and considering approach on the second term. It is advisable to leave some room for fine-tuning on how to implement the programme of work in the latter-term, although the similar approach (item-by-item discussion) can also be applied.

Other points

In developing the five-year programme of work, it is important to integrate scientific advice from the scientific community, e.g. IPCC.

The five-year programme of work is a first step to be followed by succeeding ones, if necessary. This is because climate change will most likely impact human beings and ecosystems for a long period of time.

Once this process is launched, all the information exchanged need to be easily accessible to all Parties. Japan proposes the related materials and information to be distributed through the UNFCCC Website.

3. Comments for specific areas

(1) Methodologies, data and modeling

On the programme of work on methodologies, data and modeling, the first step is to review the existing activities of each Party to identify what type of information or knowledge is needed. Then Parties will discuss what kind of knowledge should be acquired. In Japan's view, the following issues need to be covered in planning the programme of work:

- 1. Development of elementary data, such as current and future climate data, climate scenario, notably regional climate scenario;
- 2. Establishment of methodology, i.e. modeling, on impact and adaptation assessment;
- 3. Human resource development, notably researchers;
- 4. Dissemination of information to the policy makers and relevant actors, as well as promoting their understanding of the issue.

It should be noted that the above-mentioned items have common elements to a certain degree regardless of the region. Among these common elements, knowledge and know-how should be shared among both developed and developing countries.

It should also be noted that although each region should develop methodologies, data collection and modeling through integrating the regional-specific characteristics, many developing countries have problems in developing and retaining capacity in these areas, which leads to an increase in vulnerability to climate change in these countries. Therefore, Japan proposes the following systematic plan of developing a regional monitoring system:

- 1. Establishing climate change monitoring assessment centers in leading developed countries covering some geographical regions, which collect and process the monitoring data consisting of regional climate data, impact data and socio-economic data to assess impacts of climate change and future climate;
- 2. The centers will provide information and capacity building training on monitoring and impact assessment to developing countries, collaborating with other developing agencies or research support network such as APN.
- 3. The centers will work with international organizations dealing with earth observation or global change research, such as the IGOS-P and the ESSP, in addition to the IPCC, taking into account contribution to GEOSS 10-Year Implementation Plan.
- 4. By the end of the implementation of the five-year programme, a leading developing country in each geographical region can establish a regional monitoring and assessment center on climate change impact.

(2) Vulnerability assessments

Each region has different geographical and climatic elements influencing its vulnerability. Therefore, the vulnerability of each country or region needs to be analyzed by identifying its composing elements. Through the analysis, it shall be made clear how much the vulnerability has been studied and understood; what will be the knowledge needed for further examination; and in which area the knowledge needs to be strengthened and shared among relevant actors. In identifying the needs for knowledge, the most vulnerable region and sector needs to be highlighted to have a concrete and objective understanding of the facts to take urgent policies and measures to promote adaptation in each country and region, especially in small island countries and LDCs.

In assessing vulnerability, Japan proposes that the highly reliable regional climate scenario developed in the regional monitoring system mentioned above should be utilized.

Special attention should be paid to integrate into the vulnerability assessment the need for a highly disaggregated and regional analysis on the impact of extraordinary weather events, which, according to the IPCC TAR, may be more frequent and inflict more serious damages.

Lastly, vulnerability assessment needs to take into account the socio-economic causes, such as poverty, population increase in the disaster-prone region, and excessive reliance on rain fed agriculture. Economic assessment of the impact of climate change and vulnerability will be useful.

(3) Adaptation planning, measures and actions

Adaptation planning, measures and actions should be built on the basis developed in the previous phases: analysis of methodologies, data, modeling, and the vulnerability assessment.

It would be useful, however, at this stage that we would share further information on: the status of development and implementation of adaptation planning and measures in different countries and regions, accessibility to feasible adaptation technologies, and the outcome of the research conducted by international organizations and experts on adaptation measures.

Adaptation capacity, like vulnerability, is influenced by socio-economic factors. Therefore, in examining the adaptation planning, measures and actions, socio-economic aspects, such as the evacuation from disaster-prone area, effective management of water resources and improvement of agricultural technology, play an important role.

Additionally, adaptation capacity also depends on: the risk assessment capacity, risk communication with the local population, appropriate response by the local population, and traditional social systems for adaptation in each country and region, and they need to be taken into account in the adaptation planning, measures and actions.

(4) Integration into sustainable development

Integration of adaptation into sustainable development is critical for each Party when implementing adaptation policy towards climate change, which has long-term impacts. Each Party must integrate adaptation to the climate change into its sustainable development strategy, which then needs to be implemented progressively over a long time span. With such an objective in mind, it is important to study and share past examples and information existing in both developed and developing countries, on how each country has integrated adaptation into their sustainable development. Such a real-life example should be derived not only from adaptation measures *per se*, but also from international development policies examples. It will be valuable to highlight those cases where development projects can be integrated into adaptation measures.

Japan also proposes that the SBSTA should consider the possibility of inviting not only climate change experts, but also experts from other relevant international organizations, such as OECD, to the discussions to ensure its effectiveness.

Table: Draft timetable of the 5	year programme of work
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			le of the 5 year programme of work
SBSTA	COP	Theme	Actions which might be taken
SBSTA23	COP11		-Results of workshops will be reported
SBSTA24			-A workshop will be held
SBSTA25	COP12		- Programme of work will be agreed.
(Nov.			
2006)			
SBSTA26		Methodologies,	- A workshop will be held
(May.		data and modeling	- Some conclusions/resolutions will be adopted if
2007)		Ŭ	necessary.
SBSTA27	COP13	Vulnerability	- A workshop will be held.
(Nov.		assessments	- Some conclusions/resolutions will be adopted if
2007)			necessary.
SBSTA28		Adaptation	- A workshop will be held.
(May.		planning,	- Some conclusions/resolutions will be adopted if
2008)		measures and	necessary.
2000)		actions	
SBSTA29	COP14	Integration into	- A workshop will be held.
(Nov.	001 14	sustainable	- Some conclusions/resolutions will be adopted if
2008)		development	•
SBSTA30		Interim Review of	- A workshop will be held.
(May.		the programme of	- Results of three regional workshops and one expert
2009)		work	workshop will be reported.
			- Interim review of work under this programme will be
			implemented.
			- Further progress under this programme will be
			discussed.
			- Some conclusions/resolutions will be adopted if
0007404	005/-		necessary.
SBSTA31	COP15	Methodologies,	- A workshop will be held
(Nov.		data and modeling	- Some conclusions/resolutions will be adopted if
2009)			necessary
SBSTA32		Vulnerability	- A workshop will be held
(May.		assessments	- Some conclusions/resolutions will be adopted if
2010)			necessary
SBSTA33	COP16	Adaptation	- A workshop will be held
(Nov.		planning,	- Some conclusions/resolutions will be adopted if
2010)		measures and	necessary
		actions	
SBSTA34		Integration into	- A workshop will be held
(May.		sustainable	- Some conclusions/resolutions will be adopted if
2011)		development	necessary
SBSTA35	COP17	Summary of the	- A workshop will be held
(Nov.		programme of	- Summary of the programme of work will be adopted.
2011)		work	- Further step under this agenda item will discussed.
- ,			
2011)		WUIN	- Some decisions will be adopted if necessary.