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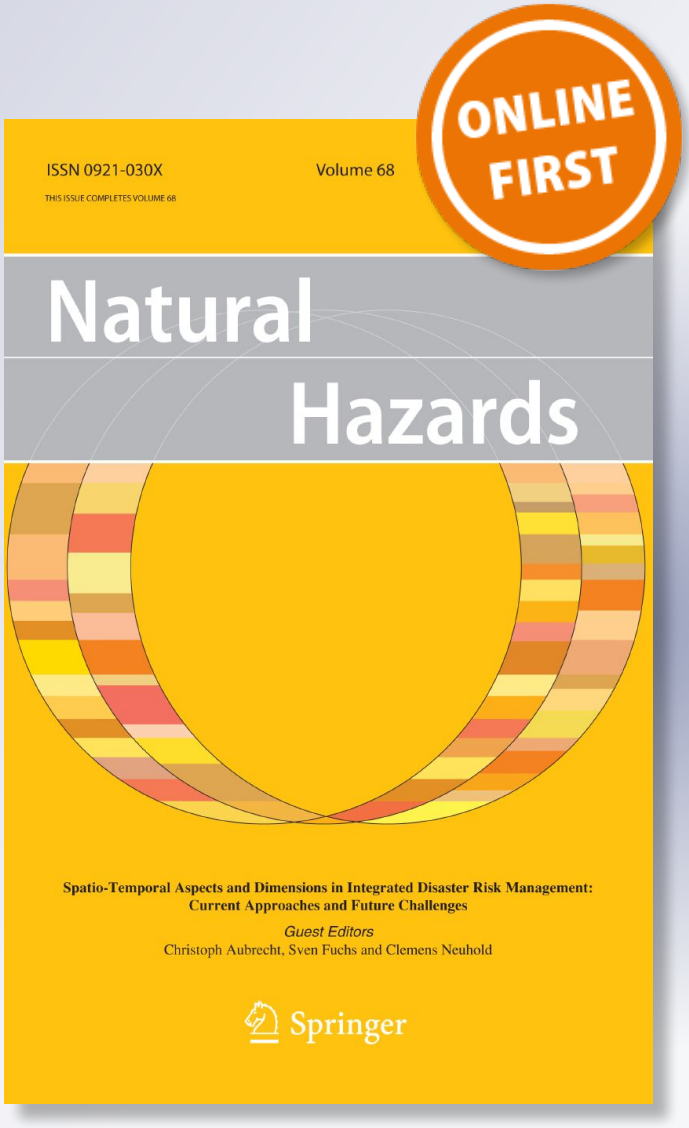

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REVIEW ARTICLE

People's capacities in facing hazards and disasters: an overview

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Abstract
This article constitutes an effort towards providing an academic overview and grounding for the concept of capacities in the context of disaster studies and disaster risk reduction. Capacities refer to the set of diverse knowledge, skills and resources people can claim, access and resort to in dealing with hazards and disasters. They are both an individual and collective attributes. Everyone possesses a unique set of knowledge, skills and resources that are often shared and combined with those of relatives, kin, neighbours, etc. People's capacities are not necessarily place based, but they are endogenous to the community of people who share and combine them in dealing with the same hazards and disasters. They further reflect people's everyday life as it is very seldom that those affected by disasters resort to extraordinary measures to face harmful events. In practice, capacities allow for active prevention to avoid hazards to occur in the first place. They are further tapped to foster preparedness in facing impending hazards and respond to disasters. Capacities also prove invaluable in coping with the lingering effects of disasters and in recovering on the longer term. Harnessing capacities should therefore be an integral part of disaster risk reduction strategies as recognised in the widespread practice of vulnerability and capacity/ies assessment. Ultimately, harnessing capacities for reducing the risk of disaster requires to foster people's genuine participation in assessing and enhancing their existing knowledge, skills and resources.

Keywords People · Capacities · Natural hazard · Disaster · Disaster risk reduction

1 Introduction

Over the past 25 years, vulnerability and capacity assessment (VCA) has become a mainstay of disaster risk reduction (DRR), especially amongst those activities meant to foster the participation of the most vulnerable. The practice of VCA springs from the pioneer

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work of Anderson and Woodrow (1989) who suggested an innovative toolkit to appraise both people's susceptibility to be affected by and their strengths in facing disasters, i.e. their vulnerabilities and capacities.

By the late 1980s, there was a burgeoning academic literature on the concept of vulnerability, which provided a strong epistemological foundation for its use by practitioners of DRR. On the other hand, the concept of capacities was then a new thing developed by the same practitioners as a response to the increasing recognition that people are not only vulnerable but also have a wide range of knowledge, skills and resources when confronted with hazards and disasters. Interestingly, while it has gained considerable traction amongst practitioners, the concept of capacities has since then received limited academic attention although its different components, taken separately, have stirred independent studies.

This article constitutes an effort towards providing an academic overview and grounding for the concept of capacities in the context of disaster studies and DRR. It does not focus on the companion concept of vulnerability which has received significant attention in the academic literature (see Wisner 2016 for an extensive recent review). From an academic perspective, grounding the concept of capacities is important amidst the contemporary proliferation of cognate concepts such as resilience, subculture and coping strategies. Some of these concepts, notably resilience and coping strategies, have somehow gained more attention than capacities over the past decade despite them being either polysemous (if not loose), in the case of resilience, or narrower in scope, for coping strategies. In fact, capacities denote an aspect of people's response to disasters that is only loosely or insufficiently captured by other concepts although of critical importance to support the actual practice of DRR. A better theoretical appreciation of the concept should therefore further strengthen the practice of VCA through a clearer identification of both its key components and opportunities for strengthening.

The present article therefore reviews existing approaches and suggests a consensual definition of the concept. It further attempts to outline it through identifying its main dimensions and components although not detailing each aspect, such as the multiple forms of embedded power relations and structures at play. It eventually discusses how capacities are embedded in people's daily life and how they are used in dealing with disaster risk through empirical examples. The article finally identifies challenges and opportunities for further strengthening capacities and, as a consequence, fostering people's participation in DRR. The final section of the article also discusses pathways and barriers towards integrating people's capacities with external resources provided by external stakeholders. It draws upon an extensive review of the academic literature on people's response to disasters and practitioners' reports on actual DRR initiatives, especially those relying on VCA. It further stems from continuing discussions with practitioners and people at the forefront of DRR.

2 Defining capacities

Capacities, as a stand-alone concept, was first coined by Anderson and Woodrow in 1989. It explicitly emerged as a spin-off the so-called vulnerability paradigm (O'Keefe et al. 1976; Hewitt 1983). This paradigm recognises that people are at risk of disaster because they are made vulnerable by an unequal distribution of power and resources within society rather than because of the occurrence of rare and extreme natural hazards. Labelling some people as 'vulnerable,' however, leads to their being stigmatised as 'helpless victims' of an unjust society and more powerful individuals. Throughout the 1970s and 1980s, practitioners of DRR at the local level, especially in Latin America,

South Asia and Southeast Asia, were nonetheless observing that people are often proactive and creative in facing natural hazards (e.g. Wisner et al. 1977; Cuny 1983; Maskrey 1989; Delica 1993). As Anderson and Woodrow (1991, p. 47) put it, 'no matter how poor nor how much they have lost through a disaster, people still have some material capacities'.

The recognition of people's capacities in facing hazards and disasters in the 1970s and 1980s participated to the broader consideration of local people's contribution to development. The emergence of the concept of capacities in the field of DRR was indeed strongly influenced by the growing and concomitant momentum gained by the idea that people, including the most marginalised, should be at the forefront of development because they are knowledgeable and resourceful (Freire 1970; Hall 1978; Chambers 1983). Capacities in facing hazards and disasters were then seen as a rationale for fostering people's participation in DRR. Recognising that people have capacities therefore underpins the assertion that they should also participate in DRR or as put in many Red Cross and Red Crescent Societies manuals in the early 2000s that they should 'have more control over shaping their own futures' (e.g. Vietnam Red Cross Society 2000, p. 6). This suggests a shift in power relations at the detriment of outside institutions and organisations who were, at the time, considered the dominant, if not exclusive stakeholders of DRR. Capacities in fact emerged alongside the concept of empowerment or the process 'by which people, organizations, and communities gain mastery over their lives' (Rappaport 1984, p. 3).

Despite its strong epistemological grounding, there have been very few definitions of the concept of capacities and, interestingly, most spring from publications by practitioners or international organisations rather than scholars. All definitions nonetheless converge to suggest that capacities encompass the strengths people possess to mitigate, prepare for, cope with and recover from disasters (Heijmans and Victoria 2001; Davis et al. 2004; United Nations International Strategy for Disaster Reduction 2004; Wisner et al. 2004). These strengths include a wide array of knowledge, skills and resources as well as the ability to claim, access and use them (Kuban and MacKenzie-Carey 2001). In other words, capacities refer to the set of diverse knowledge, skills and resources people can claim, access and resort to in dealing with hazards and disasters. Capacities thus emphasise people's 'positive condition or abilities' to face disaster (Ahmed et al. 2011, p. 3) and constitute a springboard for empowerment 'on which future development efforts can be built' (de Dios 2002, p. 7). The concept of capacities hence constitutes a useful companion to vulnerability often tagged with a negative and passive connotation.

Capacities as a 'plural' set of knowledge, skills and resources should be distinguished from the 'singular' capacity or ability to do something. Capacities as a stand-alone concept therefore differs from the concepts of 'adaptive capacity', i.e. the ability to adapt to environmental, especially climate change (e.g. Smit and Wandel 2006) and 'coping capacity', i.e. the ability to survive amidst an adverse environment (e.g. United Nations International Strategy or Disaster Reduction 2009). In fact, capacities cover both the prospective dimension of 'adaptive capacity', or the ability to anticipate future changes in the environment, and the retrospective nature of 'coping capacity', based on the experience of past events. Capacities as a 'plural', stand-alone concept, also diverges from the 'singular' capacity or ability of a group/organisation/institution/country to achieve social and economic goals (United Nations International Strategy or Disaster Reduction 2009; Few et al. 2015; Capacity for Disaster Reduction Initiative nd). It similarly differs from the broader concept of 'capability/ies' defined by Sen (1993, p. 30) as 'the alternative combinations of things a person is able to do or do—the various "functionings" he or she can achieve' that depend on 'opportunities created by a combination of personal abilities and the political, social and economic environment' (Nussbaum 2011, p. 20).

Capacities apply to people, in all their diversity, who face hazards and disasters as part of their everyday life. They are both an individual (e.g. Kuban and MacKenzie-Carey 2001) and collective attributes (e.g. de Dios 2002; Ahmed et al. 2011). Everyone possesses a unique set of knowledge, skills and resources that are often shared and combined with those of relatives, kin, neighbours, etc. The diversity of people's unique capacities taken all together forms a collective pool of knowledge, skills and resources tapped by both individuals and the broader 'community' that share these capacities. The use of capacities as a plural noun is here important to emphasise this diversity, unlike in the wider concept of 'community capacity' use in public health and that takes people's knowledge, values, feeling, resources and initiatives as a whole (e.g. Goodman et al. 1998). Furthermore, capacities are not necessarily place based and can well involve transnational links such as in the case of remittances sent by migrants (Le Dé et al. 2013). However, they are endogenous to the community of people who share and combine them in dealing with the same hazards and disasters.

As such, people's capacities differ from their vulnerability that is largely driven by exogenous and structural factors beyond their reach, i.e. how power and resources are shared within society (Wisner et al. 2004). This explains why, unlike commonly assumed, vulnerability and capacities are not the two ends of the same spectrum (Davis et al. 2004). Some very vulnerable people may display a whole range of very diverse knowledge, skills and resources, while similarly vulnerable individuals may have very few capacities. Vice versa, less vulnerable individuals may have more or fewer capacities. This distinction is essential in defining priorities to be given to different DRR initiatives at various scales as discussed later in this article.

On the other hand, the endogenous nature of capacities makes them overlap with the older concept of disaster subculture put forward by sociologists in the 1960s and the 1970s. Anderson (1965, p. 3) defined a disaster subculture as 'those subcultural patterns operative in a given area which are geared towards the solution of problems, both social and non-social, arising from the awareness of some form of almost periodic disaster threat'. A disaster subculture usually includes cultural elements such as norms, values, beliefs, knowledge, technology and legends (Wenger and Weller 1973; Wenger 1978). These serve 'as a blueprint for individual and group behavior before, during, and after the impact of the disaster agent' (Anderson 1965, p. 3). Capacities and disaster subculture thus both refer to endogenous knowledge, skills and resources deployed towards dealing with hazards and disasters at personal and collective scales.

Both concepts, however, differ in that capacities have supported a political agenda, i.e. people's participation in DRR, taken up by the many international practitioners who have popularised the concept. In parallel, disaster subculture, although initially better defined and bounded, was never picked up by practitioners and has henceforth been neglected with the exception of a limited number of isolated academic studies (e.g. Granot 1996; Luna 2003; Gaillard et al. 2008). The subsequent section constitutes an attempt at further defining and bounding what constitute people's capacities and how these capacities are actually used by people confronted with hazards and disasters.

3 What constitute people's capacities in facing hazards and disasters?

As suggested in Introduction, there have been very limited attempts at unpacking the concept of capacities. There are two main exceptions: the pioneer capacities (and vulnerabilities) matrixes of Anderson and Woodrow (1989), eventually revisited by Wisner (2004) and the All India Disaster Mitigation Institute (2006), and the circle of capacities by

Wisner et al. (2012), eventually modified by Rampengan et al. (2014). The former provides a framework to tease out different forms of knowledge, skills and resources gathered into three categories that are physical or material, social or organisational, and motivational or attitudinal. These categories can be further analysed through gender, age and wealth lenses (Anderson and Woodrow 1989) and/or by stakeholders (All India Disaster Mitigation Institute 2006). Almost 30 years later, this framework still constitutes the main theoretical guide used by practitioners who carry out VCA in the field. On the other hand, Wisner et al.'s (2012) and Rampengan et al.'s (2014) circles of capacities draw upon the classification of resources that are used to characterise the concept of livelihood, which are natural, physical, human, social, financial or economic, and political. This framework is useful to appraise the diversity of people's capacities and their multiple usage in dealing with disasters.

Capacities indeed include a whole range of diverse forms of resources that combine to provide each individual with a unique array of strategies to deal with hazards and disasters. These include resources tapped within the natural environment, such as wild fruits and animals, water springs, hazard-resistant crops, seed banks, which offer options when faced with food shortage and/or damage to farmlands. Vernacular forms of architecture, water collection and irrigation also provide protection in facing earthquake and drought, while formal education, traditional medicine and prior experience of harmful events provide people with useful knowledge of hazards, their potential impact and how to deal with them. Social networks (often associated with the controversial concept of 'social capital') and kinship ties are amongst the best studied support systems people resort to in dealing with hazards through pooling, sharing, offering, swapping, pawning, buying and loaning resources. These notably encompass transnational links such as in the case of remittances sent by migrants to their kin before, during and after disasters. Financial transactions may also take the form of microfinance schemes such as in the case of tontine, micro-credit and micro-insurance initiatives. Finally, traditional leadership and governance system may provide enough flexibility to face the adverse effects of disasters and make decisions in a constraining physical and social environment.

Each form of resources nonetheless requires specific knowledge and skills to claim and access them in dealing with hazards and disasters. Harvesting wild fruits from the forest to overcome food shortage necessitates knowledge of the flora but also skills to harvest as for climbing on top of coconut trees. Building earthen or bamboo houses resistant to earthquake or tropical cyclone requires specific engineering skills, while formal education provides reading skills used to access Western science. Providing first aid care also requires proper training and skills and/or knowledge of medicinal plants in the vicinity. Finally, sending or receiving remittances increasingly entails transactions through mobile phones that may be unfamiliar to some people. Furthermore, it is frequent that different forms of knowledge, skills and resources are combined in dealing with a particular threat. For example, observing unusual animal's behaviour may activate an early warning system which involves both traditional devices, such as gongs, and mobile phones.

Ultimately, it is the extent, strength and diversity of people's knowledge, skills and resources that reflect the scope of people's capacities and their ability to deal with hazards and disaster on their own. The more the knowledge, skills and resources people have, the more capacities they can resort to. These different forms of capacities, however, need to be resistant enough to overcome the adverse effects of disasters. The diversity of people's portfolio is also of paramount importance should one or several of these be affected by the hazard or prove inappropriate for any reasons. The extent, strength and diversity of people's capacities differ according to age, gender, ethnicity and physical ability. Indeed,

although capacities are often shared and pooled between people, knowledge, skills and resources are not evenly distributed across individuals living in the same place or sharing kinship. Local knowledge, for example, may be a source of power and prestige kept away from most people by a few individuals entitled to hold such knowledge (Wisner et al. 2014). The ability to claim and access collective capacities therefore depends on power relations amongst individuals.

4 Capacities in context

The entangled nature of all forms of knowledge, skills and resources people resort to in dealing with hazards and disasters makes it difficult to artificially categorise or break down resources as in both Anderson and Woodrow's (1989) and Wisner et al.'s (2012) frameworks. If these frameworks are useful to provide an overview of what capacities entail, they do not provide field practitioners with tools that allow for capturing the complexity of local realities. Capacities are indeed people and context specific.

People have capacities to deal with hazards and disasters in wealthy and less affluent regions of the world, in Western countries as much as in Latin America, Africa, Asia and the Pacific, in islands and mountains, as well as in rural and urban areas. However, the Western nature of the typologies of knowledge, resources and skills suggested in the existing frameworks for understanding capacities (Anderson and Woodrow 1989; Wisner et al. 2012) do not necessarily match people's own view of what diverse forms of knowledge, resources and skills mean elsewhere in the world. For example, biodiversity resources are most often classified under natural resources—however, in many instances, land and water may have a more significant social or economic value that shapes how people actually make use of them in facing hazards and disasters. Similarly, earthquake-resistant vernacular houses usually fall under physical or material resources although they also reflect a fine knowledge of the natural environment combined with engineering skills inherited from elders or learned at school.

Furthermore, if knowledge, skills and resources may be explicit, as in the case of vernacular architecture and seed banks, they can also be hidden and difficult to appraise for an outsider, as for loose and distant social networks and traditional political strategies. They may also be indigenous or borrowed from the outside as well as traditional or relying upon the latest technologies, or most often hybrid versions of all combined. The often hybrid nature of people's capacities reflects local history of hazards and disasters as well as access to external knowledge, skills and resources influenced by formal education, professional experiences and migration patterns amongst many other factors. In any case, capacities are unique to those people, individuals or groups, who draw upon them in dealing with hazards and disasters.

In fact, capacities reflect people's everyday life as it is very seldom that those affected by disasters resort to extraordinary measures to face harmful events, for the simple reason that one can hardly generate instant knowledge or improvise skills without prior training. In facing hazards and disasters, people therefore extend to uncommon or not so common situations what they know and do in daily life. This point is essential in reaffirming that disasters are not accidents within society. They rather mirror the everyday social fabric (Hewitt 1983). Capacities should therefore be seen as the extension of everyday life, which is why everyone, even the most vulnerable and marginalised, has capacities.

Finally, people who face hazards and disasters may not be able to make use of their endogenous capacities because of structural barriers and temporary impediments (Wisner 2016). These barriers and impediments range from state ideologies and political decisions to physical impairments, technological failures and environmental constraints (e.g. Anderson and Woodrow 1989; Davis et al. 2004; Wisner et al. 2012). For example, freedom of assembly is essential for people to devise possible strategies to face hazards and disasters and pool and share their individual capacities. Similarly, a government's decision to block access to social media may weaken people's social networks and ability to seek support in time of hardship. This ability to seek support from friends and relatives, including to receive remittances, through social media or telephone may also be affected by power outage and communication breakdowns. Moreover, one may not be able to swim away from a river in flood because she or he is sick or injured. Lastly, the sound of a bell set up on an unstable slope to warn locals of an imminent landslide may be covered by loud thunder.

5 Capacities in practice

Capacities constitute the first pool of endogenous resources people resort to in dealing with hazards, especially for offsetting their vulnerability which is shaped by external forces. Their endogenous dimension makes them an easy-to-access and reliable source of support. This is of utmost importance as disasters are, first and foremost, local events that affect local people who are invariably the first responders (Quarantelli and Dynes 1972; Delica-Willison and Gaillard 2012). This is particularly true in facing small and frequent events that do not stir outsiders' attention and therefore hardly qualify as disasters. Those affected can then only rely upon their own bundle of capacities to overcome the impact of these neglected disasters. Capacities also constitute the only available resources for people at the margin of society whose needs are overlooked by those with more power, state institutions and other outside organisations.

In practice, people, including those at the margin of society, draw upon their capacities for a wide range of initiatives geared towards reducing the risk and impact of disasters. These include for preventing hazards, enhancing preparedness, responding to and coping with the adverse effects of actual disasters, and eventually for fostering long-term recovery.

Capacities allow for active prevention to avoid hazards to occur in the first place. For example, there are multiple accounts of traditional bush fire management practices across Latin America, Africa and Australia—all emphasising that these rely on people's very fine understanding of their environment, of factors at the origin of fire and of the negative and positive impacts of fire for their livelihoods (e.g. Lewis 1989; McDaniel et al. 2005; Eriksen 2007). People also resort to their capacities for passive prevention to avert the harmful impact of hazards for their life and livelihoods. For their example, in the Philippines, people pool labour together through *bayanihan*, which roughly translates as collaboration, to build levees or set up sandbag barriers to prevent floods to affect their village (Luna 2003; Barrameda and Barameda 2011). In the Andes, traditional houses made of adobe and thatched roofs associated with specific building techniques have been preventing the destructive effect of earthquakes for centuries (Oliver-Smith 1994). These measures are often much less costly than formal hazard prevention initiatives. They are also easy to implement and flexible, as in the previous examples, and thus quick to activate in facing fast-onset hazards. In New Zealand, marae, that roughly translate as Māori traditional settlement compounds and spiritual homes, can activate their network of kin and cater for the

food and sleeping needs of tens to hundreds of evacuees in usually a couple of hours (Hudson and Hughes 2007).

Capacities are also often tapped to foster preparedness in facing impending hazards and respond to disasters. They encompass early warning systems, evacuation, search and rescue operations and immediate psychological support. For example, the people of the small island of Simeulue in Indonesia were very prompt in associating the withdrawal of the sea following the 26 December 2004 to the threat of a potential tsunami, eventually evacuating their village in a very efficient fashion, thus preventing many casualties (Gaillard et al. 2008). Following the terrorist attacks on New York on 11 September 2001, local mariners very quickly and spontaneously organised themselves to evacuate thousands of people stuck in Manhattan (Kendra and Wachtendorf 2016). Similarly, 85% of those who survived the earthquake that struck Mexico City in 1985 were rescued by their friends, kin and neighbours who were on the spot at the time of the event (Quarantelli 1986–1987). In Japan, traditional religious practices, including rituals, arts and festivals, have provided psychological support to the survivors of the 11 March 2011 earthquake and tsunami disaster (Kimura 2016; Miichi 2016).

People's capacities also prove invaluable in coping with the lingering effects of disasters and in recovering on the longer term. Coping strategies are indeed intrinsically linked to people's past experience of similar events and thus mirror the entangled nature of capacities that combine local knowledge, existing skills and available resources. In Tikopia, an isolated Polynesian islet on the Eastern outskirt of the Solomon Islands, people have long been experiencing powerful cyclones so that when Cyclone Zoe struck on 29 December 2002 no one died and people managed to survive the devastating impact of tremendous winds for a week without any external assistance by seeking shelter in caves, drinking coconut water and eating fermented breadfruit buried underground (Treadaway 2007). Similarly, people regularly affected by landslides and floods in the remote villages of Western Nepal have to overcome government and outside organisations' neglect and rebuild their lives on their own. They cover land cracks with soil and manure, clear debris and repair farm terraces by themselves, sale assets or seek loans from money lenders and engage in diverse income-generating activities to sustain their daily needs (Shrestha 2016).

As discussed in the previous section, this array of practices that rely upon people's capacities in dealing with hazards and disasters reflect everyday knowledge, skills and resources. This does not mean that capacities are rigid and static. They are most often evolving and combined in spontaneous and creative fashions to respond to different threats and situations (Kendra and Wachtendorf 2006). For example, in Samoa, members of the *fa'afafine* gender minority include creative awareness raising activities within their regular karaoke and beauty pageant events (Gaillard et al. 2017). In the small town of Santo Tomas in the Philippines, coffins, a famous local product, are turned into outrigger canoes in time of flooding. Similarly, survivors of the series of earthquakes that struck Christchurch, New Zealand, between 2010 and 2011 have turned available shipping containers into a pop-up shopping mall to fasten recovery of the city central business district (Wilson 2013). Spontaneity and creativity contribute to the constant enrichment and evolution of people's capacities that draw upon exploiting increasing knowledge, enhanced skills and varying resources in facing changing threats.

Although the foregoing examples emphasise the positive contribution of people's capacities to DRR, capacities should nonetheless not be romanticised. Most often, local people are unlikely to build large dikes and dams to prevent long-term flooding without external technical and material support. Similarly, local knowledge proves invaluable when dealing with frequent or, at least, recurrent events but external and scientific knowledge may be

needed in dealing with the possible threats posed by a volcano which has not erupted in the past centuries or with yet locally unknown phenomena associated with climate change. In dealing with actual and possibly large disasters, those affected will probably not be able to clear large debris on their own nor will they be in a position to carry surgeries although they may have medical skills. On the long term, external support may also be needed to foster sustainable recovery and avoid the so-called ratchet effect of marginalisation associated with recurring disasters (Gaillard and Cadag 2009; Shrestha 2016). In this sense, capacities should ideally be combined with external support crafted within an integrated approach to DRR.

6 Harnessing capacities towards disaster risk reduction

Harnessing capacities is an integral part of DRR as recognised in the widespread practice of VCA. The relevance of and potential for enhancing capacities relies upon the double evidence that capacities are 1/ the extension of people's everyday life and 2/ endogenous to these people. As such, they are much easier to enhance than vulnerability and its exogenous root causes are to be addressed. Indeed, reducing people's vulnerability is a long-term challenge that requires social, economic and political reforms which are beyond the control of local people who face hazards and disasters. On the other hand, enhancing capacities requires drawing upon knowledge, skills and resources that are locally available and with which people are most often familiar as part of their everyday life.

Essential to harnessing capacities in DRR is therefore to foster people's genuine participation in assessing and enhancing their existing knowledge, skills and resources (Wisner 2006). Indeed, no one better than those people who face hazards and disasters know and understand the nature, extent, strength and diversity as well as the limitations of their own capacities. Participation here entails 'a voluntary process by which people […] influence or control the decisions that affect them' (Saxena 1998, p. 111). Enhancing capacities therefore requires a transfer of power to the benefit of local people and thus recognising that they are knowledgeable, skilful and resourceful actors of DRR. It also needs to recognise that all people have diverse capacities that they often combine and share amongst neighbours, relatives and kin. Enhancing capacities can therefore hardly be only an individual task. This means that strengthening capacities involves addressing power relations amongst local people to facilitate claim and access to locally available knowledge, skills and resources amongst individuals.

Current approaches to assessing and enhancing people's capacities often rely upon the so-called VCA toolboxes that have flourished over the past two decades. As discussed earlier, these toolboxes rely extensively on taxonomic categorisations of resources although, in some few instances, they have been tweaked to accommodate local realities (e.g. International Federation of Red Cross and Red Crescent Societies 2007; Dazé et al. 2009; Ahmed et al. 2011). These categories, often associated with quantitative and/or demographic indicators, often appear as boxes to tick in order to fully complete a VCA. In most instances, however, this approach to assessing and strengthening capacities proves insufficient to capture the complex and entangled nature of both people's capacities and their everyday life in other, very diverse regions of the world. As Bhatt (1998) suggested, people's response to disasters cannot always be understood through standard criteria and methodologies designed by outsiders as an outsider is likely to be 'filtering what she or he reads through the conceptual framework, assumptions, and values or her or his culture and, as a result, is

creating false "stories" that fit her or his expectations' (Bhatt 1998, p. 71). Assessing and strengthening capacities should therefore be considered as an insider-driven process.

Existing toolboxes for VCA also emphasise the importance of using participatory tools for eliciting the complex nature of capacities. These toolboxes often come with predefined frameworks or templates in regards to how to use them. For example, most VCA toolboxes suggest a sequence of activities to be conducted in order, e.g. a timeline is to be followed by scoring and ranking, then matrixes and problem trees and so on. Some toolboxes further provide a time frame for scheduling such a predefined sequence of activities within a daily or weekly programme. This particular emphasis on tools and toolboxes is not specific to approaches geared to enhancing capacities and reflects a broader evolution of participatory initiatives in development that has been observed since the 1990s (Cooke and Kothari 2001). These approaches fit within a project management perspective that meets the requirements of and upward accountability towards agencies and donors supporting initiatives to strengthening capacities. These are in fact often labelled 'capacity building' (Kaplan 2000; Few et al. 2015) or 'capacity development' (Capacity for Disaster Reduction Initiative nd), which entails a transfer of knowledge and endowment of external resources, often at the detriment of local people's own knowledge, skills and resources that yet constitute their first line of defence in facing hazards and disasters (Eade 2007). Too often, as M. Bhatt and Pandya (2006, p. 1) brilliantly put it, 'we' (outsiders) end up focusing 'on building our capacity to reduce their risks or our capacity to build their capacity to reduce risks' instead of strengthening people's own capacities to reduce their own risks.

Harnessing capacities for DRR rather requires a careful approach to participation through the appropriate tools but more importantly through proper behaviours and attitudes within what Chambers (2007) coined participatory learning and action (PLA). PLA here refers to tools and methods but also behaviours and attitudes designed to empower local people to share, analyse and enhance their knowledge, skills and resources in order to plan, implement, monitor and assess their own initiatives for DRR. In this context, the array of tools and approaches that have been developed for VCA by international and local NGOs over the past two decades are welcome initiatives, but they should not mask the importance of the process through which people realise by themselves the extent, strength and diversity of their individual and collective capacities and how these can be maximised in dealing with hazards and disasters. Fostering people's participation in enhancing their capacities to deal with hazards and disasters therefore requires trusting and handing over the stick to local people within a very flexible approach that stresses downward accountability. Flexibility is particularly important to offer room for innovation, building upon people's inherent spontaneity and creativity (Bhatt and Pandya 2006).

Key to enhancing capacities and stimulating creativity and innovation for DRR is also to foster sharing between local people and outside actors who may provide appropriate support in case of genuine needs. Indeed, as Wisner et al. (2012, p. 1) suggest, 'no single person can possess the knowledge and skill to map out and successfully implement DRR'. In such sharing process, there needs to be a clear and distinct distribution of roles between local people, who are to lead the process towards enhancing their own capacities, and external stakeholders, who may facilitate this process and provide additional knowledge, skills and resources when needed. Such an approach to sharing knowledge, skills and resources requires a thoughtful dialogue where local people and outside stakeholders, at some point, come together to discuss how local capacities may further be enhanced through external support. Such dialogue requires mutual understanding and trust between locals and outsiders. It also necessitates mutually accessible and tangible tools as well as genuine facilitation so that trust can be built on a common ground.

External support and intervention may also be required to remove or, at least, lessen the impact of exogenous barriers that prevent people to make use of their capacities. This is particularly important for barriers of political nature that lie beyond the grasp of those who face hazards and disasters. External support is also important to ensure that technological shortcomings do not affect people's capacities, especially their ability to seek support from their friends and relatives. Such external support and intervention should, here again, be based upon a careful assessment by local people of their needs to further strengthen their capacities.

The foregoing emphasis on harnessing capacities for DRR should not eclipse the paramount importance of reducing vulnerability. Vulnerability needs to be considered as the root cause of disasters and, as such, requires extensive attention on the short and long term to achieve sustainable DRR. Henceforth, while it is logical to assert that enhancing capacities contributes to reducing disaster risk, it is devious to say that it also inevitably leads to lessening people's vulnerability. Reducing vulnerability is a massive endeavour that, as mentioned before, requires profound transformation of social structures to address the deep-seated causes of unequal distribution of wealth and power within society beyond the control of those most vulnerable—an agenda which is often forgotten in many VCA toolboxes currently used by stakeholders of DRR. Ultimately, reducing vulnerability and enhancing capacities are distinct, but both compulsory tasks on the DRR agenda that need to be integrated together through collaboration of a wide range of stakeholders including local people and external actors (Wisner et al. 2004; Gaillard and Mercer 2013).

7 Closing thoughts

If VCA has become a mainstay of local DRR initiatives, especially those encouraged by NGOs, it is saddening to observe that the concept of capacities has, in the process, lost much of its original epistemological essence. Although the concept of capacities was initially designed as a way to advocate for stronger people's participation and hence for a transfer of power to the detriment of the traditional actors of DRR, especially central government agencies, it has since fallen within a taxonomic and quantitative approach designed to meet the requirements of outside stakeholders. In fact, it is not enough to identify capacities even through a genuine process of participation of people at risk. Fostering people's capacities necessitates commitment to balance power relations between, on the one hand, those currently holding most power in DRR policy and practice, and, on the other hand, local people who face hazards and disasters. There also needs to be a conducive institutional framework that makes space for capacities to be harnessed and enhanced within DRR plans and activities. Too often, genuine VCA activities lead to identifying a wide range of people's capacities; however, these are not recognised within government planning activities because the existing institutional structure is rigid and favours external and top-down knowledge, skills and resources. Fostering people's capacities therefore requires a broader paradigm shift in how policies and practices for DRR are designed. To facilitate the integration of people's capacities, alternative institutional frameworks for DRR should be flexible to accommodate diverse forms of local knowledge, skills and resources as well as to facilitate dialogue and trust building between local people and outside stakeholders. Indeed, there are certain conditions that should be met to ensure that people's capacities are well integrated in any DRR efforts. Those conditions, however, can be politically and culturally sensitive. This

paper suggests that any meaningful efforts should go beyond mere identification and recognition of people's capacities but instead aim to meet or confront those political and cultural conditions to allow people's capacities, and their enhancement, to be at the forefront of DRR. This is a long and winding but essential task for the nowadays standardised practice of VCA to reclaim and meet its original political goal.

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