Assessing tools and implementation of the campaign “Making Cities Resilient”. Summary of briefing on two master’s theses conducted at Lund University, Sweden

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Assessing tools and implementation of the campaign “Making Cities Resilient”. Summary of briefing on two master’s theses conducted at Lund University, Sweden

This paper is a condensed version of a presentation held for the Advocacy and Outreach Section of the UNISDR on the 15th of November 2013. It draws upon findings and recommendations stemming from two master’s theses conducted at Lund University Centre for Risk Assessment and Management, LUCRAM (Karlsson & Nielsen, 2012; Lundby & Sjöberg, 2013). The author of this paper is a Ph.D. candidate at LUCRAM and was supervising both theses. It should be noted that this paper is of an informal and "unscientific" character. The opinions expressed represent the personal views of the author and should not be regarded as representing an official position of LUCRAM.

Aims, purpose and methodologies

The aim of the first thesis was to scrutinize the tools that UNISDR thus far had produced in support of the campaign¹, what the organization had been communicating in terms of what resilience is and what to do in order to become resilient. Aside from reviewing scientific literature on the essence of resilience, the students decided to use a method that LUCRAM recently developed to support the Swedish Civil Contingency Agency whilst initiating capacity development projects around the world. The method is claimed to be holistic in the sense that it cuts across administrative and sectorial boundaries and also generic since it focuses on core elements and functions that purportedly need to be in place for any system to be resilient. The method was used as a reference point when investigating whether the

¹ The studied tools encompassed: the ten essentials, the Local Government Self-Assessment Tool, the handbook How to Make Cities More Resilient, the Making Cities Resilient Report from 2012 and additional information posted on the campaign’s website.
tools within the campaign include elements that LUCRAM emphasizes as essential to attain resilient systems².

The second thesis focused on the “city-to-city” mechanism and sought to explore how cities are matched together, the challenges they encounter and whether these exchanges were initiated and conducted in lines with the “Rights based approach” (RBA)³. The purpose of the theses was to identify measures to enhance the tools and city-to-city mechanism. Both theses draw upon document studies as well as interviews with relevant stakeholders, including representatives from the UNISDR and participating cities.

² The LUCRAM methodology stresses that resilience is contingent upon the abilities to anticipate what’s going to happen (through risk assessment and forecasting), recognize what is happening or has happened (through monitoring and impact assessments), adapt to threats as well as occurred events (including responding to and recover from specific events as well as ways to prevent/mitigate or prepare for adverse events). Finally the system has to be able to learn from the events per se (through evaluations). These nine functions are not only crucial in themselves, but also largely dependent on each other in such a way that the performance of one function requires the output from another function (e.g. risk assessments have a clear link to mitigating activities and preparedness measures, whereas responses in terms of evacuation need information from forecasting or monitoring functions). See Becker & Abrahamsson (2012) for further information on the LUCRAM methodology.

³ The rights-based approach entails integrating the norms, principles and goals of the human rights system into the plans and processes of development. In essence, RBA seeks to ensure that development is based on justice and dignity and entails principles to adopt during development work, such as empowerment, participation, non-discrimination and accountability. Since UN has it stated that a rights based approach should be used for all development work done under their umbrella, it was logical to explore whether the approach is used in the implementation of activities within the framework of the campaign Making Cities resilient and its city-to-city initiative.
Findings

- **Tools cover most of what LUCRAM finds essential for holistic disaster risk management systems.**

  **Comment:**
  The necessity of being able to perform impact assessments (as a foundation for effective response and recovery) does not seem to be addressed by the tools of the campaign. The function of forecasting is only vaguely attended to despite its importance for e.g. preparedness and response.

  Fig. 1 shows the degree to which the tools within the campaign includes the nine functions that LUCRAM deem to be important and renders account for the dependencies between them. The function impact assessment and its correlation to other functions are omitted as the function has not been addressed by the campaign tools, but otherwise all functions are covered (even though forecasting is not mentioned explicitly). The characteristics of the lines representing dependencies represents the degree to which these dependencies have been described in the UNISDR-tools (if at all or only implicit – as with the lines that are crossed over with a dashed line or fully covered).

Fig. 1  Correspondence between UNISDR- tools and LUCRAM framework

- **Interdependencies between essentials are only implied, but not described/explained in tools.**

  **Comment:**
  The thesis shows that interdependencies exist between the ten essentials, which UNISDR does not illuminate in the campaign tools. Since these essentials - and the tools of the campaign at large – more or less encompass the nine functions of LUCRAM’s framework/model, the same dependencies must exist.
• Essentials 1-3 are fundamental and supportive of other essentials

Comment:
Since the campaign presents a number of essentials rather than functions, the authors found it useful to enact a matrix over the interdependencies that exist between these essentials (fig. 2). The matrix is partly a result from information presented in the handbook and partly based on the authors’ interpretation of this.

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Fig. 2 Interdependencies between essentials

The columns in the matrix show if the essential is needed in order to fulfil any of the either nine essentials. The rows show if the essential depends on any of the other nine essentials.

The analysis shows that essential one, two and three (which concern institutional and administrative frameworks; finance and resources and risk assessments) serve as prerequisites for the other essentials. It also shows the reverse, i.e. that these three essentials are independent of the existence of the other seven essentials (as seen by reading the rows horizontally). This would mean that cities which start their disaster risk reduction work with the first three essentials indirectly commence an implementation of all ten essentials. This relationship is not apparent in the campaign handbook where the ten essentials are presented and UNISDR does not convey this message. A risk with this is that cities may start with implementing arbitrary essentials and focus their time, effort (and money) on essentials that are not the most urgent or expedient in the process of developing resilient cities (i.e. on essentials that will not render substantial output in void of necessary and supporting structures and functions).
• LG-SAT does not allow comparisons across cities and (questionably) over time.

Comment:
The LG-SAT encompasses questions that are relevant and well correlated to the overall HFA-framework. Notwithstanding, the pre-set indicators are quite lucid. This is not surprising since one cannot identify efficient indicators without having defined specific activities that should be performed (and this is context dependent/hinging upon the choices of the cities themselves). The campaign reaches out to a very heterogeneous target group and the tools therefore have to be general and non-specific to suit everybody. The LG-SAT as well as the ten essentials do not suggest specific activities. Rather it points to certain areas which are of concern when developing resilience. For this reason it is not possible to develop so called “SMART” indicators (which activities that e.g. are relevant or attainable differ from city to city).

The participants are encouraged to assess themselves on a 1-5 scale, but the description of these levels are also vague (containing words like comprehensive, substantial and some regarding achievements in certain areas). Such terms leave quite a scope for interpretations. Each and every city has to decide for themselves what e.g. a “2” means as there is no common reference point to what e.g. substantial means. This may be fine if one does not wish to compare different cities/urban areas with one another. According to the introductory text in the instrument, however, such comparisons are one of the anticipated/desired outputs of the assessments:

> Using the Local Government Self-Assessment Tool will help to set baselines, identify gaps, plan actions and have comparable data across local governments, within the country and globally, to measure advancements over time

In essence, it is not valid to use subjective interpretations as a basis to compare cities and subjective interpretations are unavoidable if having qualitative concepts like ”substantial”/”some” as indicators.

More important than being able to compare oneself with another city is, perhaps, to be able to compare one’s own progress over time. But even assessing one’s own progress over time put some requirements. To assess this one would need more than just the score points to look back on (e.g. 3,4 and so on). One need to know what these figures stand for and this requires that the person doing the assessments also motivate why they chose to grade themselves with a 3 or a 4. This traceability is necessary since one cannot be sure that it is the same person that does the assessments over time (or that one may recall one’s own reasoning between the assessment intervals). Unless the grade is further explained, one has nothing to relate to when thinking about if progress has been made or not. As opposed to the online

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4 SMART is an acronym for Specific, Measurable, Attainable, Relevant and Time-bound.
version, the offline version of LG-SAT does not comprise any boxes/space for motivating the grading, nor does it encompass recommendations to do so.

- **UNISDR’s definition of resilience "lacks"/hides the element of learning and should stress re-establishing functions rather than forms.**

UNISDR’s definition of resilience reads:

\[
\text{The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions.}
\]

The definition is further elaborated with the subsequent comment:

\[
\text{Resilience means the ability to “resile from” or “spring back from” a shock. The resilience of a community in respect to potential hazard events is determined by the degree to which the community has the necessary resources and is capable of organizing itself both prior to and during times of need.}
\]

UNISDR’s comment to the resilience definition can be linked to what is known in resilience literature and research as” single equilibrium systems”. This because the commentary refer to resilience “as the ability to ‘resile from’ or ‘spring back from’ a shock”. However, resilience is not all about the ability to ”bounce back” to a “normal state”, i.e. a pre-disaster state of operation. The output from learning may very well be that one seeks to “build back better”, i.e. reduce vulnerability by adapting to new requirements that may have become apparent through the lack of ability to withstand different forms of strains. In this view, resilience is less about safeguarding a system than safeguarding the functions that this system provides. It has to do with having the ability to safeguard the things that people value, rather than to retaining the forms (structure and processes) of a shattered system (e.g. to build houses with another material, another structure or at another place than in hazard prone areas). Since a system’s environment is dynamic rather than static, the system needs an ability to learn from experiences as well as to anticipate/foresee how one needs to alter the system based on this (i.e. define a new potentially fruitful equilibrium).

To be fair, the UNISDR definition and comment encompass terms and phrases that could be linked to learning (e.g. “accommodate” and “capable of organizing itself both prior to and during times of need”). But as the learning aspect is crucial to societal resilience it could be pointed out more
strongly in the formal definition and adherent comment (as point of fact, “accommodate” is put in conjunction with a reactive rather than proactive phrase, i.e. accommodate from the effect of a hazard rather than accommodate to a threat).

- The campaign does not have a unified strategy on how to initiate partnerships within the framework of city-to-city exchanges

  Comment: The students found that UNISDR did not have any strategy for matching cities/urban areas together (e.g. parameters like hazards types, size, cultures, GDP etc). All the interviewed cities had actually initiated their partnerships before they had joined the campaign and the students believe that partnerships are best build on the initiative from the cities themselves (albeit UNISDR could help them finding relevant partners as proposed by one of the recommendations below).

- The campaign does not explicitly state that RBA should be used in city-to-city exchanges, nor were interviewed cities familiar with the approach. Nonetheless, implementation seemed compliant with RBA!

  Comment: from the analysis of the interviews, the students found the process of initiating as well as conducting cooperative programs to be in line with RBA-principles (i.e. vulnerable groups were in focus of the attention and problems and solutions were identified by local stakeholders through participatory processes).
Recommendations

• The concept “Community resilience” needs to be clearly communicated (understood) and the tools of the campaign need to be aligned with this.

Comment: It may be hard to adjust UNISDR’s formal definition of resilience, but since “resilient cities” is the campaign’s vision, it is important that the term community resilience is clearly defined and communicated. The definition should also permeate the campaign’s tools and guide the process of reaching the envisioned state of “resilient cities”. Perhaps most important is to describe the functions that lead cities to resilience, not only what actions that should be carried out. In this endeavor, it’s important to have a holistic approach so that the concept encompasses all levels (from the “enabling environment” in form of policies, legislation at the national level to the capacities of individuals that make up the resilience of organizations), but also all necessary functions (not to forget about impact assessments as a basis for response and recovery and learning to be able to adapt to a dynamic society).

• Interdependencies between essentials need to be clarified in tools

• Issue advice on coherent order for implementing the ten essentials (i.e. essentials 1-3 as fundamental and supportive of other essentials and should therefore be implemented/addressed before attending to other essentials)

Combined comment for the two recommendations stated above:
In accordance with the interdependency analysis across essentials, the students recommend that UNISDR advocates that cities initiate their disaster risk reduction work by implementing essentials 1-3. They also underscore the value of chapter three in the handbook, which describes the implementation process of the campaign. The messages therein are to a large extent consistent with the results of the interdependency analysis as it emphasizes organization, budget and risk assessments as prerequisites for implementing the campaign objectives. Strangely enough, however, the ten essentials are not linked to the implementation process described in handbook. The students also felt that the messages that UNISDR conveyed through the interviews concerning the implementation process differed from the ideas presented in chapter three. For these reasons, the students believe that the campaign’s communication regarding the implementation process is inconsistent.

Aside from recommending that cities start implementing essentials 1-3, they recommend that the interdependencies between essentials are illustrated and explained in the campaign tools (e.g. in the handbook and preferably elsewhere too). An increased awareness in this matter is likely to facilitate
the cities’ possibilities of making sound decisions concerning their approach to implement the campaign objectives.

Notwithstanding the value and correctness of the interdependency analysis, the above recommendation may be in need of a cautionary remark. Naturally, cities diverge substantially regarding how far they have advanced in terms of DRR. The suggestion is therefore not to say that everybody has to start with essential one before commencing with other essentials. The suggestion is rather that UNISDR communicate that essentials 1-3 are supportive of other essentials and that it is wise to review whether there are any deficits with regards these areas – and seek to adjust these - before starting to implement other essentials. Moreover, essentials one and two may be hard to implement since budget issues and adjustments to institutional arrangements affect power relations. A risk with starting projects from this end may therefore be that one runs into troublesome negotiations, which effectively hinder the implementation of the campaign. Projects may therefore have to start with something more tangible and easy to attain, but as soon as possible also address these “overriding frameworks”.

- Develop LG-SAT (comparability across actors and over time requires transparent motivations)

Comment:
Strongly recommend that cities motivate their answers (grades) in order for them to be able to use their assessments as basis for comparisons of progress between different time intervals. There is a risk that people do not read instructions carefully however, wherefore incorporating “boxes” for motivations under each questions in the off-line template could be a good idea.

- Recommend that LG-SAT is performed early in the implementation process (as part of essential three)

- Recommend that the cities’ project objectives are designed in line with the SMART-criteria

Combined comment for the two recommendations stated above:
Making baseline assessments of existing capabilities within areas that one aims to develop, is obviously crucial in order to be able to verify and measure progress. Baseline assessments could further motivate leaders to engage with - and allocate necessary resources to - bridging the gaps that are identified through the assessment. Hence, the LG-SAT should be carried out early on (preferably as part of the risk assessment) and be used to inform the planning process whilst deciding on particular risk-reducing activities. The capacity assessment will also increase the possibilities of developing “SMART” objectives (especially in terms of relevance) and indicators to monitor the implementation of specific activities.
• Develop a database to enhance possibilities for cities to find relevant partners

Comment:
Albeit one of the theses came to the conclusion that partnerships are best build on the initiative from the cities themselves, it proposed that UNISDR enact a database that incorporates information on the context of participating cities, so that cities more easily could find interesting partners to probe for the initiation such partnerships.

The current website comprises a lot of data on the participating cities (the online profiles of local governments), but it is not “searchable”. Bearing in mind that the campaign now encompasses about 1600 participating cities, it is simply not viable to click on each and every city and read through the profiles. If wanting a quick snapshot of potential cities to contact, one would need a search-engine and make use of Boolean-operators to combine different aspects that one deem to be important, e.g. hazard type + population data.

Whilst enacting the database, one would also have to decide on which aspects that is particularly important to incorporate. Tentatively one could use the information that is already posted on the campaigns website. Today it comprises size (area), population number, type of hazards, vulnerability profile, DRR-activities and contact info. The last three of these are not possible to use as a basis for searches (as they comprise narratives that are not possible to use in drop-down menus), but the other ones work well.

There may, however, be additional aspects which a city would like information about if it contemplates to cooperate with another city. Language is one such issue. Information about the development level would also be interesting. A mayor of a city in a developing country with weak infrastructure may foresee that other cities of comparable standards may face similar challenges, but also that their solutions to these problems could be affordable to his/her city as well. This does not mean that it would not be interesting to learn what solutions other, more developed cities have, but these solutions may be unattainable and it is not feasible to copy solutions that are based on totally different infrastructural and technological requirements. One way to facilitate for the cities to find partners with similar socio-economical settings is to include the HDI-value (human development index).

Some aspects that affect vulnerability and disaster management capabilities may be sensitive to include (e.g. literacy rate, ethnic groups), but one could suspect that everything that is already posted on UN-affiliated websites (e.g. IRIN; Reliefweb, Prevention Web, UNFPA country profiles) would be OK to post. Notwithstanding one may need to consult the cities in this regard.
Finally, the online profiles are far from complete. Best represented are role model cities and one would need to assign resources to supplement the envisaged information and keep this updated. It is doubtful that it would be efficient to bestow this task on the participating cities. In order to avoid the frustration of continuously making requests on providing information, as well as to ensure quality and coherence regarding data sources, it is supposedly necessary that the management of the database is provided for by the UNISDR itself. The overall value of the city-to-city learning approach and the potential of highly increasing its outputs by enacting such a database would, perhaps, outweigh the costs of this tool.

- **Develop ”ten essentials for implementation” of campaign objectives**

Comment:
The campaign has up till know – through its ten essentials - focused on what to do (i.e. activities) rather than how to do it (i.e. the process of developing). According to UNISDR one of the strengths of the campaign is the simplicity of the ten essentials. A recommended implementation process just as simple, where UNISDR more clearly communicates how the ten essentials can be incorporated in practice, is likely to increase the possibility of achieving the goals of the campaign. It would also be timely as the campaign now has entered its second phase, i.e. moving on from ”doing the right things” to ”doing the things right”.

Such guidelines could encompass a suitable order of implementing the essentials (according to their interdependencies) as well as values that are useful to keep in mind whilst implementing development work on one own or through the assistance of other cities.

The authors of one of the theses believed that making references to the RBA could increase the legitimacy of the campaign, but some words of cautiousness may be called for. Albeit the rights-based approach advocates valid values and principles for development work, it’s moral or philosophical claims may scare people off.

RBA is a quite radical approach. Essentially it views underdevelopment - at least poverty - as an injustice and a violation to human rights (based on the perception that poverty is imposed on people by discriminatory policies or the state by not providing essential human rights, like the right of education and health). It also emphasizes accountability and uses the concept duty bearer, which to some people may seem like imposing a sense of guilt - an obligation to help. In some sense it takes away the “charity-dimension” and hence the possibility of feeling good about helping as this is something that one should do (rather it may make oneself feeling bad if not helping as this is to be regarded as a moral duty). And this moral/philosophical dimension of RBA can be a “too hard nut to swallow”, especially for people that are not familiar with the humanitarian world. And to be frank, city
administrators and clerks in municipalities - that one hopes to engage in the campaign - may never have been involved in development work before, at least not outside their own city, country and even less to assist other parties in totally different socio-political settings. Being defined as a duty-bearer may thus seem daunting and even put people off to initiate partnerships with cities in less developed societies. In addition, a very stringent approach to RBA requires a good knowledge on the standards and the rights spelled out by the Universal Declaration of Human rights.

For this reason, it may be prudent not to advocate for a rigid alignment with the RBA-approach, but highlight the principles for implementation (i.e. empowerment, participation, non-discrimination and accountability), which would be sound for the process of developing resilience in any setting, including through city-to-city exchanges.

Aside from the principles of RBA, there are other aspects that could be worthwhile to communicate as recommendations to cities that would like to initiate and implement city-to-city projects (e.g. knowing about the local context; the importance of trust and transparency between stakeholders; sustainability through building on existing capabilities, structures and technologies; catering for systemic approaches where capacities at all levels of the society are addressed; mixing soft and hard as well as long and short-term activities; the importance of an engaged leadership, monitoring and exit strategies). As a food for thought, I would suggest an article produced by two colleagues of mine (Hagelsteen & Becker, 2013) and have also put together a short list of additional references that could support such an endeavor (annex 1).
Sources


Annex 1. Some useful references addressing principles for implementing development projects and programs


- UNDP (2009). *Supporting Capacity Development – the UNDP Approach*


- CADRI: *Basics of Capacity Development for Disaster Risk Reduction*