INTEGRATING CLIMATE CHANGE INTO LOCAL GOVERNANCE: APPROACHES ACROSS DANISH MUNICIPALITIES

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INTRODUCTION

Adaptation to climate change part of post-carbon/sustainable/green transition

- Complex and uncertain
- Potentially a massive scale
- Challenges urban policy institutions – the scale and massive risk
- Adaptation very tangible – and costly – at local level

CPH

- Sign-post flooding and multi spectred adaptation

Key objective:

Examine why CPH has managed to institutionalize adaptation and how experimental neighbourhoods have gained a crucial position

→ CPH has – to some extent – translated policy innovation to a learning capacity through place specific experiments (and failure benefits) and the sharing of actions and responsibilities

OUTLINE

Introduction

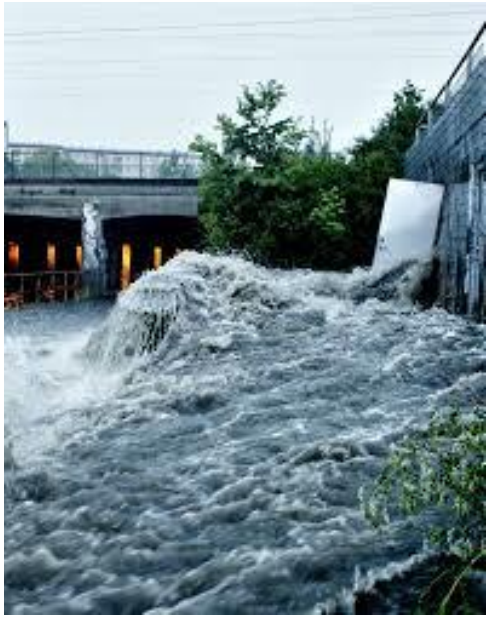
Climate change impacts in Copenhagen

Adaptive capacity and Policy innovation as conceptual framework

Sct Kjelds, Sydhavn and the significance of experimental neighbourhoods

Concluding

CLIMATE IMPACTS IN CPH



Water!

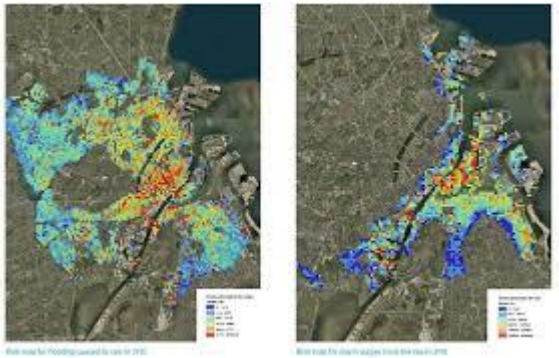
- More rain, cloudbursts, rising sea levels and floodings
- Major floods in August 2010, July 2 (costs almost 1 bill EUR and damage on crucial infrastructure) 2011, August 2011 – ‘fundraising flooding’ (Lykke Leonardsen)

Heat

- Urban heat islands
- Historical drought and heat in May-August 2018

Storms, invasive species, social change….

MANAGING CLIMATE IMPACTS IN CPH



Urban vision, Climate Strategy & Plan, Cloudburst Plan

- Green business
- Risk assessment and CBA: 100 yr rains
- Novel water infrastructure: Waterways across the city, 1st and 2nd flush
- Integrate in urban regeneration – multiple benefits
- SUDS and NBS: The green and blue solutions
- Investments: Cloudburst Plan 2012 w 11 bill DKK (1.5 bill EUR)
- Participation: Create ownership, embed locally

Investments over 1-20 yrs – waterways, SUDS and climate proofing

Experimental neighbourhood Skt Kjeld (and South Harbour)

CONCEPTUAL FRAMEWORK: ADAPTIVE CAPACITY

IPCC 3rd assessment report

Specifies the capacity of policy institutions to manage the challenges of climate changes:

‘ the characteristics of communities, countries and regions that influence their propensity or ability to adapt’ (IPCC 2001:18)

- i.e. the capacity to
  - Modify exposure to climate risks
  - Absorb and recover from the climate related losses
  - Exploit new opportunities that arise due to CC/adaptation

Generic and context specific – uncertainty

Complex: Governing (governance), civil society (social capital), financial resources

- Policy institutions central in urban adaptation

CONCEPTUAL FRAMEWORK: POLICY INNOVATION

Policy innovation

> 'novel policy activity....[implying] changes to existing policy practices which introduce non-status quo, if not necessarily entirely novel, policy components or combinations of components which often result in new outcomes' (Howlett, 2014: 396)

Axes

- Short lived vs (quasi) lasting
- Positive vs negative
- **Process vs substance**

Process: the procedures and structures of policy making

Substance: the content and instruments of policies and measures

SIGNIFICANCE OF EXPERIMENTAL NEIGHBOURHOODS

Sct Kjelds

- 1st experimental neighbourhood – co-creation and urban lab for novel solutions
- Local expert support – open office
- 300 mill DKK for developing solutions
- Urban spaces, liveability and local cohesion
- Blue and green – integrate water in urban spaces, greening of road space
- Citizen driven – to some extent

Sydhavn

- Energy and climate
- Social inclusion and local business partnerships
- Adaptation infrastructure a given

SIGNIFICANCE OF EXPERIMENTAL NEIGHBOURHOODS

Participation

- Citizens desire sustainable and safe mobility, liveable urban spaces
- Community places for gardening, recreational activities, encounters and everyday lives

Tåsinge Square Waterpark

- Local experiments since 2012 – citizens, communities, local business involvment
- Intention to be Wild – create conditions for urban nature
- Capacity to store water from 8000 m2; channel water to Cph waterways

SIGNIFICANCE OF EXPERIMENTAL NEIGHBOURHOODS

Policy innovation along the process dimension

- Participation practice: A sum for developing local solutions; workshops; co-creation of water knowledge – 2-way
- Position of urban authorities: proximity and ambassadors in city administrations
- Social cohesion: Saturday get-togethers, partnerships w housing associations (emerging - SH)
- Tentative integration of local businesses (SH)
- Make visible (old) conflicts of interest

SIGNIFICANCE OF EXPERIMENTAL NEIGHBOURHOODS

Policy innovation along the substance dimension

- Urban mobility central – change of road space at the centre
- Road water retention sculputers
- Building tailored solutions – shared responsibility; highlight structural barriers
- Boardgame to invite and motivate and to resolve conflicts of interests

SIGNIFICANCE OF EXPERIMENTAL NEIGHBOURHOODS

Findings

- Expert competencies at the scale of urban citizens' experience/ tacit knowledge
  - Place specific translation of the Cph waterways & blue green
  - Changed position of local planners – in-between
- Social aspect highlighted – and integrated
  - The everyday life of local citizens – their desired place
  - Evaluation of measures and new practices
- Stimulate learning capacity in city administration
- Raise attention to challenges and solutions – showroom for CPH solutions

CONCLUDING

Why is adaptation policy tentatively institutionalised

Yes – costs of non-action, severe floodings, increased attention, strong admin leadership – but also:

Integrate policy innovation in the specific form of local experimental sites

Adaptation at neighbourhood level – upscale process and business solutions

Policy innovation is risky business

Leads decision making capacity in potentially uncertain directions

Public media attention

Learning organisation and benefit from the uncertainty of failures

Joint leadership – across policy and politics, across sectors – across scales?

CONCLUDING

Crucial role to experimental neighbourhoods

- Relatively safe urban laboratory
- Tailor solutions – adaptation in the national-local nexus
- Engage across actors – policy makers, experts, citizens, business
  - embed and share responsibility
- Include the social aspect of sustainable adaptation
  - Social cohesion, participation – also socially deprived, local knowledge

Thanks for your attention

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