

Wageningen Climate Solutions

Glasgow, 5th-9th June 2017



A guide to Wageningen University & Research
activities at the 3rd European Climate Change
Adaptation (ECCA) Conference



WAGENINGEN
UNIVERSITY & RESEARCH

'To explore the potential of nature, to improve the quality of life'



Who we are: Wageningen University & Research

WUR is a world leading research institute in the Netherlands, developing knowledge and innovative climate solutions for governments, businesses and communities globally. WUR is strongly involved in fundamental and applied research, education and knowledge transfer to provide a crucial contribution to answering the challenges formulated through the Sustainable Development Goals.

The challenge: Climate change

Climate change is one of the biggest challenges of present time leading to increased risks for floods, droughts and heat waves. Climate change is already affecting livelihoods all over the world and the impact will increase in the coming decades. It is disrupting economies, affecting lives, destroying ecosystems and human settlements and impacting our food production. Urgent action to combat climate change and its impacts is needed through reducing greenhouse gas emissions (mitigation) as well as reducing the impact of climate change (adaptation). This will create opportunities to improve the quality of life. Wageningen University & Research (WUR) offers innovations, extensive knowledge and sustainable solutions for climate resilient societies.



UN SDG Goal 13: Take urgent action to combat climate change and its impacts. As affordable, scalable solutions are now available to enable countries to leapfrog to cleaner, more resilient economies.



Wageningen Climate Solutions

WUR stresses the importance of an integral vision and a regional systems approach for sustainable development. Climate change has an overarching effect on development. The consequences of climate change vary strongly among systems and regions worldwide. WUR holds a transdisciplinary 'Science for Impact' systems approach, stimulating collaboration between experts in livestock, plants, soils, water, atmosphere, economics, sociology, geo-informatics, forestry and ecology in both the terrestrial as well as the marine environment. Together with relevant clients and stakeholders, WUR strives for innovative climate solutions.





Climate Services

There is a growing availability of climate information offered to researchers, practitioners, entrepreneurs and policy makers through climate services. WUR researchers consider climate services from a user perspective, through for example the translation of climate data into policy-relevant indicators, offering support to municipalities in user engagement strategies, and complementing climate information with knowledge on adaptation options and design of adaptation strategies. A strong emphasis is placed on co-design and co-production of climate services with the users when and where meaningful and feasible.

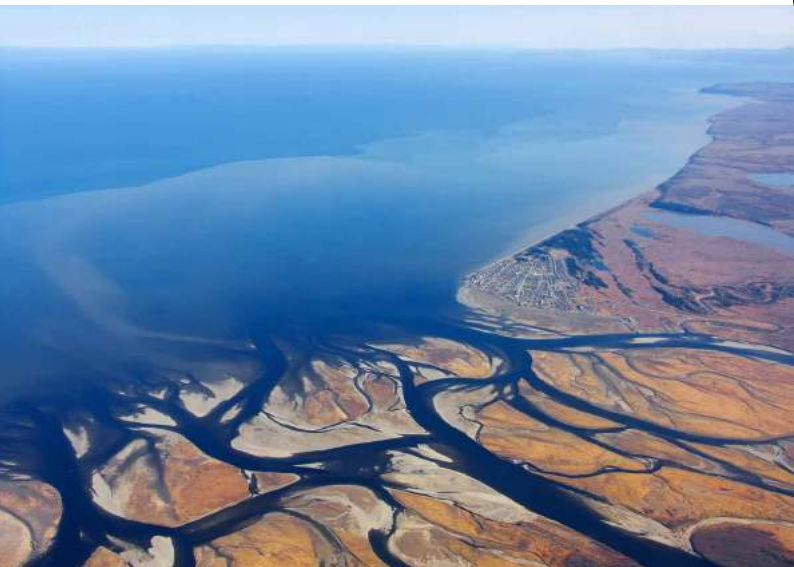


Nature Based Solutions for Climate Resilient Cities

The world is urbanizing. In 2050 over 6 billion people will live in cities. Climate change will have major impact on cities causing floods, droughts and heat waves. Nature based solutions such as green roofs, green facades, green space and urban forest are innovative and promising solutions for climate resilience and increased liveability of cities. WUR has a broad knowledge on blue and green approaches and nature based design for cities providing an evidence base about costs and benefits for climate resilient cities.

Adaptive Water Management

The World Economic Forum identified the water crisis as one of the largest risks for the global economy. The daily impact of droughts and flooding is felt by industry, businesses, farmers and civilians around the world. How do you make sure there is enough water now and in the future? Sea level rise, increased salinization, changed land use and an increasing demand for water creates a mismatch between the demand for water and water availability. WUR offers innovations, extensive knowledge and quantification as well as solutions for the purpose of increasing the value of water.



Climate Smart Agriculture

Agriculture emits greenhouse gasses and therefore contributes to climate change, but agriculture and food security are also threatened by climate change. The growth of the world population and increase of income levels has resulted in an increased demand for food. Yet, this demand is increasing faster than ever before because the number of middle and high income people in the world is growing rapidly. Climate-Smart Agriculture addresses on the one hand the reduction of the environmental and climate impact of agricultural activity and on the other hand the development of food production methods and crops that are well adapted to changing weather conditions.





Governance of Climate Change Adaptation

Adapting to the possible impacts of climate change presents a demanding challenge within the existing governance structures and arrangements. It raises normative questions (e.g. who should be responsible?) and may require innovative experiments, leadership approaches and process designs. Governments may need to reconsider the economic instruments and governance structures that allocate risks and responsibilities between public and private partners. Furthermore, climate change is surrounded by uncertainties, contested knowledge and differences in stakeholders' perspectives. The specific complexities of adaptation governance call for new advanced governance knowledge.



Rob Swart - Chair and Presentation

Session: 2.5 Foresight in Climate Change Adaptation and Disaster Risk Reduction (PLACARD)

Presentation: Introduction & What can foresight bring to the adaptation table - megatrends and surprises

Time: 11:00-12:45 (AM)

Contact: rob.swart@wur.nl

A set of foresight tools wider than the traditional quantitative, model-based scenarios analysis can advance the debate with diverse experts and stakeholders to explore future risks and opportunities to reduce vulnerability to climate-related hazards. This session will explore the potential role of foresight methods, tools and processes, identify relevant long-term trends and explore needs and priorities.



Robbert Biesbroek - Chair

Session: 4.1 A better understanding of adaptation governance

Time: 11:00-12:45 (AM)

Contact: robbert.biesbroek@wur.nl

This session brings together different contributions around the ethical, legal and governance dimensions of climate change adaptation. Emphasis in these sessions will be about the conceptual and theoretical developments within these three dimensions, focussing particularly on how these will influence our understanding of the governance of climate change adaptation.



Saskia Werners - Presentation

Session: 2.4 Community-based adaptation planning

Presentation: Community based adaptation pathways to adaptation to salt intrusion in coastal Bangladesh

Time: 13:45-15:30 (PM1)

Contact: saskia.werners@wur.nl

We use adaptation pathways to map how different actors would prefer to adapt to increasing salinity. We take data from Satkhira, one of the coastal districts of south-western Bangladesh and most vulnerable to salinity intrusion. This study concludes that pathways help to discuss short, medium, and long-term adaptation with actors. Community based adaptation pathways can map the perspective of different actors and communities.



Saskia Werners - Presentation

Session: 4.8 Local adaptation pathway design in practice. Gaining flexibility and managing uncertainty in the long-term climate resilience planning

Presentation: Adaptation turning points: long-term sustainability of water supply under climate change in the Pearl River Delta, China

Time: 13:45-15:30 (PM1)

Contact: saskia.werners@wur.nl

In this presentation, a methodological approach for identifying the policy implications of climate change is presented and applied to coastal management in the Pearl River Delta, China.

This approach focuses on the identification of situations where policies and management practices no longer perform effectively due to climate change. We call this situation an 'adaptation turning point'.



Annemarie Groot - Presentation

Session: 5.4 Capturing and sharing knowledge on adaptation across Europe: how to support decision makers in EU

Presentation: Success factors and limitations in the development of user-oriented climate information portals: Lessons from CLIPC, Euporias, Climate4Impact and SWICCA

Time: 16:00-17:45 (PM2)

Contact: annemarie.groot@wur.nl

With a growing demand for climate information to guide climate change adaptation decisions, the number of web-based climate portals is surging. These portals give primacy to users' requirements and scientific quality and as such embrace a participatory approach to their development. However, success factors, failures and limitations of user involvement in the development of such portals are hardly known. The presentation will highlight experiences with involving users in climate information portals such as CLIPC, Euporias, Climate4Impact and the SWICCA demonstrator.

TUESDAY, 6TH OF JUNE



Annemarie Groot - Presentation

Session: 5.2 Novel methodologies & tools for knowledge co-production

Presentation: Critical climate stress moments: focussing adaptation by understanding at what moments people are particularly vulnerable to climate and weather-related stresses

Time: 16:00-17:45 (PM2)

Contact: annemarie.groot@wur.nl

The presentation discusses the concept of 'critical climate stress moments'. Critical moments help to elaborate when a household or community and the livelihood systems it depends on is particularly vulnerable to climate and weather-related risks and hazards as well as on the drivers giving rise to these moments. The presentation highlights the research methods and tools developed to conduct a critical moments assessments and discusses first insights from case examples in the Hindu Kush Himalayan (HKH) region.

WEDNESDAY, 7TH OF JUNE



Karianne de Bruin - Chair and Presentation

Session: 2.6 Are you sure you want to do this?

An interactive participatory experiment on extremes and uncertainty

Presentation: Adaptation decision-making under climate extremes

Time: 11:00-12:45 (AM)

Contact: karianne.debruin@wur.nl

This session will explore the state-of-the-art and highlight the advantages of using fully probabilistic approaches that account for uncertainty both in climate projections and benefit assessments i.e. to turn information on uncertainty into a driver of change rather than a barrier. Participants discuss linkages between current scientific knowledge and evidence base of future climate extremes and practical applications of adaptation planning and decision-making to deal with the impacts of extremes. The session is co-organised by the Center for International Climate Research (CICERO) and Wageningen Environmental Research.



Simona Pedde - Presentation

Session: 8.1 Adaptation, Mitigation and Transformation:
The high-end context, synergies and trade-offs

Presentation: Scenario-guided pathways: using the SSPs to contextualise adaptation strategies in the Netherlands

Time: 11:00-12:45 (AM)

Contact: simona.pedde@wur.nl

The presentation is about extended global SSPs (European SSPs) to describe four extreme socio-economic futures for each case study including also non-linear developments as the context for building robust adaptation and mitigation strategies.



Karianne de Bruin - Chair and Presentation

Session: 3.2 Climate Services for Business: adapting and building long term resilience to climate change by and for the private sector

Presentation: Perspective on climate services for business - a network of actors

Time: 13:45-15:30 (PM1)

Contact: karianne.debruin@wur.nl

The session provides perspectives on climate services for business and private sector adaptation and resilience. We explore what creates an enabling environment that allows businesses to make use of the extensive information, tools and instruments which are (or could be made) available to inform and support management practices and decision-making. The session highlights experience from the private/ SME and research sector, including climate smart agriculture, fishery and coffee & tea sector, interactions between climate services users and providers and complexities of user engagement.



Ingrid Coninx - Presentation

Session: 3.2 Climate Services for Business: adapting and building long term resilience to climate change by and for the private sector

Presentation: Case study Agrifood - the enabling environment for climate smart agrifood sector: the role of climate services

Time: 13:45-15:30 (PM1)

Contact: ingrid.coninx@wur.nl

The agrifood sector has an important role in climate mitigation and adaptation. Ingrid will present how climate services support agrifood companies to implement climate smart solutions based on her experiences in the European Climate Smart Agriculture Booster (Climate KIC).



Saskia Werners - Chair and Presentation

Session: 5.3 Learning from co-production of adaptation practice and climate services

Presentation: Hydro-climatic information services to enable adaptive decision-making in rice production systems in Ghana

Time: 13:45-15:30 (PM1)

Contact: saskia.werners@wur.nl

In this session we aim to learn from examples of co-production. We focus on co-production of adaptation practice and climate services. Co-production can stimulate the development of innovation adaptation practices, support practitioners to incorporate adaptation in decision making, and increase the capability of a community to adapt.



Simona Pedde - Chair

Session: 6.6 Inclusive and local adaptation studies

Time: 13:45-15:30 (PM1)

Contact: simona.pedde@wur.nl

The five presentations in this sessions all report on local adaptation studies, often using participatory methods to engage a range of stakeholders, aiming at creating a strong local community and working towards successful adaptation options and their implementation as part of a broader package of integrated solutions.



Karianne de Bruin - Presentation

Session: 1.5 Providing a fit-for-purpose climate service for Europe: users' and purveyors' perspectives

Presentation: Pitch SECTEUR C3S Project - Sector user specific information Agriculture & Forestry sector

Time: 16:00-17:45 (PM2)

Contact: karianne.debruin@wur.nl

The session combines different perspectives on climate services, amongst others the Copernicus Climate Change Service, a European roadmap for Climate services and the projects SECTEUR, MARCO and EU-MACS. Wageningen Environmental Research (Alterra) is part of the SECTEUR project and will pitch sector user specific information needs from the agriculture and forestry sector.

WEDNESDAY, 7TH OF JUNE



Ingrid Coninx - Panel

Session: 5.11 Exploring urban adaptation practice: a focus on co-production and multi-level governance

Presentation: Participate in Multi-level governance panel

Time: 16:00-17:45 (PM2)

Contact: ingrid.coninx@wur.nl

This session explores the multi-level governance in climate adaptation by sharing experiences from Flanders, the Netherlands and Spain. Ingrid will contribute to the panel discussion based on her experiences with climate finance and monitoring and evaluation.

THURSDAY, 8TH OF JUNE



Simona Pedde - Co-Chair

Session: 5.6 Integrated research methods for co-creating adaptation solutions

Time: 09:00-10:45 (AM1)

Contact: simona.pedde@wur.nl

The session combines presentations on the applications of different methods and a panel discussion between researchers and practitioners, who have experience with such research and its practical relevance to reflect on the suitability and challenges of inter- and transdisciplinary for the development of climate adaptation solutions in different contexts



Rob Swart - Chair

Session: 6.2 Tools for inclusive and local adaptation options

Time: 11:00-12:45 (AM2)

Contact: rob.swart@wur.nl

This session presents tools and guidance for planning, monitoring and assessing adaptation options, including accounting for co-benefits, as well as case studies and evaluations of real-life adaptation projects in different parts of the world. Presentations are included from research institutes and consultancy companies in The Netherlands, Spain, Denmark, Vietnam and Canada.



Sanda Lenzholzer - Presentation

Session: 6.2 Tools for inclusive and local adaptation options

Presentation: Fostering urban climate adaptation via a smartphone app: the Urban ClimAdApp

Time: 11:00-12:45 (AM2)

Contact: sanda.lenzholzer@wur.nl

To inspire and facilitate concrete urban climate adaptation and to make information easily accessible for all, we developed the Urban ClimAdApp. The prototype of this smartphone app was made for Amsterdam (the Netherlands) and for the two main target groups of house owners and public space designers/ urban planners. The app shows high resolution urban climate maps, indicating urban climate problems and a range of site specific potentials for adaptation options.

THURSDAY, 8TH OF JUNE



Robbert Biesbroek - Chair and Presentation

Session: 4.3 Tracking Adaptation to Climate Change at Multiple Levels: International, National and Urban

Presentation: Framework for tracking adaptation to climate change

Time: 11:00-12:45 (AM2)

Contact: robbert.biesbroek@wur.nl

This session aims to critically reflect on the ways in which climate change adaptation can be meaningfully tracked. The combination of presentations will discuss how tracking can take place across different levels and scales, discusses the key challenges for tracking adaptation, and offers several novel frameworks to systematically and comprehensively track adaptation progress across time and space.

The exact location of each of the sessions can be found in the ECCA Session Abstract Book www.ecca2017.eu/conference/wp-content/uploads/2017/05/ECCA-Session-Abstract-Book.pdf and Conference App



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Other contributions of WUR at ECCA

WUR theme convenors have been part of the organisation of the ECCA 2017 conference for different sessions:

- **Robbert Biesbroek** - Theme 4. Making it happen: organisations, policy, governance, justice & ethics
- **Saskia Werners** (lead convener) - Theme 5. Working together: co-production of knowledge between science, business, policy, practice and local communities
- **Kasper Kok and Rob Swart** - Theme 6. Adaptation in practice: case studies, monitoring, support tools and guidance.

Rob Swart is also a member of the Science & Practice Advisory Committee.

Fokke de Jong is present at the JPI Climate booth, twittering about WUR, JPI Climate and ERA4CS activities and supporting EEA with the Climate ADAPT booth. Follow him on @fokke and hashtag **#wurecca17**



WUR activities at ECCA: **#wurecca17**



Tim van Hattum - tim.vanhattum@wur.nl

Karianne de Bruin - karianne.debruin@wur.nl



Relevant websites

www.wur.nl/climateservices/avc.htm www.ecca2017.eu

www.wur.nl/nl/artikel/Wageningen-Climate-Solutions.htm

www.wur.nl/en/Research-Results/Themes/Climate-change.htm