

## Conclusions from the seminar:

### “Resilient cities - From knowledge to local action”

*Convened by the Swedish Water House cluster group for Water and Disaster Risk Reduction*

Fast developing cities in exposed coastal locations are a ticking bomb in terms of urban disasters. This is not only caused by extreme weather, but because the cities are built and operated in such a way they expose their inhabitants – mainly the most vulnerable and poor - to disaster risk. In terms of water-related hazards, cities lack e.g. adequate planning, awareness, communication and coordination, as part of their governance structures, which form a great part of the underlying cause of increasing disaster risk. **Sweden is seen as a center of excellence when it comes to ‘future cities’ as well as risk thinking and holistic planning, yet this knowledge is only available for those who can pay for it, or are on par with Sweden in terms of socio-economic development. It is not available for capacity building with those most in need in low and middle income countries.** Why can't Sweden contribute more? Arguably we have an opportunity in sharing previous mistakes and promote new, highly efficient systems, which can save a lot of resources and create step changes in development. Money is there (although not in the right places), knowledge is there, but we are inactive, as if waiting for something (Magnus Enell). UNISDR - the United Nations Office for Disaster Risk Reduction and their campaign Making Cities Resilient aim to support cities in their efforts to build resilience. UNISDR encourage cities to commit by signing up to address a ten point checklist. Having the commitment in place, the practical and hard work of building capacity and improving the system however remains. The good news is that there are already more than 1000 committed cities that Swedish actors could link up to.

On Friday, May 25th, 2012 the Swedish Water House/ SIWI - Cluster group for Water and DRR held a half day seminar to look at how Sweden can boost its support to cities in low and middle income countries, looking especially at twinning and private sector engagement. There are a few ways in which the knowledge sharing *is* encouraged today:

- Sharing by Swedish private consultants (e.g. Sweco, Wsp etc). But not everyone can afford it.
- Individual staff members take time off to go and work internationally in other organizations.
- In Sida supported projects where e.g. Boverket engages a private consultant and works on site with a local partner.

But we think there are more ways in doing it. The conclusions here will describe a few new ideas to boost Swedish support to resilient cities, and discussing some barriers and opportunities. But first a quick look at the problem in question - the nature of the disaster.

### What is a disaster?

Whether a disaster is happening, is not only caused by the magnitude of a hazard, but it is also depending on how prepared we are in terms of building and operating our systems to withstand and adapt to the challenges. To paint a picture of how the *water*-disaster in cities looks like, we can take flooding as an example. Often land use management of the area upstream of a city is important not

to channel the waters into the city. Inside the city, drainage is a key solution to channel the large amounts of water away from the city, as well as providing non-paved (green) areas where rainwater can infiltrate into the ground (Arun Rana). Another solution is to choose to build on higher ground, as some areas are more flood prone than others. Construction can also be more or less robust to rainfall, cyclones and flooding, where regulations and enforcements are important. If cities are not planned properly, there is also a lot of waste, pollution and sanitary hazards made worse for example by rainfall and flood waters. For example, the lack of waste management in many cities can clog the drains and spread disease, and as such best be described as “advanced open defecation” (Thor Axel Stenström). The electricity supply is another key component, where without it, e.g. pumps and water treatment facilities do not work. The lack of progress in creating healthy and well-planned city environments is due to “organised irresponsibility” where the complexity of it all leaves the overall responsibility open and the planners simply give up. A general problem is that we only plan 2-3 years in advance in urban planning due to political mandate periods. We should instead be thinking 50 years ahead (Nikolaj Tolstoy). In 2020 75% of all persons will be living in cities, which shows the magnitude of the future problem.

In judging what is a disaster or not is depending on different baselines and sometimes this confuses the language. A planner in a well developed country will call the emergency alarm when there is a break in water supply for two hours, while this is an everyday phenomenon in a developing country (Thor Axel Stenström). In the same way, activities labeled as ‘sustainability’ focusing on aspects of environment, and socio-economic issues in a richer country also contribute to building resilience in a low and middle income country, where the absence of basic development as such, constitutes a risk.

## Capacity building through twinning

Sharing knowledge is done most efficiently by twinning, i.e. peer to peer learning between one city and another (Helena Molin Valdes). However, there are barriers for Sweden to engage in twinning with developing countries. Swedish municipalities cannot engage in activities with ‘commercial risk’ and especially not in the water sector, as there is a monopoly situation and only necessary costs are allowed, which are in the end covered by the water bill and paid by the citizens. This makes exchanges which do not also provide a clear mutual benefit for the Swedish municipality difficult (Lena Söderberg). Another issue is also that municipalities are not allowed to compete by doing a service which a Swedish private consultancy would be capable of. As a result of this, Resilient cities platform in Sweden is not planning to engage in capacity building in developing countries. Now there are twinning with e.g. Austria and other countries with similar socio-economic characteristics as Sweden (Mette Lindahl Ohlsson).

Perhaps we overestimate the Swedish capacity? It is not always relevant for the massive problems encountered in many cities. Often Swedish experts get overwhelmed when they come to a city like for example Jakarta, and the issues encountered such as polluted water, air and there are so much bigger than in any Swedish city (Nikolaj Tolstoy). There are also other regulations and local contexts a we are not aware of. Although Sweden may not have good capacity in the specific components, Swedish actors are seen as having good capacity in looking at the whole picture, and general ‘implementation capacity’, whatever that means (Lena Söderberg). We are also good at long term planning and at the process of how to involve other and create the engagement (Ann-Kristin Karlsson). We are also good at including green areas in the planning of our cities and general cross over issues such as gender, equality and democracy.

If individual government departments would need to start engaging towards developing countries there is a need to have a mandate to do so. For example, the Swedish National Food Agency (Livsmedelsverket) has developed a lot of capacity building materials for Swedish municipalities,

including the support network VAKA, but to extend this to developing countries would require a formal mandate and a pot of money (Christina Nordensten). But there is no doubt that the willingness from individuals working at municipal level is there, to share different Swedish best practices (Pålsson personal communication).

## **Sustainability Certification of Urban Areas**

Sustainability certification of urban areas is one way to reduce risk. Through this kind of certification it would be possible to integrate the risk thinking for example in ensuring a certain quality of drainage and runoff, assessing flood risk, reduce heat absorption and the need for powered cooling, and ensure weather resilient development. The project for Sustainability Certification of Urban Areas (Projektet Hållbarhetscertifiering av stadsdelar - HCS [www.hallplatsen.nu](http://www.hallplatsen.nu)), is a collaboration between Swedish governmental departments, municipalities, building companies, property owners, consultants, architects, energy companies, researchers etc. This project is studying international systems for sustainability certification of city areas, and evaluates the systems promoted by BREEAM communities to adapt the systems to Swedish context, potentially to be recommended by the Swedish Green Building Council ([www.sgbc.se](http://www.sgbc.se)). Over the long term, this project aims at carrying out projects with other countries and this is an opportunity to share knowledge internationally.

Activities are underway which indicate other countries are interested in what Sweden is doing in this area, for example, the Delegation for Sustainable cities (<http://www.hallbarastader.gov.se>) has been invited by the Swedish embassy in India, funded by Sida. This is an opportunity in also integrating the water related risk aspects, thinking of the presentation from Mumbai, India (Arun Rana). Other organizations involved in international collaboration are Mistra Urban Futures (<http://www.mistraurbanfutures.se>), Swedish Trade Council (<http://www.swedishtrade.se>), Swedish Embassies and diverse companies (Karlsson).

## **Private sector engagement - in country and by Swedish companies**

Private companies are only one actor among many who will make things happen in a city, however an important one. Often there are different arrangements (public private partnerships – PPPs) between the public and the private sector to construct, maintain or operate services in society. Recommended actions for private companies are to adopt associated practices with e.g. corporate citizenship/governance, CSR, sustainable development, the next generation, good business values and brand/reputation. This can be done through business own initiatives like The Global Reporting Initiative (GRI), The UN Global Compact, ISO-standards, and lots of other national and international mechanisms. Profit is good, but "break even" is good enough. A green economy will make it profitable. In turn, governments should regard business as an equal player, with knowledge, skills and experiences, and involve business from the start. Governments should look beyond the election period, offer more than supporting words and find cofinance options (Magnus Enell).

In terms of sharing of Swedish capacity, the private sector has a lot to offer, however a Swedish consultant is too expensive to engage in commercial projects for e.g. South Africa. One solution would be to find cofinance in some way. Also as a private sector actor it is difficult to join interesting activities which may lead to something further in the future.

## **"JESSICA" - going global?**

JESSICA – is an initiative developed by the European Commission and the European Investment Bank, in collaboration with the Council of Europe Development Bank (CEB). Under new procedures,

Member States are being given the option of using some of their EU grant funding, their so-called Structural Funds, to make repayable investments in projects forming part of an integrated plan for sustainable urban development. A suggestion was that perhaps the same model may be applicable to international level? Read more: [http://www.eib.org/products/technical\\_assistance/jessica](http://www.eib.org/products/technical_assistance/jessica)

## Sanitation Safety Plans

So called Sanitation Safety Plans (SSPs) are being developed by WHO, to maximize the health and environmental benefits associated with wastewater, excreta, solid waste and greywater accounting for the impact on stormwater. This can be accomplished by preventing the transmission of disease and the exposure to hazardous chemicals, where seasonality and impact of events are key variables. The WHO Guidelines aims to function as an integrated management framework and is built around planning and implementation components where the health protection is central on both. This naturally link to economic and technical impact as well as the key focus on vulnerable groups in society. The guidelines are presently under development but will constitute an important system to link different institutional entities and processes in a risk framework (Thos Axel Stenström).

## A center for Pooling Swedish/Nordic capacity

One idea is to create a pooling mechanism for Swedish capacity (similar to the Siani model [www.siani.se](http://www.siani.se)) which could also encompass the Nordic countries and private sector. This could act as a think tank, identifying issues, commission studies, do outreach at events and support capacity contribution.

## Other solutions discussed

- UNISDR will design a competition on how to support cities, and welcomes ideas
- Influence politicians to prioritize the issue and invite them to be onboard from the beginning
- Develop good procurement processes
- Promote good technology systems, such as reuse wastewater
- Rating and comparing cities (benchmarking)
- Empower innovators and entrepreneurs to meet from different cities

## “Think big, start small”

After the seminar, we will try to put together a practical way forward, and we are looking for your input in terms of:

- Would you like to get involved somehow?
- In that case, what time and resources can you put aside?

The UNISDR will thereafter be sharing this idea with Sida and if the idea is good enough some funding can be set aside for a concrete action forward. 1000 local governments are eagerly waiting for ideas and input. Private companies can join the private sector group already established at UNISDR, by signing up through the website [www.unisdr.org](http://www.unisdr.org).

**References, i.e. Seminar speakers, and other persons interviewed in preparation for the seminar, in alphabetical order:**

- *Anders Pålsson, Fire engineer, Rescue service (Räddningstjänsten) Kristianstad*
- *Ann-Kristin Karlsson, Affärsutvecklare Hållbara städer, WSP Sverige AB*
- *Arun Rana, PhD student at Department of Water Resources Engineering, Lund University*
- *Christina Nordensten, Chief Government Inspector at the National Food Administration*
- *Helena Molin Valdes, Deputy Director of the UNISDR*
- *Lena Söderberg, CEO Svenskt Vatten (Swedish Water)*
- *Magnus Enell, Senior Advisor, Sustainability, Vattenfall AB, and Adj. Professor, KTH, Industrial Economics and Management, and Industrial Ecology*
- *Mette Lindahl Ohlsson, point of contact for Sweden's national commitments to the Hyogo Framework for Action, HFA at the Swedish Civil Contingency Agency (MSB)*
- *Nikolaj Tolstoy, Head of the Building and Management unit, Swedish National Board of Housing, Building and Planning (Boverket)*
- *Thor Axel Stenström, Prof, Senior Research Fellow at SEI, Chief Microbiologist at Water and Environmental Microbiology at the Swedish Institute for Infectious Disease Control and as Prof II at the University of Life Sciences in Norway. External advisor for WHO in Geneva.*

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