Illustration:
The Effects of Good Government
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ReBuS

RESILIENCE BUILDING STRATEGIES

TOOLKIT | The toolkit aims to provide public authorities with tools to assess resilience of their communities and to support planning for strategic response to emergencies | Council of Europe

Centre of Expertise for Good Governance | January 2021

CENTRE OF EXPERTISE
FOR GOOD GOVERNANCE

COUNCIL OF EUROPE

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ReBuS

RESILIENCE BUILDING STRATEGIES

Toolkit

Council of Europe

CENTRE OF EXPERTISE FOR GOOD GOVERNANCE

The Centre of Expertise for Good Governance helps Council of Europe member states deliver good democratic governance at local, regional, and central level.

The Centre of Expertise is uniquely placed to support multilevel governance. While maintaining an approach that focuses on understanding the needs of local governance actors, the Centre's connection to the Council of Europe's intergovernmental Committee on Democracy and Governance (CDDG) offers it ready access to high-level government officials from the 47 member states with a reservoir of knowledge and expertise in governance reforms.

The practical and impact-oriented projects of the Centre of Expertise are implemented in cooperation with local, regional, national and international stakeholders and are aimed at improving legislation and strengthening the institutional capacity of all tiers of government.

The Centre of Expertise promotes best European practice and standards, such as the European Charter for Local Self-Government and the 12 Principles of Good Democratic Governance, through legal and policy advice, and through implementation of benchmarks, evaluations, and innovative methodologies ("tools").

The development and promotion of new innovative capacity-building tools is among the priorities of the Centre of Expertise. These tools take inspiration from the best European practice and enable the reinforcement and evaluation of capacities of public authorities in a variety of areas. All interested bodies are encouraged to use the tools, provided that the copyright is respected; qualified and certified by the Centre experts are used; and the Centre is informed.

The Centre of Expertise can provide assistance in adapting and implementing the tools and training national experts.

ISIG – INSTITUTE OF INTERNATIONAL SOCIOLOGY OF GORIZIA

ISIG is an independent research institute in the field of social sciences.

Founded in 1968 in Gorizia (Italy), ISIG envisages a future of peaceful relations fostered by an international understanding, based on the acknowledgment of differences as resources.

ISIG carries out research at national and international levels, gathering knowledge on the problems arising from relations between states, ethnic groups and on the cultural, economic, and social development of communities.

ISIG methodological approach considers emergencies as processes, rather than specific events. In other words, we start from the assumption that the full-blown phase of the crises can be better analysed and understood on the one hand because of previous institutional and organizational structures and, on the other, as a potential trigger of alternative scenarios for the future.

ISIG' expertise on these topics stemmed from researches carried out right after the 1976 earthquake in Friuli Venezia Giulia, aimed at investigating in the first place the different social responses to the disaster (i.e., psychological response, organizational response, management of the international aid). Today our research is focused on perception, communication and risk governance, sustainable development, and public participation in environmental policies. The ultimate objective is to identify key structural and relational dynamics that determine the vulnerability, resilience, and adaptive capacity of social systems in relation to natural disasters, industrial accidents, environmental disasters, food, and health risks.

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ACRONYMS

COVID-19 - Coronavirus Disease 19

CRT – Community Resilience Taskforce

DRR – Disaster Risk Reduction

FAO – Food and Agriculture Organization of the United Nations

HFA – Hyogo Framework for Action

ISO – International Organisation for Standardisation

LULC – Land Use Land Cover Indicators

NGOs – Non-Governmental Organisations

OECD – Organisation for Economic Co-operation and Development

SFDRR – Sendai Framework for Disaster Risk Reduction

UN – United Nations

UNDRR – United Nations Office for Disaster Risk Reduction

UNISDR – United Nations Office for Disaster Risk Reduction

URP – Urban Resilience Project

1 INTRODUCTION

1.1 RESILIENCE AND GOOD DEMOCRATIC GOVERNANCE

The COVID-19 pandemic has left public authorities facing an emergency unprecedented in both scale and scope. These authorities have been called on to adopt urgent measures to address the threat to public health and contain the pandemic. They have also had to address challenges in ensuring the effectiveness and continuity of public administration in line with the 12 Principles of Good Democratic Governance, including civil participation.

As underlined by the CDDG Report on Democratic Governance and COVID-19[1] "The major lesson learnt from this experience is that strong and effective multilevel-governance is essential to prevent, identify and manage emergencies, including pandemics. Resilience, flexibility, capacity and coordination are instrumental to good democratic governance and to ensure that key services continue come what may, whilst managing the infection rates and responding to new issues. Moreover, the response must ensure compliance with the fundamental values of democracy, human rights and rule of law." (CDDG (2020)20, p.5)

As daily tasks have become a ritual in emergency management, public authorities find themselves calling into question the value of 'past' practices (i.e., the tools by which public authorities manage the present) and 'future' strategies (i.e., the vision that frames how present practice might evolve and improve in terms of efficiency and effectiveness). A critical assessment of these practices and strategies is of paramount importance for Member States in designing comprehensive and effective tools to help anticipate and respond to emerging challenges.

The COVID-19 emergency, and its aftermath, will continue to have an impact on social, economic and institutional structures across public administration for years to come, with consequent implications for civil participation and democratic governance at all levels. It is therefore imperative to conduct an in-depth analysis of the preparedness and ability of public administrations to respond to such extraordinary circumstances, at institutional, administrative and civil society levels. Given the potential implications of measures adopted, due attention should also be paid to promoting respect for good democratic governance principles at local level.

The **ReBuS - Resilience Building Strategies** Toolkit offers a framework for such an assessment shaped by the concepts of resilience and robustness - relatively new policy solutions which look at the potential of systems and actors, such as communities, to address or minimise the impacts of potential shocks and uncertainty.

These concepts reflect the recent paradigmatic shift in approach to the policy-making process from more traditional disaster management views to a pro-active approach to building strategies that reduce risk, enhance resilience, and focus on recovery and functionality.

Resilience Building Strategies address the capacity of a community to withstand, recover, adapt, and persist in the face of crises. These strategies focus on institutional preparedness and recovery, but also go beyond that as they seek to strengthen the performance of public authorities and improve overall levels of good democratic governance.

Until relatively recently, policy frameworks for dealing with disaster management focused on vulnerability (i.e., mapping the deficiencies and shortcomings of a community that make it susceptible to hazardous events and

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[1] Council of Europe, CDDG (2020)20 – Democratic Governance and COVID-19 Report, adopted by the CDDG at its 12th meeting, 25-27 November 2020, by videoconference. The special report of the European Committee on Democracy and Governance is based on contributions from member States and discussions held by the Committee and thematic conferences. The report will be complemented by an update by the end of 2021.

impacts); further developments, however, have stressed the importance of promoting disaster risk reduction by building resilience, through focused priorities for action. The international agreement on the Hyogo Framework for Action (HFA) in Kobe, Japan in 2005 gave this trend momentum, which was further reinforced through conclusion of the 2015 Sendai Framework for Disaster Risk Reduction (SFDRR)[2].

Adopting strategies to enhance resilience at local level may therefore be considered as a manifestation of the development vision and plan agreed by public authorities at international level.

Resilience is therefore a crucial element of the development vision at local level, which should, in turn, be reflected in local policies, strategies and the overall strategic municipal plan.

Resilience defines the capacity of "a system to resist, absorb and accommodate to the effects of a hazard, in a timely and efficient manner" (UN). Resilience is highly dependent on the context and should be understood within a multidimensional system of references (i.e., ecological, social, economic, political) (Manca et al, 2017). When considering the resilience of a community, all the elements and relations that form a community should be taken in consideration. Physical robustness (i.e., environmental, and infrastructural) alone is not sufficient to constitute a resilient community.

Resilience should also be considered an important guiding principle for local policymaking in terms of good democratic governance. Drafting and implementing strategies to enhance resilience at community level requires an integrated approach, that is mindful of the broader role and responsibilities of a public authority. Resilience policies should not be developed in a vacuum but rather in a transversal way covering all policy sectors.

Enabling community resilience, therefore, implies:

- Assessing the community by integrating social, economic, institutional, and physical elements.
- Identifying local needs, resources, and capacities.
- Fostering participation in decision-making processes.
- Promoting respect for the 12 Principles of Good Democratic Governance.

1.2 ReBuS TOOLKIT

OBJECTIVES

ReBuS – Resilience Building Strategies Toolkit has been developed as a resource to be used by public authorities when drafting strategies and implementing actions aimed at building community resilience. The tools contained within offer guidance to public authorities on how to assess resilience and identify the relevant actions needed to improve it at community level.

The focus on *"community"* in the toolkit may be understood as synonymous with a local authority or it may transcend local administrative boundaries to encompass regions, and inter-municipal (IMC) or cross-border (CBC) cooperation settings.

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[2] United Nations Office for Disaster Risk Reduction (UNDRR), Sendai Framework for Disaster Risk Reduction 2015-2030 Reduction, Editor. 2015, Third UN World Conference on Disaster Risk Reduction (WCDRR): New York, USA.

ReBuS is intended to complement existing emergency and crisis management tools, building on preparedness and prevention practices and mechanisms. The approach and instruments in ReBuS can help harmonise the overall intervention of public authorities in face of crises.

Ultimately, ReBuS is:

- **An awareness raising tool** – Promoting a holistic understanding of resilience and robustness.
- **An analytical tool** – Measuring the overall ability of a community to persist over time and maintain performance capacity through targeted strategies.
- **A planning tool** – Guiding public authorities to incorporate resilience and robustness in emergency and strategic planning.
- **A learning tool** – Enabling a capacity-building process for public authorities and practitioners.

STRUCTURE

ReBuS Toolkit is composed of:

1. ReBuS Handbook
2. ReBuS E-Tool
3. ReBuS Capacity building materials

The Handbook is organised in the following sections:

- Section 1 – Understanding Resilience
- Section 2 – Enabling Community Resilience
- Section 3 – Resilience Building Strategies

The E-Tool is organised in the following sections:

- Section 1 – Society index
- Section 2 – Economy index
- Section 3 – Governance index
- Section 4 – Infrastructure index
- Section 5 – Environment index
- Section 6 – Community resilience assessment
- Section 7 – Challenges and resources for Resilience Building Strategies

The capacity building materials are:

- ReBuS video tutorial
- ReBuS training: presentations, exercises and handouts for an interactive workshop that can be organised both online and in presence.

The following figure provides an overview of the main topics covered by each section of the Toolkit.
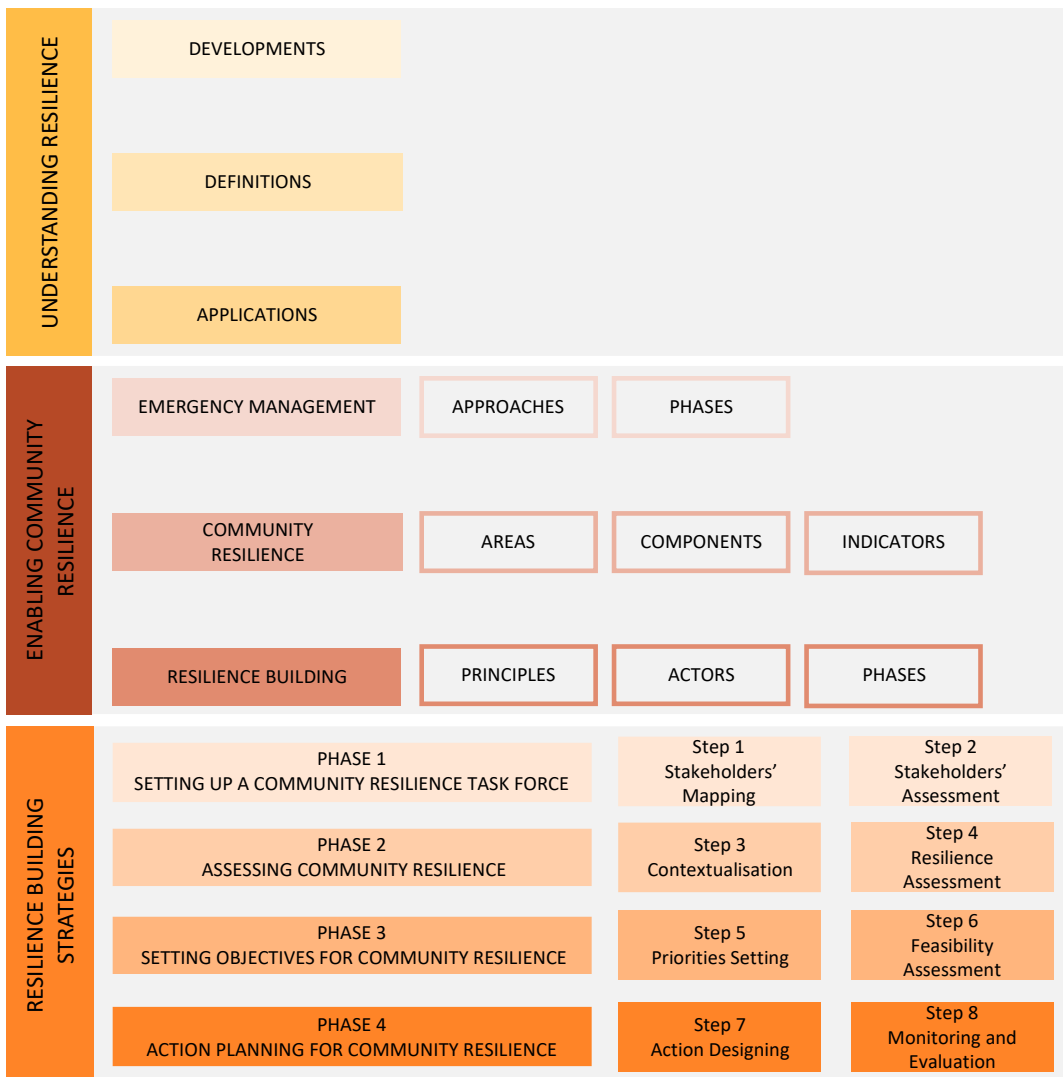
Figure 1 – Toolkit structure

PROCESS

ReBuS Toolkit is a highly adaptable and versatile instrument that can be implemented in different administrative, territorial and cultural settings across Council of Europe Member States. The following paragraphs aim to shed light on the main aspects of the implementation process for potential users.

ReBuS Toolkit may be implemented at several administrative/governance levels:

- Local level
- Regional level
- Inter-municipal level
- Cross-border level.

An interested user may be considered in terms of

- Beneficiary of the process (e.g., a local authority implementing ReBuS).
- Coordinating actors of the process that supports the implementation in different contexts (e.g., a central public authority promoting ReBuS in specific territorial/administrative contexts.

Potential users of ReBuS are most likely (though not exclusively) to be found among the following actors:

- Central level public authorities (in which case the user needs to identify implementing partner/s at local/regional level).
- Public authorities at local and/or regional level.
- Associations of public authorities (e.g., association of municipalities)
- Civil protection agencies.

An interested user should:

- Read through the Toolkit.
- Consult with local/regional/national actors who may be interested in implementing ReBuS as a means of identifying where/with whom/what level to begin implementation (e.g., one or more administrative units, region, etc.).
- Contact the Centre of Expertise for Good Governance for advice and further assistance.

When launching ReBuS in each context, the following steps will be taken:

- The user/implementing partner identifies a team of local experts.
- The local team of experts will be invited to a workshop with the Council of Europe with the aim of:

    - Developing understanding and knowledge of all elements of the ReBuS Toolkit.
    - Undertaking a situation and needs analysis of the context in which implementation of ReBuS is planned.
    - Prepare a first draft Action Plan for ReBuS implementation.

Users/implementing partners will follow the four phases of implementation as set out in the Toolkit as follows:

- Establish a dedicated working group on resilience at community level, based on a thorough and transparent mapping and evaluation process.
- Assess resilience by means of specific indicators that allow for an all-encompassing analysis of all elements of the target community.
- Set objectives for the vision of resilience at local level that reflect existing needs, priorities, and take in consideration existing resources.
- Translate the objectives for resilience into action.

2 UNDERSTANDING RESILIENCE

Objectives	Key messages
Establish resilience as a policy approach embedded in disaster risk reduction frameworks	Resilience is a multi-dimensional concept, encompassing vulnerability, exposure, risk, and hazards.
Understanding resilience and its focus	Resilience is "The ability of a system, community or society exposed to hazards to resist, absorb, accommodate, adapt to, transform 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 through risk management" (UNDRR 2016).
Using resilience	Resilience is about: - Embracing change. - Reducing inequalities for change. - Bouncing forward.

2.1 DEVELOPMENTS

DISASTER RISK REDUCTION AND SUSTAINABLE DEVELOPMENT[3]

Disaster risk reduction (DRR) is a discipline that focuses on both the study and the practice of disaster management. Specifically, it may be said that it is concerned with hazards and their relation to vulnerability and resilience (i.e., a hazardous event becomes a disaster considering the vulnerabilities of a system, and its effects may be limited considering the resilience of such system).

The impact of climate change and the increasing incidence of hazards emerging in communities world-wide have led to the recognition of DRR as an essential element to ensure sustainable development of societies. Several international documents and agreements have placed DRR as a priority in overall development strategies at all policy levels. It is in the policy and practice arena of disaster management and disaster risk reduction that resilience comes in to play.

FROM VULNERABILITY TO RESILIENCE[4]

Resilience is associated with the response of communities to the impact of external stressors, such as natural and man-made hazardous events. Resilience encapsulates a powerful, proactive message: responding means reducing risks and impacts.

Resilience came to the fore as a policy approach back in 2005 with the Hyogo Framework for Action (HFA), gaining in prominence in 2015 with the Sendai Framework for Disaster Risk Reduction (SFDRR) (*see more*

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[3] URP - Urban Resilience Project. Island Press and The Kresge Foundation, (2017). *Bounce forward – Urban Resilience in the Era of Climate Change*. Island Press

[4] Fuchs, S., & Thaler, T. (Eds.). (2018). *Vulnerability and resilience to natural hazards*. Cambridge University Press

below). The focus on resilience represents a paradigm shift in policies and practices around disaster management, which previously focused solely on the question of vulnerability.

Vulnerability, much like resilience, is a difficult to define term, that has been tackled by research and policy studies interested in disaster management and response. It is often put in relation with concepts such as risk, exposure and, indeed, resilience.

Previous frameworks concerned with the impact of natural disasters in societies, such as the Strategy and Plan of Action, launched in the 1994 World Conference on Natural Disaster Reduction, recognised a crucial role of vulnerability (and implicitly of its assessment) in reducing the impacts of natural hazards in society: while natural hazards that lead to disasters can be viewed as beyond the human control, vulnerability, in turn, may be considered as result of human activity (Cutter, 2018). In this sense, such approach entailed mapping a system (e.g., a community) in terms of deficiencies and weaknesses that make it susceptible to hazardous events and impacts, so to better prepare for the future. Such analysis and measurements of vulnerability have been performed through different systems (from Geographic. Information Systems – GIS maps, to the development of vulnerability matrixes), but the most common one remains the use of indicators which entail or are linked to different goals and targets for reducing the vulnerability of a system (e.g., number of fortified bridges in a flood prone area).

Vulnerability, however, is usually considered more in (infra)structural terms rather than social or holistic approaches. In this sense, in analysing risk, actors involved in disaster management practices tend to focus on the identification of structural vulnerabilities, put in relation with hazard and exposure (Prior et al, 2017).

PARADIGM SHIFT IN DRR[5]

In the policy arena, the paradigm shift from reducing disaster vulnerability to enhancing resilience was triggered by the international agreement on the Hyogo Framework for Action (HFA) in Kobe, Japan in 2005 (Cutter, 2018; Briceño, 2015), by means of which two important reorientations took place:

- A terminology shift from "natural disasters" to disasters or natural hazards. Such shift is an important one as it leaves behind the previous perception/sense of impotence in the face of natural phenomena that cannot be controlled (i.e., indeed, traditional policies and practices views were mainly concerned with the preparation and response to a disaster) and paves the way to a more proactive and addressable ground: reduce vulnerability and increase resilience, by means of risk reduction and management policies.
- The concept of resilience becomes the 'symbol' for promoting risk reduction for a safer future.

Following the HFA (2005), the Global Platform meeting in Sendai, in 2015, produced the Sendai Framework for Disaster Risk Reduction (SFDRR) – as a commitment to advance disaster risk reduction and build resilience, through focused priorities for action. The Sendai Framework is one of the most important programmatic documents in terms of resilience. It must be stressed that the targets and metrics used to assess concordance with the SFDRR currently set the framework within which debates on the linkages between vulnerability and resilience are caried out on a global scale (e.g., Making cities resilient Initiative of UNDRR). Since 2015, thus, it may be said that resilience has increasingly become an encompassing term for policies and strategies aimed at disaster risk reduction, while vulnerability has been used more in the context of technical/research discourse (e.g., in the context of risk assessment) rather than in policy terms (Fekete & Montz, 2018).

[5] Cutter, S. L. (2018). Linkages between Vulnerability and Resilience. In S. Fuchs & T. Thaler (Eds.), *Vulnerability and Resilience to Natural Hazards* (pp. 257–270). Cambridge University Press; Cambridge Core

2.2   DEFINITIONS

Although resilience is a relatively new policy solution, it has been subject to broad academic and policy discussion. To better understand the context in which the ReBuS Toolkit has been developed and will be applied, the broad lines of the current debates and trends around resilience are presented below.

>   Definitions of resilience

The generally accepted definition of resilience is: "The ability of a system, community or society exposed to hazards to resist, absorb, accommodate, adapt to, transform 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 through risk management" (UNDRR 2016).

Resilience is recognised as a complex and multidimensional concept whose definition varies depending on the field of application and focus of study. The concept is ultimately concerned with understanding the response provided by systems and actors to hazards (Fekete & Montz, 2018).

Resilience may also be described as: "(…) the capacities of people, places, and infrastructure to not only cope with hazards, but also the longer-term adjustment and learning processes to adapt to future threats" (Fuchs & Thaler, 2018, p.3).

>   A holistic paradigm for crisis management

Resilience describes the current holistic paradigm of disaster and crisis management. It is nevertheless notoriously difficult to define as it remains a highly relative term: "Which entities (e.g., individuals, households, communities, cities, societies) should be resilient to which shocks (e.g., earthquakes, storms, manmade threats) at which magnitudes (e.g., everyday struggles or rare extreme events) within which boundary conditions (e.g., targeted speed and level of recovery) need to be defined for every case, every research study" (Scherzer et al., 2019, p. 3).

For the purpose of this Toolkit, resilience is understood to:

- **Comprise all the elements of a given system** (i.e., community) – A resilient community is one in which social and physical elements can withstand, adapt, and recover in the face of given stressors (e.g., hazards).
- **Consider all potential disruptive events that might impact on a given system** (i.e., community) – It does not focus on the impact of specific hazardous events, but rather it tries to stimulate strengthened performance of the overall system in face of multiple (and unpredictable/unknown) hazards.
- **Encompass the entire disaster management cycle** – Prevention, mitigation, preparedness, response, rehabilitation, reconstruction, and recovery – with an operational focus on prevention and preparedness.

In short, this Toolkit advocates strengthening community resilience by addressing all components of the community, while reinforcing existing disaster management practices.

> Success factors for resilience[6]

Resilience is about:

- **Embracing change** – Society is ever evolving, with the constant changes having both positive and negative consequences on different contexts and groups. Resilience can therefore be understood as the capacity of a community to prepare and mitigate risks but also its readiness to avail of the opportunities offered by change.
- **Reducing inequalities** – Resilience strategies should promote equal opportunities to all members of a community as a means of combating rising inequality and sharing the risks and opportunities more fairly.
- **'Bouncing forward'** – Resilience can be an innovative approach that embraces the transformative potential of communities. However, it is often still considered as a reactive 'bouncing back', rather than enabling transformation/adaptation. Maintaining or returning to the status-quo is not always desirable – resilient communities, should strive to 'bounce forward' in response to crises.

APPROACHES TO RESILIENCE

Resilience is a multi-disciplinary, transversal and holistic concept which can be (broadly) classified as follows based on the field of application and respective research domains:

TYPE	DESCRIPTION	FURTHER REFERENCES
Physical/infrastructural resilience	Primarily the domain of engineers and one of the 'simplest' ways to understand resilience. It is concerned with the robustness of the infrastructure and, broadly speaking, seeks to preserve the status-quo in face of a shock.	URP, 2017, p.11
Ecological resilience	It is " a characteristic of ecosystems to maintain themselves in the face of disturbance." Resilience from an ecological perspective is linked with both ecosystems and communities/society as complex adaptive systems. This approach to resilience advances the idea of the adaptive and transformative capacities of systems in face of disturbance: when studying a system, disasters/disruptive events offer opportunities for innovation.	Adger, 2000, p.347 URP, 2017, p.12
Social resilience	Understood as "the ability of groups or communities to cope with external stresses and disturbances as a result of social, political and environmental change"; and "such stresses are often pervasive and related to the underlying economic and social situation". From a social sciences approach, resilience is mainly studied in terms of the factors that enable both individuals and communities to cope and adapt as a response to external stressors/change.	Adger, 2000, p. 348. URP, 2017, p.13
Socio-economic resilience	The policy-driven "ability of an economic system to recover from or absorb the negative impacts of adverse exogenous shocks".	Mancini et al., 2012, p.192

[6] URP - Urban Resilience Project. Island Press and The Kresge Foundation, (2017). *Bounce forward – Urban Resilience in the Era of Climate Change*. Island Press

2.3 APPLICATION

RESILIENCE IN EMERGENCY MANAGEMENT POLICIES[7]

In the framework of emergency management policies, resilience is often considered as one avenue of response to disasters that is addressed mainly through the mechanisms and interventions of civil protection agencies.

High levels of resilience are often understood as testament to a well-functioning system of disaster response and, as such, resilience is perceived as being closely linked to civil protection (or equivalent) mechanisms. In this perspective resilience is about being efficient in:

- Mapping the risks in a specific context/community (e.g., earthquake).
- Drafting plans on how to respond when such risks turn in to disasters (e.g., plans for search and rescue, evacuation of population, temporary sheltering, etc.).
- Preparing and implementing the plan during the emergency/disaster.

RESILIENCE IN DEVELOPMENT POLICIES[8]

Resilience is considered as both an objective in itself, and also as a framework within which development goals are pursued.

Resilience is understood thus in a holistic approach.

Within such approach, resilience is:

- Embedded in the long-term vision for development of a system (e.g., community).
- Put in relation with all components of the system.
- Concerned with a wide range of hazards or threats that can obstacle the development of that system.

RESILIENCE IN LOCAL GOVERNMENT[9]

International agreements such as the "Hyogo Framework for Action (2005-2015)" and the UN Sendai Framework for Disaster Risk Reduction 2015-2030 (SFDRR), have given prominence to disaster risk reduction and resilience in development policies and strategies, especially at national level. Nevertheless, introducing resilience in concrete practice remains a challenge.

The role of local authorities is crucial in ensuring that local development processes reflect resilience targets and goals agreed upon at national level. It is at community level that sustainable development and resilience are fostered and developed. Indeed, the SFDRR recognises the community as a starting point for building resilience and calls for local government to play a more pivotal role in reducing risk.

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[7] Mccreight, R. Resilience as a goal and standard in Emergency Management. Journal of Homeland Security and Emergency Management · January 2010

[8] Croese, S., C. Green, and G. Morgan, *Localizing the Sustainable Development Goals Through the Lens of Urban Resilience: Lessons and Learnings from 100 Resilient Cities and Cape Town.* Sustainability, 2020. 12(2): p. 550.

[9] UNISDR (2018). Implementation guide for local disaster risk reduction and resilience strategies Words into Action Guidelines. A companion for implementing the Sendai Framework target E

The SFDRR takes a holistic approach to resilience not merely as a measure for reducing disaster risk, but rather as an outcome and by adopting a disaster risk management rather than disaster management approach.

Key strategic documents setting objectives at international and European levels for fostering resilience among communities are presented in annexes 6.7 and 6.8.

3   BUILDING COMMUNITY RESILIENCE

Objectives	Key messages
Establish resilience within the framework of emergency management.	Resilience building should imply consolidating existing emergency management practices and aim to harmonise such frameworks within the overall community approach.
Introduce the main concepts necessary to build community resilience.	A community is a complex system that requires an all-encompassing approach in terms of building its resilience, that focuses on its physical and social characteristics.
Lay the foundation for Resilience Building Strategies, providing insights on main principles, key actors, and standard phases.	Building resilience may imply different aspects in different contexts – however, there are basic elements that can be applied transversally to different communities.

3.1   EMERGENCY MANAGEMENT

APPROACHES[10]

Emergency management systems and practices are part of the overall Disaster Risk Reduction (DRR) frameworks. Encompassing elements from fields such as ecology, social sciences and engineering, they are principally concerned with physical/infrastructural vulnerabilities.

The DRR approach also considers social factors that may impact on the vulnerability of a system (e.g., poverty, inequity, poor governance, etc.). The DRR approach has opened new pathways in relation to vulnerability and resilience by considering physical elements and social constructs in evaluating risk. However, some limitations of DRR emerge, especially when faced with complex systems such as communities (URP, 2017):

- **Specific hazard approach** – DRR is associated more with the study and practice related to specific hazards (e.g., earthquake) rather than long term processes of change (e.g., overall climate change discourse).
- **'Known' threats approach** – DRR focuses usually on what can be called 'known' disasters – although they might not be easy to predict (e.g., earthquake), there is a history of occurrence that enables the design and deployment of prevention and response measures.

Although such approach is appropriate when in tackling the 'known' threats to communities, recent events, such as the COVID-19 pandemic, as well as the rapid changes to communities and society call for different strategies and tools able to provide guidance and support in response to potential 'unknown' disasters.

This is where resilience comes in to play as a framework that guides communities to consolidate their practice in dealing with 'known' hazards, while preparing them, from a holistic and interdisciplinary approach, to face unprecedented and unforeseeable changes.

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[10] URP - Urban Resilience Project. Island Press and The Kresge Foundation, (2017). *Bounce forward – Urban Resilience in the Era of Climate Change*. Island Press

The disaster management cycle usually defines the process carried out by public institutions in collaboration with economic operators and civil society (i.e., at all levels) so to limit the impact of disasters and pave the way for recovery in the aftermath of a disaster (Khan et al., 2008).

Although there are different interpretations in terms of the phases of the cycle and even their names, it is generally agreed that specific activities need to be undertaken throughout the entire cycle to ensure the reduction of risk and impacts/effects of disasters (Coetzee and Van Niekerk, 2012).

The management cycle also includes the design of policies and operational plans aimed at mitigating the impact of disasters on people, property, and overall infrastructure.

The following macro-phases may be identified through the different models (Khan et al., 2008):

- **Before a disaster** – Mitigation and preparedness: activities designed to reduce risk, thus, to limit potential losses in case of a disaster, such as awareness raising campaigns, strengthening infrastructure works, development plans, etc. These can sometimes be considered as mitigation and preparedness activities.
- **During a disaster** – Emergency response: activities that aim to prevent further degradation and to minimise the suffering of victims (e.g., search and rescue interventions, building of temporary shelters, etc.).
- **After a disaster** – Response and recovery: activities aimed at promoting recovery and rehabilitation of communities.

Figure 2 – Disaster Risk Management Cycle - UNISDR

Resilience might be considered a constant variable throughout the emergency management process: it is transversal to all phases, but a focus is given in the pre-disaster phases (i.e., prevention and preparedness). Resilience strategies and measures focus on strengthening a given system in face of hazards, not only on reducing the impact or the potential loss.

Specifically, resilience is:

- Built and fostered in the pre-disaster phases.
- Assessed during the disasters.
- Tangible in the post-disaster phase.

3.2 COMMUNITY RESILIENCE

'Community' is understood as a 'group of interacting people living in a common location'). The community is defined as a more cohesive social unit compared to 'society', due to the presence within a community of a 'unity of will', but also of systems of shared values and norms (Council of Europe/ISIG, 2017).

The resilience of a community is determined by the relationship between its members and components and it is not a mere sum of everyone's resilience.

Community resilience implies:

- **Looking at 'communities' beyond territorial and administrative frameworks** (i.e., Cross-Border Cooperation) – The impacts of crises on communities rarely respect such borders.
- **Taking in consideration the interaction between community components and their sum** – Resilient individuals do not make resilient communities, as the resilience of the 'community' system lies in the interaction and relations between its components and not only in individual features (Prior et al, 2017). Similarly, vulnerable individuals or vulnerable groups in society do not account for 'vulnerable communities', but rather they may potentially contribute to the overall 'vulnerability' of a system/community.
- **Considering all factors shaping a community** – A community is characterised by physical/tangible elements that may refer to infrastructure, environment, demographics. However, there are underlying interactional factors that shape communities, which should also be considered to understand the implications of a crisis situation such as 'identity' related factors (e.g., shared systems of values) or 'functionality' factors, like the outreach perimeter of national-service delivery (e.g., healthcare system, first response/rescue mechanisms, etc).

Community resilience has been defined as "the ability of a community to prepare and plan for, absorb, recover from, and more successfully adapt to actual or potential adverse events in a timely and efficient manner including the restoration and improvement of basic functions and structures" (Cutter et al., 2014, p. 65).

A resilient community will "eventually suffer fewer losses in case of a disaster and will be able to recover more quickly" (Scherzer et al., 2019, p.1). Community resilience is also described as "a complex web of social interactions, characteristics and capacities that enable a community to live with the hazards they face" (Crowley Née Donovan & Elliott, 2012).

Resilience strengthening strategies and measures should, thus:

- **Start from a deeper understanding of the context** – They should take into consideration the existing relations, interactions and systems of shared values and norms of the community at stake.
- **Implement participatory approaches** – They should include communities and its members (i.e., stakeholders) in the design process.
- **Embrace a holistic approach** – They should go beyond the 'disaster-centred' discourse and consider all aspects of a community.

When designing resilience enhancing strategies for communities, the following elements may be considered[11]:

- Characteristics of the community: both tangible/physical and social.
- Capacities and resources at local level.
- Transformative and adaptive potential or intelligence of a community.

RESILIENCE AS A GUIDING VALUE FOR COMMUNITIES

Resilience itself needs to be embedded in the system of shared values and norms of a community. In so doing, communities can internalise 'resilience' as a founding pillar/value, and thus adhere 'willingly' to proposed measures and strategies, ensuring their sustainability.

The COVID-19 pandemic serves as an example here. The response of communities to the measures and restrictions adopted by public authorities has been very different, even in the same national or regional territories. Some communities adhered immediately and demonstrated a high level of compliance, while others hesitated or even opposed. Italy, for example, registered a high diversity in compliance behaviours across its regions[12]. Although it is perhaps too soon to draw conclusions from the response to and impact of the COVID-19, some hypothesis can be advanced.

The way communities responded can be linked to their level of awareness and understanding of the impact of the COVID-19. An increased awareness of the danger can account for increased preparation and thus, in this case, greater levels of compliance with the new regulations. Usually (although not always), when we talk about natural disasters increased awareness is linked with the experience: communities that are more exposed to or have previously experienced disasters, will better prepare and better comply with measures.

However, the COVID-19 experience demands another change in mind-set when talking about emergency management. The highly unforeseen and extensive character of the pandemic made it so that no community, not even those considered forerunners in building resilience and sustainable development, were 'prepared' to face this event. This experience alerts us to the fact that new approaches are needed to ensure that measures and strategies are efficient and sustainable.

It could be that the new restrictive measures and regulations adopted in face of the pandemic are better understood by some communities. The new restrictions were better received and respected by some communities as they were perceived as corresponding to (already existing) shared values and norms of the community, such as trust in institutions, collective good, etc.

Therefore, it could be that a more holistic approach in designing strategies and measures to strengthen resilience is needed to promote resilience as a guiding value/principle inherent to communities (and their development), thereby ensuring the sustainability of overall strategies. This can be achieved through the promotion and strengthening of good democratic governance at local level.

DESCRIBING THE RESILIENCE OF A COMMUNITY

Building resilience at community level starts from a deeper understanding of the challenges and opportunities for resilience inherent to that community itself.

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[11] Norris, F.H. et al Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness. American journal of community psychology, 2008. 41(1-2): p. 127-150

[12] Logo Grab report: Italian COVID-19 Quarantine – using public data and visual AI to identify violations, March 2020, available at: https://www.logograb.com/assets/downloads/Covid19_Italy_summary_230320.pdf

The following guiding questions are provided to better frame the challenges faced by the community in terms of resilience[13]:

- Are the basic needs of the community met?
- Is there an accessible healthcare system? Do members of the community follow healthy lifestyle practices?
- Is the average standard of living of members of the community a decent one?
- Is the community a safe place?
- Are there accessible and open learning opportunities for all members of the community?

The following guiding questions are provided to better frame opportunities for the community in terms of resilience[14]:

- What are the values of the community?
- Is the community cohesive?
- Does the community provide equal opportunities to all its members?
- Is the community open and does it treasure freedom?
- Is good democratic governance a guiding principle for the communities' decision-makers?

ReBuS can help operationalise resilience in a community across five main areas where the above-mentioned challenges and opportunities can be 'observed' (i.e., at community level):

- **Society** – Describing the social wellbeing and vitality of the community.
- **Economy** – Describing the economic wellbeing and dynamism of the community.
- **Governance** – Describing the institutional and political setting and decision-making processes.
- **Infrastructure** – Describing physical elements (i.e. exposed values) of a community.
- **Environment** – Describing the sustainability of a community's environmental health and ecosystems.

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[13] Further elaboration from URP, 2017.

[14] Idem
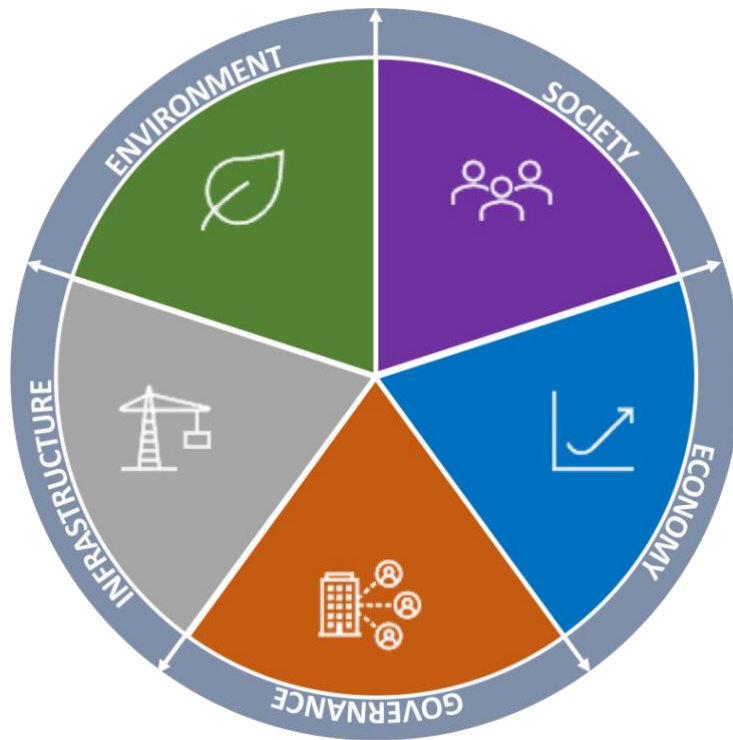
Figure 3 – ReBuS Areas of Resilience of a Community

Across each of the 5 areas, ReBuS components and indicators describe community resilience as illustrated by the following figures.
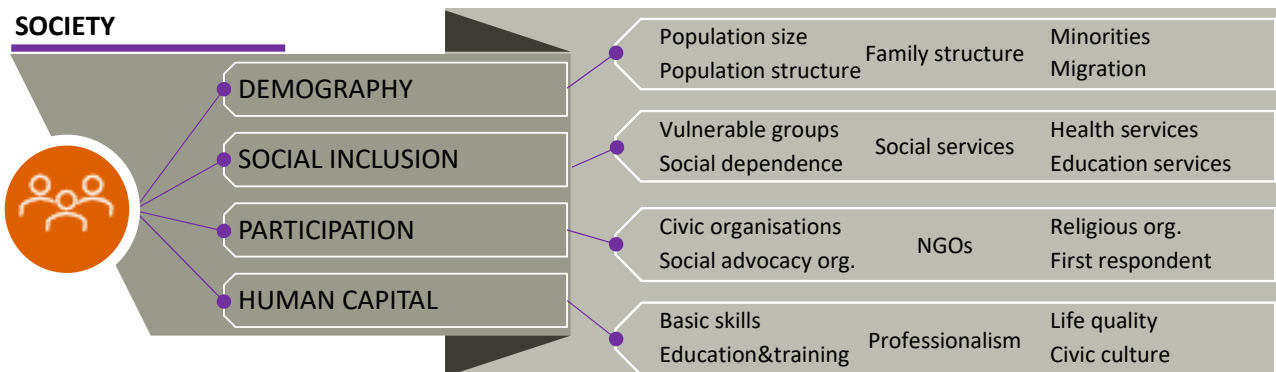
Figure 4 – Area 1, Society

ECONOMY

PRODUCTIVITY PROFILE			
Primary	Tertiary	Quaternary	
Secondary		Quinary	

WELFARE PROFILE			
Income	Welfare benefits	Cultural offer	
Property		Public safety	

EMPLOYMENT			
Unemployment	Self-employment	Vocational training	
Sectors		Brain drain	

RISK FINANCING			
Personal insurance	Infra insurance	Reinsurance	
Property insurance		Hazard mitigation	

Figure 5 – Area 2, Economy

GOVERNANCE

LEADERSHIP			
Autonomy	Cooperation	Open & Transparent	
Coordination		Accountability	

CITIZENS ENGAGEMENT			
Elections	Representation	Trust	
Decision making		Rights & Obligations	

SERVICES			
Social services	Education	Housing	
Health		Transport	

RISK GOVERNANCE			
Risk assessment	Emergency	Risk awareness	
Risk mitigation	Response	Risk perception	

Figure 6 – Area 3, Governance

INFRASTRUCTURE

URBANISATION			
Population density	Dispersion	Build infra	
Urban centres		Regulations	

UTILITIES			
CIs	Water & Sanitation	Energy	
Protective infra		Regulations	

TRANSPORT			
Private	Sustainable	Infrastructures	
Public		Regulation	

ICT			
Networks	Information	Early warning	
Providers		Regulations	

Figure 7 – Area 4, Infrastructure

ENVIRONMENT

ECOSYSTEMS			
Biodiversity	Green	Recovery	
Blue		Regulations	

LULC			
Agricultural areas	Wildlands	Protected areas	
Forests		Regulations	

HERITAGE			
Sites	Social value	Attractivity	
Economic value		Regulations	

ENVT HEALTH			
Climate change	Water pollution	Air pollution	
Soil erosion		Regulations	

Figure 8 – Area 5, Environment

3.3 RESILIENCE BUILDING

> Promoting Good Democratic Governance

Resilience strategies are an integral part of the strategic vision of a community, and as such they imply a political choice in terms of priority setting, resource allocation, etc.

Building the resilience of a community is highly linked with the promotion and application of the 12 Principles of Good Democratic Governance[15]. A community that demonstrates strong adherence to the 12 Principles of Good Democratic Governance is more prepared to build its own resilience strategies.

The following table aims to illustrate how good democratic governance, understood through the prism of the Council of Europe's 12 Principles of Good Democratic Governance contributes to enabling community resilience.

Table 1 – Good Democratic Governance - added value for community resilience

12 Principles of Good Democratic Governance	ADDED VALUE FOR COMMUNITY RESILIENCE
Principle 1 – Participation, Representation, fair Conduct of Elections	Fostering participation at local level is crucial to build resilience. Citizens should be an active part of the process of building resilience strategies. Ensuring that resilience strategies are developed with the effective participation of as many stakeholders as possible.
Principle 2 – Responsiveness	Ensuring that citizens expectations and needs are taken in to account in the policies and strategies aimed at building resilience is key to ensure ownership at community level. Ensuring a timely response to citizens' requests and complaints, in all phases of an emergency, is essential to cementing solid partnerships across the community to embed resilience.
Principle 3 – Efficiency and effectiveness	Ensuring efficient and effective service is a success factor for resilience. Services should be modular and redundant so to allow for service delivery to the extent possible during and after a disaster.
Principle 4 – Openness and Transparency	Informing citizens about resilience topics on the political agenda is important for trust-building in a community. Citizens, stakeholders, and media should be actively informed (and consulted) in all phases of decision-making regarding Resilience Building Strategies, from setting priorities to monitoring and policy tuning.
Principle 5 – Rule of Law	Complying with laws and regulations ensures that the common interests of all residents prevail in building resilience (strategies). Reducing inequality is key in building resilience.
Principle 6 – Ethical Conduct	Counteracting corruption and conflicts of interests ensures equal treatment in face of a disaster for all citizens, irrespective of their connection with elected representatives. Moreover, it contributes to

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[15] Good Democratic Governance – the responsible conduct of public affairs and management of public resources – is encapsulated in the Council of Europe 12 Principles of Good Democratic Governance. The 12 Principles of Good Democratic Governance are enshrined in the Strategy on Innovation and Good Governance at local level, endorsed by a decision of the Committee of Ministers of the Council of Europe in 2008. They cover issues such as ethical conduct, rule of law, efficiency and effectiveness, transparency, sound financial management and accountability. https://www.coe.int/en/web/good-governance/12-principles

	increasing trust of citizens in authorities and institutions which in turn is a key element of building resilience.
Principle 7 – Competence and Capacity	The Committee of Ministers of the Council of Europe have recognised the importance of local government capacity to deliver public services and engage the inhabitants in the democratic functioning of local authorities, and of the need to develop this capacity further.[16] This takes on added importance to ensure quality service delivery in face of disasters.
Principle 8 – Innovation and Openness to Change	Fostering innovation is one of the key success factors for resilient communities: innovative communities embrace change and transform themselves in face of disaster. Fostering Innovation and Openness to change is key to building transformative and adaptive capacities at community level.
Principle 9 – Sustainability and Long-Term Orientation	Promoting a sustainable, long-term vision at community level is closely linked with building resilience in terms of priority setting. A resilient community is one that prepares for future changes and risks, both known and unknown.
Principle 10 – Sound Financial Management	Ensuring sound financial management, including risk management practices, is an essential component of Resilience Building Strategies as it allows for considering and including in annual budgets measures directly targeting resilience.
Principle 11 – Human Rights, Cultural Diversity and Social Cohesion	Ensuring that human rights are observed, and their implementation progresses for all segments of the population is of key importance to ensure the inclusiveness and sustainability of resilience policies and action.
Principle 12 - Accountability	Ensuring that all decisions are properly explained to residents is of paramount importance as it increases the overall awareness of a (resilient) community. Ensuring the existence and consistent use of effective remedies again maladministration is key in ensuring resilience as it increases the community capacity to monitor and assess decision making processes.

> **Fostering Participation**

Resilience is built at local level by means of participatory approaches. Public authorities may find an important support in their citizens and stakeholders for setting up efficient resilience strategies, as well as implementing and monitoring them:

- **Citizens** – Informed and aware citizens support the resilience of a community. Engaged and active citizens build the resilience of a community. Building resilience implies first raising awareness across the community and supporting the increased understanding around the risks and as well opportunities to which a community is exposed. Engaging citizens in initiatives and participatory process on resilience building will increase their ownership of the new strategies, as well as strengthen the cohesiveness and trust at local level.
- **Stakeholders** – A public authority may find solid partners in the right stakeholders from actors active in emergency management, to schools and cultural associations, stakeholders can support both the drafting and implementation of a resilience strategy.

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[16] Recommendation CM/Rec (2007)12 on capacity building at local and regional level

The following table illustrates how citizens and stakeholders may be engaged in different phases:

Table 2 – Civil participation and disaster management phases

PHASES	PARTICIPATION
Pre-disaster phases	The engagement is mainly concerned by awareness raising, planning, and preparing. Stakeholders may be perceived in this phase both as beneficiaries and as protagonists. In fact, partnerships with local civil society, school systems, etc, may support a more efficient communication and ensure a bigger outreach.
During a disaster	During a crisis, different stakeholders may support the alleviation of suffering or support service provision in case of interruption. E.g. – train substituted by buses. The role of civil society may be crucial – example of COVID-19 animation activities at local level (e.g., sport and cultural associations, psychologic support, etc).
After a disaster	In this phase the engagement of citizens and stakeholders may be related to the recovery after a shock, when it may be said that adaptive and transformative capacities of a system (i.e., community) are tested. Engagement appears thus ever so important, as a recovery phase entails the re-construction and/or transformation of the system – engaging citizens and stakeholders may contribute to promote ownership of the changes and thus build consensus for a more rapid recovery.

Engaging communities and relevant stakeholders in resilience initiatives contributes to:

- Planning based on needs assessment.
- Including local knowledge and awareness in strategies, as local knowledge is a key factor for ensuring efficient resilience strategies, especially for what concerns the 'known' threats to the community.
- Ensuring that all voices and instances of a community are considered and are represented.
- Building consensus and cohesiveness.

> **Assessing Resilience**

Assessing resilience is key for establishing strategies and long-term vision at community level.

In the process of designing resilience strategies, the assessment of resilience aims to identify:

- **The rationale of the strategy** – What does the community want to strengthen in terms of resilience? What are the changes and the threats that the community is facing? Who are the actors?
- **Challenges and resources of the community** – Are services and activities of the community diversified, redundant and modular? Is local governance promoting the 12 Principles of Good Democratic Governance?

Resilience is a relative concept in the sense that, it cannot be analysed in absolute terms, but it can be analysed in relation to a number of factors[17]:

- **Resilience of what?** What is the unit of analysis? Is it the community, the region? What components of the community should be analysed?

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[17] Further elaboration from URP, 2017 and Scherzer et al., 2019.

- **Resilience to what?** What are the changes that may impact the community? In what way? Positive or negative? To what extent? Short term or long-term?
- **Resilience for whom?** Who are the vulnerable actors in community? Are they vulnerable due to physical/infrastructural factors (e.g., flood-prone neighbourhood near a river)? Are they vulnerable due to social factors (e.g., lack of resources, subject to discrimination, etc.)?
- **Resilience by whom?** Who are the local decision-makers when it comes to resilience? What other actors contribute to the decision-making process? Are all stakeholders represented in the decision-making process?

Several approaches to the assessment of resilience have been tested, from qualitative approaches (i.e., experts studying one context by means of interviews, workshops, etc.), to quantitative approaches (i.e., use of statistical data and models), as well as mixed approaches in which both qualitative and quantitative data is considered. The most common way to approach the assessment of resilience is by means of indicators and indexes of resilience, which can be performed both with quantitative and qualitative data (Cutter et al., 2003, 2010; Guillard-Gonçalves et al., 2015; Fekete, 2019; Schipper and Langston, 2015).

When the assessment aims to further guide the process of building resilience of a community, self-assessment appears to be the most efficient way. Self-assessment tools, such as ReBuS, contribute as well to raising awareness on resilience and stimulate users (such as public authorities) to look at the community from a different perspective, a more comprehensive perspective on the community than the risk assessments usually carried out to reducing the vulnerability of communities.

Resilience assessment is not a one-time exercise. In fact, it is recommended to perform such an assessment, both in the process of setting new strategies as well as during the implementation so as to ensure the monitoring and evaluation of the strategy itself.

ACTORS

> Institutional Actors
Different institutional actors can contribute to building resilience at community level, such as:

- Decision-makers
- Public bodies and agencies
- Cooperation institutions

Decision-makers that may influence the process may be identified at different levels, from local to regional or even national, based on the context and framework existing in different countries. Relevant decision-makers may be identified also beyond the sphere of policies that usually deal with emergency management and disaster response (i.e., not only civil/population protection, environment but also welfare social services, cultural services, etc.).

Public bodies and agencies that are active at community level and support different development sectors, such as: education, environment, etc.

Moreover, the institutions that foster different types of cooperation between local and/or regional authorities are crucial for building resilience, as crisis and their impact do not respect territorial borders. In this sense the following types of institutions prove to be relevant:

- Cross-border cooperation institutions, such as EGTCs, Euroregions, etc.
- Inter-municipal cooperation institutions.

> Emergency Services Actors[18]

The response of communities and societies to disasters is usually set in Europe within the framework of Civil Protection bodies and agencies.

Such mechanisms differ greatly from one context/country to another, in terms of legislation, regulations, bodies and resources. However, usually they entail a national level coordination and priority setting, that is reflected at all levels of governance. Moreover, such mechanisms coordinate their work at European level, in light of the EU agencies and programmes such as the EU Civil Protection Mechanism, Emergency response Coordination Centre, etc.

In terms of legal or policy framework, such mechanisms usually envisage the following functions/tasks, at different governance levels:

- Risk assessment of occurrence of hazardous events.
- Design and implement plans related to the management of a disaster.
- Coordination of prevention, mitigation and recovery activities.

Objectives regarding the response to a disaster may include, among others:

- Protection of the population.
- Protection of the environment, both natural and built.
- Support to maintaining the delivery of services and normal activities of communities.
- Support the re-establishment of services within communities.

Moreover, such mechanisms are usually supported by different emergency services and first responders, such as:

- Law enforcement
- Firefighters
- Medical services.

> Civil society actors

During and in the immediate aftermath of disasters there is generally a cooperation between different governmental and civil society actors, that can be formalised or ad-hoc. Such partnerships usually aim to relieve suffering and support the recovery process.

Moreover, in building resilience and strengthening preparedness of a community, civil society actors have a crucial role in ensuring a comprehensive representativeness of community instances and groups.

Among civil society actors, there are:

- NGOs
- Youth associations
- Associations representing the interests of minority groups
- Associations representing the interests of disadvantaged groups
- Volunteering associations
- Awareness raising associations
- Entrepreneurs from different fields
- Private foundations

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[18] IMC, (2019). Engaging Local Actors in Disaster Recovery Frameworks, IMC Worldwide Ltd, World Bank and European Commission - European Civil Protection and Humanitarian Aid Operations.

- Professional associations.

Building resilience at community level may mean different things in different contexts. However, four main standard phases can be identified, as follows:

- Phase 1 is focused on the creation of a Community Resilience Taskforce (CRT), as an expert working group supporting overall public authorities in the processes related to building resilience. CRT is established based on principles such as representativeness of local instances, capacities and knowledge in terms of emergency management and context awareness. The CRT should be established based on a structured process including stakeholders' mapping and assessment activities, to allow for transparency (i.e., show why and how members were selected) as well as for efficiency (i.e., members selected based on the potential added value to overall efforts for building resilience, i.e., capacities, knowledge, awareness).
- Phase 2 is focused on the assessment of the community resilience. The assessment aims to highlight both challenges and opportunities for resilience at community level. The assessment should be performed through a standard method and be evidence based.
- Phase 3 is focused on setting the objectives for community resilience, and thus setting the vision. Objectives should be formulated to reflect priorities at community level, as well as to be feasible and realistic.
- Phase 4 is focused on translating the set vision and strategy to concrete action plans.

4 RESILIENCE BUILDING STRATEGIES

Objectives	Key messages
Providing a step-by-step companion for each of the four phases of building resilience strategy.	Although communities are very diverse and may face different challenges and opportunities in terms of resilience, a structured approach should be adopted in setting resilience strategies, that envisages the following phases: - Establishing a dedicated workgroup on resilience at community level, based on a thorough and transparent mapping and evaluation process. - Assessing resilience by means of dedicated indicators, that allow for an all-encompassing analysis of all elements of a community. - Setting objectives for the resilience vision at local level, that reflect existing needs, priorities and take in consideration existing resources. - Translate the objectives for resilience in concrete action plans so to pave the way for the intervention.

The following section is intended as a practical companion that will guide users through the 4 phases and 8 steps of the implementation of the ReBuS Toolkit.

4.1 PHASE 1 – SETTING UP A COMMUNITY RESILIENCE TASKFORCE

The Community Resilience Taskforce (CRT) represents an informal working group that is going to support the public authority in the toolkit implementation at community level.

The taskforce will work in close contact with the public authority in all phases of the implementation of the toolkit, from assessment to strategy drafting and action planning.

Ideally the taskforce composition should demonstrate high levels of:

- Representativeness of local instances (e.g., minority groups, productivity sectors, etc.).
- Technical knowledge and capacities relevant for the toolkit implementation.
- Context awareness (e.g., be familiar with local specificities in terms of community composition, culture, risks that the community might face, etc.).

Furthermore, the process of establishment of the taskforce should be coordinated by the public authority implementing the toolkit.

For example, if the toolkit is implemented by a municipality, such coordination effort should be formed by:

- the Mayor.
- Elected representatives such as councillors from relevant policy areas (e.g., civil protection, environment, welfare, minorities etc.).
- Technical staff (e.g., senior civil servants from relevant departments).

To ensure a structured approach, as well as transparency, to the process of establishing the taskforce, the Toolkit proposes the following steps[19], that stem from the methodology proposed by the Civil Participation Toolkit of the Council of Europe as well (Council of Europe/ISIG, 2017):

- Step 1 – Stakeholder mapping (i.e., the identification of a preliminary list of potential members).
- Step 2 – Stakeholder assessment (i.e., the evaluation of the preliminary members for the purpose of final selection of the most adequate profiles of stakeholders).

STEP 1 – STAKEHOLDER MAPPING

The first step implies a preliminary identification of the stakeholders that will form the CRT.

Ideally the stakeholders of the taskforce should represent the diversity of the community, thus, they should come from different sectors and represent different groups at community level.

Two criteria should be considered in the brainstorming exercise for the purpose of drafting the preliminary list:

- Stakeholders background – stakeholders should reflect, in terms of their knowledge and expertise, the 5 areas of resilience of a community, as explained in Section 0: Society, Economy, Governance, Infrastructure, Environment.
- Stakeholders' category – generally, stakeholders will be selected from three broad categories that represent the community composition: institutional actors, emergency services actors and civil society actors (for examples of stakeholders pertaining to each category, see Section 3, ACTORS).

Recommendations:

- Ideally, for each of the 5 areas of resilience both institutional and civil society actors should be identified. However, this depends greatly on the community composition and resources. For instance, in the case of a small community, it might not be possible to identify both institutional and civil society actors for all the 5 areas.
- Stakeholders should be understood as organisations and institutions that delegate specific contact persons to the activities concerning the taskforce. However, based on the specificities of the community at stake, such actors can be identified also among individual citizens that are considered relevant in terms of expertise, representativeness, etc. (e.g., in small communities, citizens may volunteer in supporting emergency response related activities, although volunteering might not be always institutionalised in the form of associations).

It is key for the results of the brainstorming to be recorded in a structured way. The table below represents a potential tool in which to record the preliminary list – the table is as well integrated in **Annex 1 – Tool for stakeholders' identification**, for an easiness of use.

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[19] For further details on activities of stakeholder mapping, assessment, and further engagement in decision-making processes at local level, users may consult the Civil Participation in Decision-Making Toolkit of the Council of Europe at : https://www.coe.int/en/web/good-governance/toolkits.

Table 3 – Tool for Stakeholders Identification

AREAS OF EXPERTISE/RESILEINCE	Name of stakeholder	Type of actor (i.e., institutional, civil society)	Name and role of contact person	Contact details (email -phone)
SOCIETY	Stakeholder 1	Institutional	-	-
	Stakeholder 2	Civil society		
ECONOMY	Stakeholder 1			
	Stakeholder 2			
GOVERNANCE	…..			
INFRASTRUCTURE	…..			
ENVIRONMENT	…..			

STEP 2 – STAKEHOLDERS' ASSESSMENT

Once the preliminary list has been drafted, users should perform an assessment of each stakeholder in terms of:

- Relevance (i.e., capacity, expertise, knowledge) of the stakeholder for the purpose of the taskforce and for the overall activities concerned with assessing and improving resilience at local level.
- Interest (i.e., perceived willingness) of the stakeholder to be engaged in the task force.

The evaluation proceeds for each identified stakeholder individually.

In running this evaluation exercise, users will rely on their own knowledge of the context (i.e., Community) and on the stakeholder.

Thus, the guiding questions for the assessment will be:

- On Relevance:

  - Is Stakeholder X relevant for the taskforce? Does it have the right capacities to support the assessment under the Area of Resilience in which it was indicated?

- On Interest:

  - Based on past experiences of engaging Stakeholder X in activities at local level, is it going to be willing to participate? Are there motivations, incentives that could stimulate the stakeholder to participate?

During the brainstorming around each stakeholder, the following table should be used so to record the 'assessment' scores in terms of high or low relevance and interest.

Table 4 – Tool for stakeholders' assessment

AREAS	STAKEHOLDER DESCRIPTION		ASSESSMENT		NOTES
	NAME OF STKEHOLDER	TYPE OF ACTOR	RELEVANCE (High/Low)	INTEREST (High/Low)	
SOCIETY	Stakeholder 1		H	H	
ECONOMY	Stakeholder 1		L	L	
GOVERNANCE	Stakeholder 1		H	L	

INFRASTRUCTURE	Stakeholder 1		L	H	
ENVIRONMENT	Stakeholder 1		H	H	

The table allows users to classify stakeholders on the preliminary list (identified in Step 1) in four different typologies of involvement in the taskforce. The table is available as well in the **Annex 2 – Tools for stakeholders' assessment**, for easiness of use.

The following figure and paragraphs, detail four potential typologies of stakeholders (involvement), as generated by the relevance and interest analysis.
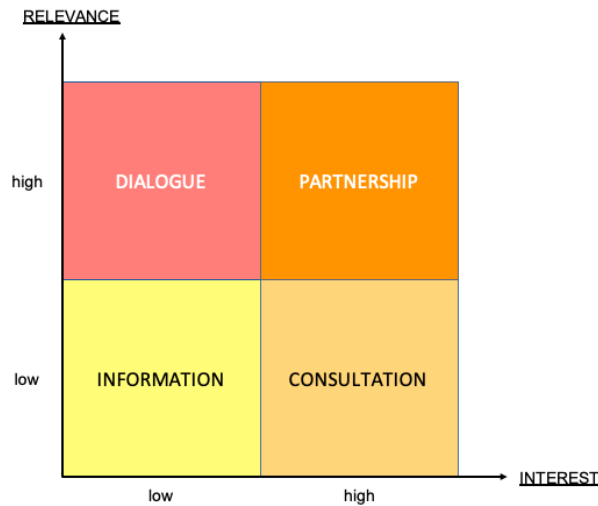
Figure 9 – Stakeholders categories

- **Information** – Stakeholders falling in this typology are characterised by a perceived low interest as well as relevance. Yet, it is crucial that information is always provided to all in a decision-making process, in line with the 12 Principles of Good Democratic Governance. In all activities related to the resilience task force, information should be provided, both to specific stakeholders falling into this quadrant after the evaluation, as well as to the population at large.
- **Consultation** – Stakeholders falling in this quadrant are characterised by a perceived high interest, but a low level of relevance on the topic at hand. Their engagement will mainly consist in consultation moments that will allows public authorities implementing the toolkit to benefit from a feedback.
- **Dialogue** – Stakeholders falling in this quadrant are characterised by a perceived low interest, but a high level of relevance on the topic at hand. Engaging stakeholders through dialogue allows public authorities to benefit from stakeholders' competences, while ensuring a constant feedback so to increase the level of interest and keep the stakeholders involved.
- **Partnership** – Stakeholders falling in this quadrant are characterised by a perceived high interest, as well as high level of relevance and competence on the topic at hand. They represent the core group of the future Community Resilience Taskforce.

Finally, the users may record the results of the assessment in the Stakeholders Register – available as well in the Annex 3 – Stakeholders' register, for easiness of use.

Table 5 – Example of Stakeholders register

DIALOGUE – Low interest, high relevance	PARTNERSHIP – high interest, high relevance
• Stakeholder 1 • Stakeholder 2 • …	• Stakeholder 1 • Stakeholder 2 …
INFORMATION - Low interest, low relevance	CONSULTATION – high interest, low relevance
• Stakeholder 1 • Stakeholder 2 …	• Stakeholder 1 • Stakeholder 2 …

At the end of Step 2, users will have thus established the composition of the Community Resilience Taskforce.

Operationally, the following activities are suggested:

- Official invitation of the members to join the taskforce – This may be performed via a standard letter.
- Organisation of a plenary meeting with all the members of the resilience taskforce – Such meeting may be performed either in presence or online. The purpose of the meeting is to share the overall toolkit methodology and establish a shared calendar of activities related to the implementation of the following steps

> SUMMING UP Phase 1

To sum up, at the end of phase 1:

- Users have performed the steps related to the identification and assessment of the stakeholders.
- Have officially established the Community Resilience Taskforce.

4.2 PHASE 2 – ASSESSING COMMUNITY RESILIENCE

Phase 2 of the toolkit is concerned with the assessment of community resilience.

In this phase, the users work in close cooperation with the newly established CRT.

The phase is composed by 2 steps, as follows:

- Step 3 – Contextualisation. It aims at the adaptation of the assessment tool, as well as the identification of the sources of information needed for the assessment (i.e., evidences).
- Step 4 – Resilience Assessment. It is the actual assessment of the community resilience, by means of the ReBuS E-Tool, based on which the strategies and action plans will be designed.

STEP 3- CONTEXTUALISATION

The ReBuS E-Tool is a standard tool that allows users to perform a (self-)assessment of the overall resilience of a community.

Prior to its implementation a preparatory process of contextualisation is required, mainly consisting with:

- **Translation** – The list of variables supporting the (self-)assessment, grouped in areas, components and indicators need to be translated so to allow for an easier implementation.
- **Adaptation** – For each proposed indicator, the users will need to:

  - Provide a descriptive explanation of how the indicator is understood at local level.
  - Identify sources of information and evidences that will support the assessment (i.e., scoring the indicator).

In order to do so, users should:

- Set up a meeting with the members of the taskforce.
- Explain the process and assign the contextualisation tasks based on the composition of the taskforce. If the taskforce is numerous enough (at least 2 actors per each Area of Resilience) the contextualisation exercises can be performed per area, by the relevant members. If the taskforce composition is limited to just a few members, all members will work jointly in the contextualisation.
- Perform the contextualisation activities by means of the Contextualisation tool provided in Annex 4 – Tool for Contextualisation.
- Lay down the final version of the Contextualisation tool, integrating all insights.

The following example is provided below:

Table 6 – Example of Contextualisation results

INDICATOR	CONTEXTUALISATION	SOURCES OF INFORMATION/EVIDENCE	
Minority groups	In Community A, minority groups are mostly related to the national ethnic and cultural groups present in the community. Such groups are recognised by the national law on minorities.	• Municipal records • National/regional census data • Local associations representing the minority groups	• Link to national statistical database • Link/contact of the local associations

STEP 4 – RESILIENCE ASSESSMENT

The ReBuS E-Tool enables users to perform a (self-)assessment of the overall resilience of a community.

Resilience is assessed by means of five indexes, one for each area of resilience as identified in the ReBuS Resilience Framework.

As explained in detail in Section 3, each area of resilience is structured in 4 area-specific components, which, in turn, are composed of 5 component-specific indicators.

Having gathered sufficient evidence within Step 3 – Contextualisation, the CRT is now ready to perform the (self-)assessment.

When performing the (self-)assessment, the CRT is tasked with the identification of the Community "level of resilience" for each indicator. The assessment is performed on the following levels:

Table 7 – Levels of assessment of community resilience

NOT RELEVANT	NOT AT ALL	PARTIALLY	SUFFICIENTLY	FULLY
This indicator is not relevant for the community Explanation:_____ _____ _____ _____ _____ _____	We are aware of the key issues but not planning nor action is taken.	We acknowledge the key issues and designing answers, but only limited actions is taken.	We have well developed plans and activities to address key issues with significant examples of implementation.	We can show clear evidence of good practices which are monitored and integrated in our interventions.

The CRT is expected to:

- Consider the evidence made available (Step 3) which would support the level of performance on each indicator.
- Conduct the self-assessment on the level of their resilience for that indicator according to the Community Resilience Benchmark (Annex 5 – Benchmarking tool).
- Record the score for each indicator in the ReBuS E-Tool, working on one Area of Resilience at the time (each area is assessed on a separate E-Tool Sheet).
- Evaluate whether the summary results (e.g., Results Visualisation) for each Area of Resilience are in line with their expectations and/or differ from a shared understanding of the level of community resilience for each area.
- If the CRT is unsatisfied with the results, the assessment should be performed again focusing on the evidences for those indicators for which the initial evaluation is not considered satisfactory.

The ReBuS E-Tool provides for each Area of Resilience, the following tools:

- Automatised score card
- Dashboard

    - Area Index Gauge – displaying the overall area index.
    - Component Gauges – displaying the score for each indicator (inner meter) and the component index (outer meter).

- Identification of Challenges and Resources – colour coding of indicators according to attributed scores.

The following images visualise the ReBuS E-Tool Score Card and Results Dashboard prior and after the assessment.
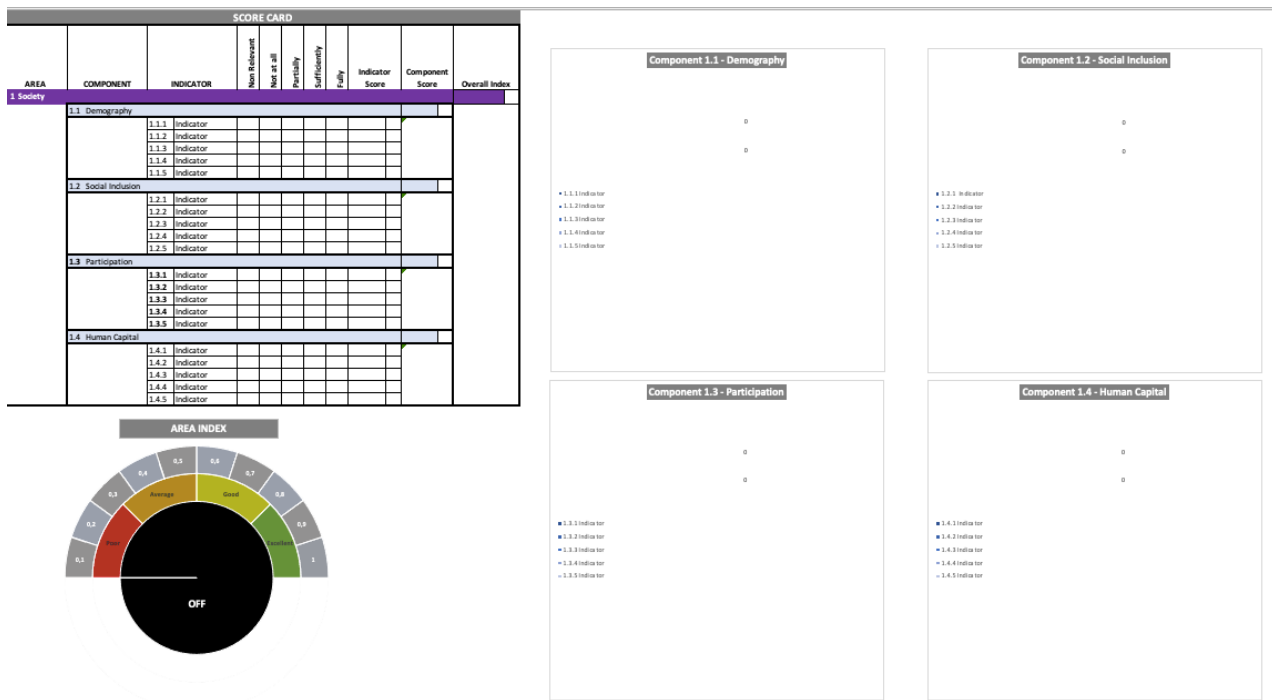
Figure 10 – Automatised scorecard and Dashboard (prior to the assessment)
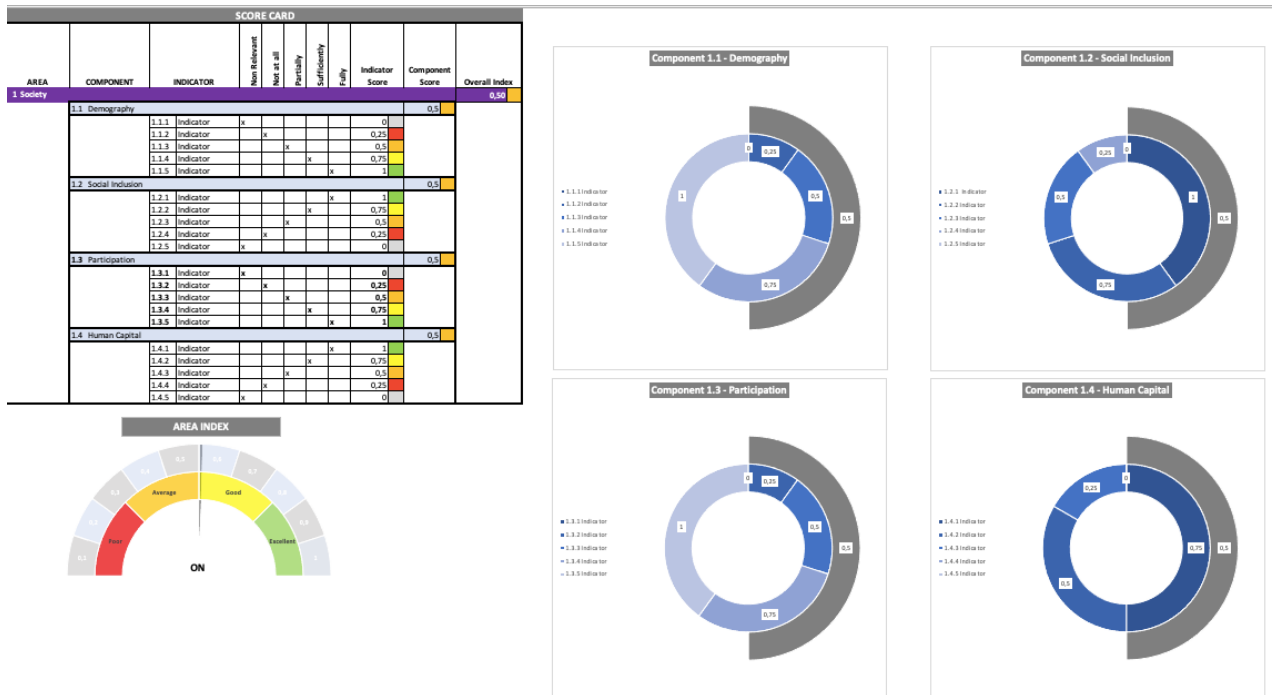
Figure 11 – Automatised scorecard and Dashboard (an example of Results visualisation – Area 1 – Society)

> SUMMING UP Phase 2

To sum up, at the end of phase 2:

- Users have contextualised the ReBuS E-Tool, identifying the main evidences and sources of information necessary for the justification of the score/performance level assigned to each indicator.
- Performed the resilience assessment, identifying the overall level of performance for each indicator, component and area of resilience, identifying the challenges (red variables) and resources (green variables) that will guide the following phase of setting the objective for the community resilience.

4.3   PHASE 3 – SETTING OBJECTIVES FOR RESILIENCE COMMUNITY

Phase 3 of the Toolkit supports users in setting the overall objectives and goals for resilience in their community.

Stemming from the Results visualisation of the 5 resilience indexes, the CRT is called to formulate objectives for resilience at community level, for each of the 5 areas of resilience.

Laying down the objectives will imply the following:

- First formulation of objectives per each area.
- Identifying the priorities (i.e., Step 5).
- Checking the feasibility (i.e., Step 6).
- Final formulation of objectives per each area integrating elements of priority and feasibility.

Objective should strive to address the weaknesses highlighted by the assessment (i.e., red and orange variables) while capitalising on the strengths registered in the community (i.e., green and yellow variables).

The following table is provided as support for the formulation of objectives.

Table 8 – Example of objectives' table

AREAS	Society	Economy	Governance	Infrastructure	Environment
OBJECTIVES	Obj.1	Obj. 1	Obj.1	Obj. 1	Obj.1
	Obj.2.	Obj.2	Obj.2.	Obj.2	Obj.2.

The table should be revised and integrated at the end of each of the steps envisaged by the phase (i.e., priority setting and feasibility assessment.)

Moreover, to support the formulation of the objectives, a simple yet efficient approach is proposed in the application of the SMART criteria. It is recommended that, upon formulation, users ensure that the description of each objective complies with the following checklist:

- **Specific** – Target a specific area for improvement.
- **Measurable** – Quantify or at least suggest an indicator of progress.
- **Assignable** – Specify who will do it.
- **Realistic** – State what results can realistically be achieved, given available resources.
- **Time-related** – Specify when the result(s) can be achieved.

In the formulation of the final list of objectives for resilience, users are invited to formulate several transversal objectives as well to the 5 areas, that take in consideration generally recognised success factors for resilience (URP, 2017), as follows:

- **Diversity** – A resilient community is one that shows and embraces diversity as a guiding development principle, building resilience. Diversity may be understood from different perspectives, from the cultural diversity of a community, to the diversity of services from which a community benefits, to the diversity considered by decision-making process (i.e., including a wide range of stakeholders).
- **Redundancy** – Having multiple ways to perform on given functions or to deliver specific services supports building resilience at community level. In time of emergency, it is essential for a community to relay on different alternatives to service delivery (e.g., multimodal transportation system, private and public operators on the market, etc.).

- **Modularity** – It refers to the independence of different (administrative) units of the community (e.g., sectors, neighbourhoods), able to ensure the continuation of activities and services even without a connection to the wider/central network of services.
- **Social cohesiveness** – Levels of trust in communities influence greatly their resilience. Trust and cohesiveness are stimulated at community level through the promotion of civil participation.
- **Innovation** – A resilient community is a community that embraces change and that in face of change it responds by adapting, learning, and growing.

Operationally, thus, the phase will imply the implementation of the following main steps:

- Step 5 – Priority setting.
- Step 6 – Feasibility assessment.

STEP 5 – PRIORITY SETTING

Considering the information gathered during the process so far (i.e., assessment results and first draft of objectives), objectives should be firstly ordered by level of priority.

In order to do this, the taskforce should consider:

- Which among the objectives are perceived as most urgent?
- Which among the objectives appears to be of primary importance in face of a potential emergency?

The exercise of setting the priority should consist in debates and exchanges within the resilience taskforce (e.g., within the framework of a workshop). The focus of the discussions should be given to the red and orange variables in the Results visualisation.

The list of objectives per each area should be revised at the end of this step according to the agreed priorities.

The following images visualise the ReBuS E-Tool - Identification of Challenges and Resources prior and after the assessment.

AREA 1 - SOCIETY

AREA	COMPONENT	INDICATOR	Indicator Score	Component Score	Overall Index
1 Society					
	1.1 Demography				
		1.1.1 Indicator			
		1.1.2 Indicator			
		1.1.3 Indicator			
		1.1.4 Indicator			
		1.1.5 Indicator			
	1.2 Social Inclusion				
		1.2.1 Indicator			
		1.2.2 Indicator			
		1.2.3 Indicator			
		1.2.4 Indicator			
		1.2.5 Indicator			
	1.3 Participation				
		1.3.1 Indicator			
		1.3.2 Indicator			
		1.3.3 Indicator			
		1.3.4 Indicator			
		1.3.5 Indicator			
	1.4 Human Capital				
		1.4.1 Indicator			
		1.4.2 Indicator			
		1.4.3 Indicator			
		1.4.4 Indicator			
		1.4.5 Indicator			

AREA 2 - ECONOMY

AREA	COMPONENT	INDICATOR	Indicator Score	Component Score	Overall Index
2 Economy					
	2.1 Productivity Profile				
		2.1.1 Indicator			
		2.1.2 Indicator			
		2.1.3 Indicator			
		2.1.4 Indicator			
		2.1.5 Indicator			
	2.2 Welfare Profile				
		2.2.1 Indicator			
		2.2.2 Indicator			
		2.2.3 Indicator			
		2.2.4 Indicator			
		2.2.5 Indicator			
	2.3 Employment				
		2.3.1 Indicator			
		2.3.2 Indicator			
		2.3.3 Indicator			
		2.3.4 Indicator			
		2.3.5 Indicator			
	2.4 Risk financing				
		2.4.1 Indicator			
		2.4.2 Indicator			
		2.4.3 Indicator			
		2.4.4 Indicator			
		2.4.5 Indicator			

AREA 3 - GOVERNANCE

AREA	COMPONENT	INDICATOR	Indicator Score	Component Score	Overall Index
3 Governance					
	3.1 Leadership				
		3.1.1 Prova			
		3.1.2 Indicator			
		3.1.3 Indicator			
		3.1.4 Indicator			
		3.1.5 Indicator			
	3.2 Citizens Engagement				
		3.2.1 Indicator			
		3.2.2 Indicator			
		3.2.3 Indicator			
		3.2.4 Indicator			
		3.2.5 Indicator			
	3.3 Services				
		3.3.1 Indicator			
		3.3.2 Indicator			
		3.3.3 Indicator			
		3.3.4 Indicator			
		3.3.5 Indicator			
	3.4 Risk Governance				
		3.4.1 Indicator			
		3.4.2 Indicator			
		3.4.3 Indicator			
		3.4.4 Indicator			
		3.4.5 Indicator			

AREA 4 - INFRASTRUCTURE

AREA	COMPONENT	INDICATOR	Indicator Score	Component Score	Overall Index
4 Infrastructure					
	4.1 Urbanisation				
		4.1.1 Indicator			
		4.1.2 Indicator			
		4.1.3 Indicator			
		4.1.4 Indicator			
		4.1.5 Indicator			
	4.2 Utilities				
		4.2.1 Indicator			
		4.2.2 Indicator			
		4.2.3 Indicator			
		4.2.4 Indicator			
		4.2.5 Indicator			
	4.3 Transport				
		4.3.1 Indicator			
		4.3.2 Indicator			
		4.3.3 Indicator			
		4.3.4 Indicator			
		4.3.5 Indicator			
	4.4 ICT				
		4.4.1 Indicator			
		4.4.2 Indicator			
		4.4.3 Indicator			
		4.4.4 Indicator			
		4.4.5 Indicator			

AREA 5 - ENVIRONMENT

AREA	COMPONENT	INDICATOR	Indicator Score	Component Score	Overall Index
5 Environment					
	5.1 Ecosystems				
		5.1.1 Indicator			
		5.1.2 Indicator			
		5.1.3 Indicator			
		5.1.4 Indicator			
		5.1.5 Indicator			
	5.2 LULC				
		5.2.1 Indicator			
		5.2.2 Indicator			
		5.2.3 Indicator			
		5.2.4 Indicator			
		5.2.5 Indicator			
	5.3 Heritage				
		5.3.1 Indicator			
		5.3.2 Indicator			
		5.3.3 Indicator			
		5.3.4 Indicator			
		5.3.5 Indicator			
	5.4 Environmental Health				
		5.4.1 Indicator			
		5.4.2 Indicator			
		5.4.3 Indicator			
		5.4.4 Indicator			
		5.4.5 Indicator			

Figure 12 – Identification of Challenges and Resources (prior to assessment)

Figure 13 – Identification of Challenges and Resources (An example post-assessment)

STEP 6 – FEASIBILITY ASSESSMENT

Considering the revised list of objectives, the taskforce should focus in this step on checking their feasibility.

Assessing feasibility of objectives implies putting them in relation with the envisaged resources needed for their achievements, specifically it implies:

- Assessing available cognitive resources (i.e., available know-how to reach the set objective).
- Assessing available concrete resources (i.e., human, financial, material, etc).

In this step, the discussions of the taskforce should focus as well on the highlighted strengths on the Results visualisation (i.e., green, and yellow variables).

The list of objectives per each area should be revised at the end of this step according to the agreed feasibility.

> SUMMING UP Phase 3

At the end of Phase 3 usurers should have:

- Drafted objectives for each area of resilience of the community.
- Revised list in terms of priority.
- Revised list in terms of feasibility.
- Integrated list with transversal objectives to the 5 areas that refer to: diversity, redundancy, modularity, social cohesiveness, innovation.

The table below illustrates an example on how to record the final objectives. In Annex 6 – Tool for setting the objectives, a tool is provided s provided so to support users in recording the final objectives.

Table 9 – Example of objectives

AREAS	SOCIETY	ECONOMY	GOVERNANCE	INFRASTRUCTURE	ENVIRONMENT
OBJECTIVES	Obj.1	Obj. 1	Obj.1	Obj. 1	Obj.1
	Obj.2.	Obj.2	Obj.2.	Obj.2	Obj.2.
TRANSVERSAL OBJECTIVES					
Diversity	Obj.1				
	Obj.2.				
Redundancy	Obj.1				
	Obj.2.				
Modularity	Obj.1				
	Obj.2.				
Social cohesiveness	Obj.1				
	Obj.2.				
Innovation	Obj.1				
	Obj.2.				

4.4 PHASE 4 - ACTION PLANNING FOR COMMUNITY RESILIENCE

The last phase of the toolkit aims to support users in drafting the action plan that will support the implementation of the identified strategic objectives.

The phase will be developed through 2 steps, as follows:

- Step 7 – Action designing.
- Step 8 – Monitoring and evaluation.

STEP 7 – ACTION DESIGNING

In this step users are guided towards the elaboration of an Action plan, aimed at translating the set objectives in to concrete activities.

It is recommended that the efforts around the elaboration of the Action plan should be the result of a (series of) working meetings of the CRT.

The step envisages two main activities:

- Structuring
- Drafting

Structuring the Action plan is concerned with:

- The identification of tasks, potential attribution of responsibilities and the definition of their outputs.
- The definition of a timeframe for the plan as well as for each envisaged task/activity.
- The definition of the succession and interrelations among activities.
- The identification of needed resources (e.g., human, technical, legal, financial, etc.) For the implementation of the activity.

- Selecting indicators needed for the future monitoring and evaluation of the implementation of the Action plan (e.g., KPIs, output indicators).

Drafting the Action plan will imply developing the structure, including the following sections:

- **Vision** – Focus on the broad envisaged features of community resilience.
- **Mission** – Focus on how this vison is going to be operationalised.
- **Overall objective** – Focus on the overall expected results.
- **Outcome** – Focus on the expected impact.
- **Outputs** – Focus on the immediate and concrete results (i.e., results which are achievable directly by the implementation of the plan).
- **Work Programme** – Focus on the activities planned to achieve the outputs, including references to Monitoring and Evaluation processes.

STEP 8 – MONITORING AND EVALUATION

The Action plan is intended as a concrete intervention contributing to the enhancement of the resilience of a community.

To determine the extent of such contribution it is necessary to establish a Monitoring and Evaluation mechanism, envisaging three phases of application: before, during and after implementation.

Inferring from the results of the *ex-ante* evaluation, Monitoring and Evaluation should be considered as a continuum, a transversal task which is considered in the Action Plan.

Setting up a Monitoring and Evaluation system implies the following:

- **Identifying Indicators** – Indicators are linked to the objective-based planning and measure how the objectives, purpose, results, and activities will be achieved.
- **Setting Milestones** – Milestones are specific points/events in the lifecycle of the progress of the implementation of the Action plan.

> **SUMMING UP Phase 4**

At the end of Phase 4, users:

- Have structured and drafted an action plan aimed at supporting the achievement of the set objective.
- Designed a monitoring and evaluation system.

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5 RESOURCES

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6 ANNEXES

6.1 Annex 1 – Tool for stakeholders' identification

AREAS OF EXPERTISE/RESILEINCE	Name of stakeholder	Type of actor (i.e. institutional, civil society)	Name and role of contact person	Contact details (email -phone)
SOCIETY	Stakeholder 1	Institutional	-	-
	Stakeholder 2	Civil society		
ECONOMY	Stakeholder 1			
	Stakeholder 2			
GOVERNANCE	…..			
INFRASTRUCTURE	…..			
ENVIRONMENT	…..			

6.2 Annex 2 – Tools for stakeholders' assessment

AREAS	STAKEHOLDER DESCRIPTION		ASSESSMENT		NOTES
	NAME OF STKEHOLDER	TYPE OF ACTOR	RELEVANCE (High/Low)	INTEREST (High/Low)	
SOCIETY					
ECONOMY					
GOVERNANCE					
INFRASTRUCTURE					
ENVIRONMENT					

6.3   Annex 3 – Stakeholders' register

DIALOGUE – Low interest, high relevance	PARTNERSHIP – high interest, high relevance
- Stakeholder 1 - Stakeholder 2 …	- Stakeholder 1 - Stakeholder 2 …
INFORMATION - Low interest, low relevance	CONSULTATION – high interest, low relevance
- Stakeholder 1 - Stakeholder 2 …	- Stakeholder 1 - Stakeholder 2 …

6.4   Annex 4 – Tool for Contextualisation

INDICATOR	CONTEXTUALISATION	SOURCES OF INFORMATION/EVIDENCE	

6.5   Annex 5 – Benchmarking tool

AREA	COMPONENT	INDICATOR		KEY ISSUES	NOT RELEVANT	NOT AT ALL	PARTIALLY	SUFFICIENTLY	FULLY
					This indicator is not relevant for the community	We are aware of the key issues but not planning nor action is taken.	We acknowledge the key issues and designing answers, but only limited actions is taken.	We have well developed plans and activities to address key issues with significant examples of implementation.	We can show clear evidence of good practices which are monitored and integrated in our interventions.
1 Society									
	1.1 Demography								
		1.1.1	Population size	Total number of residents					
		1.1.2	Population structure	Residents aged 65 years or above Median age Population below 5 Aging index in the past 5 years Gender Structure of the population					
		1.1.3	Family structure	Average Number of people per bedroom Residents separated or divorced Residents who are married Residents who are widowed Single parent families					

	1.1.4	Minorities	Population with a minority background Population that is not familiar with majority language and culture					
	1.1.5	Migration	New residents over the past five years Residents that left the community in the past five years Residents commuting daily outside the community					
1.2	**Social Inclusion**							
	1.2.1	Vulnerable groups	Special needs population Percent of the population that is not institutionalised or infirmed Childcare programmes per 1,000 population Residents who require assistance with daily tasks Residents at-risk -of-poverty					
	1.2.2	Social dependence	Social assistance programmes per 1000 inhabitants					
	1.2.3	Access to social services	Age Gender Ethnicity Linguistic skills IT literacy					
	1.2.4	Access to health services	Age Gender Ethnicity Linguistic skills IT literacy					
	1.2.5	Access to education services	Age Gender Ethnicity Linguistic skills IT literacy					
1.3	**Participation**							

	1.3.1	Civic organisations	Active organisation/population Membership Vitality Representativeness Visibility/acknowledgment Relation to Institutions Engagement in community affairs Management/Coordination level (local, national, international)					
	1.3.2	Social advocacy organisation	Active organisation/population Membership Vitality Representativeness Visibility/acknowledgment Relation to Institutions Engagement in community affairs Management/Coordination level (local, national, international)					
	1.3.3	Non-governmental organisation	Active organisation/population Membership Vitality Representativeness Visibility/acknowledgment Relation to Institutions Engagement in community affairs Management/Coordination level (local, national, international)					
	1.3.4	Religious organisations	Active organisation/population Membership Vitality Representativeness Visibility/acknowledgment					

			Relation to Institutions Engagement in community affairs Management/Coordination level (local, national, international)					
	1.3.5	First response volunteering	Active organisation/population Membership Vitality Representativeness Visibility/acknowledgment Relation to Institutions Engagement in community affairs Management/Coordination level (local, national, international)					
1.4	**Human Capital**							
	1.4.1	Basic skills	Age Gender Ethnicity					
	1.4.2	Education and training	Age Gender Ethnicity Population with high school diplomas Adult education and skills training Population with higher education Literacy rate Early leaves from education and training					
	1.4.3	Professional skills and capacities	Presence of Life-Long Learning (LLL) possibilities Ratio of skilled and unskilled works					
	1.4.4	Quality of life and health	Robust public health systems Adequate access to quality healthcare Emergency medical care Psychosocial support facilities					

				Health services Number of doctors and medical professionals per 1,000 population Population with access to sanitation Life expectancy at birth Maternal mortality per 100 thousand Social service support Social placements (beds) for children at risk or with disability Social placements (beds) for seniors at risk or with disability Social places (capacity) for people (all ages) at risk Number of dentists staff per 1,000 population Number of other medical specialists per 1,000 population						
		1.4.5	Civic culture	Number of active funding programmes promoting civic education Percentage of NGOs/CSOs funded for the promotion of civic education in the last 5 years Civic engagement Political equality Solidarity Trust Tolerance						

AREA	COMPONENT	INDICATOR		KEY ISSUES	NOT RELEVANT	NOT AT ALL	PARTIALLY	SUFFICIENTLY	FULLY
					This indicator is not relevant for the community	We are aware of the key issues but not planning nor action is taken.	We acknowledge the key issues and designing answers, but only limited actions is taken.	We have well developed plans and activities to address key issues with significant examples of implementation.	We can show clear evidence of good practices which are monitored and integrated in our interventions.
2 Economy									
	2.1 Productivity Profile								
		2.1.1	Primary	Agriculture Mining Resource Industries					
		2.1.2	Secondary	Manufacturing Engineering Construction					
		2.1.3	Tertiary	Service industries that contribute to the economy.					
		2.1.4	Quaternary	Education, Public sector Research and development					
		2.1.5	Quinary	High level decision makers in Government and industry					
	2.2 Welfare Profile								

		2.2.1	Income	GDP per capita Per capita average income Main revenue sources					
		2.2.2	Property	Private property Average Household Size Living structures with single room (inhabited or not) Living structures with two or three rooms (inhabited or not) Percent of housing that is a mobile home					
		2.2.3	Welfare benefits	Provide protection against the risks and needs associated with: Unemployment Parental responsibilities Sickness and healthcare Social exclusion Housing					
		2.2.4	Cultural offer	Number of active cultural associations per 1000 inhab Number of theatres per 1000 inhab Number of cinema per 1000 inhab Annual turnover for cultural operators					
		2.2.5	Public safety	Corruption prevention programmes Crime and policing					
2.3	**Employment**								
		2.3.1	Unemployment	Percentage of unemployment from the total labour force Youth unemployment rate Rate of unemployment in the country over 30 years					
		2.3.2	Sectors of employment	Male labour force participation rate Female labour force participation rate					

		2.3.3	Self-employment	Percentage of self-employed workers					
		2.3.4	Vocational and Professional training						
		2.3.5	Brain drain						
2.4	**Risk financing**								
		2.4.1	Personal insurance	Residents covered by personal insurance Awareness of citizens with personal insurance					
		2.4.2	Property insurance	Percentage of households covered					
		2.4.3	Infrastructure insurance	Infrastructure and housing insurance as a percent of GDP					
		2.4.4	Reinsurance policies						
		2.4.5	Hazard mitigation funds	Existence of dedicated funds Percentage of the population covered by a recent hazard mitigation plan					

AREA	COMPONENT	INDICATOR		KEY ISSUES	NOT RELEVANT	NOT AT ALL	PARTIALLY	SUFFICIENTLY	FULLY
					This indicator is not relevant for the community	We are aware of the key issues but not planning nor action is taken.	We acknowledge the key issues and designing answers, but only limited actions is taken.	We have well developed plans and activities to address key issues with significant examples of implementation.	We can show clear evidence of good practices which are monitored and integrated in our interventions.
3 Governance									
	3.1 Leadership								
		3.1.1	Autonomy	Decentralisation Original and delegated function					
		3.1.2	Coordination	Deconcentration					
		3.1.3	Cooperation	Institutional cooperation w/in the community Institutional cooperation outside the community (IMC, CBC) With non-institutional actors					
		3.1.4	Openness and Transparency	Access to information regarding the decision-making process Information on decisions is made public					
		3.1.5	Accountability	Decisions are reported can be sanctioned					

				Decisions taken are explained to residents					
3.2	**Citizens Engagement**									
		3.2.1	Elections	Citizens voting in the last municipal election						
		3.2.2	Decision making	Inclusive Multi-stakeholders oriented Monitored & Assessed						
		3.2.3	Representativenes s	Vulnerable groups (access, voice, participation) Women (access, voice, representation) Youth (access, voice, representation)						
		3.2.4	Trust							
		3.2.5	Rights and Obligations	Political rights Civil rights Civic education						
3.3	**Services**									
		3.3.1	Social services	Infrastructure Funding Monitoring of delivery Responsiveness						
		3.3.2	Health services	Infrastructure Funding Monitoring of delivery Responsiveness						
		3.3.3	Education services	Infrastructure Funding Monitoring of delivery Responsiveness						
		3.3.4	Housing	Infrastructure Funding Monitoring of delivery Responsiveness						
		3.3.5	Transport	Infrastructure Funding						

				Monitoring of delivery Responsiveness					
3.4	**Risk Governance**								
		3.4.1	Hazard and risk assessment	Hazard mapping Exposure mapping Frequency of loss causing weather events (hail, wind, tornado, hurricane)					
		3.4.2	Risk mitigation	Hazard mitigation plan					
		3.4.3	Emergency response system	Existence of an organization of emergency response, with coordination authority Effective emergency response services Fire, police, emergency relief services, and temporary shelters per 1,000 population Fire, police, emergency relief services, and temporary shelters outside of hazard zones Early warning systems used in coordination with emergency response procedures					
		3.4.4	Risk awareness	Programmes for risk communication Hazard maps available Assessment of direct impacts to exposed populations Levels of risk awareness and preparedness Previous hazard experience					
		3.4.5	Risk perception	Known hazards and frequency Population that has been affected by a hazard					

AREA	COMPONENT	INDICATOR		KEY ISSUES	NOT RELEVANT	NOT AT ALL	PARTIALLY	SUFFICIENTLY	FULLY
					This indicator is not relevant for the community	We are aware of the key issues but not planning nor action is taken.	We acknowledge the key issues and designing answers, but only limited actions is taken.	We have well developed plans and activities to address key issues with significant examples of implementation.	We can show clear evidence of good practices which are monitored and integrated in our interventions.
4 Infrastructure									
	4.1 Urbanisation								
		4.1.1	Population density	Population living in high intensity urban areas Population average annual growth rate					
		4.1.2	Urban centres	Urban average annual growth rate					
		4.1.3	Settlements dispersion	Urbanised territory					
		4.1.4	Density of built infrastructure	Population living in high intensity urban areas Population average annual growth rate					
		4.1.5	Guidelines and Regulations						
	4.2 Utilities								

		4.2.1	Critical infrastructure	Constructions are of strong/medium/weak resistance Mapping risks, monitoring activities					
		4.2.2	Protective infrastructure						
		4.2.3	Water potable and sanitation	Providers Obsolete infrastructure					
		4.2.4	Energy	Redundancy Modularity					
		4.2.5	Guidelines and Regulations	Public and Private partnership					
4.3	**Transport**								
		4.3.1	Private transport	Private vehicles per 1000 inhabitants					
		4.3.2	Public transport	Redundancy Modularity Intermodality					
		4.3.3	Sustainable transport	Practice Programmes Awareness raising					
		4.3.4	Transport infrastructure	within and beyond					
		4.3.5	Guidelines and Regulations						
4.4	**ICT**								
		4.4.1	Network infra	Internet, television, radio, and telecommunications Percent of media with declared owner Number of local media					
		4.4.2	Providers	Diversity Modularity					
		4.4.3	Access to information	Broadcasters per 1,000 population Percent of households that use internet					
		4.4.4	Early warning	Alert systems					

		4.4.5	Guidelines and Regulations						

AREA	COMPONENT	INDICATOR		KEY ISSUES	NOT RELEVANT	NOT AT ALL	PARTIALLY	SUFFICIENTLY	FULLY
					This indicator is not relevant for the community	We are aware of the key issues but not planning nor action is taken.	We acknowledge the key issues and designing answers, but only limited actions is taken.	We have well developed plans and activities to address key issues with significant examples of implementation.	We can show clear evidence of good practices which are monitored and integrated in our interventions.
5 Environment									
	5.1 Ecosystems								
		5.1.1	Biodiversity	Mapping, monitoring No. of species which have become extinct this century No. threatened, endangered species/10,000 sq. km land (coastal area) No. introduced terrestrial species/10,000 sq. km land (over last 100 years) No. of endemic species per 10,000 sq. km land area					
		5.1.2	Blue ecosystems	Number of rivers Mapping, monitoring					
		5.1.3	Green ecosystems	Mapping, monitoring					

	5.1.4	Recovery and regeneration	Mapping, monitoring					
	5.1.5	Guidelines and Regulations	Protection					
5.2	**LULC**							
	5.2.1	Agricultural areas	Percent land area that is arable cultivated land					
	5.2.2	Forests	Percent of land as forests					
	5.2.3	Wildlands	Percent land area that is developed open space Percent land-cover that has not changed to urban areas					
	5.2.4	Protected areas	Percent of land area under protected status					
	5.2.5	Guidelines and Regulations	Conservation and protection policies					
5.3	**Heritage**							
	5.3.1	Sites	Number of sites					
	5.3.2	Economic value	Tourism					
	5.3.3	Social value	Cultural heritage & identity					
	5.3.4	Attractivity	Visibility at regional, national, international level					
	5.3.5	Guidelines and Regulations						
5.4	**Environmental Health**							
	5.4.1	Climate change	Impacts of climate change at local, regional, national level					
	5.4.2	Soil erosion	Soil degradation resulting from human activities					
	5.4.3	Water pollution	Quality of water					
	5.4.4	Air pollution	Quality of air					

		5.4.5	Guidelines and Regulations						

6.6 Annex 6 – Tool for setting the objectives

AREAS	SOCIETY	ECONOMY	GOVERNANCE	INFRASTRUCTURE	ENVIRONMENT
OBJECTIVES	Obj.1	Obj. 1	Obj.1	Obj. 1	Obj.1
	Obj.2.	Obj.2	Obj.2.	Obj.2	Obj.2.
TRANSVERSAL OBJECTIVES					
Diversity	Obj.1				
	Obj.2.				
Redundancy	Obj.1				
	Obj.2.				
Modularity	Obj.1				
	Obj.2.				
Social cohesiveness	Obj.1				
	Obj.2.				
Innovation	Obj.1				
	Obj.2.				

6.7 Annex 7 – International Case Studies

SOURCE	DESCRIPTION	REFERENCE
The Sendai Framework for Disaster Risk Reduction 2015 - 2030	The Sendai Framework for Disaster Risk Reduction 2015-2030 is a strategic document adopted by the UN member states in 2015. The document provides for a stronger action on disaster risk management than disaster management. The document foresees a greater involvement of the role of local governments. Moreover, the document focuses on the review of periodical of disaster preparedness and contingency policies, the development and the reinforcement of multi-hazard and multisector risk management system, the resilience promotion of critical infrastructure, the promotion of public awareness, the adoption of public policies to support public service workers, and the training of the existing workforce and voluntary workers for disaster response. Even though the Sendai Framework is voluntary for the UN member state, it provides a set of common standards, achievable targets on the disaster risk reduction, and a framework of legally based instruments. To conclude, the Sendai Framework emphasises the need to tackle risk management and climate adaptation dangers through the lenses of the Sustainable Development Goals, set by the UN General Assembly in 2015. Focus: • Environmental hazard • Technological hazard • Biological hazard	Preventionweb–The knowledge platform for disaster and risk reduction, Sendai Framework Indicators, URL: https://www.preventionweb.net/sendai-framework/sendai-framework-monitor/indicators Riyanti Djalante and Shuaib Lassa b (2019) "Governing complexities and its implication on the Sendai Framework for Disaster Risk Reduction priority 2 on governance" Progress in Disaster Science, 2 (2019) Sendai Frameworks for Disaster Risk Reduction, Measuring Implementation of the Sendai Framework, URL: https://sendaimonitor.undrr.org/ United Nations Office for Disaster Risk Reduction (UNDRR), Sendai Framework for Disaster Risk Reduction 2015-2030 U.N.O.f.D.R. Reduction, Editor. 2015, Third UN World Conference on Disaster Risk Reduction (WCDRR): NewYork, USA
The Global Strategy for the European Union	The Global Strategy for the European Union is a strategic document which promotes the anticipation, prevention and preparedness of crisis containment and, at the same time, a long-term structural approach to global challenges. The European Strategy, as the High Representative and the European Commission Joint Communication highlights, works along three different lines: the European commitment towards the partner countries through political, development and humanitarian support; bilateral policies to address domestic efforts and enhancing resilience; to integrate the external and internal security dimension of EU policy. Focus: • Humanitarian intervention • Inclusive growth • Sustainable development • Energy security • Climate adaptation • Economic and social policy	European Commission, Hugh Representative of the Union for Foreign Affairs and Security Policy, Joint Communication to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the regions – Reinforcing Resilience. an Eastern Partnership that delivers for all, Brussels, 18.03.2020, URL: https://eur-lex.europa.eu/legal-content/IT/TXT/PDF/?uri=CELEX:52020JC0007&from=EN European Union, Institute for Security Studies, After the EU global strategy – Building Resilience, May 2017, URL: https://www.iss.europa.eu/sites/default/files/EUISSFiles/After_EU_Global_Strategy._Resilience.pdf European Union-External Action, A Global Strategy for the European Union, August 2018, URL: https://eeas.europa.eu/headquarters/headquarters-homepage/49323/global-strategy-european-union_uz

JRC – Policy Reports	Even before the outbreak of COVID-19 pandemic, the European concept of resilience was drifting toward a multidimensional phenomenon with several cross-cutting aspects among sectors. The COVID-19 emergency showed to the European countries a new type of crisis, embracing at the same time health, economic, and social system. The current actions proposed by the EU seem more effective on the economic aspect of this crisis even if the EU put in places different actions intervening on multiple fronts. At the same time, the COVID-19 crisis represents a chance to build a more sustainable paths for the economic, environmental, and social point of view, coordinating a comprehensive recovery plan for all Europe, promoting permanent shift towards a more resilient future. The papers took into consideration are policy papers. Focus: • Environmental hazard • Biological hazard • Economic and social policy	JRC - Science for Policy Report, Time for transformative resilience: the Covid-19 emergency, Publication Office of the European Union, 2020, URL: https://publications.jrc.ec.europa.eu/repository/bitstream/JRC120489/resilience_coronavirus_final.pdf JRC - Science for Policy Report, Building a Scientific Narrative Towards a Mor Resilient EU Society – Part1: a Conceptual Framework, Publication Office of the European Union, 2017, URL: https://publications.jrc.ec.europa.eu/repository/bitstream/JRC106265/jrc106265_100417_resilience_scienceforpolicyreport.pdf The European Commission; Protect, prepare and transform Europe – Recovery and Resilience post COVID-19, EISIR Policy Brief n.1, Publication Office of the European Union, 2020, URL: https://ec.europa.eu/info/sites/info/files/research_and_innovation/groups/esir/ec_rtd_esir-recovery-resilience-covid19.pdf
The global approach to resilience by IFRC (the International Federation of Red Cross and Red Crescent Societies)	The IFRC proposes a strategy paper with a holistic approach to disaster prevention and management, combining the long-term planning with sustainable and institutional approaches. The community resilience is seen as the result of the interaction among hazards, the context, and the culture of the community. The plans put in action by IFRC have the aim to support communities in risk management actions and decision-making, to build more resilient communities. Focus: • Humanitarian intervention • Inclusive growth • Sustainable development	IFRC, IFRC Framework for Community Resilience, URL:https://media.ifrc.org/ifrc/document/ifrc-framework-community-resilience/
100 Resilient Cities Initiatives (100RC)	Operating from 2013 to 2019, the 100 Resilient Cities Initiative was a global network promoted by the Rockefeller Foundation, presented in a strategy paper. The program worked with a global network of cities, preparing them for future disasters. Each member city received funding for a two-years period to create specific figure to follow the implementation of specific projects. The program aimed to implement long-term transformations towards a future resilience and sustainability, fighting against climate change and for the promotion of equity. Focus: • Unemployment • Public transportation system • Endemic violence • Food and water shortages • Earthquakes • Floods • Disease outbreaks • Terrorism and violent extremism	Martin, C; McTarnaghan, S., Institutionalizing Urban Resilience-A Midterm Monitoring and Evaluation Report of 100 Cities, Urban Institute, The Rockefeller Foundation, URL: https://www.urban.org/sites/default/files/publication/99442/institutionalizing_urban_resilience_2.pdf The Rockefeller Foundation: Resilient Cities Network, URL: https://www.100resilientcities.org/resources

The City Resilience Framework	The City Resilience Framework based on the City Resilience Index creates an international system of shared tools in collaboration with governments, civil society and industries, to improve resilience of cities and communities. The CRF's vision, presented in the policy paper, is resilience as the results of several interlinked system among the physical, social, and economic dimensions. It is conceived as a performance- based approach based on several functions which are interlinked and collected in four dimensions. In this way, a disaster happening in a dimension influences directly the others. The CRF has developed different measurement tools to diagnose and analyse these interdependencies. In this way, The City Resilience Framework looks through the lenses of 4 categories, 52 indicators, and 156 variables to assess cities' resilience. Focus: • Health and Wellbeing • Economy and Society • Infrastructure and Environment	The Rockefeller Foundation | Arup City Resilience Framework, April 2014 (Updated December 2015), URL: https://www.rockefellerfoundation.org/wp-content/uploads/City-Resilience-Framework-2015.pdf The Rockefeller Foundation, City Resilience Framework, URL: https://assets.rockefellerfoundation.org/app/uploads/20140410162455/City-Resilience-Framework2015.pdf
UNDRR Making Cities Resilient Global Campaign - implementation of the Sendai Framework for Disaster and Risk Reduction 2015-2030	The campaign is promoted by the United Nation for Disaster Risk Reduction to achieve more resilient and sustainable urban communities. The campaign's slogan is "My city is getting ready" and its target are the mayor and local government of cities of different sizes. For the launch of the Campaign, the Ten Essentials for Making Cities Resilient are developed to implement the Sendai Framework, and they are presented in a policy paper. The main tool born from the campaign is the Disaster Resilience Scorecard for Cities, which helps to identify the "most probable" and "most severe" scenario possible. Focus: • Environmental hazard • Technological hazard • Biological hazard	UNDRR – UN Office for Disaster Risk Reduction, Making Cities Resilient: My City is Getting Ready, URL: https://www.unisdr.org/campaign/resilientcities/

6.8 Annex 8 – European Case Studies

Source	Description	References
Resilient Cities Network–Athens Resilience Strategy for 2030	The development of Athens' resilience strategy, through a strategy paper developed with the 100 Resilience Cities, will be implemented following the Sustainable Development Goal proposed by the UN. The resilience strategy will pursue the implementation of 4 different pillars named: "an Open city", "a Green city", "a Proactive city", "a Vibrant city". Focus: • Earthquakes • Climate change • Civil unrest • Cybercrime • Economy and social policy • Aging infrastructures • Migration	100 Resilient Cities, City of Athens, *Redefining the city – Athens Resilience Strategy for 2030*, URL: https://resilientcitiesnetwork.org/downloadable_resources/Network/Athens-Resilience-Strategy-English.pdf
Resilient Cities Network-Our Resilient Glasgow. A city Strategy.	Implemented between 2014 and 2015, the main aim of the Glasgow's resilience strategy, through a strategy paper developed with the 100 Resilience Cities, was to improve the existing response system to hazards. The strategy considered the local, regional and national dimension of the city, involving several partners. The long-term strategy was pursued through 14 different goals, divided in 4 different pillars named "Empower Glaswegians", "Unlock place-based solutions", "Innovate to support fair economic growth", and "Foster civic participation". Focus: • Population growth • Uneducated adult population • High violent crime rate • Fuel poverty households • 50% of residents living near vacant or derelict lands	100 Resilient Cities, *Our Resilient Glasgow. A city Strategy*, URL: https://resilientcitiesnetwork.org/downloadable_resources/Network/Glasgow-Resilience-Strategy-English.pdf

Resilient Cities Network- London City Resilience Strategy 2020	In the recent years, London has developed an emergency response system through the London Resilience Partnership following the strategy paper developed with the 100 Resilience City. The Resilience is defined through several levels: Communities, Good Growth, Governance, and Infrastructures and Environment. Empowering resilience for a city like London means, at the same time, to create mitigation of future shocks and stresses and to establish a strong emergency respond plan. Focus: • Major shocks (drought, flooding, infrastructure failure, terrorism, extreme weather, cyber-attack, disease pandemic) • Chronic stresses (lack of social cohesion, inequality, poor air quality, food insecurity, poor housing affordability and quality, poor health and wellbeing, Brexit)	100 Resilient Cities, Greater London Authority, *London City resilience Strategy 2020*, URL: https://resilientcitiesnetwork.org/downloadable_resources/Network/London-Resilience-Strategy-English.pdf
Resilient Cities Network- Paris Resilience Strategy. Fluctuat nec mergitur.	The Paris' resilience strategy plan is based on three pillars: an inclusive and cohesive city; a city developed to meet the challenges of 21st century; and a city in transition. The resilience strategy is based on cross-cutting projects, trying to maximise benefits and to collect resources. Focus: • Social and economic inequalities • Terrorism and security • Climate change • Environmental hazards • The Seine and river-related risks • Territorial governance	100 Resilient Cities, Mairie de Paris, *Paris Resilient Strategy – Fluctuat Nec Mergitur*, June 2018, URL: https://resilientcitiesnetwork.org/downloadable_resources/Network/Paris-Resilience-Strategy-English.pdf
Resilient Cities Network – Roma Strategia di Resilienza	Rome's resilience strategy plan was based on pillars, goals, and actions. The 4 pillars and actions were divided in 4 different groups: an efficient city for citizens; a dynamic city; an open, open and united city; and a city which preserves its natural resource. For each pillar correspond several goals and actions were is highlighted the link SDG, the status of the operation, the partners involved and the institution in charge. Focus: • Major shocks (economic crisis and population vulnerability, migrants and asylum seekers arrival, aging infrastructures and household emergency, high commuting and inefficiency of public transports, environmental-related problems and pollution) • Chronic stresses (earthquakes, landslide, floods)	100 Resilient Cities, Roma, *Roma Strategia di Resilienza*, URL: https://resilientcitiesnetwork.org/downloadable_resources/Network/Rome-Resilience-Strategy-Italian.pdf

Resilient City Network- Resilient Thessaloniki. A Strategy for 2030.	Thessaloniki's resilience strategy plan took into consideration different scales: the EU, the national, the regional and metropolitan scale. At the same time, the planning was structured on different timescale (from year-plan to 15-years plan) and type of planning (about funding sources, spatial planning, and strategies and operational plans). As other resilience plan, Thessaloniki's plan is divided in several goals, objectives, and actions. Focus: • Social and economy policy • Urban Environment and Natural Resources • Natural Hazards • Governance and Urban Finance	100 Resilient Cities, City of Thessaloniki, Metropolitan Development Agency of Thessaloniki, *Thessaloniki. A strategy for 2030*, URL: https://resilientcitiesnetwork.org/downloadable_resources/Network/Thessaloniki-Resilience-Strategy-English.pdf
Kosovo Risk Reduction Strategy and Plan of Action 2016-2020	The Kosovo's resilience strategy and action plan campaign 2016-2020 was mainly focused on natural-related hazards and their consequences on communities. The plan analysed strengths, weakness, opportunities, and threats of the national context, trying to address these problems to cope with natural disasters. The plan foresaw an analysis about the current emergency response system and how to improve it; the analysis of the current legal and institutional framework; the possible alternatives; and a system of monitoring and evaluation of the policies empowered. Focus: • Natural disasters (flooding, fires, geological, biological, and meteorological events) • Socio-economic development	Republic of Kosovo, Emegency Management Agency, *Disaster Risk Reduction Strategy and Plan of Action 2016-2020*, URL: http://www.kryeministri-ks.net/repository/docs/SZRrF_anglisht_1.pdf
UNISDR- Lisbon's Resilience Action Plan	The Lisbon's resilience strategy plan followed the implementation of the Sendai Framework. The action plan analysed insights, risks, and impacts, structuring the intervention through different actions. Moreover, the plan also introduced a monitoring section to analyse the plan impact. Focus: • Earthquake • Flood • Wind/Gust • Maritime Agitation • Maximum/minimum temperature • Population aging • Buildings and infrastructures aging • Climate change • Poor accessibility • Social cohesion and inclusion	UN-UNISDR, Lisboa, *Lisbon's Resilience Action Plan,* URL: https://www.preventionweb.net/files/56369_lisbonactionplanv120160727small.pdf

National Report in Preparation for WCDR (2004)-Slovakia	The presented National Report in preparation for WCDR was a document presenting the state of the art about risk and emergency management in Slovakia. The National Report analysed, through a set of different questions, Political Commitment and Institutional Aspects; Risk Identification; Knowledge Management; Risk Management Application and Instruments; Preparedness and Contingency Planning; Call for good practices in disaster risk management; and Priorities to address at the World Conference on Disaster Reduction. Focus: • Land covering and land erosion • Rainfalls • Floods	• PreventionWeb, *Reference guide for preparation of National information,* 2004, URL: https://www.preventionweb.net/files/927_Slovakia-report.pdf
National Report in Preparation for WCDR (2005)-Austria	The presented National Report in preparation for WCDR was a document presenting the state of the art about risk and emergency management in Austria. The National Report analysed, through a set of different questions, Political Commitment and Institutional Aspects; Risk Identification; Knowledge Management; Risk Management Application and Instruments; Preparedness and Contingency Planning; Call for good practices in disaster risk management; and Priorities to address at the World Conference on Disaster Reduction. Focus: • Floods • Avalanches • Soil erosion	• PreventionWeb, *National information provided by Austria in preparation for the World Conference on Disaster Reduction,* 2005, URL: https://www.preventionweb.net/files/854_Austria-report.pdf
National Report in Preparation for WCDR (2005)-Greece	The presented National Report in preparation for WCDR was a document presenting the state of the art about risk and emergency management in Grecia. The National Report analysed, through a set of different questions, Political Commitment and Institutional Aspects; Risk Identification; Knowledge Management; Risk Management Application and Instruments; Preparedness and Contingency Planning; Call for good practices in disaster risk management; and Priorities to address at the World Conference on Disaster Reduction. Focus: • Urban Risks • Fire • Floods • Earthquakes	• PreventioWeb, *Reference guide for preparation of National information,* 2005, URL: https://www.preventionweb.net/files/869_Greece-report.pdf

| National Report in Preparation for WCDR (2005)- Armenia | The presented National Report in preparation for WCDR was a document presenting the state of the art about risk and emergency management in Armenia. The National Report analysed, through a set of different questions, Political Commitment and Institutional Aspects; Risk Identification; Knowledge Management; Risk Management Application and Instruments; Preparedness and Contingency Planning; Call for good practices in disaster risk management; and Priorities to address at the World Conference on Disaster Reduction.

Focus:
• Natural and man hazards
• Landslides
• Mudflows
• Floods
• Wildfire
• Earthquakes | • PreventioWeb, *National report on Disaster Reduction in the Republic of Armenia,* 2005, URL: https://www.preventionweb.net/files/837_Armenia-report.pdf |

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