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***Community resilience in the face of climate change: challenges to  
multi-level capacity building***

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**Abstract**

Communities facing the effects of climate change are actively trying to boost their resilience. At the same time, governments are mainstreaming climate change into their development frameworks. Close examination of current practice, however, points at a disconnect between government policy and community initiatives. This study explores how strengthening specific capabilities at various levels can ensure synchronization of policy and practice and further community resilience in face of climate change. Choosing an approach that appreciates the interplay of top-down and bottom-up logics towards performance under stress, it illustrates that understanding resilience in terms of capacity opens the door to practical thinking on policies as well as practices. Evidence is taken from case studies in Chile and Vietnam to show how governments can play an enabling role when connecting their efforts to initiatives taken by communities. At the same time, top-down structures, such as the United Nations Framework Convention on Climate Change (UNFCCC) and the Sustainable Development Goals (SDGs), can help to break silos between different (inter)national political agendas and underscore the need to link top-down and bottom-up approaches to ensure resilience. This paper contends that improving communities' adaptive capacity demands bridging the disconnect between multiple levels of policy and practice. In doing so, different, and too often conflicting, values, interests, and political agendas need to be aligned. More concretely, we found that resilience, as an emergent property of human systems, can be enhanced when government and local stakeholders work together in a number of specific areas. For instance, combining multi-stakeholder platforms in which diverse actors – ranging from policy-makers to researchers to community representatives – translate lessons learned at the community level into local and national policy, with initiatives aimed at strengthening capacities and ensuring access to relevant assets at the community level.

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**Full paper**

***Introduction***

Climate change is arguably one of the worst threats to global stability in the 21<sup>st</sup> Century. The trouble is, however, that we do not know what exactly climate change has in store for us. Are the current changes all we have to worry about, or are they just the tip of the iceberg? This makes it imperative that countries and communities strengthen their adaptive capacity; both with regard to slow-onset events (e.g. climate and water availability changes due to seasonal weather shifts) and shock events (e.g. heavy floods, hurricanes).

Yet building adequate adaptive capacity to deal with the consequences of such events does not happen overnight. In fact, improving the communities' capabilities to deal with climate-related stress requires significant long-term investments. This article explores how strengthening specific capabilities may contribute to greater community resilience in the face of climate change. Choosing an approach that appreciates the interplay of top-down and bottom-up logics towards performance under stress, it illustrates that understanding resilience in terms of capacity opens the door to practical thinking on policies as well as practices to improve it. Evidence is drawn from research in both Chile and Vietnam.

The article uses three complementary perspectives. Firstly, Baser et al. (2008) suggest capacity can be understood as a dynamic system of capabilities that individually and in their interaction determine the 'capacity' of a community. It will help us understand how specific capabilities engage and interact at the community level to improve resilience in the face of climate change. Secondly, we use the approach to improving collective performance under stress and uncertainty proposed by Engel & Engel (2013). It allows us to draw lessons from

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disaster and innovation studies to define key areas in which improving capabilities can contribute to strengthening resilience at the community level. Thirdly, we make use of the Policy Arrangement Approach (PAA) (Tatenhove et al., 2000), adapted by Knaepen (2014) to look into the dynamics of mainstreaming climate change adaptation into development policy planning and implementation; and what local government (policy) can do to create a conducive environment for strengthening key capabilities.

Drawing from a wide variety of perspectives (disaster, policy, innovation and capacity studies) allows us to highlight several key issues that we hope may help focus the debate on capacity development in the face of climate change, but it also carries with it some limitations. While we may highlight a number of key areas for improvement, we cannot and do not pretend an exhaustive treatment of each area identified, nor a full analysis of the various relationships involved within the framework of this article. Being of an exploratory nature, the article does suggest that looking at resilience and capacity as emergent properties of human systems leads us to identify specific areas in which government and local stakeholders should work together in order to improve their adaptive capacity and ensure resilience vis-à-vis climate change.

### *Improving resilience to climate change, defining the capacity challenge*

Perhaps the most important insight from the study Baser et al. (2008) conducted into the relationship between capacity and performance is the *emergent nature of capacity*. It is within a particular context that the application of diverse capabilities by a community and its members generates a community response. In short, capacity in the face of a crisis is what emerges from community efforts when it experiences collective stress. In addition, the relationship between the application of capabilities and the overall capacity of a community is an interactive, fuzzy one. As Fowler and Ubels (2010) argue, capacity emerges from “different (...) capabilities of people that combine and interact to shape the overall capacity of a purposeful human system”. How a community develops its capacity<sup>3</sup> to perform well under climate-related stress is therefore *not a straightforward, linear process*. In this light, the questions we would like to explore and to a degree, answer are: What capabilities in particular should be strengthened and, how do these interact and engage, to improve a community’s performance under climate-related stress?

We suggest the five *core capabilities* (CCs) Baser et al. (2008) identified that can be specified as follows for communities exposed to climate-related stress:

1. *Capability to commit and act*: communities are able to anticipate, decide on a course of action and act jointly under stress (CC1);
2. *Capability to deliver on development objectives*: communities are able to set development objectives, mobilize available resources and deliver results accordingly (CC2);
3. *Capability to adapt and self-renew*: communities are able to change their ways and find novel solutions when the situation so demands (CC3);

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<sup>3</sup>OECD/DAC (2006): “Capacity development is understood as the process whereby people, organizations and society as a whole unleash, strengthen, create, adapt and maintain capacity over time.” (in Keizer et al., 2011, page 8)

4. *Capability to relate to external stakeholders*: communities are able to develop and maintain relations with relevant 'outsiders' and to their support when needed (CC4);
5. *Capability to achieve coherence*: communities are able to maintain their sense of community and the coherence of their actions under duress (CC5).

In the next paragraphs we will explore which of the above core capabilities need to be strengthened and how their interaction can be improved to reinforce a community's performance under climate-related stress. We will first look from the inside out, how communities can strengthen their own adaptive capacity, using the focal areas for strengthening performance under stress suggested by Engel & Engel (2012) and evidence from Chile (K.E. Engel, ongoing field research 2013-2016). Next we will look from the outside in, at what governments can do to enable communities to do so, making use of the work of H. Knaepen (2014) on mainstreaming climate change adaptation in Vietnam.

### *Improving community resilience: focal areas for strengthening adaptive capacity at the community level*

When looking at how to unleash and strengthen a community's adaptive potential, a key lesson put forward by Engel and Engel (2012) is that under stress, paradigms of organization (political, social and economic arrangements, rules and institutions) often become obsolete but not necessarily fluid even though disaster studies consistently underline the need for flexibility. Combining insights from disaster as well as innovation studies, the authors suggest two dimensions along which a community may act to strengthen its performance under stress.

The first is for the community to ***lay an enabling foundation for improvisation and creativity*** while you can: "[C]reating enabling structures requires discipline and learning [as] competent emergent behavior is in fact improvisation based on a solid foundation" (Engel and Engel 2012: 143). Just like jazz players require a solid knowledge base, discipline and lots of practice, so do communities and their members to ensure an overall adaptive capacity that can deal with the unexpected under time constraints. A first step to create such a foundation is *promoting awareness, practice and learning*, strengthening the community's capability to anticipate, decide on a course of action and act (CC 1)<sup>4</sup>. Next, effective improvisation requires a detailed understanding of a community's culture, underlying structures and social patterns, as well as of the support networks, individual competencies and resources available (CC 2, 5). Both can only be acquired by active engagement of relevant stakeholders, forward planning as well as practical exercises. Besides, "without proper planning, there will be no proper improvisation and without improvisation, no plan is good enough" (Engel and Engel 2012: 144). Furthermore it is vital for the community to *identify and engage with all possibly relevant allies* - both likely and unlikely ones - and to ensure *broad social networks* that in times of stress will allow for rewiring relationships and re-linking available resources (CC 4). Such

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<sup>4</sup> Reference to core capabilities as defined above will be indicated as CC 1-5.

relationships need to be based on trust and mutual understanding, the foundation for which needs to be laid before they are really needed. This underscores the need for a broad, participatory process to build trust, raise awareness, anticipate and plan ahead, including broad multi-stakeholder negotiations to ensure an understanding about the possible (re-) deployment of critical resources when disaster strikes (CC 1, 2, 3).

This does not always happen, particularly where a substantial disconnect exists between relevant actors, such as policy-makers, government services and the public. One example from Chile may illustrate this point. Chile is and always has been a seismic country with a 7 magnitude earthquake every five years, and a 4 magnitude earthquake happening at least 5 times a week. In addition it is highly vulnerable to climate change even if it contributes only 0.2% of the world's greenhouse gas emissions. As a consequence Chilean communities find themselves in need of ensuring adequate adaptive capacity to deal with future potentially destructive events. However, the environment in which local experts and community leaders operate often remains far from enabling. The following example regarding adaptation to climate change provides more insight into some of the challenges local actors face.

#### **Bottom-up adaptation initiatives in Hualqui, Chile**

In Hualqui (Chile) one technical manager responsible for supporting a substantial number of small-scale farmers realized that climate change is already having adverse effects and threatening people's livelihoods. This moved her to execute together with the farmers a simple risk assessment to identify the most important threats and consequences they were facing in light of climate change. As the most important risks they identified: long-term drought, torrential rains, and greater temperature disparities. Additionally, they explored the interaction between the different elements and assessed that torrential rains would not allow sufficient water to seep into the ground to augment groundwater levels, to supply wells and catchments, and would thus further increase drought.

To start acting, they proceeded to work out a climate change strategy, including proposals for concrete actions, such as rainwater harvesting and conservation practices that will increase water infiltration into the soil (e.g. micro-basins or eyebrow terraces, water diversion channels and infiltration trenches). Particularly the latter activities require substantial investment and would thus really benefit from more governmental assistance. Unfortunately, their proposals have so far fallen on deaf ears.

**Source:** field research 2013-2014, K.E. Engel.

The second dimension is for the community ***to loosen up, to create awareness of and space for emergent behavior***. Key again is creating *enabling* conditions that support, rather than constrain “people who happen to come up with a good idea, in the right place, at the right time” (Engel and Engel 2012: 142). Creating such conditions often requires revisiting and adapting *institutional cultures and systems of accountability*. Alas the “fear of being responsible for out-of-the-ordinary decisions with uncertain consequences can stifle even the most competent individuals, unless they are certain that an ex-post evaluation will look at impact, take into account conditions on the ground and acknowledge that it is impossible to say whether other actions/decisions would have produced

better results” (Engel and Engel 2012: 142). Unfortunately, current evaluations are often based on pre-conceived targets, indicators and procedures that seem perfectly rational when continuity prevails, but may lose most of their relevance when disaster strikes. Loosening up such structures and allowing emergent behavior to be formally recognized as necessary and positive to ensure adequate and timely responses to a novel reality will considerably contribute to strengthening the community’s ability to adapt and self-renew (CC 3).

Another requirement is to create room for out-of-the-ordinary solutions and a commitment to results. Climate change will trigger changes and events we have not experienced before. As a result there is a need for incentives to dare to envision and employ unthought-of solutions; to look beyond what is readily available in order to unleash and strengthen the communities’ innovative potential (CC3). In case of a crisis, as a minimum, this requires relief as well as stimulating community initiatives by providing access to necessary resources. Here again one would expect the government to be able to play an enabling role by connecting its efforts, and resources, to initiatives taken by communities themselves. However, the Chilean experience illustrates that the existing disconnect between government policy and community initiative has yet to be tackled (see box below).

#### **Bridging the gap between adaptation policy and practice in Chile**

The Chilean government is well aware of the country’s vulnerability to climate change. As a result, it enabled, amongst other activities, the execution of studies, development of law projects, articulation of national plans and establishment of new governmental bodies. So far, however, these are largely dealing with policy issues and lack a close articulation with actual communities’ needs. At the same time, small-scale local efforts such as the one in Hualqui above have been undertaken by the communities themselves to improve their adaptive capabilities. But so far local actors are largely on their own with access to limited resources as they seek ways to ensure greater resilience.

Just like in many countries, governmental officials and policy makers seem taken aback by the need to take action on the basis of an unpredictable future, incomplete information, lack of control and a plurality of legitimate perspectives. However, to small-scale farmers experiencing drought, national strategies, new governmental bodies and studies are irrelevant as long as they do not assist in preventing the loss of their crops and livelihoods. Linking up bottom-up and top-down initiatives, engaging relevant stakeholders, putting in place the necessary conditions and resources to enable and support emerging behavior for enhancing the local communities’ resilience, should allow Chileans to ensure more powerful adaptation to the foreseeable effects of climate change.

**Source:** field research 2013-2014, K.E. Engel.

#### ***Mainstreaming climate change adaptation: working towards an adaptive policy arrangement at the local level***

Risks posed by climate change impede the achievement of development objectives. Therefore, governments in the developing world increasingly mainstream climate change adaptation into their development policies, planning and implementation. It entails assessing to what extent climate change impacts people’s vulnerability and the sustainability of development pathways; it also

means involving all actors and building all-inclusive, sector-wide capacity and resilience. How does such mainstreaming contribute to strengthening adaptive capacity at the local level?

The Policy Arrangement Approach (PAA) has been created as a framework to understand the dynamics of new policy arrangements in environmental politics (van Tatenhove et al., 2000). Knaepen (2014) has adapted this approach to assess mainstreaming efforts for climate change adaptation into development specifically. It looks at the existing policy arrangement from four angles. First, it zooms in on current *policy discourses* i.e. the views and narratives of the various actors involved in terms of awareness and definitions of development and climate-related problems and solutions. Do these discourses set development objectives and define effective ways to deliver on these, even under conditions of climate-related stress? In other words, do these policies reflect capabilities on the part of the stakeholders to anticipate, commit and act, and to deliver under duress (CC 1, 2). Secondly the PAA approach focuses on the capabilities of relevant *actors and their coalitions* that need to respond to climate change and, more specifically whether an authority is in place to coordinate climate change responses and to ensure that all stakeholders, internal and external, are able to respond to climate change (CC 2, 4). Third, PAA evaluates the *rules* currently in operation, both in terms of actual rules for political and other forms of interaction, and the legislative framework with regards to regulation on disasters and climate change. This focus on the formal rules and procedures includes a review of the accountability of governments in case of disasters. It focuses on the joint ability of stakeholders to adapt formal procedures to fit situations of climate-related stress (CC 3). And finally, the PAA approach takes account of the *resources needed*, referring in particular to the mobilization, division and deployment of financial resources (CC 2, 4). This dimension also captures whether a capability for adaptation and self-renewal is fostered through pilot projects on adaptation and flows of separate climate financing (CC 3).

### **Mainstreaming Climate Change Adaptation in Can Tho, Vietnam**

Efforts on mainstreaming in the Vietnamese city Can Tho inform this discussion. It is the biggest city in the Mekong Delta and highly prone to sea level rise. Hence, it is required that *all* actors build the necessary capabilities to adapt. The application of the PAA reveals barriers as well as entry-points for mainstreaming and for building these capabilities.

Overall, mainstreaming has been strengthened in Can Tho. This is partly due to the support of the Rockefeller Foundation that helped set up a Climate Change Coordination Office (CCCO) with the specific aim to mainstream climate change into the city's development. First of all, the *discursive framework*, thanks to the CCCO's work, benefitted from increased awareness on climate change issues and a newly created climate change action plan. Furthermore, the CCCO's leader has achieved that *actors* from all sectors cooperate in favor of a sector-wide climate change response. Adding to this, there has been more engagement with NGOs and importantly, the highest authority in Can Tho, the Chairman of the People's Committee, has been heavily involved in pushing climate change measures forward. However, it is clear that the right *rules* are not yet in place in Can Tho. Despite the creation of the Action Plan, adaptation measures have not yet been included in the city's socioeconomic development strategies. Finally,



in terms of *resources*, Can Tho, as the most important Mekong Delta city, has benefitted from a number of adaptation projects. However, there is no clear mapping of separate climate change budget at the local level. Hence, it is challenging for donors to ensure the allocation of resources to adaptation projects. Moreover, 90 % of the CCCO funding comes from foreign aid. So, what will happen to resilience if the project ends?

**Source:** Knaepen, 2014.

The case of Can Tho shows that foreign donors may play an important role in facilitating capacity development at the local level. The CCCO contributed to raising awareness of climate change issues and, to mobilizing key actors, including the highest authority and local NGO's to develop a joint response (CC 1, 2, 4). Less forthcoming was change in terms of the regulatory framework and the incorporation of climate change adaptation measures in the city's socio-economic development strategies (CC 3). This is due to both lack of resources and political fragmentation, although the latter has a stronger impact. Besides, traditional top-down policy-making and a lack of full-fledged decentralization often inhibit successful mainstreaming. On top of that, overburdened and often underpaid officials limit effective mainstreaming. Nevertheless, so far, various adaptation projects have been achieved. However due to lack of technical capacity and political will, no local budget line for climate change adaptation has yet been formulated, leaving the progress made exposed to the most frequent fallacy known in development: discontinuation when donors leave.<sup>5</sup>

In response to the above, a *four-step mainstreamed policy dialogue* was suggested, starting from the engagement with multi-stakeholders to the full incorporation of adaptation in the local planning process. Full application of the policy dialogue would generate a *strong awareness, understanding and skills* amongst a broad array of stakeholders, who learn to take into account whether elements of development will jeopardize adaptive responses, thereby enhancing vulnerability, or whether development will be threatened by future climate change. Taking into account all four dimensions of the PAA framework, this comprehensive multi-stakeholder policy dialogue would lay a solid foundation for the city's adaptive capacity with regard to climate change.

### ***Some tentative conclusions***

Our cases highlight a number of insights that deserve to be looked at more in detail. One is that ***a community's adaptive capacity emerges as diverse capabilities come together and engage*** in response to slow onset and/or shock events related to climate change. It underscores how different core capabilities hold each other hostage by enabling and/or constraining each other's engagement. No awareness without purpose, no delivery without mobilizing local assets, to name just two. Our analysis illustrates the importance of addressing the full range of core capabilities identified by Baser et al. (2008) to improve climate change adaptation. Resilience to climate change cannot be achieved by focusing on the community's ability to adapt and self-renew (CC3) alone. Other core capabilities need to be developed simultaneously, as the

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<sup>5</sup> It should be noted that international adaptation targets have not yet been agreed, which makes it challenging to come to a common understanding at all levels of societies.



community's adaptive capacity rests upon their combined action under stress. Besides, our analysis goes a step further by showing that in fact, *climate change adaptation requires modifications in what some have called the 'capillaries of society'*, in order to be able to achieve adaptive capacity to the full. A community's assets, including physical, economic, social and cultural ones, need to be mobilized and organized in novel ways, and government policies, institutions, rules and regulations need to be reviewed and turned fit-for-purpose to anticipate upon and face climate-related events. This may include the need for government and communities to unlearn, or at least create space to sidestep, certain practices that have proved useful before.

We also believe the distinction between, on the one hand laying a solid foundation for adaptation to *foreseeable events* and, on the other, creating awareness of and space for emergent behavior in case of *unexpected events*, proves to be a useful one. ***To create an enabling foundation for adaptation to foreseeable events requires the strengthening of core capabilities throughout the community at all levels.*** The basis for its emergence could be a comprehensive multi-stakeholder policy dialogue along the dimensions of the PAA approach: discourse, actors, rules and resources. Such a dialogue would aim at, amongst others, climate adaptation awareness, understanding of impacts and emerging opportunities and threats, and the design, planning and implementation of policies and practices that allow for adequate responses in the case of likely events. Equally it would have to include identification of and engagement with all possible internal and external allies and an anticipated understanding of the possibilities for (re)deploying vital resources if need arises. The box below illustrates how supermarkets in Concepción, Chile, were ill-prepared to face the consequences of an 8 magnitude earthquake thereby adding fuel to the social disruptions that followed, while smaller establishments gained the trust of their neighborhoods by adopting out-of-the-ordinary measures.

**Supermarkets: an example of the need to prepare for out-of-the-ordinary solutions to alleviate massive stress**

When in 2010 Chile was hit by an 8.5 magnitude earthquake that was accompanied by a major tsunami, the supermarket sector in one of the major cities affected, Concepción, was ill-prepared. When in the wake of the earthquake people started flocking to the supermarkets to buy essential goods such as food and water, these remained closed, citing the lack of electricity as the obstacle that didn't allow them to open up. While various smaller establishments, neighborhood shops, etc. decided to give away perishable goods such as milk products, meat and fish, the supermarkets stayed closed.

In the end, this contributed to major social upheaval and material losses. People desperate to fulfill the first needs of their families and to obtain supplies to be able to endure adverse circumstances in the weeks to come, broke their way into the supermarkets. First it was for food, water, medicines and other essential supplies, but soon looting started, people taking everything they could get their hands on. One supermarket even burned to the ground. They were simply unprepared for such an emergency and couldn't fall back on out-of-the-ordinary solutions to satisfy the demands of their clientele. On the contrary, many smaller establishments that opened up were shown gratitude and respect and were able to prevent substantial damage.

Foresight and pro-active measures could have prevented a great deal of the damage as well as the serious social disruption that large-scale looting brought to the affected communities. In hindsight, for many the large-scale looting had a greater adverse impact on their lives than the earthquake and tsunami did.

**Source:** field research 2013-2014, K.E. Engel

The above example also shows that the level of preparedness needed to avoid such events requires a pro-active attitude and a profound understanding of what makes the difference between 'normal' times and times of massive disaster-related stress; underlining the need for a multi-stakeholder, creative dialogue beforehand to generate the necessary support from different sectors in society for engaging in the type of extraordinary solutions that are needed. It also reinforces the notion that an important element in laying an enabling foundation for resilience may be a multi-stakeholder platform or office to coordinate community-wide adaptation activities and the inclusion of local budget lines that free up resources for that same purpose. From the Vietnam case study it is also clear that in certain cases donors can play an important role, if they are able to connect to and complement national and local initiatives.

***To create awareness of and space for emergent behavior in the case of unexpected events*** seems more complicated. Both studies underline the importance of rules, a regulatory framework and accountability of government in case of disaster. However, to create space for creativity, improvisation and out-of-the-ordinary solutions requires these rules and institutions to encourage out-of-the-box thinking, to promote flexibility and to be generous to those who stick their neck out to try to do something different. As the above example from supermarkets in Chile illustrates, this is not the normal 'modus operandi' for large businesses, institutions and rules frameworks. To create space for emergent behavior may therefore require adaptations in both the community's and institutional cultures, revisiting customary behaviors and existing regulatory frameworks to detect and neutralize barriers to and install incentives for, emergent initiative in case of urgency. *The type of dialogue that this requires will be highly political in nature*, as it may bring into the open differences between what is considered 'good' behavior and leadership under normal circumstances and, what is considered adequate when disaster strikes. And with this, it may touch upon the very values that hold the community together and require changes in its relationship with the government and its institutions to allow it to maintain its coherence.

Finally, in both cases we note ***the need for bridging the disconnect between the community level and the government/policy level***. Given the emergent nature of adaptive capacity, the success of policies, institutions and regulatory frameworks for climate change adaptation will always depend on local, community level initiatives, cultures and capabilities, and vice versa. Therefore, to develop the community's adaptive capacity to climate change such disconnect is problematic as it may render ineffective both community and government efforts. In the case of Chile, government and community do not actually meet eye to eye on climate change adaptation, causing serious limitations to what can be

done at the local level. In the case of Vietnam, the city's actors and leadership actually work together but despite the jointly developed Action Plan, adaptation measures have not been included yet in the city's socioeconomic development strategies. Again, *the political nature of such disconnects seem obvious: different values and interests, different political agenda's need to be aligned*. Amongst the various "Achilles' heels" of climate change adaptation, we suggest this is a prominent one that needs much more research to get to the bottom of it.

## **References**

- Baser, H. & Morgan, P. (2008). Capacity, Change and Performance. Study Report. Maastricht: ECDPM discussion paper DP 59B
- Engel, K.E. & Engel, P.G.H. 2012. Building Resilient Communities: Where Disaster Management and Facilitating Innovation Meet. In: A. Wals and P. Blaze Corcoran (Eds.), *Learning for Sustainability in Times of Accelerating Change*. Wageningen: Wageningen Academic Publishers, p. 133-147.
- Fowler, A. & Ubels, J. (2010). The Multi-faceted Nature of Capacity: Two Leading Frameworks In: Ubels, J., Acquaye-Baddoo, N. & Fowler, A (Eds.) *Capacity development in practice*. Earthscan, Washington-London.
- Keizer, N., Phlix, G., Fowler, A. & Spierings, E. (2011) Bringing the invisible into perspective: Reference document for using the 5 Cs framework to plan, monitor and evaluate capacity and results of capacity development processes. Maastricht: ECDPM
- Knaepen, H. (2014). Mainstreaming Climate Change Adaptation into Vietnamese Development as a New Policy Arrangement. In: N. Danh Thao, T. Hiroshi and M. Esteban (Eds.). *Coastal Disasters and Climate Change in Vietnam*. London: Elsevier Inc., p 355-374.
- van Tatenhove, J., Arts, B., Leroy, P. (2000). Political Modernisation and the Environment – The Renewal of Environmental Policy Arrangement. Dordrecht, Boston, London: Kluwer Academic Publishers.

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