

## SUBMISSION BY

**The Organisation for Economic Co-operation and Development (OECD)**

### **NAIROBI FIVE-YEAR PROGRAMME OF WORK ON IMPACTS, VULNERABILITY AND ADAPTATION TO CLIMATE CHANGE**

At its 25<sup>th</sup> session, the Subsidiary Body for Scientific and Technological Advice (SBSTA) invited Parties and relevant organizations to provide structured submissions on *adaptation approaches, strategies, practices and technologies for adaptation at the regional, national and local levels in different sectors, as well as, on experiences, needs and concerns*. In response to this request, the OECD would like to submit the information on its relevant work.

The OECD is not an implementing agency, and it does not develop nor implement adaptation projects. The OECD provides analyses of practical adaptation experiences of its Member countries and other countries, and it develops recommendations and guidance for its Member countries.

Recent analysis by the OECD of adaptation approaches, strategies, practices and technologies focuses on two main dimensions: integration of adaptation into sectoral policies at the national and local levels, and integration of adaptation into development cooperation. The results of this analysis include the following products:

#### Integration of adaptation into sectoral policies:

- 1) *Policy Frameworks for Adaptation to Climate Change in Coastal Zones: the case of the Gulf of Mexico*, by Levina E., Jacob J., Ramos L and Ortiz I. (2007)

This OECD paper focuses on legal and institutional issues as well as policies and management practices that govern wetlands and human settlements in the US and Mexico on the Gulf of Mexico coast. It examines how current practices and arrangements could either facilitate adaptation to climate change or create impediment to adaptation. The paper found that many current policies on wetland protection and mitigation facilitate wetland's adaptation to climate change but may not be sufficient to compensate wetland loss associated with sea level rise. However, there is no legal statute that would authorise protection of lands that may become wetlands in the future as sea level rises. Sea walls designed to protect human settlements may potentially impede adaptation of wetlands by disrupting a natural water flow between the sea and wetlands. As for human settlements, current policies that regulate the quality of housing and other construction, land use management and urban patterns have a key role in facilitating adaptation of human settlements to climate change.

The paper can be downloaded from the OECD website:

- <http://www.oecd.org/dataoecd/36/22/38574805.pdf>

- 2) *Domestic Policy Frameworks for Adaptation to Climate Change in the Water Sector. Part I: Annex I Countries*, by Levina E. and Adams H., (2006)

*Domestic Policy Frameworks for Adaptation to Climate Change in the Water Sector. Part II: Non-Annex I Countries. Lessons Learned from Mexico, India, Argentina and Zimbabwe* by Levina E., (2006)

In 2006 the OECD published these two papers on mainstreaming adaptation into the water sector policy frameworks in Annex I and non-Annex I countries. As part of the analysis, the papers examined climate change impacts on the water sector in 8 countries: Argentina, Canada, Finland, India, Mexico, UK, US, and Zimbabwe. The papers analysed how domestic and international water-related laws and agreements, institutional arrangements, water policies and management tools, traditional knowledge and practices, and status of infrastructure in the examined countries affect vulnerability of these countries' water sector to climate change and either facilitate or impede adaptation of the water sector to climate change. The papers analysed the existing long-term water management strategies, flood and drought management strategies and tools, demand side policies, and approaches to water abstraction in the context of their ability to facilitate adaptation of the water sector to the impacts of climate change. s.

The papers can be downloaded from our website:

- <http://www.oecd.org/dataoecd/46/15/37671630.pdf>
- <http://www.oecd.org/dataoecd/32/47/36835429.pdf>

- 3) OECD (2006) *Climate Change in the European Alps: Adapting Winter Tourism and Natural Hazards Management*, edited by Shardul Agrawala.

OECD's recent book focuses on adaptation measures to address two key vulnerabilities in European Alps: increasing losses in winter tourism due to reduced snow cover, and increased exposure of settlements and infrastructure to natural hazards. The book examines frameworks and financial mechanisms to manage natural hazards as well as technological and behavioural measures that might be needed to deal with climate change in five Alpine countries: France, Switzerland, Italy, Germany and Austria.

- Executive Summary : <http://www.oecd.org/dataoecd/25/40/37909236.pdf> Climate Change in the European Alps. Adapting Winter Tourism and Natural Hazards Management (ISBN: 9789264031692, published 18 January 2007).
- URL to the Alps book : <http://www.oecd.org/env/cc/alps>

Integration of adaptation into development cooperation:

- 4) To highlight the importance of integrating climate change adaptation into development cooperation projects and programmes, the OECD Environment and Development Co-operation Ministers signed the *OECD Declaration on Integrating Climate Change Adaptation into Development Co-operation* in April 2006.

- Link to the ministerial Declaration : <http://www.oecd.org/dataoecd/44/29/36426943.pdf>

- 5) As a follow up to the Declaration, the OECD is preparing a *Stocktaking Paper of Progress on Integrating Adaptation to Climate Change into Development Cooperation Activities*.

The paper will review progress made by international donor agencies and international financial institutions in raising awareness on climate risks and taking such risks into account within their development cooperation activities.

- The paper is forthcoming in 2007, and will be available at the OECD website: [www.oecd.org/env/cc](http://www.oecd.org/env/cc)

- 6) OECD (2005) *Bridge Over Troubled Waters: Linking Climate Change and Development*, edited by Shardul Agrawala

This OECD publication is the product of a collaborative effort between the OECD Environment and Development Co-operation Directorates on mainstreaming responses to climate change in development planning and assistance. This volume synthesises insights from six country case studies that reviewed climate change impacts and vulnerabilities, analysed relevant national plans and aid investments in terms of their exposure and attention to climate risks, and examined in depth key systems where climate change is closely intertwined with development and natural resource management. These include the Nepal Himalayas, Mount Kilimanjaro in Tanzania, the Nile in Egypt, the Bangladesh Sundarbans, coastal mangroves in Fiji, and agriculture and forestry sectors in Uruguay.

- Executive Summary : <http://www.oecd.org/dataoecd/16/4/36174361.pdf>
- URL to Bridge Over Troubled Water : <http://www.oecd.org/env/cc/bridge>
- URLs to the following Case Studies :
  - Egypt : <http://www.oecd.org/dataoecd/57/4/33330510.pdf>
  - Uruguay : <http://www.oecd.org/dataoecd/42/7/32427988.pdf>
  - Nepal : <http://www.oecd.org/dataoecd/6/51/19742202.pdf>
  - Bangladesh : <http://www.oecd.org/dataoecd/46/55/21055658.pdf>
  - Fiji : <http://www.oecd.org/dataoecd/46/58/21056315.pdf>
  - Tanzania : <http://www.oecd.org/dataoecd/47/0/21058838.pdf>

Type of adaptation action <sup>1</sup>	Title of adaptation action, including projects	Status of adaptation action - ongoing - under implementation - under development - under consideration	Needs in order to successfully implement the adaptation action	Concerns/Barriers	Experiences/Lesson learned	References i.e. publications, websites etc.
<b>Scope of adaptation action</b> <i>Regional level</i>						
<b>Approaches/strategies</b>						
<b>Practices</b>						
<b>Technologies</b>						
<i>National level</i>						
<b>Approaches/strategies</b>	Integration of adaptation into development cooperation	On-going analysis by the OECD on integrating adaptation into development co-operation.			Lessons learned from country case studies and from recent analysis of the progress made by bi-lateral and multi-lateral donor institutions in raising awareness on climate risks and taking such risks into account within their	Stocktaking paper of Progress on Integrating Adaptation to Climate Change into Development Cooperation Activities. (forthcoming in 2007, <a href="http://www.oecd.org/env/cc">www.oecd.org/env/cc</a> ).  OECD Declaration on Integrating Climate Change Adaptation into Development Co-operation, adopted by OECD Environment and Development Co-operation Ministers in April 2006. <a href="http://www.oecd.org/dataoecd/44/29/36426943.pdf">http://www.oecd.org/dataoecd/44/29/36426943.pdf</a>  OECD (2005) <i>Bridge Over Troubled Water: Linking Climate Change and Development</i> , edited

<sup>1</sup> Please be aware of the degree of adaptation within activities:

- Some activities are undertaken specifically to adapt to climate change, e.g. increased water storage capacity, development of new crop varieties.
- Some activities include a component of climate change adaptation, e.g. infrastructure replacement incorporating higher flood standards
- Some activities are not carried out for adaptation but have other objectives such as preserving biodiversity, however they can offer adaptation co-benefits, e.g. restored wetlands protect against storm surges.

					development co-operation activities.	<p>by Shardul Agrawala  <a href="http://www.oecd.org/env/cc/bridge">http://www.oecd.org/env/cc/bridge</a></p> <p>(2004) Development and climate change case studies:  Egypt :  <a href="http://www.oecd.org/dataoecd/57/4/33330510.pdf">http://www.oecd.org/dataoecd/57/4/33330510.pdf</a>;  Uruguay :  <a href="http://www.oecd.org/dataoecd/42/7/32427988.pdf">http://www.oecd.org/dataoecd/42/7/32427988.pdf</a>  Nepal :  <a href="http://www.oecd.org/dataoecd/6/51/19742202.pdf">http://www.oecd.org/dataoecd/6/51/19742202.pdf</a>  Bangladesh :  <a href="http://www.oecd.org/dataoecd/46/55/21055658.pdf">http://www.oecd.org/dataoecd/46/55/21055658.pdf</a>  Fiji :  <a href="http://www.oecd.org/dataoecd/46/58/21056315.pdf">http://www.oecd.org/dataoecd/46/58/21056315.pdf</a>  Tanzania :  <a href="http://www.oecd.org/dataoecd/47/0/21058838.pdf">http://www.oecd.org/dataoecd/47/0/21058838.pdf</a></p>
<b>Practices</b>						
<b>Technologies</b>						
<i>Local (community) level</i>						
<b>Approaches/ strategies</b>						
<b>Practices</b>						
<b>Technologies</b>						

<i>Sectoral level<sup>2</sup></i>						
<i>Agriculture</i>						
<b>Approaches/Strategies</b>						
<b>Practices</b>						
<b>Technologies</b>						
<i>Water resources</i>						
<b>Approaches/Strategies</b>	Integration of adaptation into water sector policies, management practices, legal and institutional frameworks.	Completed analysis by the OECD Annex I Expert Group.			Lessons learned from the analysis of current policies, legal provisions, institutional arrangements and water management practices in 8 case study countries: Canada, Finland, the US, UK, Argentina, India, Mexico and Zimbabwe.	(2006) <i>Domestic Policy Frameworks for Adaptation to Climate Change in the Water Sector. Part II: Non-Annex I Countries. Lessons Learned from Mexico, India, Argentina and Zimbabwe</i> by Levina E. <a href="http://www.oecd.org/dataoecd/46/15/37671630.pdf">http://www.oecd.org/dataoecd/46/15/37671630.pdf</a>  (2006) <i>Domestic Policy Frameworks for Adaptation to Climate Change in the Water Sector. Part I: Annex I Countries</i> , by Levina E. and Adams H. <a href="http://www.oecd.org/dataoecd/32/47/36835429.pdf">http://www.oecd.org/dataoecd/32/47/36835429.pdf</a>
<b>Practices</b>						
<b>Technologies</b>						
<i>Health</i>						
<b>Approaches/</b>						

<sup>2</sup> The sectors below are given as examples. Please provide information on any other sectors which you consider important and have examples to share.

<b>Strategies</b>						
<b>Practices</b>						
<b>Technologies</b>						
<i>Coastal zones (settlements)</i>						
<b>Approaches/ Strategies</b>	Integration of adaptation into coastal zone management.	Completed study by the OECD Annex I Expert Group.			Lessons learned from the analysis of the US and Mexican current coastal zone policies, legal provisions and management practices on the Gulf of Mexico that either facilitate or impede adaptation of coastal wetlands and human settlements to climate change.	(2007) <i>Policy Frameworks for Adaptation to Climate Change in Coastal Zones: the case of the Gulf of Mexico</i> , by Levina E., Jacob J., Ramos L and Ortiz I. <a href="http://www.oecd.org/dataoecd/36/22/38574805.pdf">http://www.oecd.org/dataoecd/36/22/38574805.pdf</a>
<b>Practices</b>						
<b>Technologies</b>						
<i>Others: Winter Alpine tourism</i>						
<b>Approaches/ Strategies</b>	Integration of adaptation into hazard management and winter tourism sector in European Alps.	Completed analysis by the OECD.			Lessons learned from the analysis of winter tourism and hazard management in five Alpine countries:	OECD (2006) <i>Climate Change in the European Alps: Adapting Winter Tourism and Natural Hazards Management</i> , edited by Shardul Agrawala.

					France, Switzerland, Germany, Italy and Austria.	
<b>Practices</b>						
<b>Technologies</b>						