

# INTERNATIONAL CONFERENCE DELTAS IN TIMES OF CLIMATE CHANGE

29 SEPTEMBER TO 2 OCTOBER 2010

## ROTTERDAM

THE NETHERLANDS



**Deltas** in Times of  
**Climate Change**  
Rotterdam 2010  
Connecting world science and deltas



FIRST ANNOUNCEMENT  
CALL FOR PAPERS



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**Rotterdam 2010**  
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Deltas offer abundance. They link rivers and inland waters to the oceans. Their soils are rich and well-watered. They are the focus of economic and cultural activity. They are home to more than half the world's population.

However, as sea levels rise, land subsides and populations grow, deltas and their cities are becoming more vulnerable. Increased incidence of floods, heatwaves and salt water intrusion threaten the economic vitality and attractiveness of deltas worldwide. Dealing with subsidence and adapting to climate change have become an imperative. The need to address these challenges calls for cooperation of deltas worldwide.

Two official Dutch research programmes on climate change and spatial planning (Climate changes Spatial Planning and Knowledge for Climate), the City of Rotterdam and the C40 (a group of the world's largest cities committed to tackling climate change) invite scientists, politicians, policy-makers and practitioners to share their knowledge and experience in a major international conference on climate adaptation.

The conference pursues three main goals:

1. exchanging up-to-date top science on climate change and delta planning
2. strengthening international cooperation between deltas and delta cities
3. exploring and strengthening the links between science, policy and practitioners

Themes to be discussed include: climate change and spatial planning, subsidence, flood risk management, salt water intrusion and fresh water supply, brackish agriculture, urban heat island effects, governance and innovative policy instruments for planning and decision-making. The overall focus is on planning and investments in times of climate change.

During the conference, the Delta Alliance, Connecting Delta Cities and the C40 will be working to develop worldwide cooperation between deltas and delta cities. The Delta Alliance is an international alliance promoting effective cooperation among deltas in their efforts to manage existing and new challenges. The Connecting Delta Cities is an international network that unites delta cities that strive to make their cities climate proof.

We hope to see you in Rotterdam at the end of September 2010, so please mark the dates in your calendar.

Pier Vellinga  
Chairman Knowledge for Climate

Ahmed Aboutaleb  
Mayor of Rotterdam

David Miller  
Mayor Toronto  
Chairman C40





## Programme

The conference offers a mixed programme attractive for scientists as well as politicians, policy makers and practitioners. Plenary sessions with inspiring keynote speakers will alternate with workshops for presentations of scientific findings and issues of policy and practice in climate adaptation.

### Series 1

In scientific sessions, scientists from all over the world present their findings. Sessions will take place on [September 29 and 30](#) and on [October 1](#). The best papers will be selected for publication in scientific magazines. The programme is structured around the following themes:

#### Fresh water availability under sea level rise and climate change

Scientific evidence is mounting about increased frequencies and magnitude of floods and droughts in deltas. Salinization also takes its toll. At the same time land use claims put eco-systems under pressure. This theme covers research about impact of climate change on fresh water availability and solutions for optimizing freshwater demand and supply in deltas.

**Convenors:** Eelco van Beek (Delft), Ainun Nishat (Dhaka), Gerald Galloway (Maryland, US)

#### Governance and economics of climate adaptation

Governance of adaptation is a complex issue. The central question is how to govern all multi-level and multi-scale processes in ways leading towards climate proof development. Part of the problem relates to which measures are the most cost effective and yield the most socially desired benefits. This theme focuses on governance and economic issues related to climate change in deltas.

**Convenors:** Elizabeth Wilson (Oxford Brookes), Terry Barker (Cambridge), Katrien Termeer (Wageningen), Ekko van Ierland (Wageningen)

#### Competing claims and land use in deltas under climate change

Urban expansion, infrastructure, agriculture, nature and leisure, all compete for land in delta areas. Measures to protect people from the effects of climate change, such as flood protection measures, also require more space than in the past. The theme contains competing claims on land, the impact of climate change on relationships between various land uses and adaptation solutions.

**Convenors:** Saleemul Huq (London), Paul Opdam (Wageningen), Martin Wassen (Utrecht), others t.b.c.

#### Climate change and estuarine ecosystems

Despite playing a critical role in the functioning of the planet, estuarine ecosystems are threatened by growing demands on the planet's limited freshwater supplies, eutrophication, pollution and climate change. In this theme, presentations will put the ecological functions and socio-economic values of estuarine ecosystems in the context of climate change.

**Convenors:** Peter Herman (Netherlands), Hans Paerl (Chapel Hill, US), others t.b.d.

#### Climate and health in Delta areas

Climate change is a significant and emerging threat to public health. Developing country populations in coastal areas are particularly vulnerable. In this session recent research will be presented about the impact of climate change on health in delta regions. Also national or local health programmes and interventions in deltas will be discussed.

**Convenors:** Paul Epstein (Harvard), Pim Martens (Maastricht)

#### Regional climate, sea level rise, storm surges, river run-off and coastal flooding

Uncertainties surround climate change and sea level rise. The impacts concern increased risks of coastal flooding and storm surges. This theme covers recent research on the climate system, sea level rise, and their physical impacts on coastal and river flooding.

**Convenors:** Hans von Storch (Hamburg), John Church (Australia), Wilco Hazeleger (Utrecht), Marcel Stive (Delft)

### **Climate change and climate proofing in urban areas**

Climate change affects cities and surrounding areas through increasing extremes in precipitation, droughts and temperatures. Adaptation of urban patterns, public space, water systems and buildings is essential to keep cities pleasant to live in. Measures have to take into account the interaction among the various scales, building, street, district, city, region. The impacts of climate change on the city and adaptation measures in delta cities are central to this theme.

**Convenors:** Simin Davoudi (Newcastle), Jim Hall (Newcastle), Helmut Mayer (Freiburg), Chris Zevenbergen (Delft), Tejo Spit (Utrecht)

### **Managing risks of extreme climate events**

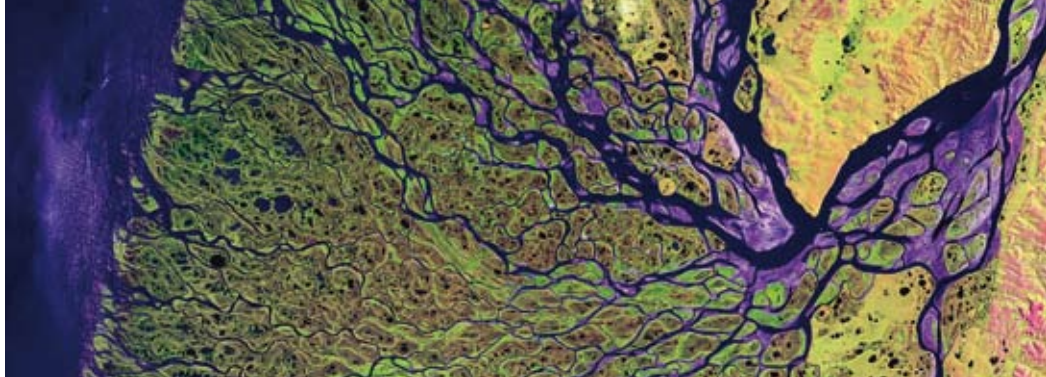
Climate risk in coastal areas is largely determined by the frequency and magnitude of extreme climate events and by socio-economic trends such as the growth of population and economic assets. This theme covers management of climate related losses, the role financial instruments play, damage reduction measures, evacuation and risk communication and information and tools needed for the management of extreme events.

**Convenors:** Svenja Surminski (London), Reimund Schwarze (Leipzig), Jeroen Aerts (Amsterdam), Myles Allen (Oxford)

### **Decision support instruments for climate adaptation policy**

Uncertainties play a role in the decision making about climate policies. They enlarge the complexity of the decision making process. In this theme, decision support tools for adaptation policies will be presented and case studies will offer lessons about processes and the role of decision support instruments in them.

**Convenors:** Suraje Dessai (Exeter), Kerry Turner (East Anglia), Piet Rietveld (Amsterdam)



## **Series 2**

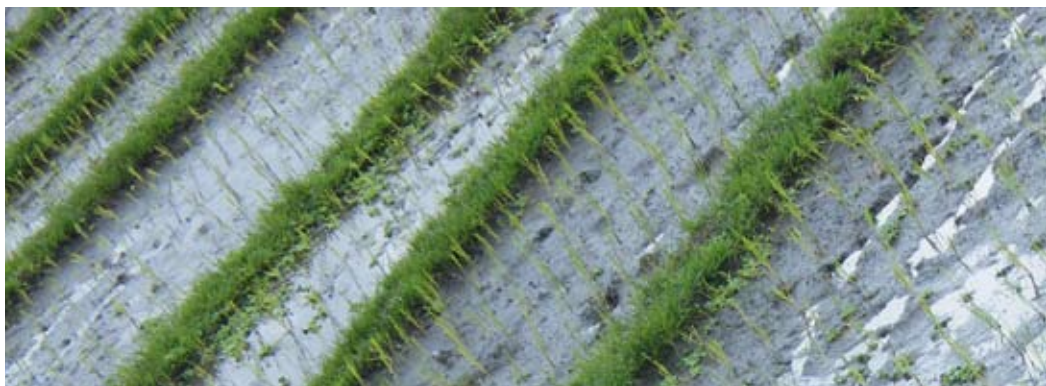
In these sessions, the themes are similar, but more related to policy and practice. Several sessions will be action-oriented and dedicated to C40 delta cities. Other sessions will cover delta regions. A number of sessions will help identify best practices. These sessions will take place on September 29 and 30. More details will follow. In the morning of September 30 a number of workshops will be held on the cooperation between science and policy in deltas and delta cities. Case studies will be presented and opportunities for strengthening the cooperation between science and policy will be explored.

## **Series 3**

This is a series of meetings of a more formal character. Here, the Delta Alliance and the Connecting Delta Cities network in collaboration with C40 will explore opportunities to strengthen international cooperation. The formal sessions will take place on September 30 late afternoon and on October 1. Some of these sessions will be by invitation only. More details will be available later.

## **Side events**

A series of site visits is planned for October 1 and 2.



## Submission of abstracts

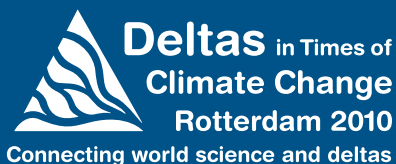
Authors who wish to present a paper or poster related to the scientific programme are invited to submit an abstract. The abstracts have to be submitted before 15 February 2010, and will be expected to fit within one of the themes. The instructions for the submission of abstracts and posters can be found on the conference website, as well as the full texts of the themes. Those whose abstracts or posters are selected by the convenors and the scientific committee will be notified as soon as possible.

## Venue of the conference

The conference will be held in the centre of Rotterdam, since Rotterdam and its port are at the forefront of climate adaptation: it turns challenges into opportunities and takes integrated measures to create a safer city and region. This strategy will result in a more attractive city to live, recreate, work and invest in.

## Dates to be remembered

- February 15 deadline for submission of abstract
- February registration open  
(fee: approximately € 350)
- April notification of abstract/poster selection
- August 1 submission of draft full paper



[www.climatedeltaconference.org](http://www.climatedeltaconference.org)



## Recommendations committee

- Ahmed Aboutaleb, City of Rotterdam
- Harry Baayen MSc, Deltares
- Dr. Frits Brouwer, Royal Netherlands Meteorological Institute, KNMI
- Dr. John Church, Australian Commonwealth Scientific and Research Organization, CSIRO
- William Cosgrove, Ecoconsult Inc.
- Dr. Aalt Dijkhuizen, Wageningen UR
- Prof.dr. Robbert Dijkgraaf, Royal Netherlands Academy of Arts and Sciences, KNAW
- Lenie Dwarshuis - van de Beek, Province of Zuid-Holland
- Prof.dr. Leen Hordijk, Institute for Environment and Sustainability, Joint Research Centre
- Tanja Klip-Martin MSc, Province of Drenthe
- Prof.dr. Ruud Lubbers, Minister of State, The Netherlands
- Ed Nijpels MSc, ONRI Dutch association of consulting engineers
- Ms. Yvonne van Rooy, president Executive Board Utrecht University
- Dr. Sybe Schaap, Dutch Association of Regional Water Authorities
- Cees Slingerland MSc, Wageningen UR, Environmental Sciences Group
- René Smit MSc, chairman Executive Board VU University Amsterdam
- Prof.dr. Hans Joachim Schellnhuber, Potsdam Institut für Klimafolgenforschung (PIK)
- Prof.dr. Andras Szöllösi-Nagy, UNESCO-IHE

## Steering committee

- Prof.dr. Pier Vellinga, Research Programme Knowledge for Climate (chairman Steering committee)
- Florrie de Pater MSc (secretariat), Research Programmes Knowledge for Climate / Climate changes Spatial
- John Jacobs MSc, City of Rotterdam
- Prof.dr. Peter Driessen, Research Programme Knowledge for Climate
- Dr. Raimond Hafkenscheid, Co-operative Programme on Water and Climate
- Prof.dr. Pavel Kabat, Research Programme Climate changes Spatial Planning
- Arnoud Molenaar MA, City of Rotterdam
- Paula Verhoeven MA, City of Rotterdam

## Scientific committee

- Prof.dr. Pavel Kabat, Research Programme Climate changes Spatial Planning (chairman Scientific committee)
- Dr. Maarten van Aalst, Red Cross, Climate Centre
- Prof.dr. Jeroen Aerts, VU University Amsterdam, Institute for Environmental Studies
- Prof.dr. Terry Barker, Cambridge Centre for Climate Change Mitigation Research
- Dr. Bryson Bates, Australian Commonwealth Scientific and Research Organization, CSIRO
- Prof.dr. Guy Brasseur, National Center for Atmospheric Research, Earth and Sun Systems Laboratory
- Prof.dr. Peter Driessen, Research Programme Knowledge for Climate
- Dr. Wilco Hazeleger, Royal Netherlands Meteorological Institute, KNMI
- Prof.dr. Carlos C.A. Nobre, National Institute for Space Research - INPE
- Florrie de Pater MSc, Research Programmes Knowledge for Climate / Climate changes Spatial Planning (secretariat Steering committee)
- Prof.dr. Karen Richardson, University of Copenhagen
- Prof.dr. Johan Rockström, Stockholm Environment Institute & Stockholm Resilience Centre
- Prof.dr. Jan Rotmans, Erasmus University Rotterdam
- Dr. Saleemul Huq, International Institute for Environment and Development
- Dr. Sybil Seitzinger, The Royal Swedish Academy of Sciences
- Prof.dr. Marcel Stive, Technical University Delft
- Prof.dr. Pier Vellinga, Research Programme Knowledge for Climate
- Dr. Charley Vörösmarty, University of New Hampshire
- Dr. Roderik van de Wal, Utrecht University
- Prof.dr. Tetsuzo Yasunari, Hydrospheric Atmospheric Research Centre

**More information:**  
[www.climatedeltaconference.org](http://www.climatedeltaconference.org)



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