



PRUV: Definition of Key Terms

Introduction

The PRUV project adopts a transdisciplinary approach, drawing together different disciplines and interventions in exploring how urban preparedness and resilience can be enhanced. The adoption of such an approach allows for the undertaking of research into problems and challenges that no one discipline can fully comprehend and address. Moreover, it ensures that the problem, in this case urban vulnerability, rather than disciplinary convention, is placed at the centre of the research project. By combining different disciplinary approaches, problems can be addressed in a more holistic manner. This is particularly the case for the PRUV project as resilience can be considered a “boundary concept” that is relevant to a range of disciplines. Furthermore, the urban systems whose vulnerabilities the project seeks to address are highly complex, thus rendering a range of disciplinary perspectives necessary. Thus, while the inter-disciplinary concepts of “urban”, “resilience”, “preparedness” and “vulnerability” ought to be defined at the consortium level, their definition ought to be undertaken with sensitivity to the disciplinary orientations within the project. While there is consensus around the need for greater preparedness and resilience to address urban vulnerabilities, there is no agreed definition or common understanding of what these terms constitute. Nonetheless, in order to ensure a common understanding across the consortium concerning the key concepts deployed within the project it is important that at least rudimentary definitions are provided. These working definitions were adopted on the basis of a consultative process amongst the members of the consortium. Moreover, they were adopted with the understanding that more appropriate definitions for the key concepts within the project could be an outcome of the project itself.

Defining Preparedness and Vulnerability

If one examines the key terms associated with the project: **Preparedness; Resilience; Urban; Vulnerabilities**, varying definitions can be found across disciplines. The least contentious terms are Preparedness and Vulnerabilities. There seems to be a degree of consensus that **preparedness** is





associated with *'enhancing the capacities and knowledge of all key stakeholders (affected people, communities, authorities, and professional response organisations) to anticipate and respond to existing and future threats'* (UNISDR, 2008). The term **vulnerabilities** serves to identify the potential sources of these threats and is frequently applied to mean *'the conditions determined by physical, social, economic and environmental factors or processes, which increase the susceptibility of a community to experience disruptions in the functioning of a community or society and causes human, material, and economic or environmental losses'* (UN Habitat, 2007).

Defining Resilience

There is no consensus on a definition of **resilience** across the aid community. Resilience is what can be described as a "travelling concept" (Darbellay 2012). Originating etymologically from the term *resilio* (to bounce back), from a disciplinary perspective it has emerged from physics and engineering. Subsequently, it was adopted within psychology and from there it migrated to the other social sciences. It is now a widely used term with genealogical roots in a wide range of disciplines and has been widely adopted by the humanitarian and disaster risk reduction communities in recent years.

Such wide adoption of the concept of resilience notwithstanding, it has been defined in varying ways by disaster management and humanitarian actors. The UN International Strategy for Disaster Risk Reduction defines the term as:

"the ability of a system, community or society potentially exposed to hazards to adapt, by resisting or changing, in order to achieve or maintain an acceptable level of functioning and structure. It is determined by the degree to which the social system is capable of organizing itself to increase its capacity to learn from past disasters in order to better protect themselves in the future and improve measures for risk reduction." (EIRD 2004)

Remaining with the notion of 'threats' or 'stresses' as cited in the above definitions of preparedness and vulnerabilities, the humanitarian and disaster risk reduction literature tends to focus on a community's or society's vulnerabilities and views resilience as enhancing its capacity to 'absorb' (linked to future threats) or 'adapt' (learn from prior stresses and mitigate against a future re-occurrence). Development literature tends to focus on the capacity of a community or society to





‘transform’ or change to overcome anticipated threats or stresses without compromising their long term processes (Kindra, 2013). It is also worth noting that resilience is an ‘evolving’ term or concept which may lead the Consortium to consider that the concept ‘**urban resilience**’ might be a product of the PRUV study process. Adopting such an approach it would be prudent for work packages to view resilience in its broadest sense.

Defining Urban Resilience

Urban resilience has been inconsistently defined in the literature (Meerow, 2015). Twenty five definitions of urban resilience have been found in the literature (ibid). Its conceptual fuzziness can be considered both a strength and a weakness. It is beneficial in enabling it to function as a “boundary object”, a common object or concept that appeals to multiple “social worlds” and can, therefore, foster inter-disciplinary scientific collaboration, such as that proposed by the PRUV project (Star & Griesemer, 1989). On the other hand, without an overarching concrete definition it may be difficult to operationalise (Gunderson, 2000; Pizzo, 2015; Vale, 2014).

In order to move towards a commonly agreed definition of urban resilience across the consortium it is worthwhile to consider the main variables in composing a definition of urban resilience. Meerow, (2015) argues that the twenty five definitions of urban resilience that they identify vary in relation to the following issues:

- (1) the definition of ‘urban’;
- (2) the understanding of system equilibrium;
- (3) positive vs. neutral (or negative) conceptualizations of resilience;
- (4) the mechanisms for system change;
- (5) adaptation versus general adaptability; and
- (6) timescale of action.

Two further variables are also worth exploring:



(7) the object of study, i.e. who/what is being considered resilient;

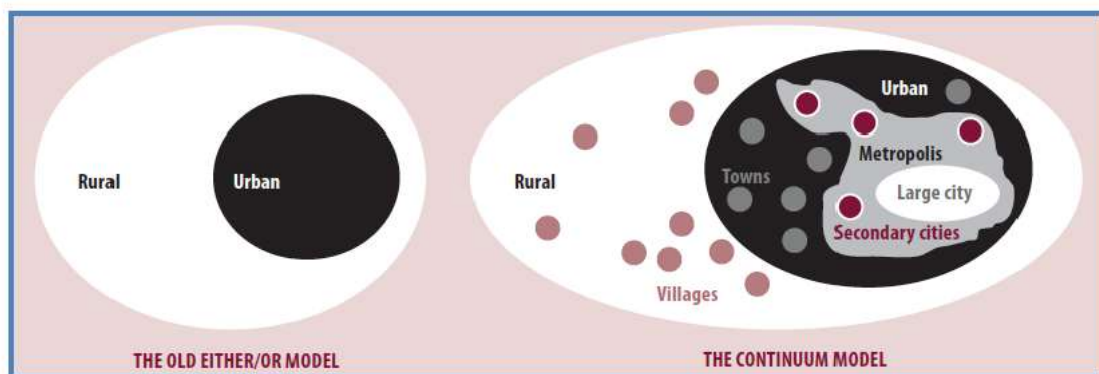
(8) relevant sectors focused upon for improving resilience

In serving to determine the working definition of urban resilience within the PRUV project, each of these variables are addressed in turn below.

1. The definition of urban

The definition of urban varies widely depending on discipline or theoretical construct (Meerow, 2015). However, it is possible to assert that the urban-rural dichotomy has been largely rejected within the social sciences in favour of a continuum model, which is illustrated in Figure 1.

Figure 1: World Bank 2009 (in Concern Worldwide & UCD Centre for Humanitarian Action, 2013)



All of the demographic research that provides valuable insight into issues associated with global urbanisation focus on rural-urban as a dichotomy, however there is a recognition that rural and urban are (inter)dependent and form one system (Schaeffer, et al., 2014). What constitutes “rural” and urban” thus is better characterised by a spectrum “in which the most remote backwoods sub-rural settlements blend imperceptibly into the rural and then gradually through all degrees of rural and suburban into the most urban and hyper-urban way of living. If such be the case, a scale, rather than a dichotomy, would provide the most satisfactory device for classifying the population or the group according to rural or urban characteristics” (Smith & McMahan, 1951).

The level and nature of this (inter)dependency varies within and between communities and societies and hence the more accepted notion of viewing rural-urban as a continuum. One might view



subsistence farmers at one end of this continuum who are characterised by being *self-sufficient* and an urban slum or refugee camp at the other characterised by *dependence*. While both contexts can experience similar levels of threats or stresses, the sheer number and range of potential threats and stresses to urban slums and the (inter)dependence on disparate social, economic, political, and infrastructural systems greatly complicates the process of building urban resilience. Particularly complex social systems are urban social systems. Social systems are denser, not only in terms of population but also in terms of relationships of (inter-) dependency in the economic, social, security, cultural, and other spheres. To this end PRUV is more concerned with *urban in terms of the potential threats and opportunities of growing inter-dependencies of complex social, protection, legal, security and health systems*.

Within each of these issue areas (social, protection, legal, security and health systems) relationships of dependency come to the fore. Relationships of dependency, intimately interlinked, arise from the livelihoods, social care, leisure, financial resources, shelter etc.

2. Understanding of system equilibrium

Within the literature on resilience, there is a divide between those who conceive of systems as being characterised by single-state equilibrium, multi-state equilibrium or dynamic non-equilibrium (Meerow et al., 2015). Proponents of single-state equilibrium conceive of systems as returning (resilient) to a pre-existing equilibrium once an external shock is applied to the system. Multi-state equilibrium proponents on the other hand recognise that there might be several states of equilibrium to which a single system might return. Finally, dynamic non-equilibrium proponents do not presume that there is a pre-defined stable state within a system. Systems are open and can shift in nature over time in such a way as to allow transformation. This latter approach characterises the approach of Béné, et al., 2015 who conceive of resilience not only as incorporating absorptive and adaptive capacities but also transformative capacities.

3. Positive v neutral conceptualisations of resilience

Certain definitions of resilience have been critiqued as facilitating potentially politically



conservative/individualistic orientations. To a certain extent one's understanding of system equilibrium above determines the extent to which one adopts a positive conceptualisation of resilience. Equilibrium models (both the single-state and multi-state equilibrium models) presume a status quo ante that prevents the imagining of a new system state in which shocks and stressors can be overcome. By adopting a dynamic non-equilibrium approach a conceptualisation of resilience can be achieved that

Related to this is whether resilience is to be conceived as being socially constructed or not. If the former approach is taken then conceptual space is allowed for the definition of urban resilience to represent desirable outcomes from the perspective of those undergoing shocks and stressors.

4. Mechanisms for system change

Meerow et al. (2015: 44) identify within the resilience literature different pathways to system change. They identify three general pathways: persistence; transition; and transformation. These pathways map somewhat neatly onto Béné, et al.'s (2015) triptych of capacities: absorptive; adaptative; and transformative capacities.

Absorptive coping capacities

These kinds of capacities 'includes all the various risk management strategies by which individuals and/or households moderate or cope with the impacts of shocks on their livelihoods and basic needs' (Béné, et al., 2015, p. 10) Enhancing absorptive capacities can be linked with preparedness activities whereby households, communities and societies are enabled to merely respond to shocks/stressors. Preparedness interventions do not strive to overcome recurring shocks and stressors.

Adaptive capacities

Béné, et al. (2015: 10), citing Berkes, et al., 2003, define adaptive capacity as the "capacity to learn, combine experience and knowledge, adjust responses [in a pro-active way] to changing external





drivers and internal processes, and continue operating”.

Transformative capacities

Béné, et al., (2015: 10) defines transformative capacity as “the capacity to create an enabling environment through investment in good governance, infrastructure, formal and informal social protection mechanisms, basic service delivery, and policies/regulations that constitute the necessary conditions for systemic change.”

In supporting transformational responses, the PRUV project will address both structures and processes, as defined by the sustainable livelihoods framework (DFID, 1999). Structures refer to different levels of government as well as the private sector. Processes refer to laws, policies, culture and institutions. Together, structures and processes operate at all levels, from the household to the international arena (ibid.).

5. Adaptation versus general adaptability

By this dichotomy, Meerow et al. (2015) refer to whether the definition of urban resilience focuses on adaptation to particular kinds of shocks and stressors or whether it is flexible enough to address a wide range of shocks and stressors.

In the PRUV project we examine resilience in four concrete case studies. Given the diversity of the case study contexts within PRUV, both geographically and in terms of the specific shocks and stressors present in each of the case study contexts, it is recommendable that PRUV’s definition of urban resilience adopts a definition that focuses on general adaptability that can be deployed in each of the case study contexts.

6. Timescale of action

This variable relates to the speed at which a system “resiles” once an external disturbance is imposed. Meerow et al. (2015) identify definitions that refer to “rapid” recovery while other definitions do not refer to speed of recovery. Given the heterogeneity within the PRUV project there





is no compelling reason to explicitly identify the timescale of action at this stage. However, the PRUV project recognises that resilience strives to provide a link between humanitarian action and development.

7. Objects of study

This variable poses the question as to who/what is resilient? Resilience, given the travelling nature of the concept, has been applied to various objects of study, including organisations, psyches, institutions and cities themselves. It would seem prudent to carefully define the objects of study within the PRUV project. While the resilience of organisations and institutions might be relevant to the resilience of social units (e.g. the household, community and societies), the primary focus of the PRUV project is on these latter social units.

8. Relevant Sectors

As mentioned above, the PRUV project addresses a range of sectors that reflect the inter-disciplinarity of the project. These map onto the five PRUV work packages. In each of the work packages the absorptive, adaptive and transformative capacities that these sectors promote are addressed. Each of the work packages will elaborate further on the relationship between the relevant sector and urban resilience.

Towards a PRUV definition of “urban”, “resilience”, “preparedness” and “vulnerability”

Table 1 summarises the approach to key terms within the PRUV project.

Table 1: Definition of Key Terms in PRUV Project

Term	Definition
<u>Preparedness</u>	<i>Preparedness relates to the capacities and knowledge of all key stakeholders (affected people, communities, authorities, and professional response organisations among others) to anticipate and respond to existing and future threats (UNISDR, 2008).</i>



<u>Resilience</u>	<i>Resilience is a measure of households', communities` and societies' ability to both address their vulnerabilities by improving their capacities to absorb and adapt to existing and anticipated shocks and stresses while strengthening their capacities to transform/overcome to a level where these stresses are no longer relevant. Resilience is to be considered a concept that is "co-created" by all actors in the research process, both researchers and participants.</i>
<u>Urban</u>	<i>Urban is defined in relation to the capacities and vulnerabilities arising from the inter-dependencies that characterise highly complex and interlinking social, protection, legal, security and health systems. Urban areas feature high population density, diverse livelihoods and means of production and are often sites of government-provided facilities/infrastructure.</i>
<u>Vulnerability</u>	<i>The characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard (Wisner, et al., 2012). Such characteristics and circumstances can be multi-dimensional (physical, social, economic, structural...)</i>



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