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Mitigating flood risk under conditions of strong growth and weak planning:

Constraints and solutions in Can Tho City

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1

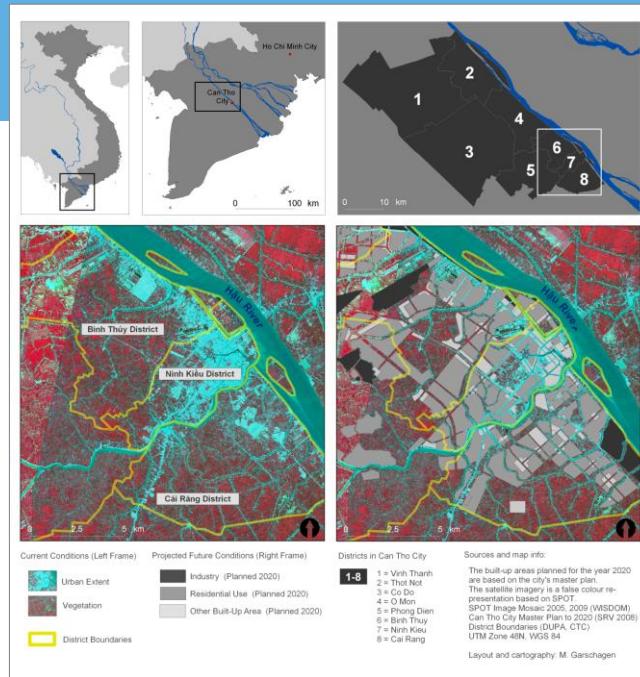
Rationale / question / structure



Which institutional constraints for successfully managing future flood risk can be observed in the Mekong Delta's Can Tho City, under conditions of strong urban sprawl coupled with a weak planning framework? How can these constraints be overcome?

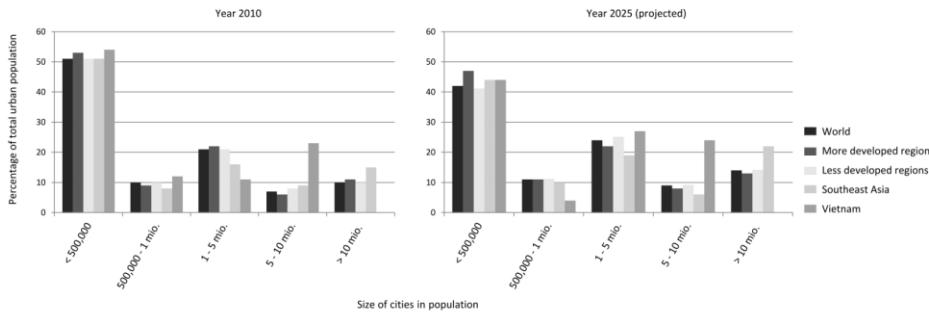
Case study context

- ca. 450,000 residents and rapidly growing
- Cai Rang: 90,000 currently; another 120,000 – 150,000 planned to 2025
- urban areas not coherently covered under „Living with Flood“-policy
- increase in flood occurrence (Ho et al. 2007)
- increase in flood variability (Delgado et al. 2010; Huong & Pathirana 2013; Väistölä et al. 2010)
- projected climate change impacts, e.g. 75cm SLR: 22% of current topography and 19% of current pop. of MKD (IMHEN 2010)



Question | Case Study Context | Methods | Adaptation Measures and Structure | Challenges | Discussion 3

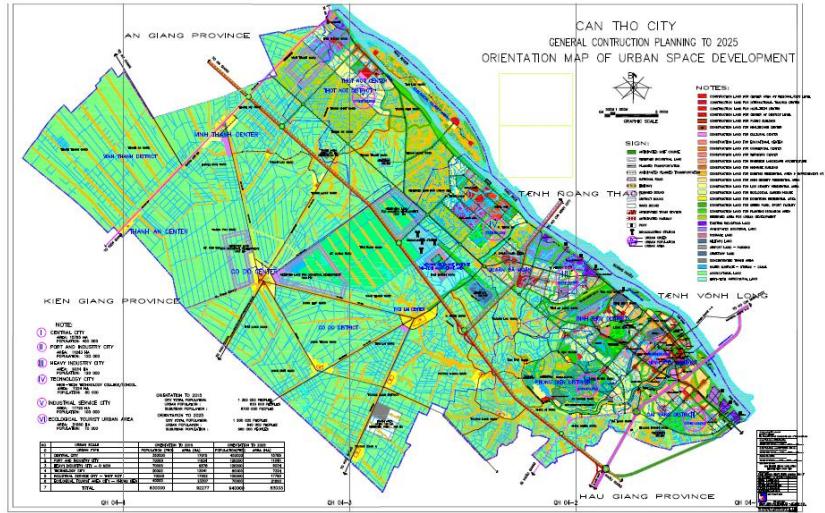
The importance of mid-sized cities



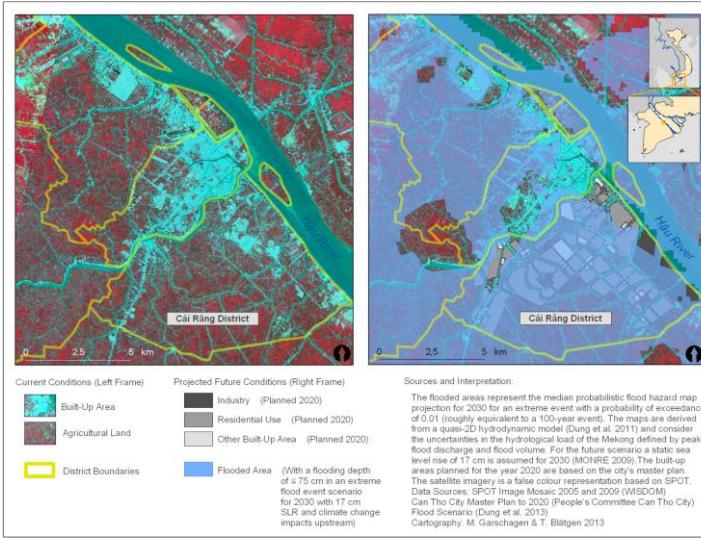
Source: own draft, based on data from UN-DESA (2012)

Question | Case Study Context | Methods | Adaptation Measures and Structure | Challenges | Discussion 4

Current development master plan



Future exposure and flood risk

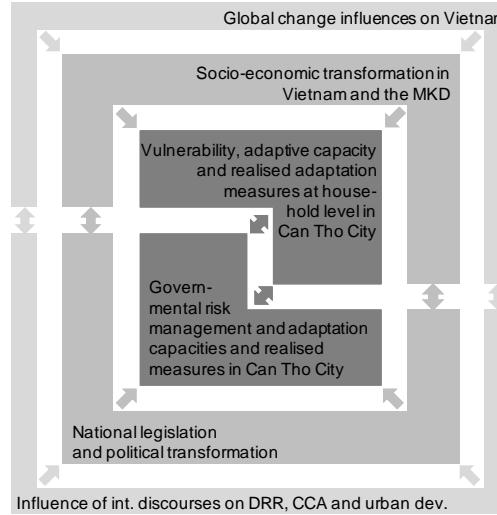


Source: Garschagen 201

Question | Case Study Context | Methods | Adaptation Measures and Structure | Challenges | Discussion

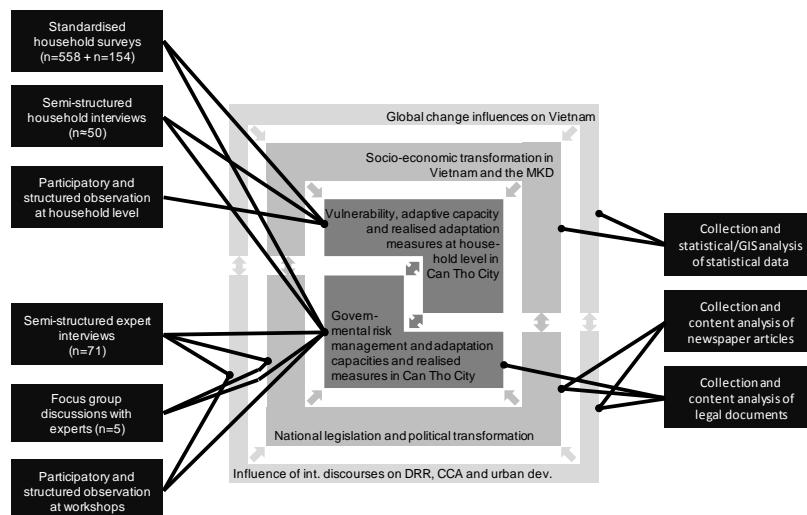
6

Research elements and methods



Question | Case Study Context | Methods | Adaptation Measures and Structure | Challenges | Discussion 7

Research elements and methods



Question | Case Study Context | Methods | Adaptation Measures and Structure | Challenges | Discussion 8

Entry points for gov. urban flood risk management

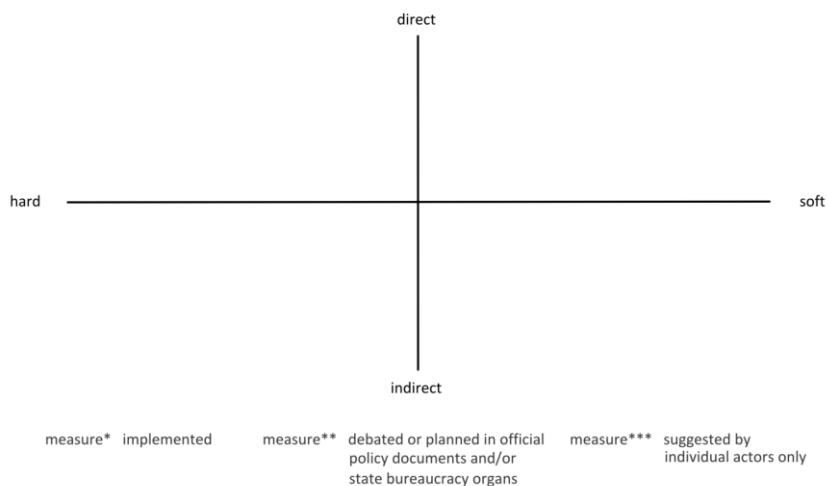


	Hazard	Exposure	Susceptibility	Coping capacity
Entire city and beyond				
Single districts or wards within city				
Individual buildings or households				

Source: own draft, summarized from measures discussed in Burby et al. (1999, 2000); Jha et al. (2012); Burby and Dalton (1994); March and Henry (2007); Greiving and Fleischhauer (2006); Fra Paeo (2009); Sánchez Rodríguez (2009); Alexander (2006, 2009); Sudmeier-Rieux et al. (2013)

Question | Case Study Context | Methods | Adaptation Measures and Structure | Challenges | Discussion 9

State-driven measures in Can Tho City: Which roles does mainstreaming adaptation into planning play?

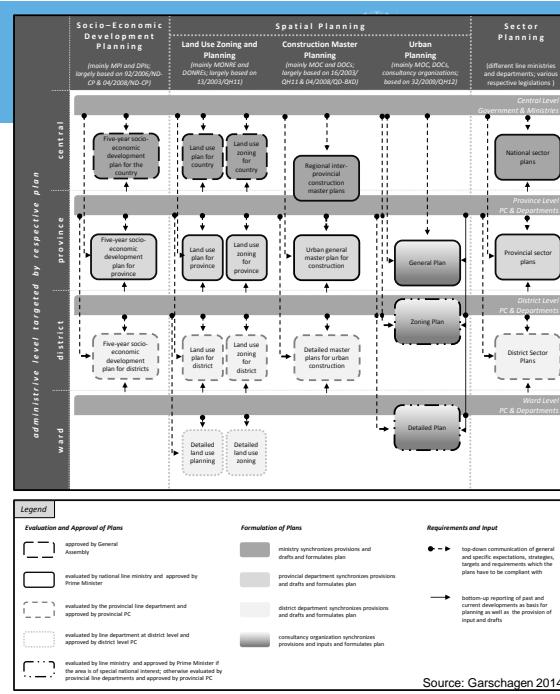


Source: own draft Garschagen, based on key informant interviews and legal documents

Question | Case Study Context | Methods | Adaptation Measures and Structure | Challenges | Discussion 10

Formal planning structure

- three key streams
- vertical nesting
- in theory bottom-up and top-down process
- new law on urban planning



Question | Case Study Context | Methods | Adaptation Measures and Structure | Challenges | Discussion

11

Prevalent challenges



Technical and procedural shortcomings

"I think actually nobody not even, for example, [...] the Vietnam Institute of Architecture and Rural and Urban Planning would be able to answer that question and I think that is already the key – the key crux [...] that the planning system is so complicated. [...] The sad thing that is related to that is that as such it is very easy to [...] abuse the system – because the process is so confusing. It allows for people to go through the cracks – I mean to be able to develop projects which are maybe not completely in line with what is good for a city." (KI-08-IO: 27)

Question | Case Study Context | Methods | Adaptation Measures and Structure | Challenges | Discussion

12

Prevalent challenges



Cross-sectoral integration

“In Vietnam sustainable urban development mostly means architecture development only. So this is not good. [...] Planners in Vietnam do not get enough training in actual urban planning. And in addition we do not have enough planners anyhow.” (KI-52-GOS: 31)

Lack of horizontal integration

“The level of the region is missing in Vietnam in terms of planning and administration. There is no platform to discuss the common problems of a region. We do not have a strong link between different provinces for doing such joint planning.” (KI-63-RO: 47)

Data availability and exchange

[Question](#) | [Case Study Context](#) | [Methods](#) | [Adaptation Measures and Structure](#) | [Challenges](#) | [Discussion](#)

13

Prevalent challenges



Uncertainty, knowledge and insecurity

“Drainage and elevation of infrastructure and buildings is based on the current situation and past experiences [...]. However, DUPA cannot take into account future weather and climate because it does not have any information on that – nobody knows the weather in the future; how shall we know it?” (KI-15-IP: 37-38)

“No, there is no climate change scenario or no sea level rise scenarios that can be applied in the applicable form in Can Tho. Why? Because until now there is a lot of different speech in the scenarios and nothing is considered the official one to be referred to.” (KI-14-IP: 90)

[Question](#) | [Case Study Context](#) | [Methods](#) | [Adaptation Measures and Structure](#) | [Challenges](#) | [Discussion](#)

14

Prevalent challenges



Limited effect of national reforms at local level

"I think the unfortunate conclusion [...] is that the real impact of what many had hoped for [...] – the real impact on local governments – is unfortunately limited. The processes [...] at the local government level are still very much the same and the level or the capacity of the people who are running the process are also are still very much the same – while the pressure to develop has increased immensely and the pressure to address issues like climate change, [...] and urban expansion and so on – they are intensely growing." (KI-08-IO: 32)

Lack of capacity at the level of local urban governments

"[...] it's almost a not spoken rule, but there is no [...] real investment in the capacities of these local government officials besides a kind of regular training which more relates to being a very good bureaucrat and complying with the laws and regulations of the Communist Party – and that is of course quite sad. [...] I mean as long as this is not combined with an investment in the people who are running the city, or planning for the city, or managing the city – yes, than it's – [long pause] quite difficult!" (KI-08-IO: 32)

[Question](#) | [Case Study Context](#) | [Methods](#) | [Adaptation Measures and Structure](#) | [Challenges](#) | [Discussion](#)

15

Prevalent challenges



Technocratic and mechanistic planning bureaucracy

"The plan itself is just one step, but the process in order to get to the plan is probably more important. [...] It seems to be for me almost impossible, but the plan making process has been reduced to authority – totally emptied. As long as the plan is there, that's fine. [...] So at the end of the day there is a book or a document. [...] [T]his output is then 'wonderful, ok finished' and 'we hang it on the wall or we put it in a cupboard' – that's nice, but it's not very helpful – not a helpful process." (KI-08-IO: 28-36)

Public participation

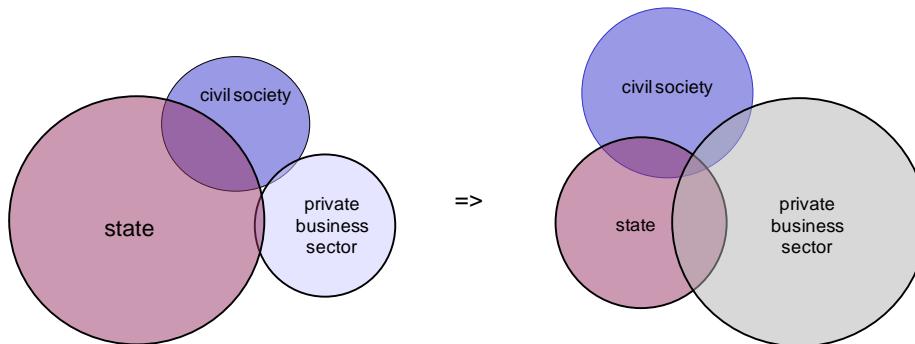
"Up to now we don't really ask for the opinion of [...] the people. But we should do that. The task is not only to ask people after we are finished, but to invite their opinion beforehand." (KI-63-RO: 46)

[Question](#) | [Case Study Context](#) | [Methods](#) | [Adaptation Measures and Structure](#) | [Challenges](#) | [Discussion](#)

16

Prevalent challenges

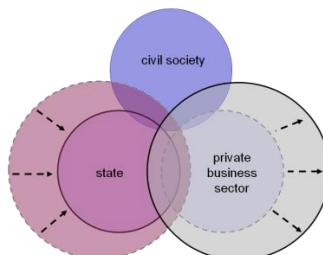
Risk governance in the changing political economy



Question | Case Study Context | Methods | Adaptation Measures and Structure | Challenges | Discussion

17

Prevalent challenges



"I personally feel that for many of the planners indeed they are faced with so many [...] day-to-day priorities they need to address that anything which is beyond time duration of more than – you know – of five years is very difficult for them to grasp [...] because at the same time investors keep knocking on their door, saying: "I want to put my money somewhere - I want to develop a certain area [...]" And if they come with enough money, it is very difficult for a local government to say: "Oh, I'm sorry, we're not building this, [...]" As such planners do not have sufficient leverage in order to say no." (KI-08-IO: 28)

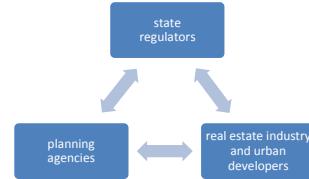
"The master plan is nowadays in fact made by the developers, not by the government. Even though we have long-term master plan which is approved by the Prime Minister, we have to change it every five years. Why? Because private developers come in and want to develop it differently." (KI-38-RO: 34)

Question | Case Study Context | Methods | Adaptation Measures and Structure | Challenges | Discussion

18

Key findings

- multiple institutional challenges
 - entrenched in the planning system
 - different level of fuzziness and 'implicity'
- mismatch btw.
 - socialist planning logic
 - vs. liberalized market forces
- rifts and mismatches btw. three groups
 - risk evaluation
 - time scales
 - vested interests
 - development visions
- lack of checks and balances through
 - weak law enforcement
 - cronyism



[Question](#) | [Case Study Context](#) | [Methods](#) | [Adaptation Measures and Structure](#) | [Challenges](#) | [Discussion](#)

19

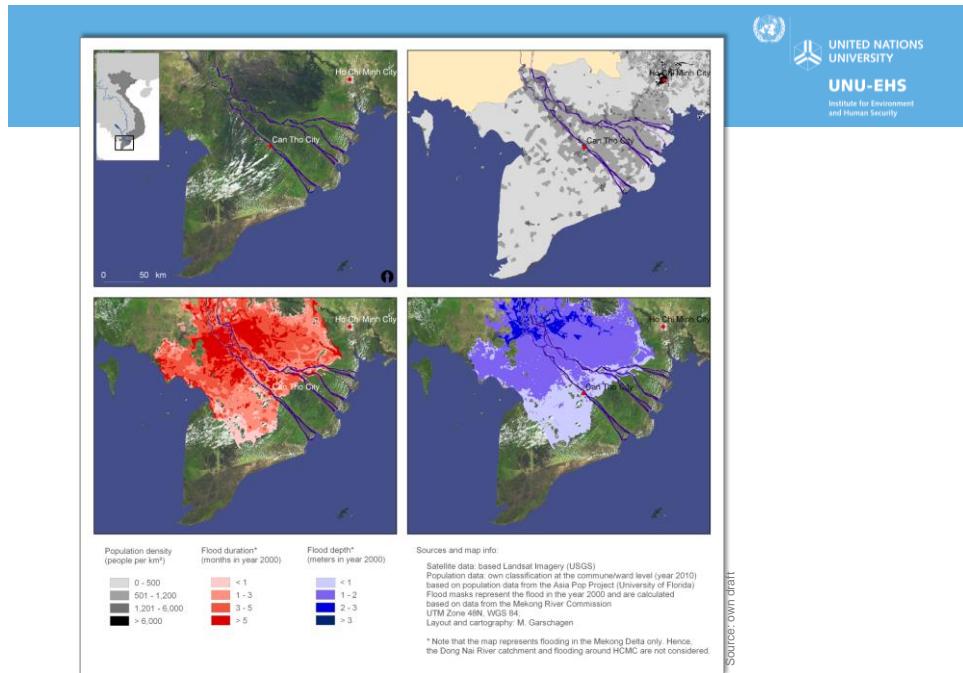
Overcoming the constraints?

- Study has shown that superficial adaptation fixes are not going to work
- Adaptive urban governance is needed
- But this is linked closely to the deeper institutional set-up defining also the 'rules of the game' for planning and risk management
- Political dimensions are key here => 'a-political' adaptation science is not going to work for that matter
- Hence, it would be naive to believe that adaptation could be easily implemented without challenging the deeper political economy of the country

[Question](#) | [Case Study Context](#) | [Methods](#) | [Adaptation Measures and Structure](#) | [Challenges](#) | [Discussion](#)

20

Thank you very much for attention and questions !
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- **Vertical integration**
- “The trend towards decentralization in urban planning does mostly exist on paper. We have the feeling that in reality the country’s urban segment is rather experiencing a trend towards centralization because all the important documents, master plans and so forth have to be approved by the Ministry or even the PM [Prime Minister] in Hanoi. So in particular for those cities like Can Tho which are climbing up the ladder of administrative levels, they do now need to have their plans and strategies approved as they are now centrally-run cities. They did not have this requirement when they were smaller cities of lower administrative level in the past.” (KI-33-IO: 22).

23

- “People in Vietnam do not yet seriously think about how to prepare for climate change. You know, this is also because of our system of periodical governments. Each leader is nominated for 5 or 10 years. So they are not very much engaged in long-term problems. Maybe they are also too tired because they are so busy with engaging in the short-term daily problems. So [...] it is very hard to raise awareness for the long-term problems.” (KI-52-GOS: 36)

24