

Sustainable Governance of Land and Water

International Summer School 2013

Utrecht, 25-28 August



>>> REPORT <<<

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GOVERNANCE OF LAND AND WATER

There are big challenges in the governance of land and water in urban regions – managing groundwater resources, flood risk management and space for the rivers policy, water supply and wastewater treatment in dynamic urban regions, and many more. These challenges affect many different disciplines and reach beyond administrative and national boundaries. Also, these challenges require more intense research to cope with the socio-economic and environmental dynamics of our time. So, what would be more obvious than assembling 12 on-going PhD projects researching at the frontiers of these challenges from various disciplines and different countries and also invite 6 professors in the field to discuss, reflect and give feedback on the projects in order to explore sustainable governance of land and water?

The German Academy for Spatial Research and Planning (ARL) and the Urban and Regional Research Centre Utrecht (URU) hosted an international summer school where the young and senior researchers shared their passion, approaches and ideas on governance questions and challenges of land and water. Disciplines covered spatial planning, hydraulic engineering, economics, infrastructure planning, policy science, landscape planning, political economy, law, and others. **Dr. Andreas Klee** (klee@arl-net.de), **Dr. Thomas Hartmann** (t.hartmann@uu.nl), and **Prof. Dr. Tejo Spit** (t.j.m.spit@uu.nl) organized this event which took place from 25-28 August 2013 in the historical academy building in the centre of Utrecht.



PASSION FOR INTERDISCIPLINARY AND INTERNATIONAL EXCHANGE

The 12 PhD students, the 6 senior academics and also the vice president of the ARL, **Dr. Bernhard Heinrichs**, intensively discussed the 12 projects. The rationale of the summer school was that each PhD project was presented and discussed within a time slot of 45 minutes, the professors shared in keynotes their perspective on the overall topic.

Dr. Thomas Hartmann and Prof. Dr. Tejo Spit will try to assemble the best contributions in a special issue of the journal *Water International*. Therefore, James Nickum, the Editor in Chief, gave his comments and recommendations right at the start of the summer school in a video-interview.

PROGRAM

The program of the summer school was intense and dense. It created an atmosphere where preliminary findings, vague ideas, and feedback could evolve in a constructive way. The exchange of thoughts already started in the welcome reception on a boat cruise at the channels of Utrecht, where the relevance of the topic became visible for the participants from Australia, Austria, the Czech Republic, Germany, Greece, the Netherlands and the UK. But also the discussions around the major station reconstruction project in Utrecht led to new insights on the relation of land and water management. The programme was rounded off by a dinner in the exclusive Faculty Club in Utrecht. An academic highlight of the programme was the feedback session on Wednesday: Every PhD student submitted a paper beforehand to the summer school; each paper has been reviewed by a professor who was not the supervisor of the PhD project and another PhD student. This session led to substantial and extraordinary interdisciplinary exchange and was

of extraordinary importance for improving the individual papers.

	Sunday 25.8.	Monday 26.8.	Tuesday 27.8.	Wednesday 28.8.
9.00		Prof. James Nickum Water International	Prof. Dr. Robert Jünker TU Kaiserslautern	FEEDBACK SESSION
9.30		GROUNDWATER GOVERNANCE Gabriela Cuadrado-Quesada	ADAPTIVE FLOOD RISK GOVERNANCE Heleen Mees	Individual sessions with peers and professors
10.00				
10.30		COFFEE	COFFEE	COFFEE
11.00		SHORT ROTATION COPPICE Jens Hartwich	CLIMATE ADAPTATION Caroline Littenbroek	REFLECTIONS BY PARTICIPANTS
11.30				plenary
12.00		WATER SUPPLY & WASTEWATER Martin Schmidt	ADAPTABILITY TO CLIMATE CHANGE Karen Hetz	
12.30				
13.00		LUNCH	LUNCH	LUNCH
13.30		Prof. Dr. Jirina Jilkova Univ. of Economics, Prague	Dr. Carel Dieperink Utrecht University	LESSONS LEARNED
14.00	WELCOME (APOLLO HOTEL)	URBAN RIVERSCAPES Meike Levin-Keitel	INTEGRATED FLOOD RISK MANAGEMENT Lukas Löschner	Podium discussion with professors of the Summer School
14.30	KICK OFF ARL			
15.00	WELCOME SPEECH URU, Utrecht University	WATERFRONT REGENERATION Theodora Papatheochari	SPATIAL GOVERNANCE IN FLOOD RISKS Thomas Thaler	CLOSING CEREMONY ARL & URU
15.30	INTRODUCTION Dr. Thomas Hartmann	COFFEE	COFFEE	COFFEE
16.00		COST PROPORTIONALITY Vitezslav Maly	GREENING OF FLOOD MANAGEMENT Martijn van Staveren	
16.30		Prof. Dr. Jochen Monstadt TU Darmstadt	Prof. Dr. Colin Green Middlesex University	
17.00	BOAT TOUR: Utrecht's Water			
17.30	with traditional Dutch 'borrel' (drinks and fingerfood)	CASE STUDY CU2030 at information centre Utrecht station area		
18.00				
18.30				
19.00	EXPLORE UTRECHT ! pub-crawl (on own expenses)	WALKING TOUR: Utrecht's Land (City)	SUMMER SCHOOL DINNER (ACADEMY-BUILDING)	
open				



The feedback session took place in the garden of the historic academy building of Utrecht University.

GROUNDWATER GOVERNANCE



Gabriela Cuadrado-Quesada from the University of New South Wales, Australia, discussed diversity in national legal frameworks in groundwater governance. She therefore referred to three case studies from Australia, Costa Rica and the European Union. In the discussion property issues and the case study design have been addressed.

SHORT ROTATION COPPICE AND THE WATER CYCLE

Jens Hartwig, Geographisches Institut, Freie Universität Berlin, Germany, presented his paper on Short Rotation Coppice and how its impact on the environmental water cycle leads to new governance questions. Short Rotation Coppice (SRC) can have a significant impact on the water balance of a particular site. Hartwig discussed the possible effect on drinking water abstraction but also how such SRC could support a retention effect in floodplain. Particular the last argument raised a discussion on flood risk management and Short Rotation Coppice.



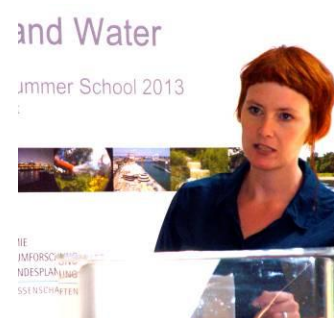
WATER SUPPLY AND WASTEWATER DISPOSAL



In Germany water supply and wastewater disposal are traditionally organized by local authorities; a multitude of small-sized utility companies are engaged in the supply of infrastructure services. **Martin Schmidt** from TU Darmstadt, Darmstadt, Germany, discussed this and compared the place-specific characteristics of water supply and wastewater disposal in the three urban regions of Frankfurt/Main, Berlin and the Ruhr. He raised questions like: Which forms of inter-municipal and regional collaborations can we identify in urban water and wastewater management?

URBAN RIVERSCAPES AND CULTURE

Meike Levin-Keitel from the Institute of Environmental Planning, Leibniz University Hannover, Germany, shed light on a cultural perspective of water governance in the process making of urban riverscapes. She offered a perspective that regards the specific local planning instruments and their implementations at the local and regional level as a representation of cultural acts itself, with distinct logics and self-perceptions. With her contribution she nurtures further insights in innovative future management of riverscapes.



WATERFRONT DEVELOPMENT AND ICZM



Waterfront regeneration in Mediterranean coastal cities in the context of Integrated Coastal Zone Management (ICZM) – this topic was presented by **Theodora Papatheochari** from the Laboratory of Environment and Spatial Planning, University of Thessaly, Greece. Her PhD is about examining methods through which waterfront regeneration can be achieved in the context of ICZM. She looks at Mediterranean medium sized cities and explores ways to incorporate waterfront development in spatial planning procedures including the active participation of the involved local stakeholders.

WATER FRAMEWORK DIRECTIVE AND COST PROPORTIONALITY

Vitezslav Maly, University of Economics, Prague, Czech Republic, approached the implementation of the Water Directive 2000/60/EC from an economic point of view, highlighting cost proportionality. Member States may use exceptions against strictly enforced objectives set under Article 4 of the Directive. Each of the exceptions must be carefully articulated and substantiated by objective monitoring and analytical documents. In this context, a key requirement seems to prove "costly disproportionate" to bring the water body into good condition.



ADAPTIVE FLOOD RISK GOVERNANCE



Heleen Mees from the Copernicus Institute of Sustainable Development, Utrecht University, the Netherlands, raised the issue of the public-private divide in flood risk governance. This led to intense discussions on the role of the state in flood protection. Mees focused in her presentation on the analysis of public and private responsibilities in adaptive flood risk governance arrangements. She presented the case studies of three urban regeneration projects in un-embanked areas in Hamburg, Helsinki and Rotterdam where adaptive strategies have been integrated.

CLIMATE ADAPTATION AND PLANNING

In her contribution on "An exploration of planning tools that assist in the mainstreaming of climate adaptation: With insights from the Dutch context", **Caroline Uittenbroek**, Human Geography and Spatial Planning, Utrecht University, focused on the future water related challenges for cities due to climate change. She aims at providing insights in whether or not there is a need for new planning tools in case of mainstreaming climate adaptation into the policy domains of water management and spatial planning. Her focus is on urban areas in The Netherlands.



WATER RELATED RISKS OF CLIMATE CHANGE AND THE LIMITS OF URBAN PLANNING



With an example from Johannesburg in South Africa, **Karen Hetz**, Leibniz Institute of Ecological Urban and Regional Development, Dresden, Germany, discussed the limits of the urban planning system to adapt to challenges of informal growth and climate change in Johannesburg. She focuses on vulnerable urban population and showed how the policy of providing giveaway houses to low-income groups constitutes a lock-in situation. Hetz investigates which adaptation options planning actors realise within this lock-in situation in order to address water quality and flooding.

PARTICIPATORY PLANNING PROCESSES IN FLOOD MANAGEMENT DECISIONS

Lukas Löschner from the University of Natural Resources and Life Sciences (BOKU), Vienna, Austria, presented his research design for analysing how the shift towards an integrated flood risk management influences local authorities' flood management decisions. A key research aim is to develop guidance for local planners and decision makers which may serve as a frame of reference for a more systematic consideration of uncertainties in future flood-related decision making. In his empirical research, Löschner aims at combining quantitative and qualitative methods on the example of Austria.



SPATIAL GOVERNANCE IN FLOOD RISK MANAGEMENT



Another perspective on flood risk management in Austria has been delivered by **Thomas Thaler** from the Flood Hazard Research Centre, Middlesex University, London. He summed up the current flood risk management debate in two areas in Carinthia (Austria). Thaler explained that the co-operation of local authorities in this respect remains quite low and discusses the introduction of a spatial governance framework. In his PhD he addresses the limitations and barriers in establishing collaborations and making them effective.

GREENING OF FLOOD MANAGEMENT

Martijn van Staveren from Wageningen University briefly explained how the over-dominant technological approach to flood management led to an underestimation of ecological functions and awareness of its potential. He researches in his PhD strategies for greening of flood management in a selection of world deltas. 'Greening' is understood as the development and/or implementation of strategies which consciously depart from an ecosystem approach to flood management. His PhD is part of a larger research project incorporating Bangladesh, Vietnam, and the Netherlands.



KEYNOTE ADDRESSES

The participation professors shared their insights and perspectives on sustainable governance of land and water in keynote addresses. These covered topics like:

- "Economic perspective of sustainable governance" by **Prof. Dr. Jirina Jilkova**, University of Economics, Prague and the J.E. Purkyne University in Usti nad Labem;
- "Translating urban infrastructure ideals and planning models: adaptation and creativity in the governance of land use and water infrastructure in African cities" by **Prof. Dr. Jochen Monstadt**, TU Darmstadt;
- "Flood risk management – experiences from the recent flood events" by **Prof. Dr. Robert Jüpner**, TU Kaiserslautern;
- "Starflood - Towards more resilient flood risk governance" - by **Dr. Carel Dieperink** (in place of Prof. Dr. Peter Driessen);
- "The integration of water and spatial planning: conflicting discourses and needs" - by **Prof. Dr. Colin Green**, Middlesex University.

These keynotes raised issues and triggered further discussions. They also helped bridging disciplinary gaps and gathering insights in the different ways of thinking of the disciplines.



Prof. Dr. Jochen Monstadt

Prof. Dr. Jirina Jilkova

Prof. Dr. Robert Jüpner

Prof. Dr. Colin Green

LIST OF PARTICIPANTS, SUPERVISORS, AND HOSTS

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