



**Building social  
capacities for natural  
hazards**

M. P. Hare et al.

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# Brief Communication: CATALYST – a multi-regional stakeholder Think Tank for fostering capacity development in disaster risk reduction and climate change adaptation

M. P. Hare<sup>1</sup>, C. van Bers<sup>1</sup>, P. van der Keur<sup>3</sup>, H. J. Henriksen<sup>3</sup>, J. Luther<sup>6</sup>, C. Kuhlicke<sup>6</sup>, F. Jaspers<sup>7</sup>, C. Terwisscha van Scheltinga<sup>7</sup>, J. Mysiak<sup>4</sup>, E. Calliari<sup>4</sup>, K. Warner<sup>2</sup>, H. Daniel<sup>2</sup>, J. Coppola<sup>5</sup>, and P. F. McGrath<sup>5</sup>

<sup>1</sup>seeconsult GmbH, Osnabrück, Germany

<sup>2</sup>United Nations University, Institute for Environment and Human Security (UNU-EHS), Bonn, Germany

<sup>3</sup>Geological Survey of Denmark and Greenland (GEUS), Department of Hydrology, Copenhagen, Denmark

<sup>4</sup>Fondazione Eni Enrico Mattei (FEEM), Venice, Italy

<sup>5</sup>The World Academy of Sciences (TWAS) – for the advancement of science in developing countries, Trieste, Italy

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<sup>6</sup>Hemholtz Centre for Environmental Research (UFZ), Department of Urban Environmental Sociology, Leipzig, Germany

<sup>7</sup>Alterra, Wageningen, the Netherlands

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Correspondence to: M. P. Hare (mhare@seeconsult.org)

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## Abstract

This brief communication presents the on-going work and objectives of the CATALYST project on “Capacity Development for Hazard Risk Reduction and Adaptation” funded by the European Commission. CATALYST has set up a multi-regional Think Tank covering four regions (Central America and Caribbean, East and West Africa, the European Mediterranean, and South and South East Asia) and is intended to strengthen capacity development for stakeholders involved in disaster risk reduction (DRR) and climate change adaptation, in the context of natural hazards. This communication concludes with a selection of recommendations for capacity development in DRR and climate change adaptation from the perspective of governance issues.

### 1 Project context and objectives

The CATALYST project (October 2011 – September 2013), funded by the European Commission Seventh Framework Programme (FP7), has been set up in part to address a specific gap (Jaspers et al., 2012); a gap most recently identified by the International Panel on Climate Change (IPCC) special report on extreme events (IPCC, 2012) that although we have substantial knowledge to improve the management of climate risks, this knowledge is not taken advantage of often enough. CATALYST follows on from earlier EU-coordination actions on natural hazard risk reduction, e.g. CapHaz-Net (see Kuhlicke et al., 2011) and is intended to strengthen capacity development available to stakeholders involved in disaster risk reduction (DRR) in the context of natural hazards (see UNISDR (2009) for relevant definitions). Since many of these hazards are driven by current and future climate variability, it also addresses climate change adaptation (CCA). The project seeks, with the support of knowledgeable regional experts, to compile and analyse the best of knowledge from four regions of the world, in order to develop knowledge products useful to practitioners from diverse sectors.

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CATALYST deals with natural hazards, both hydro-meteorological (cyclones, droughts, heat waves, wildfires, storm surges, and floods) often aggravated by climate change, and geological (earthquakes, tsunamis, and landslides). As mentioned, the project is focused on four regions: Central America and the Caribbean, East and West Africa, the European Mediterranean, and South and South East Asia (see Fig. 1).

The ultimate goal is to share and bring knowledge of disaster risk management to bear on economic development, water resources management, and land-use planning issues, and to make DRR and CCA critical components of the sustainability agenda (see O'Brien et al. (2008) for an explanation of the importance of doing so). CATALYST adopts the UNISDR definition of capacity development – i.e., “The process by which people, organisations and society systematically stimulate and develop their capability over time...” (UNISDR, 2009: p. 6), as well as Alaerts and Kaspersma’s (2010) focus on the importance of knowledge production – i.e. the collation and synthesis of knowledge, as key components of capacity development. Hence, key outputs of the project include the development of knowledge products that describe best practices suitable for each of the CATALYST regions; identify gaps in research and existing networks; and outline recommendations for how to foster capacity development to strengthen DRR/CCA in those regions.

## 2 The CATALYST Think Tank

The added value of the CATALYST project is its Think Tank, which is now composed of around 75 specially selected regional experts from the four CATALYST regions. These regional experts are from inter-governmental, governmental and non-governmental organisations, the scientific community and the private sector. Together they work together with the CATALYST project partners in a collective effort to develop the key knowledge products and, by doing so, ensure that the project’s knowledge products are useful to their own work, and that of others in these regions.

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The CATALYST Think Tank is global in extent but regional in implementation. It is not the intention of the project to provide a “one-size-fits-all” set of knowledge products, nor to promote a Euro-centric view of what other regions of the world may need in terms of DRR and CCA capacity development; rather the intention is to allow regional experts to define the needs and best practices of their own region – a process for the regions, by the regions. However, the Think Tank also seeks to catalyse inter-regional exchange of knowledge and ideas from all regions, for the benefit of each one. As a result, the Think Tank process – see Fig. 2 – has both multi-regional (Think Tank members from all regions) and regional discussion processes (members work with their regional colleagues). Whether regionally or multi-regionally, the Think Tank members in CATALYST are able to discuss issues with each other via online discussions, regional and multi-regional virtual meetings, and, face-to-face in workshops.

In Spring 2012, the CATALYST Think Tank was launched by a virtual “kick-off” meeting of the multi-regional Think Tank, permitting members to exchange first experiences, and to clarify the goals of the project and their role in the Think Tank. The process then divided into four regional processes for each of the project regions (see Fig. 2). Each regional sub-process began with online discussions to identify the key thematic issues of importance to the region and to identify first gaps in knowledge. These were swiftly followed by regional virtual meetings to permit the Think Tank members to discuss these thematic issues. Online discussions were then continued so that information about the regions pertaining to these issues could be collected for inclusion in two initial collaborative CATALYST knowledge products:

- **Report on issues, gaps and opportunities in the regions** – an in-depth analysis of the issues, gaps and opportunities for improving disaster risk reduction practice in the four CATALYST regions. It includes an initial assessment of the regions in terms of hazards exposure and susceptibility to harm. Desk research was complemented by insights gained through face-to-face and telephone consultation with Think Tank members;



– **Report on capacity development for disaster risk reduction and adaptation** – an introduction to the concepts, terminology, and reference material regarding natural hazards, DRR and CCA to be used in Think Tank discussions. It provides, in the form of regional sub-reports, the foundation material for further discussions in the Think Tank on key issues pertinent to each of the four CATALYST regions, including an assessment of hazards and vulnerabilities; a description of measures and related governance structures; a qualitative assessment of measures; an assessment of the use of science-based knowledge in stakeholder activities and the management of uncertainties; and an overview of available DRR/CCA training.

These reports have fed into regional discussions on best practices and knowledge gaps that have taken place between September 2012 and January 2013 at the four CATALYST regional workshops, held in Italy, Ethiopia, Jamaica and Thailand (see Fig. 3). Based on the results of these workshops, the regional processes are now concluding with a second set of regional virtual meetings and online discussions to collaboratively develop a synthesis report on potential best practices in the regions, for practitioners and policy makers.

By “best practices” we mean those practices that the Think Tank members believe should be implemented if DRR/CCA in those regions is to be qualitatively and positively transformed to meet future challenges, such as climate change. Those practices may have been implemented within the countries of those regions. An added value of the planned synthesis report therefore is that it will not be a simple list of practices; rather it will be a description of practices that if adopted have the potential to transform DRR/CCA in the particular region. Each region, we presume therefore, will have a different set of “best practices”. How the project can downscale from regional best practices to country-level ones is discussed in Sect. 4.

At the conclusion of the regional sub-processes (Fig. 2), the Think Tank members will meet altogether once more in multi-regional virtual meetings and online discussions to collaborate with the CATALYST partners on the final knowledge products, that will identify gaps in research and capacity development needed if the above transformational

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best practices are to be realised in the regions. The final part of the Think Tank process will be dedicated to multi-regional discussions on how to continue the CATALYST Think Tank and its online resources beyond the duration of the project, i.e. from October 2013 onwards.

### 3 Capacity development recommendations emerging from the Think Tank

As highlighted by the IPCC (2012), we often do not take advantage of our knowledge about the management of risks related to natural hazards. To be more specific, we know that governance has a major role to play in DRR (UNISDR, 2004; UNISDR, 2007; ESCAP/UNISDR, 2012) and is one element of the type of social capacities that need to be further developed in all parts of the world in order to improve DRR (Kuhlicke et al., 2011). The following examples of recommendations from Think Tank members reveal different aspects of the various roles governance plays in DRR, e.g. as an enabler for the mainstreaming of DRR and CCA into policy- and decision-making across sectors; as a constraining factor in the type of capacity development that is best provided at the country/local level; as a formal institutional environment for supporting the re-linking of urban and rural populations as joint actors in DRR; and as a creator of an enforcement environment that can better support the use of ecosystem services for DRR. In future publications, the CATALYST project will describe more recommendations of the Think Tank members, in detail.

#### 3.1 Mainstreaming DRR and climate change adaptation into policy frameworks

CATALYST Think Tank members are discussing ways of fostering capacity development to support the integration of DRR and climate change adaptation into sectoral planning activities, especially in urban land use planning, and ecosystem management, as well as providing alternative best practice models on how to integrate the activities of government departments to mainstream DRR cross-sectorally. The better

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coordination of DRR and CCA activities and practitioners (that would, for example, support improved inter-connectivity between disaster relief planning and long term climate change adaptation) are seen as very important, but members have recommended that it should not involve the creation of new networks. In East and West Africa, more coordinated regional platforms and centres of excellence would be useful. A further recommended approach is to better integrate DRR provisions into National Adaptation Programmes of Action (so-called NAPAs: the formal identification and communication of urgent activities and projects needed to reduce vulnerability in the face of climate change (UNFCCC, 2001)), not dissimilar to the way countries such as Bangladesh and Viet Nam have already integrated DRR and CCA into national development strategies (ESCAP/UNISDR, 2012).

### 3.2 Avoiding the trap of unintended policy consequences

Some Think Tank members have stressed that DRR needs to be integrated even into sectoral planning decisions that may appear tangential to risk reduction. One example, from the Central American and Caribbean region is the manner in which policy decisions related to free-trade agreements that open up small-scale farming systems to international competition can drive migration into the cities from rural areas and lead in turn to higher social, economic and physical vulnerability of those migrants now in rapidly expanding urban environments beset by natural hazards. Capacity development needs to be aimed at policy-makers across the sectors if such indirect increases in vulnerabilities are to be taken into account during planning.

### 3.3 Different governance structures require tailored capacity development activities

It has been pointed out by Think Tank members that it is very difficult to transfer best practices from one country to another due to differences, not only in culture and language, but also most importantly in governance structures (Jaspers et al., 2012). This

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means that capacity development must ultimately be tailored to specific governance contexts within a country if it is to have maximum value. Analysis undertaken by CAT-ALYST of training provision in the different regions (Jaspers et al., 2012) suggests that training offers are dominated by large, regional providers (e.g. universities or UN bodies). If this is the case, a challenge for these regional providers and funding agencies is how to ensure that specific country-level/local capacity development is explicitly provided, whilst still providing general training on DRR and climate change adaptation. This should lead to more sophisticated multi-level approaches towards DRR capacity development policy in this area – an issue which the South and South-East Asia members are considering.

**3.4 Re-linking urban and rural communities**

In order to strengthen resilience in the face of natural hazards it is important to refashion the link between rural and urban communities. To do so, the European Mediterranean Think Tank members, for example, have suggested that institutional arrangements are set up so that urban areas provide financial compensation for losses suffered by rural farmers as a result of floods and droughts. Additionally, green water credits could be implemented by which water consumers like cities, irrigated areas and drinking water companies subsidize soil and water conservation in the watershed (e.g. in Kenya). Another example of suggestions is that rainwater capture in urban areas could be encouraged and used to supply nearby agricultural areas in times of drought. These could all be considered examples of what Gutman (2007) has called the vitally important “new rural-urban compact” for sustainability.

**3.5 Carrots and sticks, and ecosystem services for DRR**

As has been mentioned, there is an interest amongst some Think Tank members, e.g. in the Central America and Caribbean region, to integrate ecosystem services into DRR, for which there are governance implications. They have pointed out that often

even when there are laws in place to protect ecosystems such that they can support the reduction of vulnerability to natural hazards, enforcement is often weak. Without enforcement, policy-makers are left with only half the possible management tools to choose from: incentives, carrots, but no sticks (a problem noted by the Think Tank members of the East and West Africa region, as well). Capacity development should focus as well on supporting institutional and organisational development to improve enforcement capabilities at the national and local level.

#### 4 Lessons learned from running a multi-regional Think Tank

In addition to developing knowledge products with the Think Tank members' support, a significant indicator of stakeholder confidence in the project is the fact that Think Tank membership has been growing: from around 50 at the kick-off, to about 75 at the time of writing. Also, the participation rate of Think Tank members in all types of activities (except online discussions) has been around 50 percent. Given that all members are busy professionals, based in many countries, this is considered to be a healthy rate of participation. Stakeholder evaluations carried out at the end of the first year confirm the positive view of the project held by members. The clear majority of respondents to the evaluations ( $n = 17$ ) had read the key CATALYST products so far developed (see above) and found them useful to their current work.

However, there have been some challenges to face, and lessons learned. First, it is difficult to schedule a multi-regional virtual meeting during working (or even non-working) hours when membership ranges from Mexico to Thailand, given the numerous time zones in between. Therefore, after the initial multi-regional part of the process (see Fig. 2), the project team decided to extend the length of time that members would work together regionally. These regional processes were also extended so that more regional virtual meetings could be added. The latter was a response to the fact that facilitating and maintaining discussions via online discussion fora in the regions has been very difficult, and that without investing a lot of resources in their maintenance, online

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discussions have had a tendency to dry up. Hence, regional virtual meetings have been increased to maintain regional discussions. Other strategies, such as organising bilateral discussions with Think Tank members and further face-to-face meetings, are to be implemented as well.

5 Whilst participation rates in regional virtual meetings have been good, participation in face-to-face workshops has been higher, illustrating that although virtual meetings have an important role in the Think Tank for setting thematic interests, exchanging knowledge, and maintaining member interest outside of workshops, there can be no substitute in such a Think Tank process for face-to-face meetings. The latter serve the  
10 role of galvanising enthusiasm for the process, helping the members to collectively formulate positions on substantive issues, as well as expanding the professional networks of the participants.

Finally, CATALYST has recognised that the regional best practices it identifies in the Think Tank are not automatically going to be of use at the country/local scale, since,  
15 as mentioned in Sect. 3, language, culture and governance structures differ between, and sometimes within, countries. The project has responded on the one hand by trying to expand membership of the Think Tank to more local/country-level experts. On the other hand, it is also hoped that after the conclusion of the project in September 2013, country-specific CATALYST projects can be set up with local stakeholders to interpret  
20 and transfer the best practices identified at the regional level by CATALYST to practicable solutions at the country/local level, with an emphasis on adaptive governance, i.e. “the ability of governance systems to recover from shocks, making transformative change possible“ (ESCAP/UNISDR, 2012, p. xxvi).

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30 visit the website www.catalyst-project.eu.

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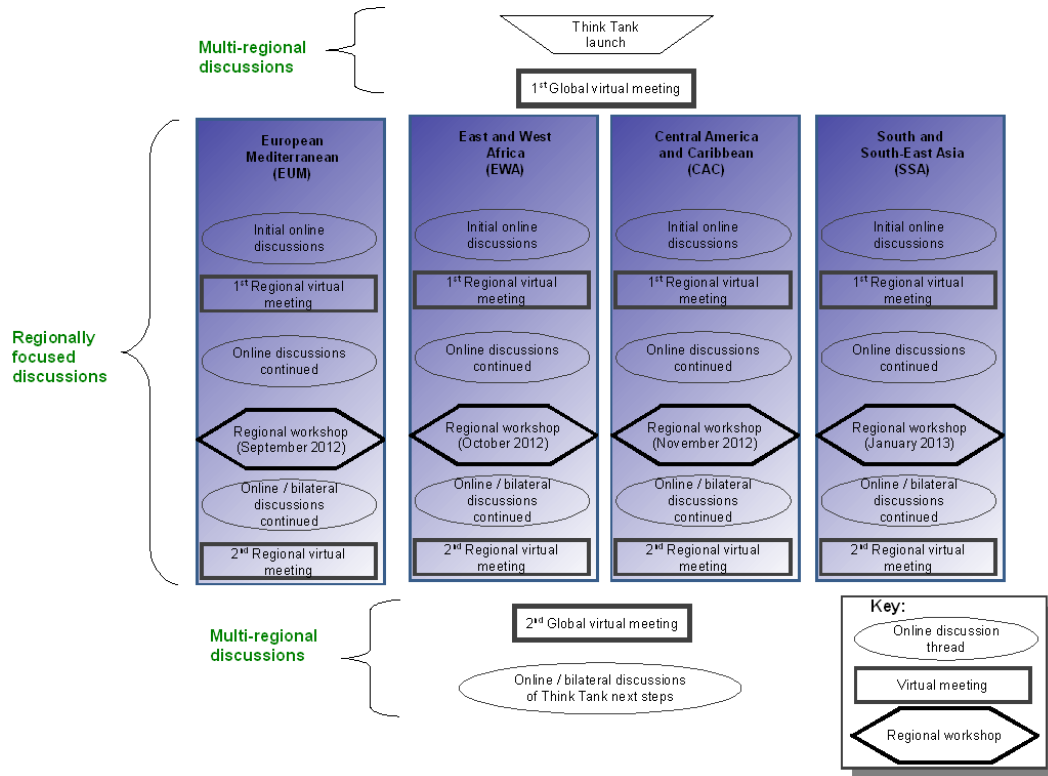
**Fig. 1.** The CATALYST regions (Jaspers et al., 2012).

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Fig. 2. The CATALYST Think Tank process 2012–2013.

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**Fig. 3.** Some of the Think Tank members in discussion at the CATALYST regional workshops for the European Mediterranean, held in Italy (left), and for East and West Africa, held in Ethiopia (right), in 2012.

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