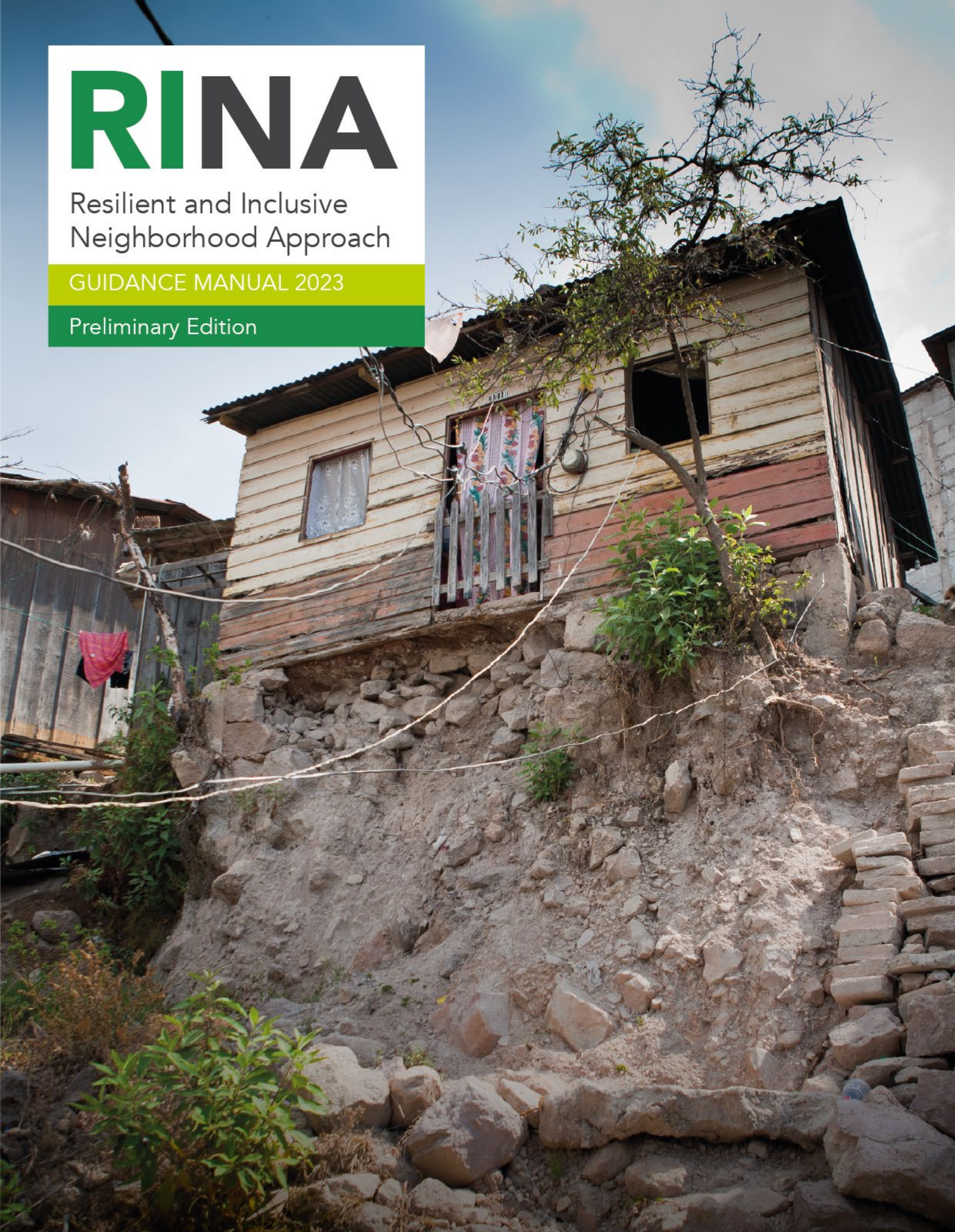


RINA

Resilient and Inclusive
Neighborhood Approach

GUIDANCE MANUAL 2023

Preliminary Edition



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EXECUTIVE SUMMARY

Over the past 50 years, our global society has been transforming from a rural to an urban population. Today, more than half of the world's population live in cities and the coming decades will bring more profound changes in the size and spatial distribution of the world's population. It is estimated that by 2050, 68 per cent of the world's population will be living in urban areas (UN DESA 2018). This rate of urbanization is accelerating due in part to the increasing impact of climate change, conflict and rural to urban migration.

To be resilient and inclusive, cities must function within the niche of sustainable extraction from the natural environment and above the social foundation whereby each person's human rights and dignity are protected. Cities that are well planned and which enable effective systems of collaboration and governance can deliver on the promise of increased resilience and inclusive wellbeing for all their residents. However, across the globe, there is a growing urban crisis as cities are struggling to cope with the rapid scale of their expansion and the increasing threats to which they are exposed. Much of the rapid global urbanization is happening in an unplanned fashion, particularly in lower- and middle-income countries resulting in a growing scale of informal and precarious urban settlements with high levels of social exclusion and disaster risk. More than 1 billion people live in informal settlements which equates to approximately 25% of the world's urban population (United Nations Statistics Division [UNSD], 2021). Additional to this is the population that live in precarious conditions in formally recognized settlements, but which are still highly vulnerable to disaster risks and social exclusion. These fragile urban contexts experience the greatest impact of shocks and stresses due to climate change, hydro-meteorological events, seismic events, infectious disease outbreaks, violence, and other hazards. Faced with this challenge and based on more than a decade of developing innovations and learning related to the Neighborhood Approach¹ and its application to urban disaster risk reduction in informal and precarious urban settlements, GOAL and Global Communities (formerly PCI) have compiled this Resilient and Inclusive Neighborhood Approach (RINA) Guidance Manual. RINA has been developed in partnership with a range of stakeholders including city administrators and urban communities and with the support of USAID Bureau for Humanitarian Assistance and IrishAid.

The RINA Guidance Manual is designed to support city managers working with partners to design and implement interventions that transform the living conditions of people in informal and precarious urban settlements towards healthier, economically productive, cohesive, inclusive, and disaster-resilient neighborhoods. RINA provides an innovative new way of transforming cities, and is an important resource for city managers for the following reasons: 1) *it provides new learning about how to protect, stabilize and strengthen local systems and build local capacity critical to the resilience and inclusion of informal and precarious urban settlements*; 2) *it is focused on practical operational interventions in the most challenging, marginalized and conflict affected urban contexts*; and 3) *it includes a comprehensive compendium of tools, case studies and guidance that can be adapted and applied to the context of any city*.

RINA is aligned to international policy on urban development and resilience including the Sustainable Development Goal 11 (SDG) – Sustainable Cities and Communities, the New Urban Agenda of Habitat III, the Sendai Framework for Disaster Risk Reduction and the UNDRR global campaign, “Making Cities Resilient”. By adopting RINA cities will progress the achievement of these international standards for those left furthest behind in cities in informal and precarious urban settlements.

RINA is a response to a growing global urban crisis which is manifesting in the form of social exclusion and disaster risk in informal and precarious urban settlements. The objective of the RINA Guidance Manual is ‘To Progress Resilient and Inclusive Cities Through Resilient and Inclusive Urban Communities.’

This Guidance Manual consists of four Chapters. Chapter 1 presents an overview of risk and vulnerability in informal and precarious urban settlements. It also explains what a resilient and inclusive city and neighborhood is and highlights the international agreements and standards relevant to RINA. Chapter 2 explains the concept of RINA, which is based on the Neighborhood Approach. Chapter 3 describes the four Guiding Principles for RINA – Community Centered, Partnerships for Local Systems, Institutional Strengthening and Good Governance and Cost Effective and Scalable - and the two high level Outcomes of Resilience and Inclusion. Chapter 4 describes the 30 steps of RINA Implementation grouped into 4 phases: Preparation and Initial Assessment, Organization and Planning, Implementation, and Adapt and Scale at City Level. RINA includes operational tools, case studies, and guidance that can be adapted to the context of each target city. RINA is designed to achieve measurable impact in the 10 essentials of Resilient Cities at neighborhood level.

The RINA Guidance Manual is designed for local governments who typically are assigned the city administrator or manager function, but it is equally relevant for other actors within cities, including neighborhood communities and others who have an interest in resilient and inclusive cities and work in partnership with city managers. The RINA Guidance Manual was designed to be used flexibly and non-prescriptively for those who apply it. RINA should be implemented by a coordinated multi-disciplinary team (RINA Team - RT) led or appointed by the city management.

RINA is designed to guide city managers to effectively address the challenges of informal and precarious urban settlements in their urban territories and to build partnerships with communities and other stakeholders for the planning and implementation of actions aimed at a more resilience and inclusive future for all the residents of their city.

¹ The Neighborhood Approach was developed by USAID as a means for delivering humanitarian assistance in urban areas.



CHAPTER 1 . CONTEXT

1.1 Background

Rapid and unplanned urban expansion cause cities to experience a wide range of disaster risks and social exclusions that threaten not only the lives of their inhabitants but also result in substantial environmental, social, and economic impacts, such as the loss of economic and domestic goods. According to the 2019 Global Risk Assessment “risk is interconnected across larger and smaller geographic scales. Neighborhoods are an example of the smaller spatial scale in urban areas, and are central places where people, economic activity and built goods are concentrated, and which are increasingly seen as the front line of disaster risk. Disasters in urban areas affect residents and their livelihoods, and transfer disruptions through supply chains and resource networks to other locations” (UNDRR, 2019).

Most cities are vulnerable to at least some level of disaster hazard. Indeed, by 2018, 59% of cities with at least 500,000 inhabitants were at high risk of exposure to at least one of six types of natural hazards (cyclones, flood, drought, earthquake, landslide, and volcanic eruption). Together, these cities and those larger than 500,000 inhabitants highly exposed to at least one type of natural threat, are home to 1.4 billion people in 2018 (UN, 2019).

On average, according to UNDRR (2019) cities in low-income countries are at higher risk of disaster and are more vulnerable to disaster-related economic losses and mortality than those in more developed regions or high-income countries. It is estimated that 92% of the mortality attributed to internationally reported disasters since 1990 has occurred in low- and middle-income countries (UNDRR, 2019). People in the poorest countries are seven times more likely to die from a disaster than in the richest (CREG and UNISDR, 2018).

Cities in developing or low-income countries are growing faster and with it, so are the impact of disasters (Blackburn and Johnson, 2012; UNISDR, 2009; UNDRR, 2019 cited by Gu, 2019). Rapidly growing small and medium-sized cities are often at greater risk due to limited financial and technical capacity for urban planning and investment in infrastructure to reduce risk (UN HABITAT 2012). All these risks have their origin in a series of factors:

- **Climate, geography and rate of urbanization:**

Climate risk factors are increasing in frequency and intensity and include flooding, water shortages, heat waves, landslides, deteriorated air quality, interface forest fire spread, disease outbreak, etc. Geographic risk factors include proximity of cities to tectonic fault lines, the coastal low-lying location of many of the cities, among others. High rates of urbanization are accelerating due to rural to urban migration, climate change and conflict.

- **Poorly planned urban development:**

In many cities, particularly small and medium-sized cities², the capacity to implement urban planning and capital investments needed to adequately control the pace of urbanization has been insufficient (UN-DESA, 2019).

- **High degree of inequality:**

High levels of inequality, including gender inequality, exist in cities, reducing access to land and affordable housing close enough to economic opportunities and social cohesion networks.

- **Urban poverty:**

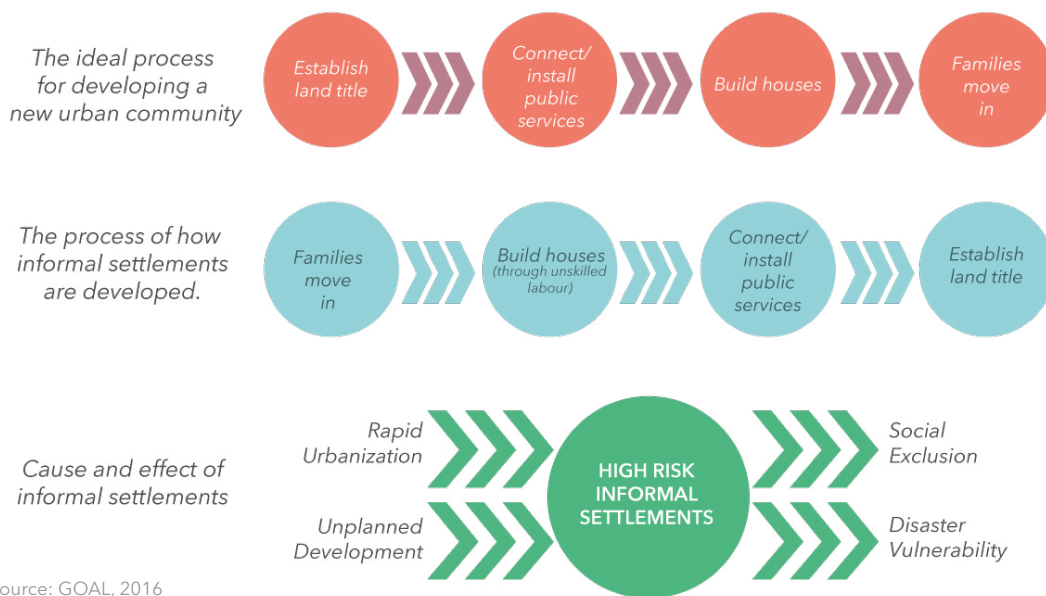
The impact of disasters and everyday risks can and often magnify existing household poverty. Families migrate to cities due to one set of risks but are confronted by new risks and exclusions in urban informal and precarious settlements forcing them deeper into poverty.

- **Insecurity and Conflict:**

Breakdown in social cohesion and lack of opportunities create conditions for youth violence, criminal gangs and conflict.

² UN-DESA (2019) defines medium-sized cities as those with populations between 1 and 5 million and classifies small cities into subgroups: cities of 500,000 to 1 million; cities of 300,000-500,000, and urban settlements of less than 300,000.

Figure 1. A global trend of rapid and unplanned urbanization leads to social exclusion and increased vulnerability.



Informal settlements are defined as:

“Residential areas where 1) inhabitants have no security of tenure vis-à-vis the land or dwellings they inhabit, with modalities ranging from squatting to informal rental housing, 2) the neighborhoods usually lack, or are cut off from, basic services and city infrastructure and 3) the housing may not comply with current planning and building regulations, and is often situated in geographically and environmentally hazardous areas” (UN Habitat, 2015).

This rapid urban expansion in middle- and low-income countries is primarily occurring in the form of informal settlements. Informal settlements are settled and expand over time in unplanned ways through “unassisted self-help” (Napier, 2002, p.8) often in hazardous areas in urban peripheries that have not been pursued for formal development (Ajibade & McBean, 2014; Melore & Nel, 2020; Napier & Rubin, 2002). Figure 1 represents the process which often occurs in the establishment of informal urban settlements.

Ideally an urbanization will begin by confirming land title and suitability for housing followed by servicing the land, construction of housing to approved standards, and finally families moving into their new homes. Informal settlements occur in reverse order whereby families first move to a location without agreed land title or confirmed suitability for development. Families then begin to build housing with whatever materials and unskilled labor is available to them. The process to service the land is complex and uncertain and can take many years often with surface water and wastewater drainage and access roads being the last to resolve. Finally, as cities expand some arrangement is eventually put in place to resolve land title although this can remain at issue for many decades. Through this process of informality families remain highly vulnerable often with minimal access to basic services and exposed to social exclusion and disaster risk.

“Urban informal settlements can be considered as fragile and conflict-affected contexts (FCAC). FCAC incorporates areas affected by fragility - situations where the state is unable or unwilling to apply authority and does not provide basic servi-

ces to the population - and conflict - the use of armed force between parties. Urban informal settlements may experience social-political fragility (via informality) and conflict (via gang violence for example). Informality is an expression of fragility, where state institutions focus on policing and security but are notably lacking in providing infrastructure and public services. People living in informal settlements are kept at the social, political, and geographic peripheries due to formal governance being unable and/or unwilling to provide for the population’s basic needs. Moreover, fragility is a breeding ground for vulnerability” (Peters, et al., 2022). Fragility, vulnerability and exclusion are all inter-related. “Vulnerabilities explain why even the same climate-related hazards do not wield uniform effects across places and social groups, with the most marginalized who are continuously held in risk (Hilhorst & Bankoff, 2022; Pörtner et al., 2022) being denied access to and ownership of needed resources” (Peters, et al., 2022). Vulnerability can be understood as exposure to risk, susceptibility to harm resulting from such exposure, and insufficient ability to cope with or adapt to the impacts of risks (Dodman, Brown, Francis et al. 2013).

The definition of what constitutes an informal settlement in this Guidance Manual is based on accepted guidance from UN Habitat, however, different cities and public policies may have varying definitions of urban informality. Irrespective of whether an urban settlement is defined as informal or not, RINA is designed to engage in settlements which exhibit the conditions of fragility, vulnerability and exclusion which characterize informal settlements. Settlements which exhibit these characteristics but are officially recognized as formal by city and public policy are still considered to be precarious. Therefore, RINA is designed to target informal and precarious urban settlements.

Different socio-economic groups with different characteristics and identities, such as age, gender, poverty level, race, ethnicity, and land occupation status (such as tenants and squatters) are vulnerable to different risks and for different reasons. Table 1 summarizes some examples of barriers to using assets and capacities to manage risks that could be presented by different groups in informal and precarious urban settlements. It reflects the need to understand why and how different groups are vulnerable and what are the root causes of their vulnerability, and thereby be more effective in building inclusion and resilience.

Table 1. Potential constraints for neighborhood stakeholders using assets and capacities to build resilience and inclusion.

Key players	Barriers to using assets and capacities to manage risk
Individuals and households	<ul style="list-style-type: none"> Poverty and continuous use of assets to survive day by day. Weak networks of trust and support, reduced social cohesion. Poor access to civic organizations or local governance processes.
Neighborhood civic organizations	<ul style="list-style-type: none"> Poor access to design, planning and budgeting processes. Few opportunities for the co-development of knowledge and services.
Business	<ul style="list-style-type: none"> Low profit margins that limit the potential to invest in resilience and inclusion. Poor access to infrastructure networks (water, transport, energy, etc.). Criminality and extortion disrupting supply chains and business operations.

A generally accepted discourse is that risks are disproportionately experienced in low-income communities when settled in areas where there is little or no market value to the land. This is the result of being excluded from access to housing and safe spaces, as well as from the social and economic benefits offered by a city. Unfortunately, the areas where informal and precarious settlements are established are exposed to multiple threats such as landslides, floods, infectious diseases, fire spreads, among others. However, its inhabitants tend to accept this level of risk in exchange for a good location for their livelihood activity, services, and social ties. This reflects the importance of integrating urban disaster risk reduction and inclusion into urban development plans to have a comprehensive understanding of the political and economic forces that need to be considered when formulating policies and plans aimed at increasing resilience and inclusion at the city and neighborhood level.

Local governments are mandated to provide institutional arrangements such as planning, financing, monitoring and regulation, but success in increasing resilience and inclusion at the city, and neighborhood level will depend largely on their capacity, resources, and partnerships to do so. A challenge for many local governments in low- to middle-income countries is the fact that many, particularly in medium-sized cities, often lack sufficient resources or institutional capacity to provide even basic public services. This reality requires careful consideration of what a local government can take on in addition to its day-to-day responsibilities, and often requires a step-by-step approach to strengthen its own capacity to better position itself and transform informal and precarious urban settlements into resilient and inclusive neighborhoods.

The role of women and youth as change leaders in informal and precarious urban settlements cannot be over-stated. These settlements often represent the areas of highest incidence of crime and violence in most countries. Women are the driving force behind the social cohesion and social capital necessary to bring about the collective action needed to transform urban settlements particularly in complex contexts with high levels of insecurity. However, inequalities in power dyna-

mics and distribution of responsibilities among genders create barriers that limit women's leadership in influencing change. Similarly, youth are the future of urban communities and can bring the motivation, energy and vision for change if given opportunity to do so. RINA is designed to empower women and youth in the process of building resilient and inclusive urban communities.

The RINA Guidance Manual is heavily based on two successful urban upgrading programs funded by USAID Office for Humanitarian Assistance and implemented by GOAL and Project Concern International (now Global Communities) over more than a decade from 2012 to 2022. These programs, Barrio Resilience and Barrio Mio, were undertaken in the city of Tegucigalpa in Honduras and Guatemala city in Guatemala. Both programs were peer reviewed during a comprehensive evaluation process by Florida International University, Extreme Events Unit. Throughout the 10 year programme GOAL and PCI coordinated their interventions to share learning and develop an overall intervention approach for informal and precarious urban settlements. In addition, GOAL and PCI collaborated and partnered with a broad range of stakeholders including local communities and city administrators, national and regional authorities, peer agencies, academic and research institutions, private sector and the UNDRR Making Cities Resilient Campaign in developing this proposed Guidance Manual on the Resilient and Inclusive Neighborhood Approach.

2.2 Related Global Policies

As mentioned, RINA aims to guide practical interventions at the neighborhood level to achieve on the ambitions of important global policies. The following is a summary of the principal global policies to which RINA is aligned:

- The Sustainable Development Goals (SDGs)**



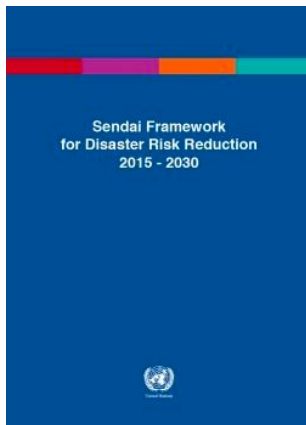
National and local governments have committed to using resilience and inclusion frameworks in development plans, programs and projects by adopting the SDGs, which in the urban context is integrated into Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation and Goal 11: Make cities and human settlements inclusive, safe, resilient, and sustainable. Goals 11.1, 11.2 and 11.3 highlight the commitments needed to introduce resilience elements into neighborhood-level plans through participatory planning, improved infrastructure and basic services, and improved access to public transport.

- **The New Urban Agenda**



The New Urban Agenda was drafted during the HABITAT III conference in Quito, Ecuador in 2016 and sought to establish a voluntary commitment between institutions and organizations from the public and private sectors, as well as civil society, to advance sustainable urban development “as a critical step to achieve sustainable development in an integrated and coordinated manner at the global, regional, national, subnational and local levels, with the participation of all relevant actors.” It proposes to implement its commitments through a series of innovations in rules and regulations, planning and design standards and municipal finances. The New Urban Agenda focuses on three main principles: (a) Leave no one behind; (b) Ensure sustainable and inclusive urban economies; (c) Ensure environmental sustainability.

- **Sendai Framework for Disaster Risk Reduction**



The Sendai Framework for Disaster Risk Reduction 2015-2030 outlines seven clear objectives and four priorities for action to prevent new disaster risks and reduce existing ones: (i) Understanding disaster risk; (ii) Strengthening disaster risk governance to manage disaster risk; (iii) Investing in disaster reduction for resilience and; (iv) Improving disaster preparedness for an effective response and “build back better” in recovery, rehabilitation, and reconstruction. It aims to achieve substantial reduction in disaster risk and losses in lives, livelihoods, and health and in the economic, physical, social, cultural and environmental assets of individuals, businesses, communities and countries by 2030.

- **The Global Campaign Making Cities Resilient MCR2030**



Making Cities Resilient 2030 (MCR2030) builds on the success of the preceding decade’s advocacy work under the Making Cities Resilient (MCR) Campaign, which began in 2010 and ended in 2020. The MCR Campaign, headed by the United Nations Office for Disaster Risk Reduction (UNDRR) and implemented in collaboration with partners, has had a significant impact on increasing urban disaster resilience through local government authorities. MCR2030 initiative intends to make cities more resilient and sustainable by 2030. It will assist cities in their efforts to reduce risk and build resilience, directly contributing to the achievement of SDG 11 which states, “Make cities and human settlements inclusive, safe, resilient, and sustainable” (UNISDR, 2022).

MCR proposes Ten Essential Essentials for cities and local governments to be more resilient. The first three refer to the organizational capacity of the city, the next five refer to operational capacity, and the last two to response and resilience (UNISDR, 2022).



CHAPTER 2. RESILIENT AND INCLUSIVE NEIGHBORHOOD APPROACH (RINA)

2.1 What is the RINA Approach?

RINA is a community-centered local systems approach designed to foster partnerships and improved governance that can deliver cost effective and scalable solutions to transform informal and precarious urban settlements into resilient and inclusive neighborhoods. RINA builds upon the Neighborhood Approach originally designed to promote multi-sectoral response to humanitarian crises in urban contexts and develops this into an overall approach to progress resilient and inclusive cities through resilient and inclusive urban communities.

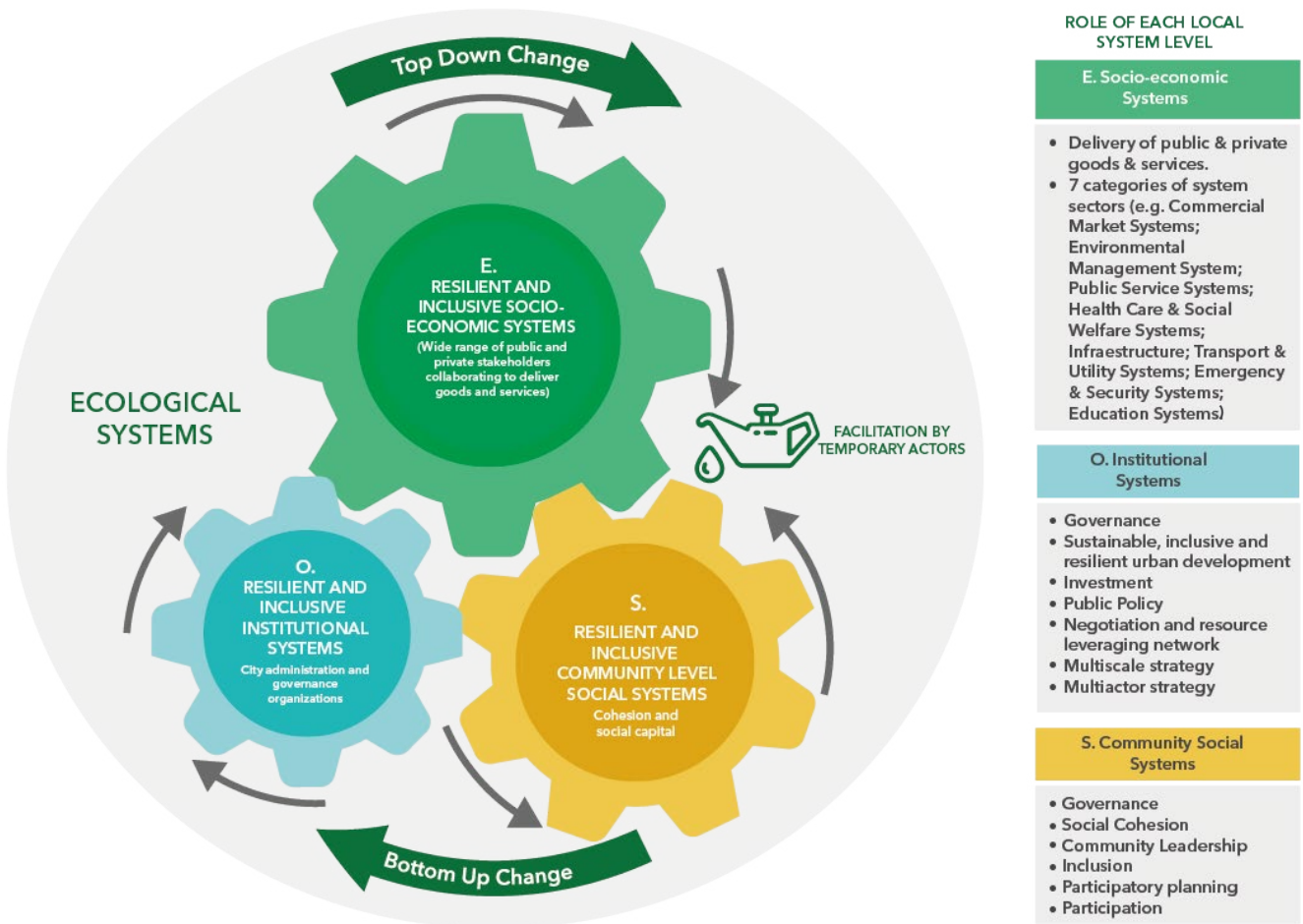
How is RINA different from other approaches?

- Community centered
- Partnerships for local systems
- Institutional strengthening and good governance
- Cost-effective, and scalable

While RINA is heavily based at the neighborhood level, it recognizes that neighborhoods rely on broader cities' socio-economic and governance systems which themselves are often fragile. It also recognizes that in many urban areas, large portions of the population may be socially or economically marginalized in ways that transcend neighborhoods; are highly susceptible to external shocks and stresses that are outside of their immediate control; and that inclusion and resilience depends on stakeholders across many different levels and across different sectors coordinating and collaborating effectively (GOAL R4S, 2019).

Cities are complex and to understand this complexity RINA proposes to frame cities as consisting of three levels of systems (i.e., people and organization collaborating) which can be mapped and analyzed. These systems include social systems at the community level (cohesion and social capital); institutional systems (organizations of administration and governance of the city); and socio-economic systems (Systems for the provision of public services and market systems). These systems are dynamic and interact in ways that define how the city functions and the degree to which it is resilient and inclusive. In this way, Cities can be considered a "System of Systems". For cities and their neighborhoods to be resilient and inclusive, these systems need to integrate and function effectively to deliver goods and services to all the residents of the city in times of stability and in times of crisis, and they must do this sustainably within the broader environmental context. RINA is designed to support local governments in using a systems approach, applying practical tools, guidance, and case studies to build multi-stakeholder partnerships that can transform informal and precarious neighborhoods and the systems they depend upon, so they are more resilient and inclusive. RINA is designed to guide local governments to make measurable progress in achieving the UNDRR 10 essentials for Making Cities Resilient at the neighborhood level.

Figure 2. Resilient and Inclusive Neighborhood Approach (RINA)



For local governments to progress resilient and inclusive neighborhoods and systems, they must implement highly contextualized and evidence based strategies anchored in an understanding of the diverse range of shocks and stresses associated with vulnerability in the lives of men, women, people with disabilities, children and youth, and marginalized populations. This requires a focus on neighborhoods - their environment, social networks, infrastructure, and service trends within them - as well as nurturing strong linkages to broader essential systems at work in the city.

To achieve this, local governments and their partners need to be able to engage directly with neighborhoods and facilitate opportunities for all those who live and work there to actively participate in the process. It also requires understanding and strengthening the different systems that make up the city together with key public and private partners—banks and other financial institutions, ministries of health, public works, and education; agencies charged with disaster risk management and emergency response; universities and non-profit groups, for example—so that they work for the benefit of its residents and are able to pivot during emergencies to support integrated and comprehensive responses to crises.

RINA actively seeks opportunities to address the root causes of vulnerability—both proactively before crisis and as an integrated part of humanitarian assistance using the Neighborhood Approach, which advocates for not only meeting immediate needs in emergencies but laying a foundation for rebuilding more resilience and inclusive neighborhoods. It also recognizes that there is an urgent need and economic justification for preventing uncontrolled growth, reversing

trends associated with increasing vulnerability, and preventing crises before they happen.

Identifying Incentives for Participation in Urban Resilience Initiatives: Lessons Learned from PCI in Guatemala.

An essential lesson learned from urban resilience work in Guatemala has been that there is significant value in casting the net to include many stakeholders that can benefit from and contribute to strengthening resilience to shocks and stresses. Indeed, no one partner, such as a local government, can take on the complex and resource intensive work of creating urban resilience in high-risk neighborhoods on its own. However, it's important to look beyond overly general philanthropic justifications for involvement and identify the many clear, measurable incentives for partners to participate. For the private sector, for example, it's often an opportunity to not only support urban initiatives with lower cost resources and technical expertise, but to expand markets into important areas of the city. For local governments, urban resilience programming can reduce costs (such as those associated with responding to crises rather than taking proactive approaches to reduce risk) and expand the tax base by adding households eager to be formalized and have clarity of land title. It can assist ministries to contextualize and operationalize strategic plans and provide students and universities with valuable opportunities for collaborative research, and gain hands on experience in grappling with challenges across the disciplines.



2.2 Who is the RINA Approach and its Guidance Manual for?

The primary audience for the RINA Guidance Manual is municipalities—local government agencies responsible for administration of cities (municipal employees, mayors, city councils)—and in some cases, municipal associations governing a wider metropolitan area—who are a focal point for efforts to address urban risk. However, the manual is also intended to inform how local governments can collaborate closely with other essential stakeholders that play roles in urban resilience and inclusion, for example ministries and other national agencies; civil society organizations including Community Based Organizations, international and local NGOs; private sector actors such as in the finance and construction sectors; universities; and local organizations. RINA aspires to be practical and assist municipal governments to build off the resources and capacities they have, but also to assist them to chart a course to build capacity for resilience and inclusion programming over time.

This Guidance Manual will also be relevant to communities and community-based organizations to inform their efforts to transform their neighborhoods and effectively engage with city administrators and other stakeholders. The manual recognizes that to tackle the complexity and scale of urban vulnerability—and to be sustainable over time—local governments need to strengthen vertical collaboration from the community level all the way to national level, and laterally across sectors—through innovative partnerships that bring together the interests, incentives, and resources of private companies, universities, and a broad range of socio-cultural and development organizations. This manual may also be useful for national or regional government agencies, academic institutions, private sector businesses, or civil society agencies that are supporting communities and municipal governments in developing resilient and inclusive neighborhoods.

2.3 How to use the RINA Guidance Manual?

RINA provides operational guidance on identifying and engaging with communities and partners, overall urban resilience and inclusion approaches, and practical steps for interven-

tions. Given the diversity of local governments, the conditions in which they are working, and their entry point into urban resilience and inclusion programming (such as before or after a crisis), local governments and their partners will ultimately be best able to determine locally appropriate strategies to accomplish the objectives identified within this guidance manual. However, the guide also provides examples of how local governments have taken on these challenges and provides links to other resources.

The material in this guidance manual is intended to be utilized not as a prescriptive set of actions to be taken in an exact order, but as a point of reference local governments and their partners can use in their broader efforts, which should be energetically contextualized and adapted to meet the challenges and opportunities of the areas where they are working. In other words, users can and should adapt the intervention model presented in this guide to meet the needs of the context in their city or their neighborhoods or to respond to the nature and scope of the intervention that is planned. In this sense, the steps will not necessarily follow the order in which they are presented here but can be adapted and focused according to the user's need.

The development of this Guidance Manual is also intended to be a living document and is expected to evolve and improve as new learning emerges. The developers of this guide appreciate constructive suggestions and feedback at the following addresses: resilience@goal.ie and/or resilience@globalcommunities.org. GOAL and Global Communities will be happy to recognize the important contributions to the development of the RINA Guidance Manual in future revisions.

2.4 How is the RINA Approach and its Guidance Manual structured?

As mentioned above, RINA is designed to assist local governments to achieve the 10 Essentials of the global initiative Making Cities Resilient 2030 (MCR2030) at neighborhood level. The Guidance Manual makes consistent linkages to the essentials, as well as provides references to other resources of value related to thinking about how to achieve these essentials. RINA is anchored and structured around a practical and

clear definition of who, why, where, what and how:

- **WHO** are the ultimate outcomes of RINA intended to benefit?

The RINA Guidance Manual aims to improve conditions for vulnerable populations living in high-risk informal and precarious urban settlements including in the most challenging urban contexts with high levels of insecurity, disaster vulnerability, and social exclusion.

- **Why** is RINA Relevant?

RINA is designed to address the global trend of rapid and unplanned urban expansion and enable local governments to implement strategies to manage this expansion and improve the resilience and inclusion of their cities. The current levels of rapid urban expansions are leading to a significant increase in the number of households living in highly vulnerable conditions, often marginalized from essential services and facing threats to their lives, livelihoods, health, and well-being. RINA is intended to help fill an ongoing need for additional applied and practical guidance targeted at municipal governments to inform their work as they take on the challenge of transforming high risk informal and precarious urban settlements.

- **Where?**

RINA is designed to assist local governments to take an evidence-based and transparent approach to determine whe-

re to prioritize work within their jurisdictions and to do so with a view towards scaling to other vulnerable settlements. RINA implementation guidance describes using primary and secondary sources of data to review prioritized areas, engaging local partners in informing decisions, and communicating the process continually to stakeholders.

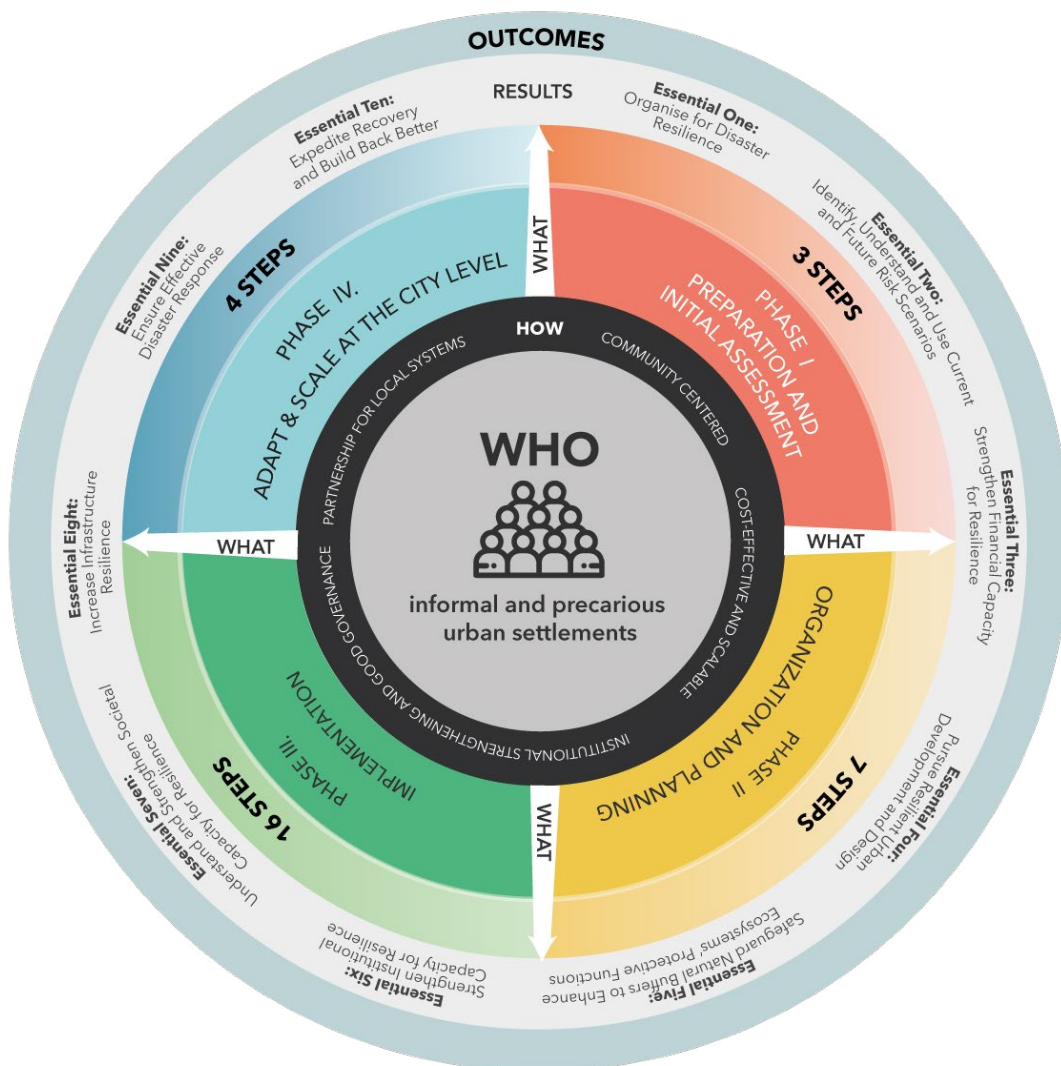
- **What to do?**

The challenges faced by local governments as city administrators is significant and each city has varying resources, capacities, and potential partnerships at its disposal to address these challenges. The RINA Guidance Manual includes 30 practical steps across four implementation phases outlining what can be done to transform informal and precarious urban settlements into resilient and inclusive urban communities. Each step can be tailored to the context of each city. RINA includes implementation tools, case studies and guidance to inform practical action to achieve the 10 essentials for making cities resilient at neighborhood level.

- **How to do it?**

RINA sets out four Guiding Principles of how to effectively engage in informal and precarious urban settlements to achieve resilience and inclusion outcomes for the vulnerable populations living in these contexts. The four principles include being community centered, building partnerships to strengthen local systems, strengthening institutional capacities and good governance, and developing interventions that are cost effective and scalable.

Figure 3. Resilient and Inclusive Neighborhood Approach Document Structure





Chapter 3. RINA GUIDING PRINCIPLES

RINA has identified four Guiding Principles for implementing durable solutions for resilient and inclusive urban communities. While each Principle is described independently below, they are intended to be utilized as parts of a highly integrated approach.

Figure 4. RINA Guiding Principles



GUIDING PRINCIPLE 1. COMMUNITY CENTERED

RINA is anchored in a geographically or socially defined urban community or neighborhood as the unit of coordination and implementation. The approach is designed to enable local governments and their partners to implement interventions that are relevant and effective for urban communities. Rather than being organized around the needs of specific populations across a broad area (such as programming for children across many neighborhoods, for example), RINA engages all people living and working in a neighborhood. However, the timing, magnitude, and type intervention will vary depending on the level of need and vulnerability. RINA engages residents in the co-production of information, knowledge, plans and services; and emphasizes addressing the need at individual, household and neighborhood level, such as basic infrastructure, water and sanitation, drainage, healthcare, access and egress, lighting, and risk mitigation infrastructure. RINA is strongly integrated and focused not only on identifying needs but on engaging neighborhood stakeholders—households, schools, businesses, churches and others—in identifying resources and solutions to complex neighborhood challenges.

GUIDING PRINCIPLE 2. PARTNERSHIPS FOR LOCAL SYSTEMS

RINA recognizes that governments or communities alone cannot tackle the challenges being faced by informal and precarious urban settlements. It requires well managed collaboration between a broad network of public institutions, the private sector, non-profit and civil society organizations, and academic partners with a clear articulation of responsibilities. Therefore, while being anchored in

the neighborhood, RINA seeks to understand and reinforce the linkages with broader systems that are essential for resilient and inclusive neighborhoods. For example, for a market system to deliver basic food supplies into a neighborhood it requires collaboration between the community, local stores who sell those products, transport companies who supply the stores, finance institutions who can provide credit to businesses, public institutions who provide and maintain access roads, government agencies who regulate food prices and quality, etc. Market systems are just one of a number of categories of socio-economic that are necessary for cities to function and for neighborhoods to be resilient and inclusive. RINA has identified 7 different categories of socio-economic systems including commercial market systems, healthcare and welfare systems, education systems, environmental management systems, infrastructure, transport and utility systems, emergency and security systems and other public administration systems. Each of these systems involves different actors collaborating and to improve conditions for informal and precarious urban settlements requires identifying and engaging with partners within these systems so that they are more inclusive of and function better for at risk urban communities. RINA identifies which systems are most critical to the resilience and inclusion of neighborhoods and guides the development of partnerships to transform these systems. For further guidance on mapping and analyzing local systems please refer to *Step 13 - Selection of Critical Socio-Economic Systems for Neighborhood Resilience and Inclusion*.

GUIDING PRINCIPLE 3. INSTITUTIONAL STRENGTHENING AND GOOD GOVERNANCE

RINA recognizes that capable and transparent local institutions managing cities and good governance is essential to achieving resilient and inclusive urban communities. RINA focuses on building the capacity of municipal governments so that they can lead effective engagement with communities, the private sector, national and regional state agencies, civil society organizations and other stakeholders. To achieve this, a key step is to acknowledge the unique strengths and constraints of local governments (e.g., recognizing and addressing the often already high workloads on municipal staff, constraints on funding and locating specialized new hires, or identifying adequate financial resources, etc.). Similarly, RINA promotes the importance of local governments' strong working relationships with higher levels of government, such as at the district, state, and national levels, as well as their ties to neighboring local governments with shared resources and vulnerabilities. RINA also recognizes that to the extent that the many national ministries and agencies with mandates associated with risk management, humanitarian assistance, inclusion and resilience are collaborating at the national level, it is critical to effectively engage these agencies to support local governments' efforts in transforming informal and precarious settlements.

RINA promotes a multilevel and inclusive approach to governance, including advocating for the use of institutional frameworks that allow a multisector, multidisciplinary approach to enhance resilience and inclusion challenges. This often entails working towards creating an adequate distribution of authority and resources among municipal, zonal or district and especially neighborhood levels. Like other levels of government, neighborhood councils or committees and other community leaders and groups should play a substantive role in shaping decisions on how financial, human and technical resources are assigned. RINA also advocates for mainstreaming a clear articulation of

resilience and inclusion into government plans for municipal development, infrastructure upgrading and maintenance, socio-economic development, and communications. Increasingly, national, and local government policies link these goals and indicators to those articulated in the Sendai Framework, SDGs and New Urban Agenda. RINA is intended to inform the process to localize these goals and indicators down to the neighborhood level, contextualize them, and align them with communities' needs and priorities.

Urban resilience and inclusion programming requires that the unique human, technical and financial resource strengths and constraints of the local governments is acknowledged and key to this, RINA includes a strong focus on strengthening transparent, inclusive and effective urban planning processes that will improve conditions for informal and precarious urban settlements.

Resilient and Inclusive Neighborhood Approach in Urban Contexts:

The same principles and management of work at the neighborhood level and within broader urban systems are as essential in situation of acute humanitarian emergency as they are in longer term resilience and inclusion programming. For example, initiatives to rapidly restore basic systems such as water or sanitation infrastructure after a major crisis event such as an earthquake need to be based within neighborhoods and informed by the participation of a broad range of stakeholders together with affected communities. These initiatives need to be integrated across technical sector priorities, such as protection, shelter, and settlements, livelihoods, health, etc. The Resilient and Inclusive Neighborhood Approach advocates for humanitarian stakeholders to coordinate their work using a socially and/or geographic area as a basic unit of analysis (and not just based on a technical sector). Integrated or area-based interventions often require planning and implementation with stakeholders that transcend the primary geographic area of focus, such as utility operators, local authorities, local and international NGOs through higher-level collaboration and coordination platforms (like the UN IASC-Cluster System). As such, the Resilient and Inclusive Neighborhood Approach creates a framework for humanitarian response that can be conducive for organizations with overlapping geographic and technical interests to collaborate and coordinate their activities and engage with counterparts at the neighborhood level. This streamlines and organizes how communities can engage with a range of stakeholder organizations and provides a platform for them to have more substantive engagement. By organizing humanitarian response actions at the neighborhood level, the RINA approach provides a framework for government actors to ground and organize the efforts of the international humanitarian and development communities, and encourage coordination, encourage greater participation of local entities and local stakeholder organizations operating in the area that may not otherwise be considered.

GUIDING PRINCIPLE 4. COST-EFFECTIVE AND SCALABLE

RINA focuses on developing evidence-based interventions that are feasible to scale, leverage local capacities and resources and that are not dependent on external funding. RINA seeks to balance the importance of working at the local level with highly contextualized and inclusive strategies, together



with the imperative that cities must be able to adopt approaches and implement them at a larger scale. It also recognizes that significant steps towards more resilient and inclusive urban communities can be made at reasonable cost, particularly when a broad range of stakeholders are collaborating and contributing resources. It is also important to highlight that there is clear evidence of the economic benefit for cities to proactively upgrade at risk neighborhoods. It is now clear that the cost of proactive risk reduction is far less than the cost of responding to and recovering from disasters events that will occur and this before even considering the benefit in terms of reduced human suffering and loss of life.

Highly contextualized and scalable programming relies on effective use of data, information, and evidence to inform decision making; a culture of inquiry; ability to adapt and agile management approaches; and planning for scale from day one.

As RINA is community centered, community members typically have a significant role in identifying, collecting, and sharing data with implementing agencies through focus groups, key informant interviews, mapping exercises, surveys and participatory planning for any proposed intervention in order to ensure it is cost effective and has potential to be scaled.

Better Understanding the True Nature of Costs Associated with Addressing Urban Vulnerability: Comparing the Costs of Proactive Risk Management vs. The Cost of Humanitarian Assistance

A recurring theme of addressing urban vulnerability is its high cost—and indeed, taken at face value, urban interventions can appear expensive. Yet taken with a broader view of true costs, urban upgrading can lead to greater revenue for local governments (such as by expanding the tax base and increasing payment for the use of basic services), increase business for the private sector, help households to improve their livelihoods, and may reduce other Household costs. For example, as part of the Barrio Mio project, PCI conducted a study on the cost of responding to an urban landslide resulting in the displacement of 100 households living in an urban area of Guatemala and compared it to the cost of proactive landslide mitigation. Tragic humanitarian costs aside, in an effort to provide emergency assistance in the sectors of health, shelter and settlements, WASH, protection, and livelihoods, the local government and its partners spent over five times what it would have spent to proactively remove these households out of landslide danger and purchase them new houses in safer areas of the city.

This data can be integrated with a broad range of other sources of technical and scientific data—satellite and aerial photography, remote sensing data, risk assessments, technical studies, geolocated information from ministries of public works, health and education databases, for example. By integrating community level data with secondary sources, it serves to promote community perspectives, can re-affirm or encourage them to revisit perceptions, and enables planners to draw linkages in trends, resources, systems, and risks from the neighborhood level to the broader city level.

Developing a Rigorous Understanding of the Local Context for Decision-Makers.

PCI's D-RISK approach is a process designed to engage local counterparts in the collection and use of data for decision-making on how to reinforce resilience in complex contexts. It reinforces capacity to assess the local context, helps to determine what data are necessary to collect and for whom, and how the data can best be organized, analyzed and visualized so they can be utilized by a range of different stakeholders.

D-Risk focuses on inclusive and equitable approaches to understanding risk and engages a broad range of community members—women, men, youth, older adults, people with disabilities, marginalized households, for example—in an effort to better understand shock and stresses and how they manifest themselves different across the community. And it integrates that locally driven understanding with alongside other types of data—such as scientific knowledge on climatic trends, environmental management, livelihoods and market fluctuations, financial systems, hazard and risk data, or access to water, sanitation infrastructure and health services.

OUTCOMES

RINA is designed to achieve two inter-related outcomes of resilience and inclusion, and these are the North Star for all interventions. The following section describes these high-level outcomes in the context of informal and precarious urban settlements.

OUTCOME 1: RESILIENCE.

Resilience is one of the two principal outcomes to be achieved through the application of RINA and hence will inform all interventions. UNDRR defines resilience as “The ability of a system, community or society exposed to a threat to resist, absorb, adapt and recover from its effects in a timely and effective manner, including the preservation and restoration

of its basic structures and functions.” Resilience is built at different levels of society, from the individual, family, community level to the systems and city levels. Resilience of urban communities is about having the capacity to anticipate, adapt, respond, or transform in the face of adversity and doing so in a way that does not compromise longerterm possibilities and ultimately leads to inclusive wellbeing. In this sense, it promotes identifying and understanding vulnerabilities and risk scenarios that affect or could affect the well-being of the population and the critical socio-economic and governance systems on which they depend. It seeks to understand the impact of such scenarios and how they affect population groups in a differentiated manner. RINA promotes that this risk analysis is not only incorporated into contingency planning and urban resilience programs, but also into territorial and development planning more broadly. RINA’s interventions seek to recognize and maximize the resilience capacities that exist at the individual, family, community and/or systems levels in the face of identified risk scenarios.

RINA applies an overall framework for achieving resilience capacities based on understanding clearly “resilience of what or of whom” and “resilience to what” and “through what capacities”. Figure 5 below is taken from the Analysis of Resilience of Communities to Disaster (ARC-D) Toolkit developed by GOAL. Resilience is about having the capacity to progress towards a desired goal and not allowing adversity to prevent from achieving that goal. (See Figure 5).

OUTCOME 2: INCLUSION

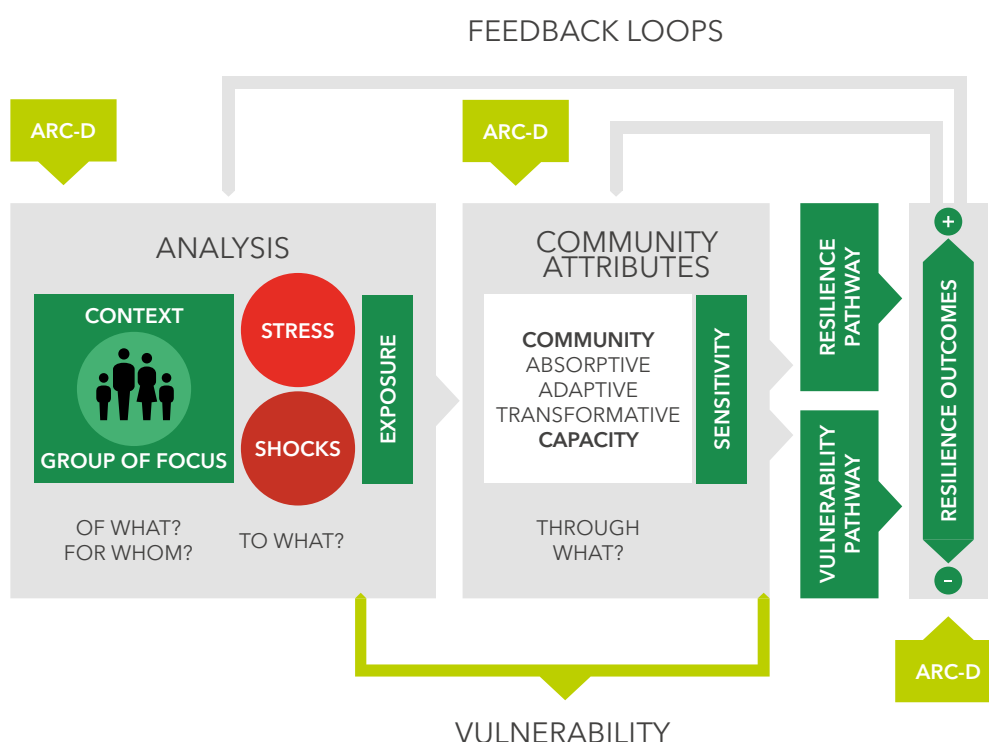
Inclusion is the ultimate outcome that RINA aims to achieve both at city level and within high risk informal and precarious urban settlements. RINA recognizes that people, for example men, women, older adults, youth, and people with disabilities are vulnerable to different shocks and stresses; have different resources and capacities with which to respond to them; and

that the same shocks and stresses affect people differently. RINA focuses on achieving measurable outcomes for all, including the most marginalized and vulnerable populations living in informal and precarious urban settlements, and extending opportunities to contribute to and benefit from urban life to all. In this way, cities and neighborhoods can be considered spaces where people can relate and collaborate so that everyone has access to their basic human rights and equal opportunity. Vulnerable populations living in informal and precarious urban settlements, are at the center of the processes to achieve resilient and inclusive neighborhoods through actions that promote equity and decrease exclusion. RINA seeks to ensure all individuals, families and communities can participate fully and actively in decision-making mechanisms and processes and have access to and control over benefits and opportunities.³

RINA promotes that people use their power, resources, and influence transparently and in a manner that nurtures more balanced power and equitable relationships. It promotes a redistribution of powers between individuals and groups and is dedicated to strengthening local governance structures to not only enable a broad diversity of people to participate, but to function in a way that their input has substantive and measurable impacts on outcomes.

RINA also stresses the importance of inclusive staffing of urban initiatives, including by local governments themselves, such that they employ a diverse team of men and women and include people with expertise and experience in mobilizing inclusive programming—from assessment and design, through implementation and monitoring and evaluation. RINA adheres to the four principles of humanitarian action and the nine commitments set out in the Essential Humanitarian Standard in terms of quality and accountability.

Figure 5. GOAL’s Resilience Framework



³ Social exclusion is defined as "a complex and multidimensional process involving the lack or denial of resources, rights, goods and services, and the inability to participate in the normal relationships and activities available to the majority of people in a society, whether in the economic, social, cultural or political sphere" (Levites and others, 2007).



Chapter 4. RINA STEPS

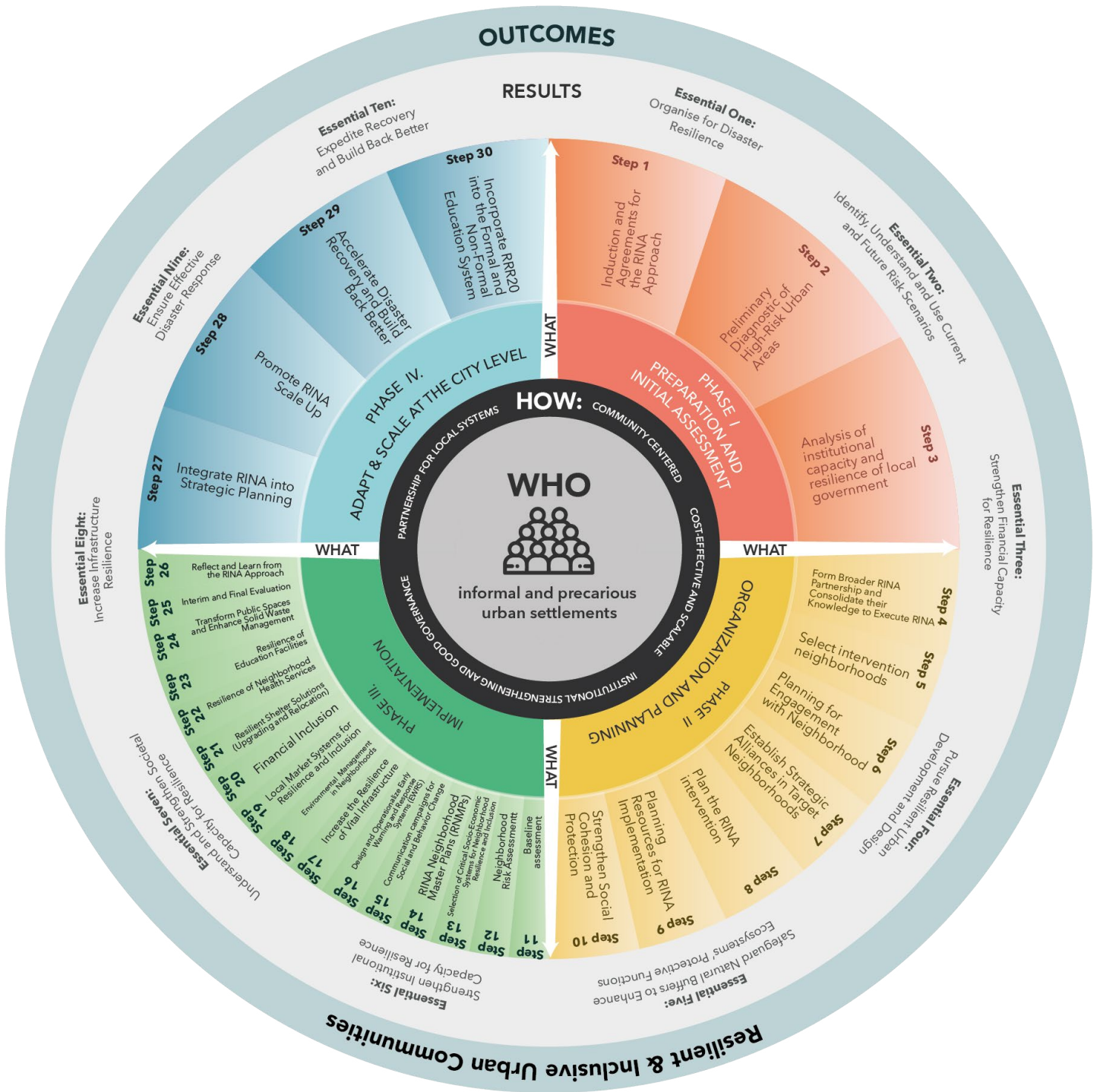
4.1 The 4 Phases and 30 Steps of the RINA Approach

RINA proposes 30 steps organized in 4 phases to progress resilient and inclusive neighborhoods. Phase 1: “Preparation and Initial Assessment” contains 3 steps and introduces RINA to the city management, identifies its relevance within the city, and explores the capacities to implement the RINA. Phase 2: “Organization and Planning” contains 7 steps relating to the necessary preparations within the local government and with the key stakeholders (including at neighborhood level) for the implementation of RINA. Phase 3: “Implementation” contains 16 steps setting out a series of interventions to stabilize and strengthen local systems for resilient and inclusive neighborhoods. Finally, Phase 4: “Adapt and Scale at City Level” contains 4 steps for scaling and replicating RINA at the city level, building back better, and longer-term adoption of resilience and inclusion. Table 2 below summarizes the 30 steps for implementing RINA under each Phase:

Table 2. RINA Implementation Steps

PHASE I. PREPARATION AND INITIAL ASSESSMENT	PHASE II. ORGANIZATION AND PLANNING	PHASE III. IMPLEMENTATION	PHASE IV. ADAPT & SCALE AT CITY LEVEL
<p>Step 1. Induction and Agreements for the RINA Approach</p> <p>Step 2. Preliminary Diagnostic of High-Risk Urban Areas</p> <p>Step 3. Analysis of Institutional Capacity and Resilience of Local Government</p>	<p>Step 4. Form Broader RINA Partnership and Consolidate their Knowledge to Execute RINA</p> <p>Step 5. Select Intervention Neighborhoods</p> <p>Step 6. Planning for Engagement with Neighborhood</p> <p>Step 7. Establish Strategic Alliances in Target Neighborhoods</p> <p>Step 8. Plan the RINA Intervention</p> <p>Step 9. Planning Resources for RINA Implementation</p> <p>Step 10. Strengthen Social Cohesion and Protection</p>	<p>Step 11. Baseline Assessment</p> <p>Step 12. Neighborhood Risk Assessment</p> <p>Step 13. Selection of Critical Socio-Economic Systems for Neighborhood Resilience and Inclusion</p> <p>Step 14. RINA Neighborhood Master Plans (RINMPs)</p> <p>Step 15. Communication Campaigns for Social and Behavior Change</p> <p>Step 16. Design and Operationalize Early Warning and Response Systems (EWRS)</p> <p>Step 17. Increase the Resilience of Vital Infrastructure</p> <p>Step 18. Environmental Management in Neighborhoods</p> <p>Step 19. Local Market Systems for Resilience and Inclusion</p> <p>Step 20. Financial Inclusion</p> <p>Step 21. Resilient Shelter Solutions (Upgrading and Relocation)</p> <p>Step 22. Resilience of Neighborhood Health Services</p> <p>Step 23. Resilience of Education Facilities</p> <p>Step 24. Transform Public Spaces and Enhance Solid Waste Management</p> <p>Step 25. Interim and Final Evaluation</p> <p>Step 26. Reflect and Learn from the RINA Approach</p>	<p>Step 27. Integrate RINA into Strategic Planning</p> <p>Step 28. Promote RINA Scale Up</p> <p>Step 29. Accelerate Disaster Recovery and Build Back Better</p> <p>Step 30. Incorporate RRR into the Formal and Non-Formal Education System</p>

Figure 6. RINA Wheel



This Guidance Manual is designed to be a practical approach that will lead to the achievement of the 10 Essentials for Making Cities Resilient at the Neighborhood Level. The 30 steps of the RINA Guidance Manual align with UNDRR’s 10 Essentials for Making Cities Resilient as shown in Table 3 below:

Table 3. Relationship between 10 Essentials for Making Cities Resilient and RINA Implementation Steps.

10 Essentials for Making Cities Resilient	RINA Implementation Steps
Essential 1. Organize for disaster resilience	Step 6. Planning for Engagement with Neighborhood Step 7. Establish Strategic Alliances in Target Neighborhoods Step 8. Plan the RINA Intervention
Essential 2. Identify, understand, and use current and future risk scenarios.	Step 2. Preliminary Diagnostic of High-Risk Urban Areas Step 12. Neighborhood Risk Assessment
Essential 3. Strengthen financial capacity for resilience	Step 9. Planning Resources for RINA Implementation Step 19. Local Market Systems for Resilience and Inclusion Step 20. Financial Inclusion
Essential 4. Pursue resilient urban development and design	Step 14. RINA Neighborhood Master Plans (RNMPs) Step 21. Resilient Housing Solutions (Upgrading and Relocation) Step 24. Transform Public Spaces and Enhance Solid Waste Management Step 27. Integrate RINA into Strategic Planning
Essential 5. Safeguard natural buffers to enhance the protective functions offered by natural ecosystems	Step 18. Environmental Management in Neighborhoods
Essential 6. Strengthen institutional capacity for resilience	Step 1. Induction and Agreements for the RINA Approach Step 3. Analysis of institutional capacity and resilience of local government Step 4. Form Broader RINA Partnership and Consolidate their Knowledge to Execute RINA Step 7. Establish Strategic Alliances in Target Neighborhoods Step 11. Baseline Assessment Step 25. Interim and final evaluation Step 26. Reflect and Learn from the RINA Approach Step 28. Promote RINA Scale Up
Essential 7. Understand and strengthen societal capacity for resilience	Step 10. Strengthen Social Cohesion and Protection Step 13. Selection of Critical Socio-Economic Systems for Neighborhood Resilience and Inclusion Step 15. Communication Campaigns for Social and Behavioral Change Step 30. Incorporate RRR into the Formal and Non-Formal Education System
Essential 8. Increase infrastructure resilience	Step 17. Increase the Resilience of Vital Infrastructure Step 22. Resilience of Neighborhood Health Services Step 23. Resilience of education facilities
Essential 9. Ensure effective disaster response	Step 16. Design and Operationalize Early Warning and Response Systems (EWRS)
Essential 10. Expedite recovery and build back better	Step 29. Accelerate Disaster Recovery and Build Back Better

RINA provides a framework and guidance for transforming informal and precarious urban settlements into resilience and inclusive neighborhoods. Throughout the RINA Guidance Manual recommended Tools which provide further detailed guidance to operationalize RINA are referenced. These Tools are enumerated through the Guidance from Tool 1 to Tool 160. All of the 160 Tools are fully referenced and the complete list of Tools are included at the end of this manual. RINA Guidance Manual includes an electronic hyperlink to the full detailed guidance available on each Tool and also a full reference description. User are encouraged to use these best practice tools depending on the specific intervention being undertaken. In addition 32 case studies are included which provide further practical experience of successful interventions that align with RINA in transforming informal and precarious urban settlements. These case studies are located throughout the description of the RINA Steps to further demonstrate the proposal approach. Each case study includes a link to a more detailed description and contact details for the lead agency for each case study are provided should further information be sought.

PHASE I: PREPARATION AND INITIAL ASSESSMENT

Step 1 Induction and Agreements for the RINA Approach



MCR Essential Six: Strengthen Institutional Capacity for Resilience

This first step will introduce RINA to the city management and consider feasibility of adopting this approach in line with other initiatives for transforming informal and precarious urban settlements.

1.1 Identify the RINA Team (RT) and Learn about the Resilient and Inclusive Neighborhoods Approach (RINA). At this starting point it is assumed that the city management has expressed interest in applying RINA and exploring the potential to implement this approach within their cities. To progress RINA and define the scope of potential interventions the city management should first name a core team who will drive its implementation. This core team should be assigned by and report to the city management. This core team will be referred to as the RINA Team or RT throughout this guidance. The RT will evolve over the course of the implementation as core partners are further identified and confirmed. The RT should be a diverse, inclusive, and technically integrated team within the local government and its partners. Additional partnerships can be leveraged to support implementation of RINA, but the RT will consist of core partners who will oversee the entire RINA intervention. The RT should plan orientations on material related to urban resilience and inclusion, urban upgrading, and disaster risk management (using this Guidance Manual). These sessions will familiarize the team with the Resilient and Inclusive Neighborhood Approach and begin to contextualize it within the target areas of intervention. Suggestions on the composition for this team and initial orientation documents can be found in *Step 4 - Form broader RINA Partnership and Consolidate their Knowledge to execute RINA*.

1.2 Gather and Review Relevant Secondary Documentation (e.g., Policies, Development Plans, Documentation on Past Projects within the Local Government, Risk Assessments, etc.). Where appropriate and possible, RINA should align with, build upon, and complement existing local, and national legislation, policies, present and past initiatives, and international best practices and frameworks. As a first step, it's important to build a library of core documents on relevant policies and plans that will inform any proposed intervention and examine how RINA and ongoing or planned initiatives align. Where possible, these documents should be made available to all RINA Team (RT) members and partners. Suggestions on the types of documents that can be added to a library can be found in RINA Team Library List⁴ in the Resilience Nexus website.

1.3 Identify the Resources Needed for the Successful Implementation of RINA. The RINA Team should begin the process of assessing what human, technical, and financial resources leveraged to support RINA implementation are available for upgrading of informal and precarious urban settlements and how they can be leveraged to support a RINA implementation, and where there may be resource gaps.

Resource needs will be further defined in *Step 2 - Preliminary diagnostic of High-Risk Urban Areas* and *Step 3 - Analysis of*

⁴ GOAL. (2022). RINA Team Library List. Retrieved from: <https://resiliencenexus.org/urban-resilience/urban-shelter-and-settlements/>
⁵ GOAL. (2022). Resilience Nexus. Retrieved from: <https://resiliencenexus.org/urban-resilience/urban-shelter-and-settlements/>

Institutional Capacity and Resilience of Local Government as part of institutional capacity assessments.

1.4 Preliminary Identification of Key Partners. The work of strengthening urban resilience and inclusion necessitates the collaboration of a broad range of partners. City Managers should plan to regularly engage with partners and consistently look for new partners to align their efforts behind the RINA initiative. Importantly, at the outset of the implementation of RINA, the RT should identify critical partners that will need to be involved from day one and potentially form part of the RT, as well as to conduct an overall mapping of a broader range of potential partnerships that can be leveraged for the intervention. Among the key partners will be the governing body of the national risk management system or civil protection system; key line ministries or secretariats, such as those in the sectors of health, gender and inclusion, housing, environment, planning, and public works, etc. Other partners can include community organizations and leaders, academic institutions, private sector companies or associations, such as chambers of commerce; non-governmental or civil society organizations; financial institutions; and donors and lenders. Identifying and reinforcing partnerships will happen continually throughout the implementation of RINA. Further guidance on developing partnerships for RINA is provided in *Step 7 - Establish Strategic Alliances in Target Neighborhoods*.

1.5 Enter into Agreements with Key Actors. At the intervention outset, the RT should develop agreements with key partners setting out clear mandates, responsibilities, and critical resources required for the success of RINA. A key partner is an individual or organization which a) has an official mandate or responsibility of importance to the aims of RINA, particularly if the implementation will likely engage with them to extend or reinforce services to the target neighborhoods, such as housing subsidies, health programming, education services, improved water and sanitation infrastructure, technical support or training, etc.; b) has financial resources that it has already pledged or could pledge to urban resilience and inclusion interventions and; c) essential technical partners, such as agencies or academic institutions which can support assessments, studies, training etc., related to resilience and inclusion of target neighborhoods. The RT should establish regular discussions with these key partners and enter into mutually beneficial agreements that secure their ability to engage meaningfully with the implementation of RINA, and fulfill their roles, while benefitting from the collaboration as well (such as through meeting targets to extend coverage of services). At the outset of the RINA implementation, these agreements may start out being broad and general, such as establishing an agreement to collaborate and for each partner to explore strategies to dedicate technical assistance and other resources to the RINA intervention in target neighborhoods. As the intervention matures, these agreements may become much more structured and detailed, and be accompanied by plans and guidance for how the collaboration will be managed, conflicts resolved, and success monitored and evaluated. See sample MoUs Teaming agreements, and formal collaboration agreements⁵ in the Resilience Nexus website.

1.6 Socialize and Follow up on Agreements. To ensure compliance with the partner agreements, it is recommended to familiarize all relevant stakeholders with the RINA partner agreements and prepare a follow-up plan (e.g., quarterly progress meetings, technical visits to the field, etc.).

Case Study 1: Innovative Partnership for Affordable and Safe Housing in the City of Tegucigalpa, Honduras.



Over 10 years, the Municipality of Central District in Tegucigalpa, Honduras, through the Barrio Resiliente Programs, has led the establishment of multiple partnerships with national government agencies, neighborhoods, community-based organizations, civil society organizations, private sector businesses, academic institutions, and its own local government departments to improve conditions for families living in informal settlements throughout the city.

One key example was a strategic partnership established by the Municipality of Central District with the national social housing programs CONVIVIENTA, private construction businesses, local communities and other actors to scale a local government housing improvement initiative and through this

partnership, the Municipality was successful in providing housing upgrades and relocations to reduce disaster risk and provide safe housing for more than 1,240 families living in high risk informal settlements.

The team assigned to oversee the Barrio Resiliente Programme in Tegucigalpa was made up as follows:

Role	Quantity	Description
Project coordinator	1	Analysis and strategic planning Establishing alliances and leveraging funds Lobbying and advocacy Leading new proposals to scale interventions
Technical specialists	4	Lead the strategic interventions for each programmatic area Coordinate with social services specialists Support in identifying and establishing alliances
Monitoring and Evaluation official	1	Lead baseline, intermediate and endline processes Monitor the compliance of indicators Register and document case studies and success stories
Communications Official	1	Support the communication strategy Design and operationalize the communication strategy
Social services specialists	3	Liaise between the RINA team and communities and neighborhoods
Internships related to programs themes	Various	Support the core team in assigned activities or tasks

Resources used by the RINA Team in Tegucigalpa included: computers, printers, projectors, vehicles, cell phones (for documenting, data access and research, etc.), GPS, drone, measuring tapes, training material, visibility garments, office space for team meetings and workspace, topographical equipment, other administrative supplies.

For more information, the full case study is available: Here | **Contact GOAL at** resilience@goal.ie

Dynamic Teams: Creating high performing teams to build resilience and inclusion in challenging contexts of informal and precarious urban settlements

Dynamic Teams are teams of interdisciplinary staff members—such as specialists in shelter and settlements, urban planning, livelihoods, natural resources management, health, WASH, disaster risk management and humanitarian assistance, gender and inclusion, and monitoring, evaluation, and learning—organized by geographic area working to understand and reinforce resilience and inclusion together. While each team member is responsible for leading in their area of expertise, they have shared accountability for the overall success of the initiative's outcomes within their shared geographic area.

Dynamic Teams work together to: (i) amplify learning by improving cross-sectoral analysis of trends associated with shocks and stresses; (ii) improve efficiency, phasing, and prioritization of efforts by optimizing resource use and coordination of team logistics; (iii) improve coverage through building the capacity of all staff to meaningfully represent all core areas of project interventions to project partners and participants (while maintaining their respective areas of specialization and responsibility); (iv) improve the overall capacity of staff in all areas associated with urban resilience and inclusion through improved communication and cross-training; (v) improve the institutional memory of the project through team work, which reduces the impact of staff attrition; (vi) create synergies and empower teams within a geographic area (vii) improve ability to document and present trends

associated with and inclusion; (viii) better mainstream cross-cutting objectives, such as incorporation of gender and protection across project activities; and (ix) reinforce agile management approaches that are driven by data and evidence reviewed by a cross section of specialists.

Step 2 Preliminary Diagnostic of High-Risk Urban Areas

MCR Essential Two: Identify, Understand and Use Current and Future Risk Scenarios

While more in-depth assessments are conducted at later stages (and covered in *Step 12 - Neighborhood Risk Assessment*, *Step 13 - Selection of Critical Socio-Economic Systems for Neighborhood Resilience and Inclusion*, and *Step 14 - RINA Neighborhood Master Plans (RNMPs)*), a critical step is to begin an initial assessment of the risk context of informal and precarious urban settlements within the city. These assessments are essential to: 1) begin to develop a broad and more articulated picture of the size and scale of urban vulnerability and the challenge at hand across the entire city; 2) support local governments to determine what are the geographic or technical priorities for the intervention—where the project should start and where it can scale to over time; 3) characterize the different types of vulnerability across the city; 4) develop a greater awareness of what information is available and what information gaps remain; 5) align the RINA team and partners behind a shared understanding of the challenges and opportunities related to urban resilience and inclusion; 6) identify risks that are shared across large areas requiring coordination and collaboration with other agencies, such as neighboring municipalities; 7) identify hidden costs and incentives for engagement in RINA—particularly those that could help uncover incentives for partners to be highly engaged (such as exposing the true costs and opportunity costs associated with informal and precarious urban settlements), and; 8) use the assessment process to identify and engage with more stakeholders and develop a collective focus on the challenges and opportunities, including organizations involved in the assessment itself.

Collaborate with Partners to Conduct Initial Assessments: Ministries, universities, graduate students, and local organizations are valuable partners in identifying existing and collecting new data and information, storing, organizing, visualizing and analyzing it, and helping to cover the costs of assessments. Partnering on assessments can also strengthen consensus and overall engagement in the long-term initiative.

2.1 Characterize the Overall Context of Vulnerable Neighborhoods and the Broader Urban Area. As mentioned above, RINA requires a rigorous understanding at the neighborhood level, as well as an understanding of the broader urban area and the vital systems working within it. A great deal of valuable data and information is likely to exist already—for example, national census data, data and research from universities, past municipal studies and assessments, municipal databases on past disasters, urban plans; data and information housed within key ministries on trends such as housing, disaster risk and past disasters, health, public services and education. Particularly in the initial phases, these sources of secondary data collated under *Step 1 - Induction and Agreements for the RINA Approach*, are perhaps most valuable, before there is significant community-level engagement. Key elements to gather about the broader context include but are



not limited to: demographic trends, such as population growth or displacement into informal and precarious urban settlements; who and where are the most vulnerable—possibly associated with their gender, age, ethnicity, social status or citizenship or where they are located (such as on hillsides, flood plains, etc.); environmental trends with bearing on resilience; land cover and use; the status of essential infrastructure, such as for risk mitigation; the status of basic services for water, sanitation, health and education; major livelihoods for men and women; and the existence of key strategic partners, such as community organizations. Additionally, the RINA Team may want to conduct community visits, mapping exercises, or initial key informant interviews, or focus groups discussions with residents and community leaders to know the physical and environmental context of the target neighborhoods to help increase understanding of the different types of vulnerability that exist in informal and precarious settlements across the city to ensure that the interventions ultimately designed will generate solutions that are applicable and relevant to the realities on the ground. Again, this step is a preliminary diagnostic to focus on the planned RINA intervention. *Step 10 - Strengthen Social Cohesion and Protection*, *Step 14 - RINA Neighborhood Master Plans (RNMPs)*, and *Step 27 - Integrate RINA into Strategic Planning*.

Communication Strategy: A strong recommendation is to have a communication strategy/community entry strategy in place before community engagement. It should cover how to explain to communities what RINA and this assessment process is about, not raise inappropriate expectations, cover privacy and rights of participants in meetings, and make sure the RINA team participating in site visits and meetings are trained on the communication strategy.



2.2 Identify and Characterize Shocks and Stresses. Consult with sources of technical-scientific information among the different key actors (national risk management agency, academic and research institutions, local or international NGOs, among others) on what the known shocks and stresses are in the identified area. Additionally, the RT should consult disaster inventory records whose sources can be online platforms (e.g. Desinventar, published by UNDRR) or registered by local and municipal emergency committees and other humanitarian actors, records of damage reported by newscasts, field inspections, local knowledge of community leaders and community-based organizations, and technical studies undertaken on the main risk scenarios and related hazards. Where information about neighborhoods under consideration is not available, limited or outdated, consider consulting expert opinions, interviewing key informants inside or outside the neighborhood; or conducting workshops or focus group discussions with community leaders and other stakeholders to obtain information about the main shocks and stressors that have affected, affect, or could affect the neighborhoods under consideration.

Inclusive Teams Improve Inclusive Assessments

Where possible, RTs should seek to employ people who themselves are representative of the communities they are assessing—men, women, older adults, and people with disabilities, cultural background, for example. RTs can hire specialists in inclusive assessments to build their capacity in assessment methodologies and help them to identify and adapt assessment tools.

For more information on how to create an historical profile of each neighborhood where adverse events are recorded, use *Tool 1: Analysis of the Resilience of Communities to Disasters*⁶ (*ARC-D*) *Toolkit*, Part A, published by GOAL, or Chapter 3 and 4 of *Tool 2: Climate Change, Vulnerability and Risk: A Guide for Community Assessments, Action Planning and Implementation*⁷, published by UN HABITAT. Irrespective of the tool or technique used to characterize shocks and stresses, preliminary assessments should begin to characterize shocks and stresses with a gender and inclusion lens recognizing that men, women, older adults, people with disabilities, and marginalized communities are vulnerable to different shocks and stresses and the same ones impact them differently. The RINA team should itself be staffed by men and women with experience in inclusive assessments.

2.3 Assess the Vulnerabilities and Capacities of Neighborhoods. Consult key informants familiar with the context of the informal and precarious neighborhoods in the city and, if necessary, complete several sample neighborhood vulnerability and capacity assessments using a best practice such as *Tool 3: Vulnerability and Capacity Analysis (VCA)*⁸, published by IFRC. These sample VCA can be completed through workshops, field trips, community sketching exercises or “talking maps”⁹ to determine the elements exposed to shocks and stresses (e.g. the population, housing, public or productive assets relevant to the neighborhood, infrastructure such as access and evacuation routes, critical infrastructure for the response such as health, fire-fighting installations, schools, among others).

Determine the characteristics of the population at risk and organizational and neighborhood response (Considering the

⁶ GOAL (2019). Analysis of the Resilience of Communities to Disasters (ARC-D) Toolkit. Retrieved from: https://resiliencenexus.org/arc_d_toolkit/what-it-is/

⁷ UN Habitat. (2020). Climate Change Vulnerability and Risk: A guide for Community Assessments, Action Planning and Implementation. Retrieved from: https://unhabitat.org/sites/default/files/2020/05/climatechange_vulnerabilityandriskguide.pdf

⁸ IFRC. (2006). What is VCA? An introduction to vulnerability and capacity assessment. Retrieved from: <https://www.rcrc-resilience-southeastasia.org/document/what-is-vca-2006-ifrc/>

⁹ A technical, methodological instrument for performing a territorial diagnosis; talking maps gather graphic information on the community perception of the local territory, from the past, present and future. They reflect the most important aspects of a territory: the natural environment, access routes, urban spaces, cultivation areas, water sources, etc.

spatial distribution with respect to the threat, socio-economic status, sex, age, disability, ethnic or cultural differences, main economic activity or other indicators regarding the quality of life such as access to basic services) and capacities (e.g. First response organizations existing in the neighborhood, response plans, tools, human and financial resources, among others). Additionally, if feasible, consider applying sample surveys at the household level, as this would be a key input for later developing community risk management plans or response plans. If at this stage, time or resources cannot be invested for collecting this information, it can be resumed later in *Step 12 - Neighborhood Risk Assessment, and Step 16 - Design and Operationalize Early Warning and Response Systems*, on deepening the knowledge of risk and vulnerability in the selected target neighborhoods.

Note: For all previous steps RINA recommends the use of open access geographic information system (GIS) platforms to collate and manage information. For example, the Central District Municipality of Tegucigalpa, Honduras, manages a public platform of information and geographic maps on settlements, risks, and infrastructure which can be accessed at the following link AMDC GIS¹⁰. RINA also recommends to use open source technology and platforms such as Google Earth¹¹, OpenStreetMap¹², or tools for real-time digital data collection such as CommCare¹³, KoBoToolbox¹⁴, among others. All data collated or made available must comply with relevant data protection policies.

2.4 Build Risk Scenarios. After identifying all the possible shocks and stresses (old and new) and their relationships, the RINA team can work to better understand how these trends, taken together, present different risk scenarios and their respective impacts. Risk scenarios should be built intuitively based on the existing experience of stakeholders or from computer models of quantitative or qualitative data (Strong, Carpenter, & Ralph, 2020). The outcome of the exercise should describe a future event that may cause harm. To do this, start by describing the primary or “triggering” event and then describe the direct or indirect effects that it could cause (Vega & R., 2021). These effects could include follow-on threats or stressors (e.g., a tropical storm causes flooding and landslides and as a result exacerbates migration or poverty levels). Where possible, characterize who specifically the

events may impact and how the nature or magnitude of those impacts may be different depending on who is impacted and the resources they have access to. For example, increased heavy rain over a short period of time may overwhelm local drainage and sanitation systems, leading to sanitation problems and contamination of water sources. This may have a particularly significant impact on pregnant and lactating women and children under 5 living in substandard housing. Many of these risk scenarios may not necessarily be associated with large scale disasters like hurricanes, floods, landslides, or earthquakes, but instead be triggered by shocks and stresses that are common in informal precarious urban settlements, such as crime, outbreaks of disease, economic shocks, violence, conflict, or political unrest.

Definition of a Risk Scenario: Negative consequences that may occur as a result of combining and interacting shocks and stressors and the related probability of occurrence.

The RT should prioritize Risk Scenarios through a participatory process of calculating risk score together with key stakeholders based on the Probability of Occurrence of the Risk Event or Series of Events, multiplied by the of each risk scenario on vulnerable families living in informal and precarious urban settlements. Table 4 presents a simple tool for identifying and selecting risk scenarios, and Table 5 can be used to analyse and describe prioritized risk scenarios. The RT should agree on criteria to assign value to each variable and in consensus define the risk scenarios to be prioritized. RINA recommends that 2 to 3 risk scenarios should be prioritized including one that captures the current ongoing level of stressors and recurring shocks impacting on informal and precarious urban settlements. For further guidance on completing risk analysis the RT should consult *Tool 4: Quick Risk Estimation (QRE)*¹⁵ published by UNDRR and Section A of *Tool 1: Analysis of Resilience of Communities to Disasters (ARC-D) Toolkit*¹⁶, developed by GOAL.

RINA recommends the Coursera Online Course on DRR - Module on Risk Scenarios¹⁷, or *Tool 5: Guide for developing risk scenarios in Disaster Risk Reduction*¹⁸ published by the University of Cambridge.

Table 4. Identification and selection of risk scenarios.

Type of Shock/Stressor (Natural, environmental, biological, social, political, economic)	Main Risks (Shocks or stressors)	Secondary Risks (Other shocks or stressors and/or their effect)	Probability	Impact	Total Risk Score
			Scale of 1-5, 1 lowest, 5 highest		

10 AMDC. (2022). Map portal. Retrieved from: <https://amdc.giscloud.com/>
 11 Google. (2022). Google Earth. Retrieved from: <https://earth.google.com/web/@0,0,0a,22251752.77375655d,35y,0h,0t,0r>
 12 OpenStreetMap Foundation (OSMF). (2022). Retrieved from: <https://www.openstreetmap.org/about>
 13 OpenStreetMap Foundation (OSMF). (2022). Retrieved from: <https://www.openstreetmap.org/about>
 14 Vinck, P., Phuong, P. (2013). KoBoToolbox. Retrieved from: <https://www.kobotoolbox.org/kobo/>
 15 UNDRR. (n.d.). Quick Risk Estimation (QRE) Tool. Retrieved from: <https://mcr2030.undrr.org/quick-risk-estimation-too>
 16 GOAL. (2019). Analysis of the Resilience of Communities to Disasters (ARC-D) Toolkit. Retrieved from: https://resiliencenexus.org/arc_d_toolkit/what-it-is/
 17 Mexico National Autonomous University. (2021). Risk Scenarios, A Tool for DRR. Retrieved from: <https://www.coursera.org/lecture/gestion-riesgo/los-escenarios-de-riesgos-una-herramienta-para-la-gestion-del-riesgo-FUWKA>
 18 Cambridge Center for Risk Studies, 2020. Developing Scenarios for Disaster Risk Reduction. United Kingdom. Retrieved from: <https://www.jbs.cam.ac.uk/wp-content/uploads/2021/11/crs-developing-scenarios-for-disaster-risk-reduction.pdf>

Table 5. Analysis and description of the risk scenario. For additional guidance on developing and prioritizing risk scenarios

Risk Scenarios	Description of the negative event or series of events which could occur and the related probability. Risk scenarios must be described in more detail than single hazards. Rather they should describe the overall combination of related shocks and stressors which are or could in the future occur together, the negative consequences if the risk is realized, and the probability of its occurrence.
Risk A Scenario	<ul style="list-style-type: none"> • What event - threat or stressor - is the most probable and devastating and how does it lead to other threats or stressors? • What is the level of impact of damage and loss for this risk scenario? • What are the positive and negative coping mechanisms and the potential or present capacities of the system to deal with the risk scenario?
Risk B Scenario	<ul style="list-style-type: none"> • What event - threat or stressor - is the most probable and devastating and how does it lead to other threats or stressors? • What is the level of impact of damage and loss for this risk scenario? • What are the positive and negative coping mechanisms and the potential or present capacities of the system to deal with the risk scenario?
Risk C Scenario	<ul style="list-style-type: none"> • What event - threat or stressor - is the most probable and devastating and how does it lead to other threats or stressors? • What is the level of impact of damage and loss for this risk scenario? • What are the positive and negative coping mechanisms and the potential or present capacities of the system to deal with the risk scenario?

2.5 Determine how the Local Government will Store, Organize, Analyze, and Utilize Data.

GIS and data visualization software to inform decision making.

Leveraging Technology - Leapfrogging Informal and Precarious Settlements to Urban Communities of the Future

RINA advocates for a “technology forward” approach to thinking about how to meet the needs of high-risk urban areas. New technologies—and particularly information technology—are changing the way societies live and work. Technology offers new opportunities for informal and precarious urban settlements to ‘leapfrog’ to urban communities of the future. This includes leveraging the potential of mobile technology and innovations in fintech for financial inclusion and new ways of money transfer, to applications and social media that support Early Warning and Response and strengthened connectivity and security within neighborhoods, telemedicine, online and cloud based education and learning, access to information through a whole range of digital media platforms potential for citizen participation, etc. Other innovations in technology can enable complex technical scientific studies for risk management in informal and precarious urban settlements using drone technologies, artificial intelligence, and modelling and simulation software that inform strategic investments to reduce risk. At the same time, new technologies present new risks—from breaches in data privacy and digital exclusion, to online abuse and misinformation.

Local governments have an opportunity to be leaders in the way they translate the promise of Smart Cities to Smart Neighborhoods. One of the most important and transformative ways to leverage new technologies from day one is to take advantage of new technologies for collection, storage, visualization, and analysis of data—from the use of smart phones to collect data, to sophisticated

Using this first assessment as a pilot, RINA recommends working with experienced data specialists to determine how to store, organize, visualize, and analyze the resulting data and information. NGOs and universities are often good partners to reinforce capacity and provide additional technical resources. This RINA database or inventory will both help select the neighborhoods where RINA implementation will begin and will be very useful to inform planning processes by the local government and other key actors (see *Step 5 - Select Intervention Neighborhoods*). City Managers should be careful to consider privacy and confidentiality of sensitive data collected on individuals and households.

For more information on how to develop this step, as well as urban profiling in crisis-affected cities, see [Tool 6: Urban Profiling Toolbox](#)¹⁹ published by UN Habitat.

In the RINA Approach, strategies are highly localized, evidence-based, and context-specific: 1) Follow participatory and innovative processes: Qualitative and quantitative information collection techniques and technical studies at the neighborhood level are used to ensure a good level of detail and certainty despite the complexity of the context and to properly capture the perspective of the residents of the neighborhood, 2) Effective use of data and diversity of sources: That is, consulting primary and secondary sources from a diversity of actors from the neighborhood to the city and national level, 3) Use of innovative tools to collect, store, analyze and visualize data: these will be used to address the complexity and challenges in understanding the many “layers” of data and trends in a geographic area.

¹⁹ UN Habitat. (2020). Urban Profiling Toolbox: Analysis tools for urban profiling in crisis-affected cities. Retrieved from: https://unhabitat.org/sites/default/files/2021/03/toolbox_v11.pdf

Step 3 Analysis of Institutional Capacity and Resilience of Local Government



MCR Essential Six: Strengthen Institutional Capacity for Resilience

RINA is designed to support city management to effectively engage with and support informal and precarious urban settlements in becoming resilient and inclusive urban communities. In order to lead this process local government working together with partners will need to develop its capacities and partnerships in a range of disciplines. This step sets out the process to assess institutional capacities for implementation of RINA.

3.1 Develop a SWOT Analysis to Assess Capacity to Implement RINA. The RINA Team together with other key stakeholders and partners should undertake a Strengths, Weakness, Opportunities and Threats (SWOT) analysis to assess capacities to implement RINA. This analysis is intended to help the local government together with its partners in the RINA Team to assess existing capacities available for RINA including past experiences of partner agencies or particular staff with implementing the core components of neighborhood upgrading, strengths in community mobilization or the use of technology for visualizing data, for example. A SWOT analysis will also identify gaps the RINA Team has, where they may find additional resources, or where there may be significant threats to the project's success. This exercise can generate a list of activities the local government can follow up on to address concerns and seize opportunities. For more information on this method, refer to helpful online sources, for example [Tool 7: SWOT analysis guidance](#)²⁰ published by Kansas University. This analysis is useful for examining how prepared the RINA team is to lead RINA in terms of the current context, as well as human, technical and financial resources. For more guidance on capacity assessment the RT should refer to [Tool 8: Instrument to Measure Capacities of a Municipality to Manage Comprehensive Neighborhood Improvement Projects \(MIB\)](#)²¹ published by Global Communities.

3.2 Assess the Local Government Institutional Capacity to Effectively Manage Shocks and Stresses at City Level. As an inseparable part of creating resilient and inclusive neighborhoods, local governments themselves should have an accurate assessment of their own internal capacity to absorb, adapt to, and respond to disasters. Towards this end the RINA team should apply [Tool 9: Disaster Resilience Scorecard for Cities](#)²² published by UNDRR, in order to: a) establish a baseline of institutional capacity, which can be monitored over time; b) inform the development of local strategies and plans for DRR and resilience and mainstream them throughout the evolution of urban resilience programming; and c) protect as much as possible the critical investments in urban development from being undermined by shocks and stresses. Additionally, this type of assessment should deepen the shared understanding across partners of vulnerability and challenges and opportunities to address these.

Creating High Performance Dynamic RINA Teams: Local governments can use cross-training to strengthen the ability of staff to work together in complex urban contexts. For example, specialists in gender and women's economic development can assist other team members to use a gender lens in their respective technical areas; Monitoring and Evaluation specialists can reinforce the team's collection and use of data; health specialists can help teams to see the impacts of neighborhood level trends, such as drainage and trash removal, on health and well-being.

3.3 Work on the Findings of Institutional Capacity and Resilience Analysis. Develop a work plan with clearly defined actions, responsibilities, timelines and resources for strengthening institutional capacity for the implementation of RINA.

20 Kansas University. (2022). SWOT Analysis: Strengths, Weaknesses, Opportunities and Threats. Lawrence, KS. Retrieved from: <https://ctb.ku.edu/en/table-of-contents/assessment/assessing-community-needs-and-resources/swot-analysis/main>

21 Global Communities. (n.d.) Instrumento para Medir Capacidades de un Municipio para Gestionar Proyectos de Mejoramiento Integral de Barrios.

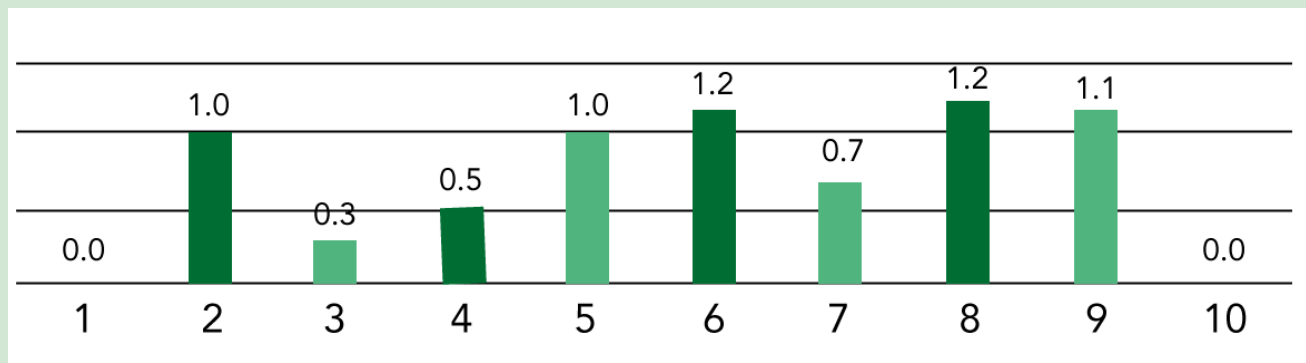
22 United Nations Office for Disaster Risk Reduction (UNDRR). (2017). Disaster Resilience Scorecard for Cities. Cancun, Mexico. Retrieved from: <https://mcr2030.undrr.org/disaster-resilience-scorecard-cities>

Case Study 2: Strengthening Institutional Capacity in Haiti: Application of Resilience Scorecard.

In 2019, GOAL in collaboration with the United Nations Office for Disaster Risk Reduction (UNDRR) in Latin America, co-facilitated a disaster resilience assessment in three local governments in Haiti: Tabarre, Quanamthe and Jérémie. This process was supported by the United States Agency for International Development (USAID). The assessment used The Disaster Resilience Scorecard for Cities or the *Scorecard* developed by UNDRR with the support of USAID, European Commission, IBM, AECOM and other partners and cities participating in the Making Cities Resilient Campaign 2010-2020 (UNDRR, 2022). Currently, this campaign is succeeded by the new initiative "Making Cities Resilient 2030 (MCR2030)." The Scorecard measures the disaster resilience of local governments, and it is structured to assess each of UNDRR's 10 essentials for making cities resilient. Also, it allows the monitoring of progress and challenges in the implementation of the Sendai Framework for Disaster Risk Reduction: 2015-2030. The Scorecard can inform DRR and resilience strategies for local governments. In November 2019, GOAL in close collaboration with the local government in Jérémie carried out a two-day participatory workshop to facilitate the Scorecard preliminary assessment to identify gaps and actions that allow them to increase the disaster resilience of Jérémie. The final score was 37 out of 142 total points. It was found that Essential 6 "Building institutional capacity for resilience" and Essential 8 "Increasing infrastructure resilience" achieved the highest results, while Essential 1 "Organizing for resilience" and Essential 10 "Accelerating recovery and rebuilding better" showed the lowest results. These findings generated a dialogue between key local government actors and informed the preparation of Jérémie's action plan for strengthening the city's resilience.



Figure 7. Scorecard results by each 10 Essentials for making cities resilient of Jérémie, Haiti.



Note: The lowest score is 0 and the highest score is 3. This graphic represents the score achieved by each essential for the city of Jérémie in southern Haiti during a participatory workshop in November 2019. Source: GOAL, 2019.

For more information, the full case study: Here | **Contact GOAL at** resilience@goal.ie

PHASE II: ORGANIZATION AND PLANNING

Step 4 Form Broader RINA Partnership and Consolidate their Knowledge to Execute RINA



MCR Essential Six: Strengthen Institutional Capacity for Resilience

4.1 Leverage Wider Partnerships for RINA Implementation. While the RT can be thought of as the core management team working for the local government, it's important to also consider setting up a broader network of partners, both from government offices, as well as from external partners—university representatives, urban planners, technical specialists, consultants, private sector representatives, NGOs, and community-based organizations, for example. RINA Partners will be charged with leading the adoption and implementation of RINA. At the outset, it's important to start by defining terms of reference for these partnerships—perhaps starting with the roles and responsibilities of institutions or agencies. First, what function does each institution normally play and what is their role in the RINA implementation. Second, the RT can work with these partners to determine the right profile of individuals from each institution to participate: what level of authority, technical experience, time available, etc. To ensure that the RT and RINA partners' work is efficient and effective, an overall plan for how the team will work should be prepared and then updated over time.

4.2 Assess and Strengthen the Capacity of RINA Partners. Once RINA Partners have been identified, the RT should engage them in conducting a collaborative self-assessment to determine the degree to which they are familiar with the overall challenges associated with urban resilience and inclusion programming and investigate what individuals or agencies feel their capacity building needs are. The RT should carry out an assessment of the capacities of RINA Partners to identify training needs or identify other partners or specialist consultants to address gaps in capacity to implement RINA. Based on the identified capacity building needs, a training plan can be prepared using this Guidance Manual as a reference. See in Table 6 an example of the RT profile and recommended sources of expertise by each sector specialization.

4.3 Strengthen the Capacities of other Technical Areas within the Local Government. Beyond the RT and external partners, successful implementation of RINA will require that other municipal staff who will be engaged in the initiative have the required capacity to be effective. The RT define the roles that municipal staff will play in RINA; identify the capacities required to effectively undertake these roles; highlight gaps that may exist; as well as internal and external resources to strengthen capacities (including peer-to-peer training within local government and across departments). Local government departments that will be involved in RINA are those that specialize in zoning and land-use management, health, engineering and infrastructure, gender and inclusion, livelihoods and economic development, WASH, urban housing, monitoring and evaluation, and others with roles in cross cutting themes such as risk management, resilience, and inclusion. Capacities that the RT may want to consider building include: (i) specific technical skills required for urban resilience work; (ii) strengthening staff ability to partner with other technical specialists and examine the relationships between interventions (such as between engineering, WASH infrastructure, and health at neighborhood level); (iii) strengthening their relationship with staff of other agencies and awareness of stakeholders' roles, responsibilities, and resources, such as ministerial counterparts, municipal associations, private sector companies, or community governance structures; (iv) understanding their interventions with a gender and inclusion lens; and, (v) the use of data monitoring, evaluation, and learning for urban programming.



Table 6. Profile of the RINA Team and sources of expertise

Sector Specialization	Potential Partner Agencies	City Administration agency that can address the issues
Inclusion and gender	Public or private agencies addressing gender or attention to women, UN Women, UNFPA, NGOs/Civil Society Agencies particularly grass roots agencies, academic institution specializing in protection of vulnerable groups	Social and Economic Development departments, and other municipal body responsible for protecting women's rights
Risk Analysis in Housing and Critical Infrastructure	Technical infrastructure institutes, housing institutes, Academic Institutions, NGOs/ Civil Society Agencies	Municipal risk management department, municipal public works department
Water, Sanitation and Hygiene	National Authority for water and sanitation services	Public works and health department
Public health	Ministry for Public Health, WHO, NGOs	Public Health / Sanitation Departments
Comprehensive Risk Management	National Risk Management Agency, Red Cross/ NGOs/ Civil Society Organizations, Academic Institutions	Municipal risk management department
Early Warning and Response Systems	National Risk Management Agencies, Academic Institutions, Water Resources Institutions, Scientific Institutes for Risk Monitoring, NGOs/Civil Agencies	Municipal risk management agency
Urban Development and Neighborhood Reconfiguration	Agencies that work in urban development such as: UN Habitat, UNDRR, Development Banks, academic and research institutions, consulting engineering and architectural firms	Urban planning department and/ or land use planning
Social and Behavioral Change	Working Groups on Behavior Change, Food and Nutrition Security Social Network; IFRC/NGOs	Social and economic development Department
Social and Behaviour Change Communication	IFRC / NGOs /Civil Society Agencies/ Media Companies	Municipal department for social communication
Economic development (includes market systems)	Economic development institutes, academic/ research institutions, vocational training institutes oriented to entrepreneurship	Social and Economic Development Department
Resilience	National Risk Management Agency	Municipal risk management body
Social protection	National Social Protection Agencies, Civil Society/ NGOs,	Body responsible for social and economic development
Environment and climate change	Ministry for environment, government agencies responsible for overseeing climate change adaptation policy	Municipal environmental department
Governance	UN Agencies, National Government Agencies (eg Ministry for Interior), Association of Municipality, Civil Society Agencies/NGOs, Academic Institutions	Municipal planning department
Conflict resolution	UNDP, organizations associated with the topic of interpersonal relations	Social and Economic Development department
Skills for strengthening social capital	UNDP, organizations associated with the topic of interpersonal relations	Social and Economic Development department
Monitoring, evaluation, accountability and learning.	Academic institutions	Planning Department, Social and Economic Development department, departments dedicated to the protection of vulnerable groups and gender equality
Self-esteem and motivation Self-confidence Proactivity Interpersonal relations	Academic Institutions particularly departments of psychology, social work	Municipal departments dedicated to the protection of vulnerable groups and gender equality, Social and Economic Development department

Step 5 Select Intervention Neighborhoods

MCR Essential One: Organise for Disaster Resilience

In some cases, local governments' point of entry into RINA will be after an intervention area has been determined and this step is already completed. This may occur where RINA is being applied to work that is already underway; there is a new mandate to upgrade a specific informal settlement; a local government must rapidly respond to a disaster that has destroyed an area that was inadequately planned and now must be re-organized and rebuilt, etc.

In cases where city management has not defined the full scope of where they will implement RINA, this step is designed to:

- i. Define the size and scope of RINA interventions.
- ii. Involve all key stakeholders in determining where initial interventions should take place.
- iii. Make sure that a comprehensive and transparent process takes place in the selection of target neighborhoods.
- iv. Position the city to be able to scale to new areas over time.

5.1. Define the Scope of Implementation of RINA. As stated previously, local governments will differ in the size, scale, and complexity of the urban resilience and inclusion challenges they intend to take on through RINA. Some projects may require intensive and short term engagement on a small scale (such as in response to an emergency); others may be intended to last 2-4 years, or even 5 to 10 years or longer and may span different electoral cycles. RINA recommends that: 1) the initial extent of the planned intervention is clear at the outset and 2) The scope is determined with a view towards creating learning laboratories such that they can furnish lessons learned, best practices, and create strong partnerships required to adapt and scale to new areas within the city. Some principal criteria for determining the extent of activities for an initial intervention include:

- a. What are the principal threats to the wellbeing of target neighborhoods?
- b. What interventions will be required to tackle these threats and can be scaled to other areas across the city?
- c. What is the level of work required to address multi-faceted challenges across interrelated technical areas, such as health, water, sanitation and hygiene, housing, access, education, etc?

- d. What will be required to address risks in an inclusive and equitable manner?
- e. What level of investment will be required to guarantee community participation, behavior change, buy-in, and the long-term sustainability of the intervention, and the availability of financial and human resources?

5.2 Establish a Preliminary Strategy to Scale the RINA Approach

While the strategies to scale the RINA Approach are covered in greater detail in *Step 27 - Integrate RINA Into Strategic Planning*, and *Step 28 - Promote RINA Scale Up*, it is helpful to be clear about planning for scale during the process of selecting initial intervention areas so that they are representative of broader municipal challenges, have achievable objectives, and generate the lessons learned that will enable scale up. The strategy should be developed collaboratively between the RINA team and partners who will have a role to play in scaling RINA. Key considerations of the preliminary strategy for scaling RINA include: 1) Articulation of how the roles and responsibilities of partners will evolve over time and what resources will be required to sustain their engagement; 2) Identification of what new strategic partnerships will be required as the initiative grows over time, such as with new community committees, NGOs, and even new local governments if new communities have inseparable ties to those within other cities' jurisdictions (such as areas sharing micro-watersheds). A getting-to-scale SWOT analysis can be used to identify:

- a. Strengths that the local government and partners have that can lead to scale that RINA should build on deliberately
- b. Weaknesses that could prevent a project from scaling, such as inadequate resources to complete pilots and demonstrate their value
- c. Opportunities, such as the ability to demonstrate successful impact in the early phases in order to build momentum and buy-in, or interest from bilateral or multilateral donors and lenders to scale successful approaches. Threats, such as unplanned for obstacles that are outside of the control of the intervention that undermine its success and credibility.
- d. A plan for adapting approaches, refining, and developing new tools and methodologies based on lessons learned such that iterative phases build on the experiences of pilots. A plan for strategic phasing for scaling of activities: In many cases, scaling and adapting to new areas can begin while the initial pilots are still under implementation and need not wait for the first intervention to be complete. Planning how, when, and where these expansions will happen in advance can help make sure they are properly staffed and resourced.

Table 7. Examples of factors to consider when refining the scope of a project

Socio-economical	<ul style="list-style-type: none"> ● Most vulnerable and precarious populations ● Minimum level of Social Capital in targeted populations ● Minimum level of acceptance and support from key stakeholders ● Acceptable security levels
Organizational	<ul style="list-style-type: none"> ● Budget availability ● Time available ● Clear deliverables ● Exclusions (What is not included in RINA)
Technical	<ul style="list-style-type: none"> ● Land Tenure ● Geographic area ● Risk prone areas ● Recurrence of hazards

- e. Identification of what geographic areas, socio-economic systems and institutional strengthening initiatives will be prioritized as the project scales. For example, if a primary goal of a first phase will be to generate lessons learned on how to reinforce livelihoods for women in high-risk settlements, later phases may be new areas where women face similar barriers and strengthen the capacity of public and private institutions to address their needs.

5.3 Developing a Preliminary Strategy for targeting and Scaling with RINA Partners.

Particularly when the local government has had the opportunity to select what neighborhoods to work in (as opposed to being pre-determined by an emergency or other set of circumstances), it is important to develop transparent means to determine where to start collaboration with RINA partners. This includes sharing with partners the purpose of the initiative and the criteria being used to select target neighborhoods. Towards this end, the RT should:

- a. Map actors who can inform the neighborhood selection and scaling process, such as universities, community-based groups; municipal technical staff; and representatives of key line ministries.
- b. Socialize and get feedback on the selection criteria and process.
- c. Get input and collaboration on the collection of data and information required to determine which neighborhoods meet the criteria. Care should be taken to recognize conflicts of interest in the community selection process and to cultivate a process that will avoid disagreements and create confidence and consensus in the community selection process. Collaboration with key partners is addressed in greater depth in *Step 7 - Establish Strategic Alliances in Target Neighborhoods*.

5.4 Complete the Neighborhood Selection Criteria and the Prioritization.

Many factors can inform the selection of initial intervention neighborhoods, so the RT should agree on the criteria and mechanism to use for the prioritization process. Among the main prioritization criteria are risk scenarios and levels of vulnerability; the frequency of shocks and stresses; and socio-economic characteristics. See Table 8 below for an example of a prioritization tool for neighborhood selection. Also, refer to *Tool 10: Guide for Community Characterization from the Municipal Level and its Matrix of selection criteria for precarious communities*²³ developed by Global Communities.

Community selection, intervention, and scale: the case of Barrio Mio.

In the case of the Barrio Mio project, PCI worked with the municipality of Mixco, Guatemala to use available data and criteria to evaluate over 700 communities across the local government as potential candidates for being included in an initial urban upgrading intervention. These communities were then narrowed down progressively to a final list of 30, where field visits with partners were carried out to collect additional information. From these 30 sites, 2 sites were selected as initial pilot sites, and another 15 were selected as sites where initiatives would begin to scale once the pilot sites were underway. The process not only helped identify the best place to begin work in a transparent way, it also helped the local

government to take stock of the broader situation of vulnerability across the city and plan for scaling its initiative from day one.

This process resulted in the creation of a community prioritization tool adopted by the technical management team of the Gran Ciudad del Sur Municipal Association, a region comprised of 7 municipalities in the Metropolitan area of Guatemala City. The tool was used as the basis for the selection and prioritization of communities for subsequent phases of the project.

5.5 Prioritize Neighborhoods. Once criteria and the relevant information required to characterize neighborhoods are available, the RT can engage RINA partners in participatory workshops with the aim of finalizing neighborhood selection. This may include selection of the initial intervention area(s) and areas where the initiative will scale. In some cases, the RT may want to select “back up” or alternate neighborhoods where work can begin if interventions in the selected neighborhoods cannot proceed for unforeseen reasons. As the initiative proceeds, additional technical information, such as technical studies, will further inform and facilitate the process of identifying priority areas to scale. The RT may update the prioritization of the neighborhoods over time as new information, challenges, opportunities, and resources change.

Communication is key in building trust.

While sharing the final selections for the intervention with RINA partners is a necessary step, also important is to manage the information carefully such that it does not unintentionally jeopardize a successful RINA rollout. For example, if the lead time for work to begin may be many months long or the resources for much of the work have yet to be secured, raising expectations with the selected communities that a neighborhood resilience and inclusion program will soon begin can undermine trust in RINA. For this reason, municipalities should have clear communication plans for all partners—including community members in intervention areas—to ensure that expectations are managed carefully, and all participants have a clear and accurate understanding of the intervention, and objectives, roles, responsibilities, and limitations are clear. The RT and partners engaging directly with communities should be trained on the relevant municipal policies, including on how to handle situations when they may not have answers to community questions or concerns, or feel pressured to make commitments they are unable to make themselves.

²³ Global Communities. (n.d.). Guía para la Aplicación de Criterios para la Priorización de Comunidades.

Table 8. Sample Matrix of Neighborhood Prioritization

Prioritization Criteria	Criteria Description	Neighborhood X, Y, etc (Add the corresponding value here)	Source of Information (Note this information will be later verified through community consultation with prioritized neighborhoods)
Neighborhood area	Neighborhood area (m2)		National and local government geographic information systems (GIS)
Number of houses in the neighborhood	Number of homes located within the neighborhood From 1 to 50 = 1 From 51 to 150 = 2 More than 150 = 3		Land registry of local / national governments, Based on the knowledge and perception of local government technicians
Total population of the Neighborhood	Total number of people living in the neighborhood. 300 or less = 1 From 301 to 900 = 2 More than 900 = 3		Population and housing census through national statistical institutes
Annual population growth rate	Less than 3% = 1 3% - 5% = 2 More than 5% = 3		According to growth rates of the national statistical institutes
% population in extreme poverty	Number of people living on less than \$1.90/day (United Nations, 22) Less than 15% = 1 From 15% - 25% = 2 More than 25% = 3		Population and housing census through national statistical institutes
Level of land tenure security	From 0 - 25% = 1 From 26 - 50% = 2 From 51 - 75% = 3 More than 75% = 4		Land registry of local governments, surveys
Level of access to and coverage of basic services and infrastructure	Access to potable water, sanitation, drainage, electricity, healthcare, schools From 0 - 25% = 1 From 26 - 50% = 2 From 51 - 75% = 3 More than 75% = 4		Geographic Information Systems (GIS) of national public service entities, Population and housing census through national statistical institutes
Percentage of housing units in conditions below the habitability standards defined by the country	Percentage of households that do not meet the habitability standards defined by the country Less than 10% = 1 From 10% - 25% = 2 More than 25% = 3		Local government reports, community visits/inspection, aerial photography (e.g. google maps)

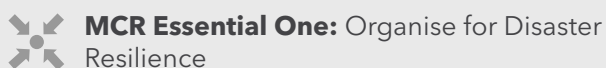
Prioritization Criteria	Criteria Description	Neighborhood X, Y, etc (Add the corresponding value here)	Source of Information (Note this information will be later verified through community consultation with prioritized neighborhoods)
Level of community participation	There is involvement of the neighborhood in the different activities that are carried out = Good = 3 Moderate participation in the activities carried out = Regular = 2 Little participation in the activities carried out = low = 1 Samples of indifference of the neighbors in the activities carried out = null = 0		Surveys or based on the knowledge and perception of local government or partner staff
Possibility to mobilize resources from the neighborhood	High = 3; Medium = 2; Low = 1		
Minimum security conditions	Can access and transit in the neighborhood in the company of community leaders be undertaken with no risk of assaults, with no threats to the security of team and do at least two secure exit routes exist. All three criterial met = Acceptable = 3 At least 2 of the 3 minimum security conditions are met = Medium = 2 Only 1 or no minimum security conditions are met = low = 1		Based on information from statistical data from ministries of security, citizen security tables, violence observatories, community tours or mappings
Hazard types	Enunciate main hazards of the neighborhood (natural, socio-natural and anthropic). Find a full list of Hazards in the Annex 2 of Tool 1: ARC-D Toolkit ²⁴ .		Based on official maps of national risk management systems, secondary sources with technical-scientific information, knowledge and perception of local government and partner staff and the knowledge of the residents of the neighborhood
Percentage area under threat for main hazards	From 0-25% = 1 From 26-50% = 2 From 51-75% = 3 More than 75% = 4		Hazard maps of national risk management systems
Percentage of houses exposed	Percentage of homes that can or are affected by main hazards Less than 10% = 1 From 10% - 25% = 2 More than 25% = 3		Hazard maps and risk assessments

²⁴ GOAL. (2017). Analysis of Resilience of Communities to Disasters (ARC-D) Toolkit. Retrieved from: https://resiliencenexus.org/arc_d_toolkit/what-it-is/

Prioritization Criteria	Criteria Description	Neighborhood X, Y, etc (Add the corresponding value here)	Source of Information (Note this information will be later verified through community consultation with prioritized neighborhoods)
Recurrence of hazard	More than 3 years = 1 Every 3 years = 2 Annual = 3 Several times a year = 4		Based on the knowledge and perception of local government and partner staff, and the knowledge of the residents of the neighborhood. Based on inventories of damage resulting from damage assessments, (See INFORM RISK Platform)
Severity of impact from hazard	Low = 1 Moderate = 2 High = 3 Critical = 4		
Neighborhood is part of the institutional intervention strategy	Does not form part of strategy = 1 It could form part of strategy = 2; It is part of and is a priority = 3;		Local Government Strategic Plans
Potential impact of the neighborhood intervention on the city's economy	Low = 1 Moderate = 2 High = 3		Based on the perception of local government and partner staff

5.6 Socialize and Update Prioritization. Once the initial priority target neighborhoods are determined, the RT should share them with relevant stakeholders along with the criteria and information used to make the determination. Depending on the circumstances, the RT may decide to ask for feedback or questions on the selection as appropriate so that there is an opportunity to make sure there is a consensus on the process and final selection and that key factors in the process were not overlooked. This process can also be used to confirm that RINA partners begin to identify technical and financial resources which can be leveraged and that they budget and plan accordingly. RINA recommends that any decision to engage in a neighborhood be validated with the neighborhood community to confirm their agreement to be part of the RINA intervention. This key engagement with preselected neighborhoods is based on the principle of informed consent and includes presentation of RINA to the residents and description of the proposed intervention. This is described in more detail in *Step 6 - Planning for Engagement With Neighborhood*.

Step 6 Planning for Engagement with Neighborhood



There are many ways that local governments can plan for community entry and build effective community relationships from day one. Community outreach staff / mobilizers already working within communities are essential resources for understanding neighborhood dynamics and how to utilize existing platforms to facilitate community engagement. The RT should consider all relevant aspects of humanitarian access when engaging in settlements with high levels of insecurity and in extreme cases a Conflict Sensitivity Analysis may be required. Given the diverse considerations for how best to

approach community entry, the following steps are illustrative and require significant contextualizing.

6.1 Initial Community Entry and Stakeholder Mapping.

Before the RT kick off a RINA intervention in a formal and comprehensive manner, it is recommended to deepen understanding of the neighborhood, its residents, community organizations, existing community leadership, the presence of existing or previous initiatives, security tensions or conflicts, or other factors that can strengthen or undermine RINA rollout. At the same time, it's important to be transparent about the RT's reason for being in the community with new intensity. One way to do this, for example, is for the RT to present the RINA approach in general and the local government's goals for urban resilience and inclusion city-wide to an open meeting in the target neighborhood being careful not to make any commitments and to manage expectations. The RT can then request the time of residents to help them better understand their community—its priorities, its community based organizations leaders, their concerns, etc. Once community relations are established and relevant security measures in place, the RT can then conduct walk-throughs of the neighborhood accompanied by community leaders and other representatives— e.g. health facility staff, a teacher, representative of community-based organization, for instance, or conduct additional focus groups and key informant interviews.

Once on the ground and consulting with communities, the RT and undertake more in-depth stakeholder mapping to identify community governance committees and their status; key players or institutions with significant influence on community leadership, and begin to understand the dynamics and relationships between key stakeholders. For further guidance on stakeholder mapping, within target neighborhoods refer to *Identifying and Analyzing Stakeholders and their Interests*²⁵, from Kansas University.

25 Kansas University. (2014-2022). Identifying and Analyzing Stakeholders and Their Interests. Lawrence, KS. Retrieved from: <https://ctb.ku.edu/en/table-of-contents/participation/encouraging-involvement/identify-stakeholders/main>

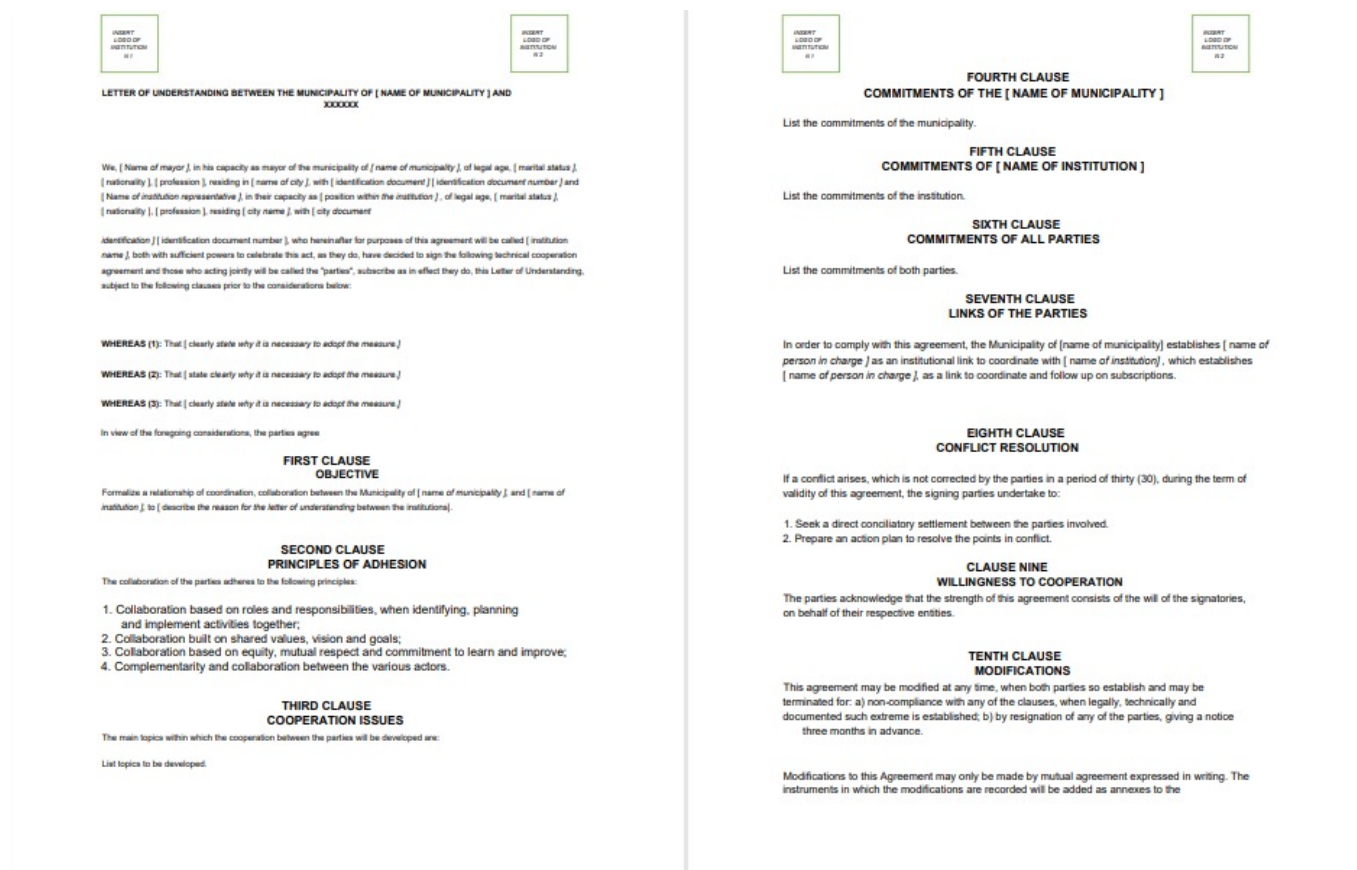
6.2 Establish the RINA Neighborhood Committee (RNC) for overall project governance. The implementation of RINA requires a clear and transparent line of communication between the RT and the neighborhood. Therefore, it is recommended to establish a RINA Neighborhood Committee or RNC. This Committee should be formed or identified in line with the existing organizational structure of the community and other relevant local or national government requirements. In most cases, there may be multiple community organizations that will be represented on the RNC. For example, there may be long-term development committees, health committees, local emergency committees, etc., within neighborhoods that all play a role in urban upgrading. The RNC should be representative of the neighborhood population (men, women, youth, older adults, people with disabilities, vulnerable groups, minorities, etc.), have legitimacy and a clear mandate, and have the capacity to perform the role of representing the neighborhood during the implementation of RINA. The RNC should be selected through a notified open meeting of the community with volunteers selected for form part of the community and ensuring diversity and representation as mentioned above.

The RT together with the RNC should develop an initial community entry strategy to determine the best way to engage with the community, how to set up meetings (usually through community leaders or community based organizations), and how to communicate the scope, objectives, expected outcomes and progress of proposed activities to residents.

6.3 Raise Awareness with the Neighborhood of the RINA Intervention. RINA recommends at this point to establish additional neighborhood engagement sessions with the target communities including exchanges of experiences and sharing success stories and challenges. These sessions should focus on both awareness of the impacts of major risk scenarios to which the neighborhood is exposed and also of the day-to-day stresses and their impacts on men, women, youth, older adults, people with disabilities and other vulnerable groups. These neighborhood engagement sessions should be designed to increase buy in for the RINA intervention.

6.4 Build and Formalize Agreements. RINA recommends establishing a formal agreement between the RNC, the City Management, and other partners for the implementation of RINA. Additional agreements or addenda can be added as new partners engage with the RINA initiative. These agreements should be formalized in accordance with the relevant legal framework at the local, city and/or national level. These agreements should outline the objectives of the RINA initiative, roles and responsibilities of various partners, lines of communication and decision making, process for resolving disputes, and create synergies and clear coordination between the national, city and neighborhood levels. Agreements will help avoid duplication or tensions between different organizations with overlapping or competing mandates. They should focus on the overall management of the RINA implementation and not on the details of implementation which will change over time and are more appropriate for work plans. A [sample Memorandum of Understanding](#)²⁶ showing a suggested overall format for agreements to operationalize RINA is shown below in Figure 8 and is also available at GOAL's Resilience Nexus website.

Figure 8. Sample of Memorandum of Understanding



26 GOAL. (2021). Letter of Agreement. Honduras. Retrieved from: <https://resiliencenexus.org/urban-resilience/urban-shelter-and-settlements/>

Case Study 3: Local Coordinators for Disaster Reduction (COLRED) Network for Disaster Risk Reduction Mixco, Guatemala.

In addition to community risk management committees focused on work within their own neighborhoods, local governments can consider creating a network of committees between neighborhoods. This is particularly relevant if the intervention area spans several communities with their own governance bodies. As an example, within Barrio Mio programme intervention, PCI developed a strategy to support communities to work together for disaster preparation—identifying threats, vulnerabilities, capacities and resources and developing strategies to address them. Together the Municipality of Mixco, PCI created a network of Disaster Risk Reduction Local Coordinators (COLREDs) representing 17 neighborhoods (COLREDs are the official community level entity responsible for DRM within the national Executive Secretary of Disaster Risk Reduction National Coordination (SECONRED) system). The members of the COLRED Network were organized and trained to represent the target neighborhoods throughout the urban upgrading project intervention. This strategy can be used to (i) more efficiently build capacity and support community committees in their work; (ii) broaden the capacity of committees by facilitating a process for them to share strategies and lessons learned; (iii) improve capacity to work on shared risks, such as upstream/downstream hazard management; (iv) and increase the overall resilience of project approaches by spreading the mandate and opportunities for participation across a broader area.



For more information, the full case study: [Here](#) | Contact Global Communities at resilience@globalcommunities.org

Step 7 Establish Strategic Alliances in Target Neighborhoods



MCR Essential Six: Strengthen institutional capacity for resilience

7.1 Stakeholder Mapping in the Target Neighborhood(s).

Once the target neighborhoods have been identified, the RT can contextualize and further develop its mapping of key stakeholders relevant to the target neighborhoods including for example, religious organizations, school committees/groups, philanthropic organizations, civil society organizations, protection service providers, private sector businesses, healthcare service providers including community health workers, government organizations, and as well as other actors. See in Table 9 an example of a Neighborhood Stakeholder Mapping Matrix. These stakeholders may be present within the community itself or have links to it or programs and services the community may qualify for. For example, if the neighborhood is located near to a watershed that requires rehabilitation to protect against landslides, there may be local or international public and private stakeholders that have an interest in providing resources or technical support. The RT should consider what national programs and service providers may be relevant for the neighborhood—from resources to support reforestation or environmental management, to housing subsidies or livelihood training programs, etc. Similarly, universities may be able to support with student time, research, and technical expertise in specific issues. Where possible, the RT should identify these strategic partnerships using a systems lens—what partners can play a role in extending and strengthening local systems that are vital to community resilience and inclusion. For more information on stake-

holder mapping, please refer to the [Tool 11: Actor Mapping Guide](#)²⁷ by FSG Consulting.

7.2 Develop Strategy for Neighborhood Stakeholder Engagement.

Once mapping of stakeholders is complete for each neighborhood, the RT can more deeply assess each stakeholder according to their interests and incentives, and ability to influence the changes proposed by RINA in the target neighborhoods. A simple tool can be developed to document what the potential contribution of each stakeholder is to the RINA intervention, what their incentives are for participating, what resources they need in order to engage and stay involved, and what is the best strategy for managing the relationship with them. The engagement with stakeholders should be designed and prioritized based on their motivation and ability to influence change. It is recommended that the RT works to ensure that these stakeholders receive all of the information and support required to undertake their role. Stakeholders often have specific incentives for being involved in neighborhood upgrading—beyond philanthropy. The graphic in Figure 9 below summarizes a high-level stakeholder engagement approach. For more information on stakeholder mapping and engagement please refer to online resources such as:

- [Tool 12: Stakeholder Engagement Strategy Handbook](#)²⁸ developed by the Business for Social Responsibility (BSR) group.
- [Tool 13: Five-Step Approach to Stakeholder Engagement](#)²⁹, developed by the Business for Social Responsibility (BSR) group.
- [Tool 14: Stakeholder Mapping Toolkit in Public Private Dialogue \(PPD\)](#)³⁰ published by the World Bank.

27 FSG Consulting. (n.d.). Guide to Actor Mapping. Retrieved from: https://moodle.swarthmore.edu/pluginfile.php/569278/mod_folder/content/0/Guide%20to%20Actor%20Mapping.pdf

28 Business for Social Responsibility (BSR). (2011). Stakeholder Engagement Strategy. Retrieved from: https://www.bsr.org/reports/BSR_Stakeholder_Engagement_Series.pdf

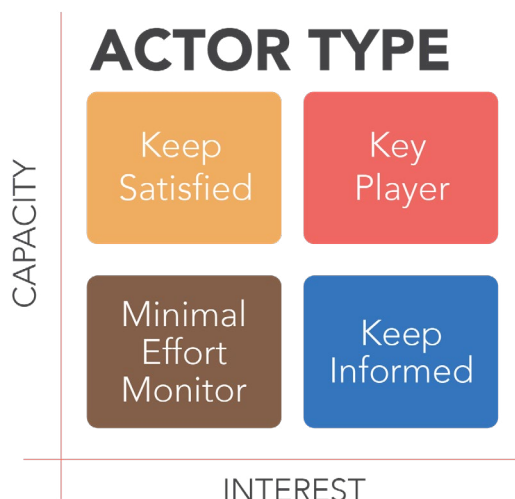
29 Business for Social Responsibility (BSR). (2011). Five-Step Approach to Stakeholder Engagement. Retrieved from: https://prod-edxapp.edx-cdn.org/assets/courseware/v1/9c75b1f4b668f786d32a777261529227/asset-v1:DelftX+RI102x+2T2019+type@asset+block/BSR_Five-Step_Guide_to_Stakeholder_Engagement.pdf

30 Manchanda, S., Robakowski-Van Stralen, A. (2016). Public-Private Dialogue (PPD) stakeholder mapping toolkit: a practical guide for stakeholder analysis in PPD using the net-map method (English). Washington, D.C.: World Bank Group. <http://documents.worldbank.org/curated/en/842721467995900796/Public-Private-Dialogue-PPD-stakeholder-mapping-toolkit-a-practical-guide-for-stakeholder-analysis-in-PPD-using-the-net-map-method>

Table 9. Example of a Neighborhood Stakeholder Mapping Matrix

#	Stakeholder name	Acronyms	Relevance to RINA implementation	Interest in RINA implementation	Contact person	Email	Phone number	Location

Figure 9. Strategy to follow according to interest and capacity of actors



7.3 Establish Technical Cooperation Agreements and Follow-up Actions. RINA recommends formalizing alliances with key stakeholders through partnership agreements. These agreements should include a work plan and a mechanism to monitor progress towards implementation of same and to adapt these agreements due to changing conditions and new learning over the course of implementation of RINA.

Establishing Strategic Agreements With Service Providers that Can Complement the Work of the Local Government.

While cities pose complex challenges, they also have a wealth of resources that residents in under-served communities can benefit from. By mapping these resources and establishing strategic agreements that are aligned and coordinated with the broader intervention, local governments can address many factors associated with vulnerability at lower cost.

In Barrio Mio, for example, PCI worked with partners to provide residents with legal counseling related to land tenure and other matters. This was utilized to assist them to qualify for housing subsidies they could use for upgrading, repairing, or building new houses that were safer and healthier. Similarly, PCI linked communities to financial institutions to do financial literacy training and link communities to financial services, and job training.

Step 8. Plan the RINA Intervention



MCR Essential One: Organize for disaster resilience

8.1 Establishment of Security Plans and Protocols. The RT should develop security plans and protocols based on an analysis of the context of insecurity or conflict in the target neighborhoods, ensuring close communication and coordination with neighborhood leaders. The RT should consult with relevant national or local security organizations, as well as with partners that already operate in the target territories. If possible, identify areas, streets, or sites within neighborhoods based on their level of risk, access routes, points of refuge, etc. The RT should consult with various departments across the local government where there will be significant knowledge on security risks and how best to engage with the target neighborhoods. The RT should develop a Security plan and protocols for all involved in the RINA implementation and develop a regular training programme on managing security risks. For further guidance on access to insecure contexts please refer to *Tool 15: Safer Access Guide*³¹ published by the International Committee of the Red Cross.

8.2 Develop a Preliminary Implementation Plan. RINA should be considered as an iterative approach. A preliminary workplan should first be developed and then updated throughout the RINA intervention. RINA recommends beginning this planning process by undertaking a series of planning workshops with focus group discussions with the target neighborhoods and key stakeholders to plan the RINA intervention. In developing this workplan the RT should reference and incorporate the priority interventions described throughout this Guidance Manual. The specific interventions will depend on the resources available, the timeframe, and the selected socio-economic systems (See *Step 13 - Selection of Critical Socio-Economic Systems for Neighborhood Resilience and Inclusion*). The RINA workplans should define tasks, timeframe for each, who is responsible, and what resources and technical support will be required. The RT should also define in the workplan how to adapt to challenges and new opportunities during the RINA implementation. For further guidance on workplanning please refer to *Tool 16: Developing a Work Plan*³² from Kansas University.

The RINA workplan will need to be tailored to the available resources that can be provided by the local government, the neighborhood community, and other partners. RINA is conceived to be low cost and based on available resources. The design of the workplan should be based on this approach. Further guidance on budgeting for RINA is provided in *Step 9 - Planning Resources for RINA Implementation*.

31 International Committee of the Red Cross. (2013). Safer Access: A guide for All National Societies, Practical Resource Pack. Retrieved from: <https://shop.icrc.org/safer-access-a-guide-for-all-national-societies-includes-3-case-studies-pdf-en.html>
 32 Kansas University. (2014-2022). Section 5. Developing an Action Plan. Lawrence, KS. Retrieved from: <https://ctb.ku.edu/en/table-of-contents/structure/strategic-planning/develop-action-plans/main>

Figure 10. Sample Work Plan

Action Plan for (Community or Initiative Name)

Community Focus Area: _____

Community Change to be Sought: _____

Collaborating Organization (s)/ Group(s): _____ Community Sector: _____

ACTION STEPS

Action Steps	By Whom	By When	Resources and Support	Potential Barriers and Resistance	Communication plan for implementation
What needs to be done?	Who will take actions	By what date the action be done	Resources Available	What organizations might resist? How?	What individuals and organizations should be informed about/ involved with these actions
Step 1					
Step 2					
Step 3					
Step 4					

Source: Kansas University, Community Toolbox, Section 5, Developing an Action Plan. (2014-2022)

During the planning workshops with the target neighborhoods the RT should share information collected to date on the risks to which the neighborhoods are exposed and also clearly communicate participant selection and accountability criteria (e.g., how information will be provided, complaints and response mechanisms, learning and transparency). For more guidance on accountability for community-based organizations consult *Tool 17: Guide to Community Engagement and Accountability*³³ developed by the International Federation of Red Cross and Red Crescent Societies (IFRC).

During planning workshops with the target neighborhoods and other stakeholders the RT should define a Theory of Change (TOC) with the participants. A TOC sets out an understanding of how change will happen, i.e. how to move from a situation of crisis in target neighborhoods to a resilient and inclusive neighborhood. A TOC should define the goal or overall impact of RINA in the neighborhood (i.e. why is the RINA intervention being undertaken?) and then what are the principle or high-level preconditions (Outcomes) to achieve that goal, while considering the related assumptions. Subsequently, the TOC process looks to define the next level preconditions (Outputs) to achieve the high-level preconditions and so on until a full description of the change with the final level setting out the Activities to be undertaken and Resources needed by the RINA intervention. As mentioned above, the planning process for RINA is iterative and will change as new learning, analysis, and adaptations are made over the course of implementation. However, setting out with an initial theory of how change will happen and updating that as RINA progresses is critical to the success of RINA.

The TOC can then be used to develop a Results Chain incorporating each strategic intervention. The Results Chain will

help to better visualize the path to change, which action produces what outputs, and thus make it easier to track progress. As mentioned, it is important to carry out regular reviews of the TOC and Results Chain. RINA recommends that this review should take place at least once a year.

For further guidance on developing a Theory of Change the RT should consult:

- *Tool 18: Designing a Results Framework for Achieving Results: A How-to Guide*³⁴ published by the World Bank.
- *Tool 19: Results Framework Indicator Annex*³⁵ published by USAID.
- *Tool 20: Resilience for Social Systems (R4S) Approach*³⁶ Component 4 and 5, developed by GOAL.

Read more on preparing Results Chains in:

- *Tool 21: Building a Results Framework Tips*³⁷ published by USAID.
- *Tool 22: The DCED Standard for Measuring Results in Private Sector Development*³⁸ published by the Donors' Committee for Enterprise Development (DCED).

For further information on participatory process for developing TOC the RT should refer to:

- *Tool 23: Theory of Change as a Tool for Participatory Planning*³⁹ by Casetti & Paredes-Carbonell.
- *Tool 24: Building Theories of Change in Social Programs and Projects*⁴⁰ from Parque Científico de Innovación Social.

33 International Federation of Red Cross and Red Crescent Societies. (2021). A Red Cross Red Crescent Guide to Community Engagement and Accountability. Geneva, Switzerland. Retrieved from: https://www.ifrc.org/sites/default/files/2021-11/20211020_CEAGuidelines_NEW1.pdf

34 World Bank. (2012). Designing a Results Framework for Achieving Results: A How-To Guide. Retrieved: <http://hdl.handle.net/10986/32158>

35 USAID. (2016). Program Cycle Guidance: Results Framework Indicator Annex Template. Retrieved from: https://usaidealarninglab.org/sites/default/files/resource/files/cleared_-_ah_-_rf_indicator_annex.pdf

36 GOAL. (2019). Resilience for Social Systems (R4S) Approach. Retrieved from: <https://resiliencenexus.org/r4s/>

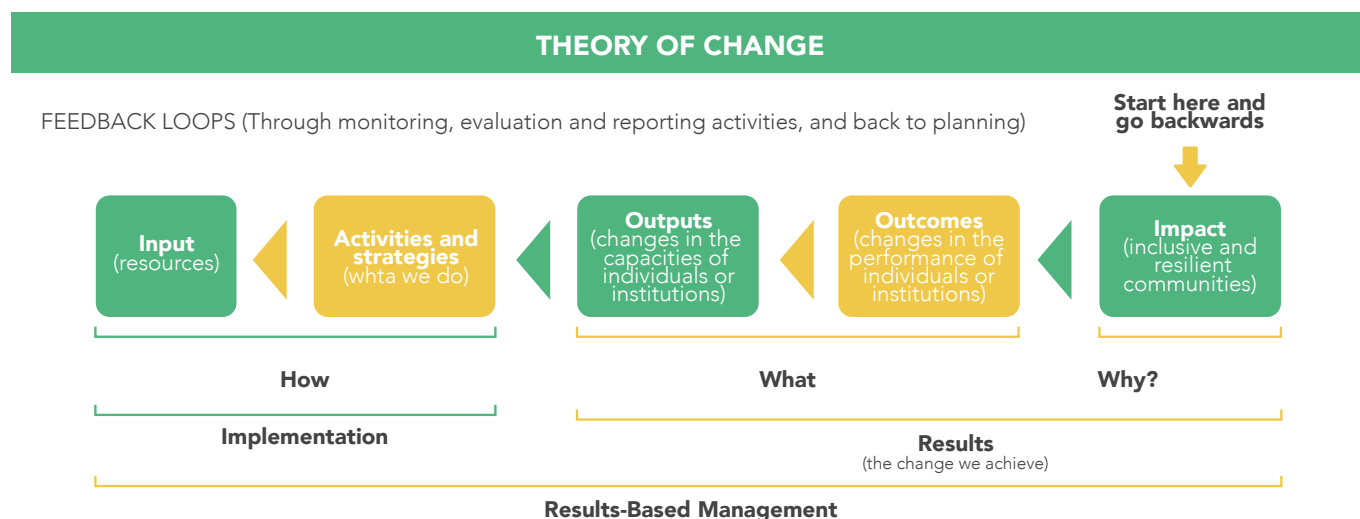
37 USAID. (2010). Building a Results Framework Tips. Retrieved from: <https://www.ndi.org/sites/default/files/Performance%20Monitoring%20and%20Evaluation%20Tips%20Building%20a%20Results%20Framework.pdf>

38 The Donor Committee for Enterprise Development. (2015). The DCED Standard for Measuring Results in Private Sector Development: Control Points and Compliance Criteria. Retrieved from: https://enterprise-development.org/wp-content/uploads/DCED_Standard_versionVII_Apr15_bluecover.pdf

39 Casetti, V., Paredes-Carbonell, J.J. (2020). Theory of Change: a tool for participatory planning and evaluation in community health. Gaceta Sanitaria, SESPAS. Vol. 34, Issue 3. Pg. 305-307. Retrieved from: <https://www.sciencedirect.com/science/article/pii/S0213911119301591?via%3Dihub>

40 Pacheco, D., Archila Q., S. (2020). Guía para construir teorías del cambio en programas y proyectos sociales. Parque Científico de Innovación Social. Retrieved from: https://iscolombia.uniandes.edu.co/images/Vacaciones2021/PCIS_2020_Guia_para_elaborar_una_teor%C3%ADa_del_cambio.pdf

Figure 11. Theory of change



Source: (D. & Q., 2020) p.25, adapted from UNICEF, 2017.

8.3 Timeframe for RINA. Transforming informal and precarious urban settlements in resilient and inclusive urban communities is a long-term commitment but which can be broken down into milestones with stages of progression to increase resilience and inclusion. Ideally, RINA interventions should plan for a full process of change, but more detailed planning will be carried out for the more immediate implementation stages which will prioritize urgent changes. RINA recommends that an initial stage intervention should plan for 3 to 5 years and future stages can be programmed once RINA is operational. The first of implementation should focus on opportunities for early progress and critical areas of risk.

8.4 Develop Clear Indicators to Measure Progress and Project Results. For each component of the Results Chain, the RT should identify data that can indicate whether the expected changes are being achieved. The RT should engage with monitoring and evaluation specialists to design indicators and the methodology for tracking them. The RT should ensure that indicators are “SMART”: (Specific, Measurable, Achievable, Realistic, and Time-bound). The RT working in collaboration with target neighborhoods and other stakeholders should set out target values for each indicator as a result of the RINA intervention(s). This will help the RT recognize over time whether interventions or changes happen as expected or adjustments are required. For further guidance on the definition of indicators and their projection, please review *Tool 25: Guidelines to the DCED Standard for Results Measurement*⁴¹ published by the Donor Committee for Enterprise Development (DCED).

While there are multiple indicators that the RT will want to achieve in terms of the resilience and inclusion of neighborhoods, the RT should be strategic and prioritize those that the RINA intervention can realistically achieve within the timeframe of an intervention. As RINA is centered on inclusion and resilience as its most important outcomes, the RT should select indicators designed to measure resilience and inclusion of the target population. Tools to measure these indicators as part of a baseline assessment, are suggested in *Step 11 - Baseline Assessment*.

8.5 Prepare a Monitoring, Evaluation, Accountability and Learning (MEAL) Plan. The RT should define who is responsible for Monitoring, Evaluation, Accountability and Learning for the RINA intervention. Using the indicators selected, design a MEAL Plan including key information to be collected as indicated in Table 9 below. The RT should define the instruments to monitor and evaluate the impact of the intervention (e.g., survey tools, interview questionnaires, guide for focus groups, etc.), as well as the formats that will be used to document the learning acquired (e.g. success stories, case studies, among others). The MEAL plan should define the frequency of data collection and who is responsible for the different Monitoring, Evaluation, Accountability, and Learning actions.

For further guidance on developing and implementing MEAL plans for the RINA intervention the RT should refer to *Tool 26: Monitoring and Evaluation toolkits*⁴² developed by USAID and *Tool 27: Participatory Evaluation Guide*⁴³ and for participatory assessment, refer to *Tool 28: Participatory Evaluation Tools*⁴⁴, from the Community of Practice and Learning for Participatory Evaluation for Latin America and the Caribbean organization.

For more information on inclusive accountability systems please refer to:

- *Tool 29: Handbook for Building Participatory Accountability Systems for City Policies*⁴⁵ published by UN Habitat.
- *Tool 30: The Core Humanitarian Standard on Quality and Accountability*⁴⁶, published by CHS Alliance, Sphere Project and Group URD.

41 Sen, N., Kessler, A., Loveridge, D., (2018). Guidelines to the OCED Standard for Results Measurement: Defining indicators of change and other information needs. The Donor Committee for Enterprise Development. Retrieved from: https://www.enterprise-development.org/wp-content/uploads/2_Implementation_Guidelines_Defining_Indicators.pdf

42 USAID. (n.d.). Monitoring, Evaluation and CLA Toolkits. USAID Learning Lab. Retrieved from: <https://usaidealarninglab.org/mel-toolkits>

43 Kansas University. (2014-2022). Section 6. Participatory Evaluation. Lawrence, KS. Chapter 36. Introduction to Evaluation. Community ToolBox. Retrieved from: <https://ctb.ku.edu/en/table-of-contents/evaluate/evaluation/participatory-evaluation/main>

44 Community of Practice and Learning for Participatory Evaluation for Latin America and the Caribbean. (n.d.). Participatory Evaluation Tools. Retrieved from: <https://evalparticipativa.net/en/resources/participatory-evaluation-tools/>

45 UN Habitat. (2020). Handbook for Building Participatory Accountability Systems for City Policies. Nairobi, Kenya. Retrieved from: https://unhabitat.org/sites/default/files/2021/06/210618_the_building_participatory_accountability_systems_for_city_policies.pdf

46 Sphere Project, CHS Alliance, Group URD. (2014). Core Humanitarian Standard on Quality and Accountability. Retrieved from: <https://corehumanitarianstandard.org/files/files/Core%20Humanitarian%20Standard%20-%20English.pdf>

Table 10. Example of a summary table of a monitoring and evaluation plan

Monitoring and Evaluation Plan														
Program Title:		Location:			Revision number:									
Developed by:		Location:			Program period:									
Organization/ Unit		Location:			Program period:									
Objective 1: Promote unity, partnership and appropriation of processes for comprehensive improvement by the neighbors														
Results	Indicator	Units	Target	Data disaggregated by:	Verification method	Data collection method (s)	Information Source	Frequency of data collection	Responsible	Start Date data collection	End Date data collection	Method of dissemination	Partners for Dissemination	Deadline to inform actors
The capacity of community organizations in target neighborhoods to lead processes of development, unity and strategic alliances has been strengthened.	# and % of neighborhood residents achieving score of 70% or higher in post evaluation of leadership training activities.	# of neighborhood residents	50	Community, age, and gender of participants	Post training evaluations	Post training evaluation reports	Training Reports	Monthly	RINA TEAM MEAL Officer	1-Jan-20	1-Jan-24	Bulletins, newsletters, community meetings, social media	Neighbor RINA Committee, Community Leaders, Community Based Organizations	2 weeks after finishing reports

Step 9 Planning Resources for RINA Implementation



MCR Essential Three: Strengthen Financial Capacity for Resilience

In order to successfully adopt RINA as an approach to transform neighborhoods and cities it is important that it is supported by an effective funding model that maximizes the potential of local resources and capacities combined with targeted support from external sources where relevant. It is important to creatively explore all potential resources and funding in order to develop cost effective and scalable solutions.

9.1 Resource Planning. As underscored by Guiding Principle 4, RINA advocates for urban resilience approaches that are contextualized, cost effective, and scalable, maximizing resources that can be leveraged at the neighborhood and city level and with other partners. With progress on the initial workplans the RT can begin a deeper analysis of what the overall costs and resource requirements for the RINA intervention will be, such as technical expertise, municipal staff time, communication costs, security requirements, supplies and equipment etc. This step should be undertaken in close alignment with *Step 8 - Plan the RINA Intervention with regular cross references between work planning and resource planning.*

9.2 Assess Potential Funding Sources, Resourcing, and Key Partners. The RT should begin by mapping possible sources of funding and other resources for the RINA intervention including through participatory consultation with target neighborhoods. This will include a close review of funding available through the city budget and potential funding partners, such as central or regional government agencies, non-governmental organizations, international corporation, and private sector business including where appropriate financial institutions or international donors. RINA is about bringing together available resourcing and enabling local governments to leverage their own resources such as techni-

cal staff (e.g., social workers, engineers and health promoters), heavy machinery, or funding and resources from communities and partners. This can include leveraging resources and funding from central or regional government infrastructure and social programs, private sector partnerships and philanthropy, partnerships with academic institutions which can support with research students and technical guidance and community outreach, etc., and neighborhood communities who bring significant resources essential for the success and sustainability of RINA outcomes. The RT should carefully assess the potential negative impacts of asking too much of community members to contribute time and effort without regarding the different implications it has for women, men, vulnerable groups such as older adults—their physical capacities or time available to take away from other critical priorities.

If the local government has the funds in their budget already in some form (as standalone funds for urban upgrading or as part of other line items such as infrastructure, for example), the RT should determine how those funds will be utilized in relevant, planned activities and how they will be complemented by other funds.

9.3 Apply to Different Sources of Funding and Explore Alternative Mechanisms. The RT may recommend the local government consider financing options or accessing funding aimed at municipal projects from national or bilateral/multilateral funding agencies. It is recommended that the RT analyzes the objectives, requirements, and procedures of the identified funding sources and decide where to apply. The RT might also consider exploring and coordinating alternative mechanisms for fund raising together with neighborhoods and key partners. These can range from “crowdfunding” campaigns (collective cooperation) to local fundraising events. At more advanced stages of the adoption of RINA and where the technical expertise exists, the RT could consider alternative innovative financing options with private sector engagement such as impact investing or development impact bonds (e.g., a RINA Bond).

Case Study 4: Facilitating Contributions from a Range of Partners to Cover the Cost of Urban Resilience Work.

In the case of the Barrio Mio project (2012-2022), PCI, and the local government created a framework to identify which partners could contribute to covering the costs of urban resilience work. For example, as part of installing new water and sanitation systems in high-risk settlements, PCI covered costs for technical assistance, monitoring and evaluation, and support for community mobilization; the local government provided technical staff, relevant certifications and approvals for design work, and heavy machinery; communities supported with digging and installations; and private sector partners provided low cost or at cost materials and supplies. The initiative provided access to formal water and sanitation services; decreased contamination of water resources and the watershed; helped improve the tax base for the local government and reduce the amount of subsidies they were providing residents for water; improved drainage and decreased flooding; increased the value of houses and land for residents; and provided infrastructure that was designed to meet future demands associated with population growth and uphill areas beyond the direct target intervention area.

For more information, contact Global Communities at resilience@globalcommunities.org



9.4 Invest in improved institutional capacity and the necessary regulatory conditions. The RT should advocate for investing in local government institutional capacity. This process could include; (a) strengthening public sector management systems (e.g. increasing value for money of budgetary expenditure, improving public financial management and transparency, among others); (b) improving the capacity to self-generate revenue to invest directly in resilience and inclusion initiatives or in an enabling environment to attract external financing (e.g. tax collection, identify and compare various business models for the provision of revenue-generating public services, among others); and (c) improving the quality and effectiveness in the preparation, implementation, and evaluation of resilience and inclusion programs (e.g., use of public-private partnerships⁴⁷ in infrastructure investments or basic service delivery systems). In terms of regulatory conditions of the city, it implies, for example; (a) demonstrating that the local government is a competent regulator, particularly in the field of urban infrastructure; (b) provide and maintain effective operating license regimes; c) implementation of risk-informed land use and construction regulations (The World Bank, 2015). The following tools provide more guidance on specific elements for improving local government institutional capacity:

- *Tool 31: Public Expenditure and Financial Accountability (PEFA) Program and Assessment Process*⁴⁸ published by the World Bank.
- *Tool 32: Finance for City Leaders Handbook*⁴⁹ published by UN Habitat.

9.5 Design and Resource Interventions According to Local Planning for Resilience and Inclusion. This involves two key actions, the first being to incorporate risk information (e.g.,

technical studies on hazards, risk assessments, etc.) into the local government's public investment budget. The second is to allocate resources (e.g., personnel, time and money) for elaborating profiles or proposals. These should align with projects or programs coming from plans or strategies that can support efforts to enhance resilience and inclusion in informal and precarious urban settlements either at the municipal level (See *Step 27 - Integrate RINA into Strategic Planning*) or neighborhood planning (See *Step 14 - RINA Neighborhood Master Plans (RNMPs)*). To increase the interest of donors or private investors, the RT must ensure adequate funding for the process of concept design for project development.

Step 10. Strengthen Social Cohesion and Protection



MCR Essential Seven: Understand and Strengthen Societal Capacity for Resilience

Protection and social cohesion are fundamental to resilient and inclusive neighborhoods and are directly aligned with the RINA outcome on inclusion. Informal and precarious urban settlements are often associated with a lack of social cohesion and high levels of insecurity, from conflicts over land tenure, to gang-related crime and violence. Social capital in these neighborhoods can be significantly disrupted for a range of reasons, such as insecurity limiting interactions and collaboration among residents, lack of spaces for residents to come together, lack of investment in public infrastructure, and related "broken window" effects affecting individual and collective self-esteem, high levels of unplanned inward migration, lack of access to protection services, and general lack of confidence in authorities. RINA recommends local governments explicitly build social cohesion, mainstream protection into programming, and strengthen access to a broad range of services associated with protection and other measures described in this step to strengthen social cohesion and protection. While this step is focused on setting the right focus and engagement with target neighborhoods prior to implementation many of the activities recommended should be considered also as part of the implementation Phase.

10.1 Assessment of Social Capital and Barriers to Inclusion. The RT should undertake an assessment of social capital to understand the level of social cohesion and communities' capacity to carry out collective action for resilience and inclusion. An assessment can identify the priority barriers to greater cohesion and opportunities to address them, such as through training, awareness programming, and planned community mobilization. For further guidance on assessment of social capital and inclusion the RT should refer to:

- *Tool 33: Integrated Questionnaire for Measuring Social Capital*⁵⁰ developed by the World Bank.
- *Tool 34: Guide for Organizations for Measuring Social Capital*⁵¹ published in Spanish by Cité-ID Living Lab.
- *Tool 35: Social Skill Scale Questionnaire*⁵² developed by Arnold Goldstein.

47 For more information on public-private partnerships visit the World Bank Public Private Partnerships Website: <https://ppp.worldbank.org/public-private-partnership/espanol-asociaciones-publico-privadas>

48 PEFA Secretariat. (2018). PEFA Handbook, Volume I: The PEFA Assessment Process - Planning, Managing and Using PEFA. 2nd Edition. Washington DC, USA. Retrieved from: <https://www.pefa.org/resources/volume-i-pefa-assessment-process-second-edition>

49 UN Habitat. (2017). Finance for City Leaders Handbook. 2nd Edition. Retrieved from: <https://unhabitat.org/finance-for-city-leaders-handbook-2nd-edition>

50 Grootaert, C., Narayan, D., Jones, V.N., Woolcock, M. (2004). Measuring Social Capital: An integrated questionnaire. World Bank Working Paper No. 18. Washington, D.C. Retrieved from: <https://openknowledge.worldbank.org/bitstream/handle/10986/15033/281100PAPER0MeasuringSocialCapital.pdf?sequence=1&isAllowed=y>

51 Cité-ID LivingLab. (2019). Measuring social capital: A guide for organizations. École nationale d'administration publique. Retrieved from: http://cite-id.com/documents/atelier-mesurer-le-capital-social-guide-destin%C3%A9-aux-organisations/Measuring-social-capital_A-guide-for-organizations.pdf

52 Arnold Goldstein, GOAL. (n.d.) Social Skill Scale. Retrieved from: <https://resiliencenexus.org/urban-resilience/social-capital/>

Case Study 5: Measuring Social Capital in Urban Communities in Guatemala.

In the case of PCI's Barrio Mio project in Guatemala (2012-2022) PCI as part of the project enumeration instrument, designed a specific module to measure social capital in target neighborhoods. This survey was applied by the project team at the household level to gather information in terms of resident's confidence in other neighbors, willingness to help others in time of crisis, if they are member of any community-based organization or if they have organized themselves to develop any social project for their neighborhood, among others. See the full survey "Modules for Enumeration". Example of Module 7 "The Integral Situation of the Neighborhood", a survey that measures social capital as part of the enumeration instrument of "Barrio Mio" project in Guatemala, developed by PCI.

Figure 12. The Integral Situation of the Neighborhood survey

Example of a social capital assessment instrument based on the enumeration instrument of the "Barrio Mio Project"

1. How reliable do you consider your neighbors in the following:

1a. Helping to take care of your children

- Very reliable
- Something reliable
- Somewhat unreliable
- Very unreliable

1b. Helping to protect your property from theft and vandalism.

- Very reliable
- Something reliable
- Somewhat unreliable
- Very unreliable

1c. Keep confidential information private

- Very reliable
- Something reliable
- Somewhat unreliable
- Very unreliable

1d. Helping with the maintenance and cleaning of the neighborhood.

- Very reliable
- Something reliable
- Somewhat unreliable
- Very unreliable

1e. They contribute to the solution of problems that arise in the neighborhood (broken water pipe, flooded house, etc.)

- Very reliable
- Something reliable
- Somewhat unreliable
- Very unreliable

1f. Contributing money to meet a priority or need of the neighborhood.

- Very reliable
- Something reliable
- Somewhat unreliable
- Very unreliable

1g. To get involved in the solution in cases of domestic violence.

- Very reliable
- Something reliable
- Somewhat unreliable
- Very unreliable

2. Your neighbors would help you in a time of need.

- Strongly agree
- Agree
- Disagree

- Strongly disagree

3 Do you trust your community development committee to represent neighborhood development priorities to the local government?

- Very reliable
- Something reliable
- Somewhat unreliable
- Very unreliable

4 Are you or anyone in your household a member of a social organization in your neighborhood?

- Yes
- No

5 If yes, what is the organization or group dedicated to?

- Religious
- Community development committee
- Community development/empowerment
- Emergency response
- Cooperative
- Other

6a Do you know if there has been a case where residents have organized to contribute labor or money to address any of their development priorities?

- Yes
- No

6b If so, when and what was involved?

7 In the past 12 months, have you and your neighbors organized and applied for improvements of any kind with your local government?

- Yes
- No

If yes, as requested

- Formal (Community development committees, etc.)
- Demonstration
- Other

8 In the past 12 months, have you or anyone in your household participated in an organized activity for the benefit of your neighborhood, such as a neighborhood cleanup?

- Yes
- No

9 Suppose there is a risk mitigation project that your neighbors are interested in and are contributing money, but it would have no benefit to you or your family. Would you contribute to it if you could?

- Yes
- No

For more information, contact Global Communities at resilience@globalcommunities.org

10.2. Preliminary Training Process in Disaster Resilience and Inclusion. One important first step in building cohesion and laying a foundation for improved protection is to build the capacity of residents and committees in resilience and inclusion. This will help to make clear that shocks and stresses affect populations differently, people have access to different networks and resources with which to adapt or absorb them, that the initiative will be transparent, inclusive and equitable in how it addresses them, and that collaborative work across the community can increase the benefits for all. This preliminary training should begin to address the findings of the above assessment and provide the necessary knowledge and skills so that community structures and groups in conditions of vulnerability can adequately exercise their rights. In many cases, government agencies responsible for disaster risk management and emergency response and protection have formal training curricula and technical staff experienced in providing this training. Where possible, local governments should endeavor to collaborate with these existing agencies to carry

out relevant training and build capacity of the municipal staff. See sample training plan in Table 11 below. The RT should also consider how to approach the training so that its effectiveness can be monitored, and that it can be continually adapted and scaled to new areas as the RINA intervention progresses. The RT should approach the training as a "Training of Trainers", in order to create capacities in the target neighborhoods so that in the future, communities can replicate this knowledge by themselves, such as through local disaster risk management committees.

It is recommended that training goes beyond generic Disaster Risk Management and Protection curricula—and reaches more than just formal disaster risk management committees, but also other community-based organizations. Trainings should be developed utilizing the findings from the assessments conducted during the earlier Steps and help to reinforce local understanding of resilience and inclusion.

Table 11. Example of training plan

Technical skills:	Soft skills:
Comprehensive Risk Management	Leadership
Early Warning and Response Systems	Self-esteem and motivation
Economic strengthening and resilience for business	Self-confidence
Conflict Resolution	Proactivity
Accountability	Interpersonal relations
Protection of vulnerable groups	Teamwork
Advocacy skills and partnership with key stakeholders	Facilitation and training skills

10.3 Establishment of Agreed Locations for Neighborhood Consultation on RINA. Designating a physical space where RINA project activities can be discussed and information and materials are made available can increase perceived and real transparency of the initiative, inspire interest and engagement, and improve participation. If a space isn't already available and identified for the RINA intervention, the RT should coordinate with the RINA Neighborhood Committee to designate a suitable community space for discussions, storage of supplies, and posting of information related to the RINA initiative. These locations should be considered a space for dialogue that is carried out in a regular and participatory way for all—inclusive of all marginalized groups.⁵³ If there is no space for consultation, with the support of neighborhood leaders, public areas can be identified and socialized with community groups and key actors. These public spaces are great places to post information on the RINA initiative (such as work plans and the names of RINA Neighborhood Committee members), behavior change messages, contact information, community feedback mechanism information, meeting schedules, etc.

10.4 Planning for Barriers in Community Organization.

This section discusses resolving conflicts, sustaining commitment, and encouraging a community focus. Within neighborhoods, sometimes existing or sudden situations will hinder organizational processes. For detailed guidance in conflict resolution, consult the [Tool 36: Training Manual on Conflict Prevention and Resolution](#)⁵⁴ and [Tool 37: Prevention and Conflict Resolution Trainer Manual](#)⁵⁵ developed by UNDP. Also consult [Tool 38: Handbook on the Transformation of Community Conflicts](#)⁵⁶ by UNDP and [Tool 39: Community Toolbox Training for Conflict Resolution](#)⁵⁷ from the University of Kansas. As for problems in communication flows, disinformation, or neighborhoods with a large territorial extension that hinders the dissemination of information, consider establishing communication mechanisms or provision of information such as community boards, social networks, assemblies, among others. These mechanisms can inform about RINA, neighborhood development initiatives more broadly, or services and resources that the government or local actors can offer related to resilience and inclusion. More guidance on communication plans can be found in [Tool 40: Developing a Plan for Communication](#)⁵⁸ from Kansas University. For more guidance on influencing behavior change the RT should refer to [Tool 41: Promoting Behavior Changes by Making it Easier and More Rewarding: Benefits and Costs](#)⁵⁹ by Kansas University, and also refer to [Step 15 - Communication campaigns for Social and Behavioral Change](#) on how to design campaigns for the social and behavior change.

10.5 Promote the Inclusion of Vulnerable Groups, Gender Equality and Social Cohesion. RINA is fundamentally about progressing more inclusive urban communities, and this can only be achieved by proactive intentioned actions to promote inclusion of vulnerable groups, ensuring gender equality, and strengthening social cohesion. Based on evaluations completed to this point the RT should plan initiatives that promote the participation of groups in conditions of vulnerability and social exclusion. While RINA endeavors to include and benefit all residents, the intensity, scope, and focus of initiatives are often different depending on levels of need and vulnerability. In many cases, local NGOs, CBOs, or government agencies (like those dedicated to youth or women's welfare) can be critical resources to assist RINA to effectively engage with, improve participation of, and improve outcomes for specific groups. Wherever possible, the RT should partner with these agencies to leverage their capacities.

For further guidance on the protection of children and adolescents, the RT should refer to :

- [Tool 42: Minimum Standards for the Protection of Children and Adolescents in Humanitarian Action](#)⁶⁰ published by The Alliance for Child Protection in Humanitarian Action.
- [Tool 43: Guide for Engaging Children and Youth in Disaster Risk Reduction and Resilience Building](#)⁶¹ published by UN-DRR.

For ensuring gender equality throughout all interventions and planned outcomes the RT should refer to:

- [Tool 44: The Gender Manual for Humanitarian Action](#)⁶² published by the Interagency Standing Committee (IASC).
- [Tool 45: The Minimum Standards for Programming on Gender-Based Violence in Emergencies](#)⁶³, developed by UNFPA.

For protecting Persons with Disabilities (PWD), the RT should refer to:

- [Tool 46: Standards for the Inclusion, Protection and Care of Persons with Disabilities in Emergencies and Disasters](#)⁶⁴ published in Spanish by UNICEF and CEPREDENAC.
- [Tool 47: Manual for Inclusive Emergency Management](#)⁶⁵ published by Kaiser, C., et al.

53 Among the groups in a condition of vulnerability are children, the elderly, people with disabilities, pregnant or breastfeeding women, migrants and refugees, people with serious illnesses, LGBTI people or other groups that according to the context are considered in a condition of vulnerability.

54 UNDP. (2018). Manual Formativo en Prevención y Resolución de Conflictos. Honduras. Retrieved from: <https://www.undp.org/es/latin-america/publications/manual-formativo-en-prevenci%C3%B3n-y-resoluci%C3%B3n-de-conflictos>

55 UNDP. (2018). Manual del Capacitador - Prevención y Resolución de Conflictos. Honduras. Retrieved from: <https://www.undp.org/es/honduras/publications/manual-del-capacitador-prevenci%C3%B3n-y-resoluci%C3%B3n-de-conflictos>

56 UNDP. (2018). Manual del Capacitador - Transformación de Conflictos Comunitarios. Honduras. Retrieved from: <https://www.undp.org/es/latin-america/publications/manual-del-capacitador-transformaci%C3%B3n-de-conflictos-comunitarios>

57 Kansas University. (n.d.). Section 6. Training for Conflict Resolution. Implementing Promising Community Interventions, Chapter 20. Retrieved from: <https://ctb.ku.edu/en/table-of-contents/implementation/provide-information-enhance-skills/conflict-resolution/main>

58 Kansas University. (n.d.). Section 1. Developing a Plan for Communication. Communications to Promote Interest and Participation, Chapter 6. Retrieved from: <https://ctb.ku.edu/en/table-of-contents/participation/promoting-interest/communication-plan/main>

59 Kansas University. (n.d.). Section 6. Promoting Behavior Changes by Making it Easier and More Rewarding: Benefits and Costs. Social Marketing and Sustainability of the Initiative, Chapter 45. Retrieved from: <https://ctb.ku.edu/en/table-of-contents/sustain/social-marketing/promote-behavior-change/main>

60 The Alliance for Child Protection in Humanitarian Action. (2020). The Minimum Standards for Child Protection in Humanitarian Action (CPMS). Retrieved from: https://alliancecpa.org/en/CPMS_home

61 United Nations Office for Disaster Risk Reduction (UNDRR). (2020). Words into Action: Engaging Children and Youth in Disaster Risk Reduction and Resilience Building. Geneva, Switzerland. Retrieved from: https://www.preventionweb.net/files/67704_67704wiachildyouthdrr202067704undrr.pdf

62 Inter-Agency Standing Committee. (2017). The Gender Handbook for Humanitarian Action. Online version. Retrieved from: <https://www.gihahandbook.org>

63 UNFPA. (2019). The Inter-Agency Minimum Standards for Gender-Based Violence in Emergencies Programming. Retrieved from: https://www.unfpa.org/sites/default/files/pub-pdf/19-200_Minimum_Standards_Report_ENGLISH-Nov.FINAL_.pdf

64 UNICEF, CEPREDENAC. (n.d.). Normas para la Inclusión, Protección y Atención de las Personas con Discapacidad en las Emergencias y Desastres. Proyecto: Participación y protección de las personas con discapacidad en emergencias y desastres en América Central. Retrieved from: https://www.unicef.org/lac/sites/unicef.org/lac/files/2018-06/P.2.3%20Documento-Normas-Inclusion-Proteccion_13.08.2016-WEB.PDF

65 Kaiser, Carlos; Vásquez, Armando; Vásquez, Daniela. (2013). Manual de Gestión Inclusiva de Emergencias: Derechos Humanos de las personas con discapacidad durante emergencias. Peñaflo, Chile. 133 p. Retrieved from: https://reliefweb.int/sites/reliefweb.int/files/resources/Manual_de_ddhh_personas_con_discapacidad_en_emergencias.pdf

For the engagement with older adults in the RINA intervention the RT should consult *Tool 48: Humanitarian Inclusion Standards for Older People and People with Disabilities*⁶⁶ published by Christian Blind Mission and HelpAge International and Handicap International.

To integrate an overall Protection Approach⁶⁷ the RT should refer to the *Tool 49: Operational Guide and Toolkit for Incorporating Protection Principles into Integrated Disaster Risk Management Processes*⁶⁸ published by ECHO and CEPREDENAC.

In terms of social cohesion and violence prevention, the RT should promote participatory spaces for dialogue with residents of the target neighborhoods to prioritize actions that strengthen social capital in their neighborhoods. Refer to *Tool 50: Social Cohesion: A Practitioner's Guide to Measurement Challenges and Opportunities*⁶⁹ developed by UNDP and *Tool 51: Violence Prevention Dialogue Toolkit*⁷⁰ developed by the International Coalition of Sites of Conscience (ICSC).

10.6 Promote the Reception, Protection and Inclusion of Migrants and Other Displaced Persons. Urban areas—and informal settlements—often experience inward-migration from people fleeing their homes under stress, such as from conflict, economic strife, violence, or in the wake of a disaster. The RT should identify and address these trends as part of their assessments and SWOT analyses, as well as be proactive about assisting communities to be able to absorb and adapt to the influx of new residents in a constructive, inclusive, and collaborative manner. The RT should coordinate with actors at the local and neighborhood level and invest in communication campaigns, creation of safe spaces, or events with positive messages around the contribution of migrants and displaced persons to the receiving communities and support their inclusion and combat xenophobia and marginalization. These initiatives can promote inclusion of migrants and refugees in decision-making processes over issues related to their well-being at both the community and city levels, and be essential opportunities to identify how local governments can work at the systems level to help communities absorb new residents and meet their needs, such as through expanding access to health, education, housing, protection, and other services in neighborhoods receiving influxes of displaced populations. Often local governments can establish partnerships with different local and international actors to offer vulnerable migrants and refugees formal and/or non-formal education, health and other protection services which can be integrated into the design and implementation of RINA in constructive and mutually reinforcing ways. For further guidance on this topic the RT should refer to *Tool 52: Guide to Local Inclusion of Migrants and Refugees*⁷¹ published by UN Habitat.

10.7 Support Protection Information Management (PIM) System. The RT should provide support to local protection actors to help improve generation of quality sex, age, sexual orientation, and disability disaggregated information in a safe,

reliable, and meaningful way. The establishment of a PIM system will help to improve the local capacity to collect, process, analyze, store, disseminate, and use information to enable evidence-informed action for quality protection outcomes. It will help ensure efficient and targeted use of resources and enable the coordination, design, and delivery of protection services. This data, for example, can help inform the planning of improved access and egress, lighting, the design of recreation areas, and strategies to increase the demand for and supply of specialized services.

10.8 Establish Neighborhood Safe Spaces and Mobile Protection Teams. In context where they don't already exist and are required, the RT should coordinate with local protection service providers to establish and operate Safe Spaces in target urban neighborhoods to function as 'neighborhood protection centers' where marginalized and vulnerable persons can access comprehensive professional protection services. These spaces can be established in coordination with local government and neighborhood leaders and operated by protection officers, social workers and lawyers, trained in protection protocols. Safe Spaces can also have an associated mobile unit to provide outreach services to underserved populations within neighborhoods. Mobile Unit teams can provide information on service providers, psychosocial support and legal assistance; carry out awareness raising on rights; risk communication on GBV and child abuse risk and mitigations; support referrals to medical, police, and family reunification services (such as for unaccompanied minors). The RT should ensure that these Safe spaces are mobilized to support housing resettlements described in *Step 21 - Resilient Shelter Solutions* (upgrading and relocation). The RT should ensure that Safe Spaces are gender- and child-friendly and equipped to ensure access for those with disabilities. The RT should raise awareness of the service in the community. Mobile teams should ensure that groups at risk of exclusion are reached and incorporate processes to identify at-risk individuals in coordination with the local community. Wherever possible, these Safe Spaces should be developed with a view towards providing long-term sustainable services, and can be an integrated part of another existing service or entity operated by public agencies, NGOs, churches, or others.

10.9 Facilitation of Community-Based Activities to Break Down the Barriers to Inclusion and Social Cohesion. The RT should engage local government, specialized local institutions, CBOs, and local leaders to promote community centered activities for inclusion, integration, and social cohesion, including to address issues of persons facing discrimination. The RT should organize workshops and other activities to address issues of concern raised by communities or partners, from Post Traumatic Stress (PTSD) in the wake of disasters, to building more effective relationships with newly arrived residents. Through these community-based activities, the RT should identify protection threats and community-based approaches to address and act as a point of contact to improve relations and strengthen capacity for dispute resolution. People in similar situations (such as GBV survivors or individuals experiencing xenophobia) can meet in the neighbor-

66 Christian Blind Mission (CBM), HelpAge, Handicap International. (2018). Humanitarian Inclusion Standards for older people and people with disabilities. Retrieved from > <https://reliefweb.int/report/world/humanitarian-inclusion-standards-older-people-and-people-disabilities>

67 According to the Essential Humanitarian Standard on Quality and Accountability, protection refers to "all those activities aimed at guaranteeing full respect and equality of the rights of all people, without distinction of any age, sex, ethnicity, social class or religion, among others" (CHS Alliance, Group URD and the Sphere Project, 2015). These rights must be respected and guaranteed at all times, especially in situations of disasters and other contexts of violence (CEPREDENAC, ECHO, NRC, Plan International, Save the Children, World Vision, 2015).

68 CEPREDENAC, ECHO, Norwegian Refugee Council. (2015). Guía operativa y kit de herramientas para incorporar los principios de protección en procesos de gestión integral del riesgo de desastres. Retrieved from: <https://reliefweb.int/report/guatemala/gu-operativa-y-kit-de-herramientas-para-incorporar-los-principios-de-proteccion-en>

69 100 Resilient Cities. (2019). Social Cohesion: A Practitioner's Guide to Measurement Challenges and Opportunities. Retrieved from: https://resilientcitiesnetwork.org/downloadable_resources/UR/Social-Cohesion-Handbook.pdf

70 International Coalition of Sites of Conscience (ICSC). (2009). Violence Prevention and Dialogue Toolkit. Retrieved from: <https://www.conareg.org/wp-content/uploads/2021/08/Violence-Prevention-Dialogue-Toolkit-EN.pdf>

71 UN Habitat. (2020). Local Inclusion of Migrants and Refugees: a gateway to existing ideas, resources and capacities for cities across the world. Retrieved from: https://unhabitat.org/sites/default/files/2021/01/local_inclusion_multipartner_guidance_.pdf

hood's Safe Spaces to share experiences, knowledge, lessons learned, and design practical solutions to address concerns. Recreational activities with children and vulnerable groups should also be included and provided in child friendly spaces.

Collaboration with local organizations focused on gender, could be a great option to develop guidance for local government and the national government on mainstreaming gender into urban upgrading interventions or to increase the impact of urban resilience programming on women.

10.10 Implement and Follow up on Agreements for Inclusion, Gender Equality, and Social Cohesion. The RT should formalize commitments for inclusion, gender equality, and social cohesion with neighborhood residents and other stake-

holders through letters of agreement. These agreements should include roles and responsibilities, as well as the time and resources needed to successfully achieve agreed commitments and initiatives. The RT should agree together with the community structures on the mechanisms to monitor and evaluate whether the implementation of the initiatives planned is contributing to the strengthening of the social cohesion and protection of the targeted neighborhoods or not.

10.11 Neighborhood Feedback Mechanism. The RT should coordinate the establishment of a Neighborhood Feedback Mechanism which should include a hotline number and confidential email address where neighborhood residents can provide feedback and raise concerns in relation to the RINA intervention. This Feedback Mechanism should include clear protocols for receiving and responding to issues in a confidential, trustworthy, timely and effective manner.

Case Study 6: Resilient Women Building Resilient and Inclusive Neighborhoods.

The Barrio Resiliente (Resilient Neighborhood) program implemented by GOAL in Colombia (2020 - 2023) supported by USAID is implementing a strategy named "Mujeres Resilientes" (Resilient Women). The strategy supports migrant women, the host population, Colombian refugees and/or returnees, and indigenous and Afro-descendant population residing in the program intervention areas (Bucaramanga, Riohacha, Manaure, Uribia, Maicao and Barranquilla). The strategy sees women as agents of change, and encourages the recognition of women's skills and abilities in their community roles. The strategy promotes self-recognition of women as subjects of rights and encourages leadership, social cohesion, and a sense of belonging in the territories of intervention. Mujeres Resilientes is a process of personal, family, and social growth and that in turn, allows women to strengthen each of the social systems in which they are immersed. The program team began by analyzing the demographic data and dynamics of target populations as well as social structures. In collaboration with institutional partners, focus group discussions and training sessions were developed to strengthen women's capacities on soft skills (e.g., such as assertive communication, female empowerment, teamwork, sense of belonging, community work); social skills and governance; business education and employability; cultural-ethnic tradition; and women's rights. The strategy also promotes women's networks ("Redes sororas" in Spanish) and social support networks between a member of women's families and existing community-based organizations and/or networks. Finally, the strategy facilitates the establishment of alliances with key stakeholders in relation to women rights access and employability. To date 2 women's networks and 12 social support networks have been established and more than 700 women are benefiting from this strategy.



For more information, read the the full case study: [Here](#) | Contact GOAL at resilience@goal.ie

For more information about this strategy follow the #MujeresResilientes on Twitter: GOAL Colombia and Facebook: GOAL Latinoamérica

Case Study 7: Resilient Neighborhood Accountability System.

GOAL's Barrio Resiliente (Resilient Neighborhood) program (2013 - 2021) supported by USAID, established an accountability system using a protection approach. The system aimed to improve the relationship of trust with target populations and stakeholders, as well as to oversight by communities and other stakeholders for the quality of interventions. This system was based on relevant global standards such as The Core Humanitarian Standard and the Humanitarian Accountability Partnership (HAP) and included close collaboration with the target population and stakeholders.

To do this, the program team started by developing a risk analysis of identified vulnerable groups. The risk analysis used the *Protection Risk Assessment Tool* developed by GOAL which is comprised of four steps (See Figure 13). It identifies all the protection and equality risks that can be produced by an intervention and that could potentially affect vulnerable groups (e.g., elderly, children, people with disabilities, women, and indigenous groups, etc); it rates the level of risk to which each group is exposed to; and it gathers mitigation measures for each identified risk. Finally, it helps to establish people responsible to undertake the agreed mitigation measures and monitoring activities. As a result of this assessment, protection capacities were assessed and strengthened among the program team and community structures; a community feedback mechanism was designed and promoted; and different communication and information provision actions were developed (e.g., regular community meetings, field visits with stakeholders, use of social media, community information boards, etc). Therefore, trust and communication among the communities, stakeholders and program team significantly increased. Community leaders were empowered and co-created program interventions, providing crucial contextual knowledge that resulted in improved program implementation.

Figure 13. Example of the Protection Risk Assessment Tool.

Protection Risk Assessment Toolkit							
Project/Programme Title:						Date of Elaboration:	
Risks	Likelihood (1 to 5 (1=Lowest; 5= Highest))	Impact (1 to 5 (1=Lowest; 5= Highest))	Level of Risk	Short term mitigation measures during implementation stage	Responsible	Long term mitigation measures post project implementation stage	Responsible
General risks							
Gender-based risks							
Disabilities and elderly people associated risks							
...Other risks							

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The RT should work with and through national systems for risk assessment and determination of habitability, such as through national disaster risk management agencies charged with doing formal disaster risk assessments, and where possible and necessary, the RT should look for possibilities to reflect on the efficiency, effectiveness, reliability, and ability to scale the process. Once an initial risk assessment is completed by the partners, recommendations on how all stakeholders—community members, municipal technical staff, ministry staff, and others—can better align and play their roles effectively.

While the scale and scope of technical risk assessments will depend on the mandate of each specific project, the local context, and resources available, the RT should be sure that they address priority hazards for all residents (and be sure that segments of the population with unique risks are considered within them). Often these technical studies will include geotechnical surveys to determine areas that are suitable for habitation, and the conditions required for safe construction, including measures to address landslide and flooding risk, or seismic risks, for example.

As part of Barrio Mio, PCI collaborated with government ministries and municipal partners to do collaborative risk and habitability assessments of high-risk neighborhoods. The purpose of this was to work through and strengthen local systems and procedures for risk assessments, and to assist them to be able to scale similar assessments to new neighborhoods. The collaboration raised critical considerations about how local governments and their public and private partners needed to reinforce how they assess risk. For example, if local governments and the national government were to allow for safe, evidence-based expansion and upgrading of urban neighborhoods, the procedures for risk management would need to be drastically accelerated and better resourced. Second, concerns of liability on the part of assessors needed to be addressed in an effective way to prevent massive urban areas from being deemed uninhabitable out of an abundance of caution; and, robust technical analysis was required to determine what areas were truly not inhabitable and impractical to make safe, areas that were not safe but could be affordably mitigated and utilized for the appropriate purposes; and areas that were safe and could be expanded or better utilized.

12.2 Participatory Risk Assessment. It is important to engage communities through a structured consultation to identify the risk scenarios to which the community is exposed or may be exposed to in the future. RINA recommends a participatory process for risk assessment with the neighborhood residents and other stakeholders. This should be developed through a series of workshops which may also include site visits to ensure full understanding and appreciation of potential risks. It is also recommended to present to the neighborhood residents the findings of the technical and scientific assessments. To assess vulnerabilities and capacities with the target neighborhoods the RT should use *Tool 60: Enhanced Vulnerability and Capacity Assessment*⁸¹ published by IFRC. It is important to engage communities through a structured consultation to identify the risk scenarios to which the community is exposed or may be exposed to in the future. To work with communities to identify and prioritize risk scenarios the RT should use *Tool 1: The Analysis of Resilience of Communities to Disaster (ARC-D) Toolkit*⁸². Note that the application of the ARC-D is included in the previous step to carry out the baseline assessment on community resilience. The ARC-D toolkit recommends identifying communities, main risk scenarios in three steps: first, by selecting all the shocks that affect the community (See Figure 14); then by selecting the stresses that affect the community (See Figure 15); lastly (See Figure 16), by analyzing the following four points to determine up to three “priority” disaster risk scenarios:

- A prioritization of shocks and identification of causal relationships among these. For example, does “Shock 1” (e.g., a flood) cause another shock (e.g., a landslide) or multiple shocks and stresses (e.g., landslide, bridge collapse, interruption in economic activity, food insecurity, etc.).
- The exacerbating effect of stresses on the identified shocks. For example, the impact of a tropical storm that leads to landslides are exacerbated by environmental degradation (e.g., soil erosion) and unplanned urbanization (e.g. poor location/quality of infrastructure), etc.
- The degree of damage/loss caused by each “risk scenario”.
- The community’s coping capacity (coping mechanisms, both positive and negative) to overcome each risk scenario.

81 IFRC. (2018). Enhanced Vulnerability and Capacity Assessment (EVCA). Retrieved from: <https://www.ifrcvca.org/>

82 GOAL. (2016). Analysis of Resilience of Communities to Disasters (ARC-D) Toolkit. User Manual. Retrieved from: https://resiliencenexus.org/arc_d_toolkit/what-it-is/

Risk scenarios can be single-hazard, e.g. earthquake, or multi-hazard, featuring causally connected hazards, e.g. earthquake which triggers landslide.

Figure 14. Summary table for Identification of Shocks, Part A of the ARC-D Toolkit

8A. Shocks (Sudden events that impact on the vulnerability of a system and its components ¹):		Mark X	Frequency (e.g. 1 earthquake in 25 years, or 5 landslides per rainy season)	Active? (Y/N, if not, explain)	Comments
Geological shocks	Earthquake				
	Tsunami				
	Volcanic Eruption				
	Landslide				
	Other: <input type="text"/>				
Hydro-meteorological shocks	Flood				
	Cyclone/Hurricane/Typhoon				
	Tornado/Twister				
	Storm surge				
	Severe winter weather				
	Drought				
	Heatwave				
	Other: <input type="text"/>				
Biological shocks	Human disease epidemic				
	Specify human epidemic: <input type="text"/>				
	Specify human epidemic: <input type="text"/>				
	Specify human epidemic: <input type="text"/>				
	Specify human epidemic: <input type="text"/>				
	Specify human epidemic: <input type="text"/>				

Source: GOAL, 2016

8A. Shocks (Sudden events that impact on the vulnerability of a system and its components ¹):		Mark X	Frequency (e.g. 1 earthquake in 25 years, or 5 landslides per rainy season)	Active? (Y/N, if not, explain)	Comments
Biological shocks	Animal disease epidemic				
	Specify animal epidemic:				
	Specify animal epidemic:				
	Crop infestation/disease				
	Specify infestation/disease:				
	Specify infestation/disease:				
	Other:				
	Economic/market crisis (severe price fluctuation, severe market disruption)				
	Conflict/violence outbreak				
	Inter- or intra-communal conflict (e.g. cattle rustling, gang violence, disputes over natural resources, etc):				
State-involved conflict					
Nuclear/radioactive accident					
Chemical accident					
Fire spread (including forest fires)					
Other:					
Other:					
Other:					

Figure 15. Summary table for Identification of Stresses, Part A of the ARC-D Toolkit

8B. Stresses (Long-term trends that undermine the potential of a system and increase the vulnerability of actors within it. ²):		Mark X	Comments
Environmental or Biological Stresses	Environmental degradation (e.g. erosion, desertification, soil fertility depletion, water and air pollution etc.)		
	Negative effects of climate change		
	Public health concerns (HIV, malaria, malnutrition etc)		
	Other:		
Economic Stresses	Economic instability (food and fuel price fluctuation) and/or decline		
	Unemployment		
	Other:		
Social Stresses	Unplanned urbanisation		
	Rapid population growth		
	Food insecurity and/or income insecurity		
	Gender-Based Violence		
	Gender Inequality		
	Discrimination		
	Substance abuse		
	Insecurity		
	Other:		
Political Stresses	Protracted conflict		
	Political Instability and/or tension		
	Land disputes		
	Other:		

Source: GOAL,2016

Figure 16. Principle Risk Scenario Analysis, Part A of the ARC-D Toolkit

8C. Principle Risk Scenario Analysis	
Based on the above information, please identify and analyse the main risk scenarios that affect this community.	
Risk scenario 1	Description
	Shock Which shock is the most devastating and, if applicable, how does it lead to other shocks?
	Stresses In what ways is the identified shock(s) exacerbated by the identified stresses?
	Impact What is the extent of impact (damage, loss, etc.) from this risk scenario (i.e. the shocks and stresses identified above)?
	Coping Mechanisms What coping mechanisms (both positive and negative) does the community use to deal with this risk scenario?
Risk scenario 2	Description
	Shock Which shock is the most devastating and, if applicable, how does it lead to other shocks?
	Stresses In what ways is the identified shock(s) exacerbated by the identified stresses?

Source: GOAL,2016

12.3 Development of Neighborhood Hazard Maps. RINA recommends developing multi-hazard maps for each neighborhood which can also include mapping key resources available to the community. To develop these maps RINA recommends using A0 or A1 sized printed maps from Google Earth (or other suitable source) of the neighborhood to identify the extent of different hazards, critical infrastructure, vulnerable groups, evacuation routes, and resources for responding to hazards. Alternatively, the RT can also work with neighborhoods to develop hand drawn sketches to map hazards and resources. This risk assessment and hazard maps will be a key input throughout the implementation of RINA. See *Tool 61: Guide to Digital Community Mapping for young people*⁸³ developed by Global Communities. See some samples of hazard maps in Figure 17, 18, and 19.

Local governments can use many different approaches and tools to engage communities in risk assessments. Some are more designed for broad urban upgrading looking at many factors associated with urban living conditions, while others may be more focused specifically on disaster risk or aspects of resilience. Depending on the scope and scale of the RINA initiative and the conditions in the target neighborhoods, the RT should work with and/or adapt the tools that are most relevant and feasible to utilize. For more information on participatory processes for risk assessment and hazard mapping *Tool 62: Instructions to apply Participatory Enumeration developed by Global Communities.*

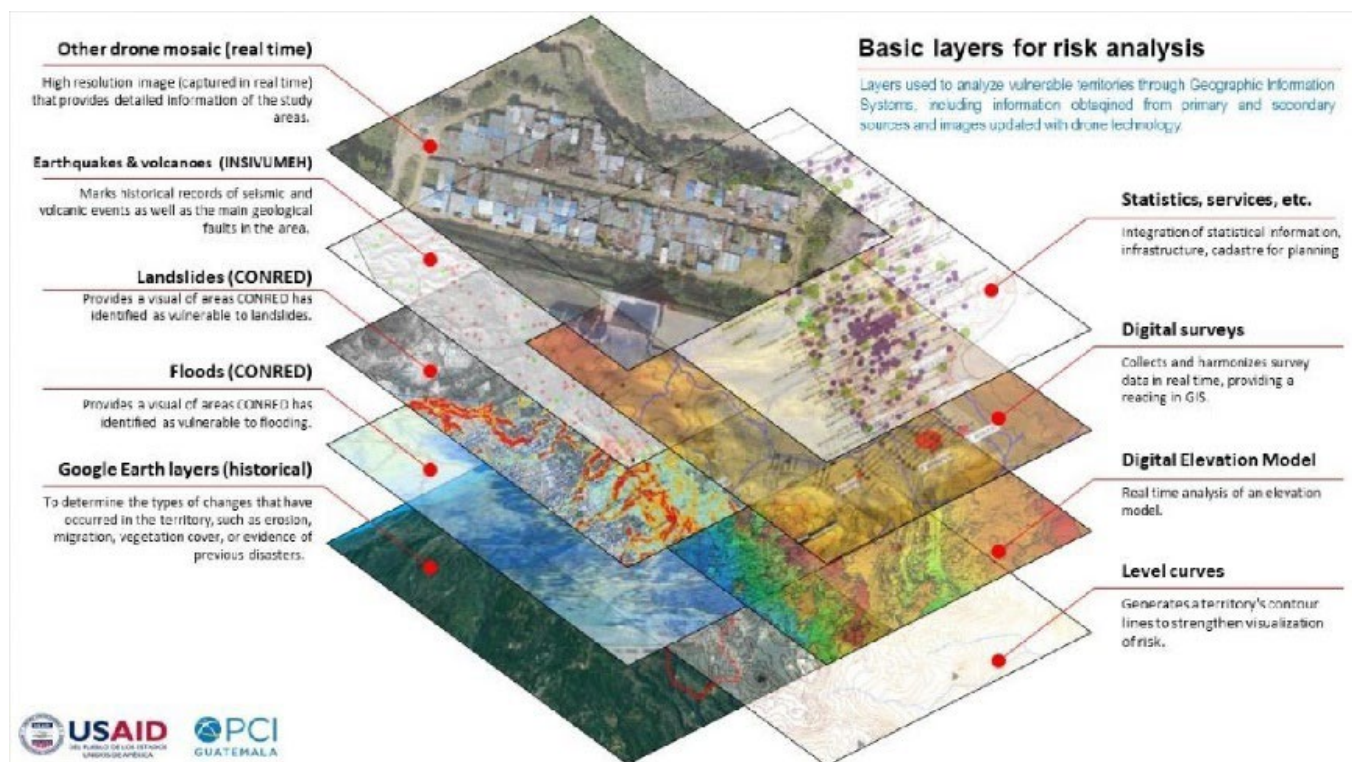
83 Global Communities. (n.d.). Mapeo Comunitario Digital: Guía para el trabajo participativo dirigido a los jóvenes del barrio. Proyecto Barrio Mio Scale Up. Retrieved from: http://gcuate.org/BMSU/KITBJGIR_archivos/6%20KIT%20BJGIRD.pdf

Figure 17. A hazard map developed by youths in the neighborhood of Colonia Belen, Mixco in Guatemala according to their perspective, drawn to scale so that it can be integrated with secondary sources of data.



Source: Global Communities

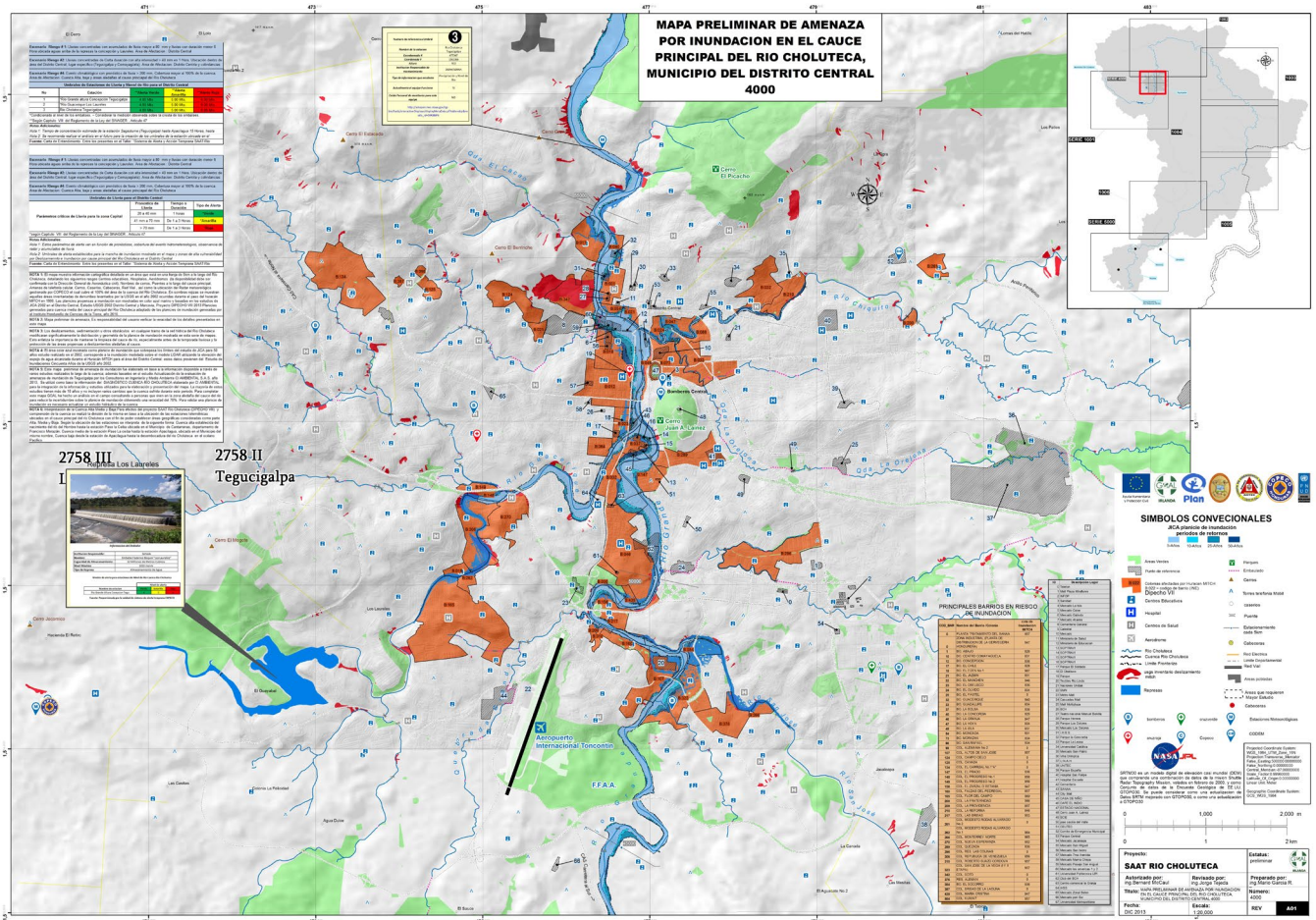
Figure 18. Example of a community map with basic layers for risk analysis using D-RISK process developed by PCI.



Source: Global Communities

Note: This map combines community perspectives on risk from a broad diversity of residents, with other sources of data from technical studies and other secondary sources so they can be analyzed together to inform decisions.

Figure 19. Sample of Flood Hazard Map in Tegucigalpa, Honduras.



Source: GOAL. See the full version of this map in the [Resilience Nexus Website](#).

12.4 Complete Census of Families at Risk. To obtain a more detailed risk analysis of target neighborhoods, a census of families at risk should be developed. This can be done with support from the university partners, by involving students from social work and civil engineering faculties. Undertaking a census of families at risk will require home visits to assess the vulnerability of the physical and built environment and the socio-economic status of families. Risk knowledge also implies knowing the socio-economic situation of the target population. For this reason the socio-economic assessment collects information regarding the family nucleus on aspects such as; their income, economic activity, vulnerable groups, number of persons in the household, number of family units living in the household, ethnic groups, legal ownership of the property or the dwelling, etc. The physical assessment seeks to determine the actual condition of dwelling and determine levels of vulnerability. Elements assessed include of hazards and frequency of occurrence, typology of dwelling, structural details, ground slope, soil characteristics, meteorological and hydrological conditions, etc. See [Tool 63: Census of families at risk format](#)⁸⁴ developed by GOAL and [Tool 64: Matrices for Disaster Risk Assessment in Family Buildings](#)⁸⁵. Information resulting from this census in each neighborhood of families at risk is key for incorporating into risk management and preparation and emergency response plans at the and family level. It is also useful for prioritizing families for relocation where families are living in extremely precarious conditions.

12.5 Risk Determination. With the data collated on risk, including technical and scientific assessments, economic assessment (where available), participatory assessment, hazard mapping and census of families at risk, the RT must come to an initial interpretation of the level of risk. This interpretation will be subject to change as new learning emerges, and contexts change over the course of the RINA implementation. A report should be compiled for each neighborhood summarizing this initial risk assessment and collating all relevant information supporting this initial interpretation. For further guidance on evaluation neighborhood risk please refer [Tool 65: Manual for Evaluating Risks in Settlements and Built Environment](#)⁸⁶ and [Tool 66: Basic Manual for Risk Estimation](#)⁸⁷ developed by the Peruvian National Civil Defense System.

Determination of Acceptable Level of Risk

One of the fundamentals to progress with RINA is that there must be a realistic expectation of permanency of the settlement and that the level of risk will allow for this. If the initial interpretation of risk is that the risk is too great and the threat to life is too high, a decision will need to be made whether RINA can or should continue. This may be a political decision for the local government administration. RINA works with the reality that large scale relocation of families is often not feasible and people will continue to live with risk, even high levels of risk. Measures

84 GOAL. (n.d.). Complete census of families at risk. Barrio Resiliente Project. Honduras. Retrieved from: <https://resiliencenexus.org/urban-resilience/ewrs/>
 85 GOAL. (n.d.) Matrices for Disaster Risk Assessment in Family Buildings. Retrieved from: <https://resiliencenexus.org/urban-resilience/urban-shelter-and-settlements/>
 86 Ginés Suárez. (2013). Manual para la Evaluación del Riesgo del Emplazamiento y del Medio Construido para Edificios, Viviendas y Lotificaciones. Retrieved from: <https://dipecholac.net/docs/herramientas-proyecto-dipecho/honduras/manual-emplazamiento-seguro.pdf>
 87 Instituto Nacional de Defensa Civil. (2006). Manual Básico para la Estimación del Riesgo. Lima, Perú. Retrieved from: <http://bvpad.indeci.gob.pe/doc/pdf/esp/doc319/doc319-contenido.pdf>

should be taken through the Guidance and learning of RINA to work to reduce this risk if relocation is not an option in the short or medium term. It will also be the case that certain zones within a neighborhood require targeted relocations because the risk is too high. In short, if the initial interpretation concludes that people will continue to live in the neighborhood in the short and medium term, and evacuation from the neighborhood is not immediately required or feasible, then RINA should progress and implement key measures to reduce risk. Note all of this will be a consideration in the initial selection of target neighborhoods but it is important to validate this decision following the detailed risk assessment and also identify zones within the neighborhood where targeted relocation is required.

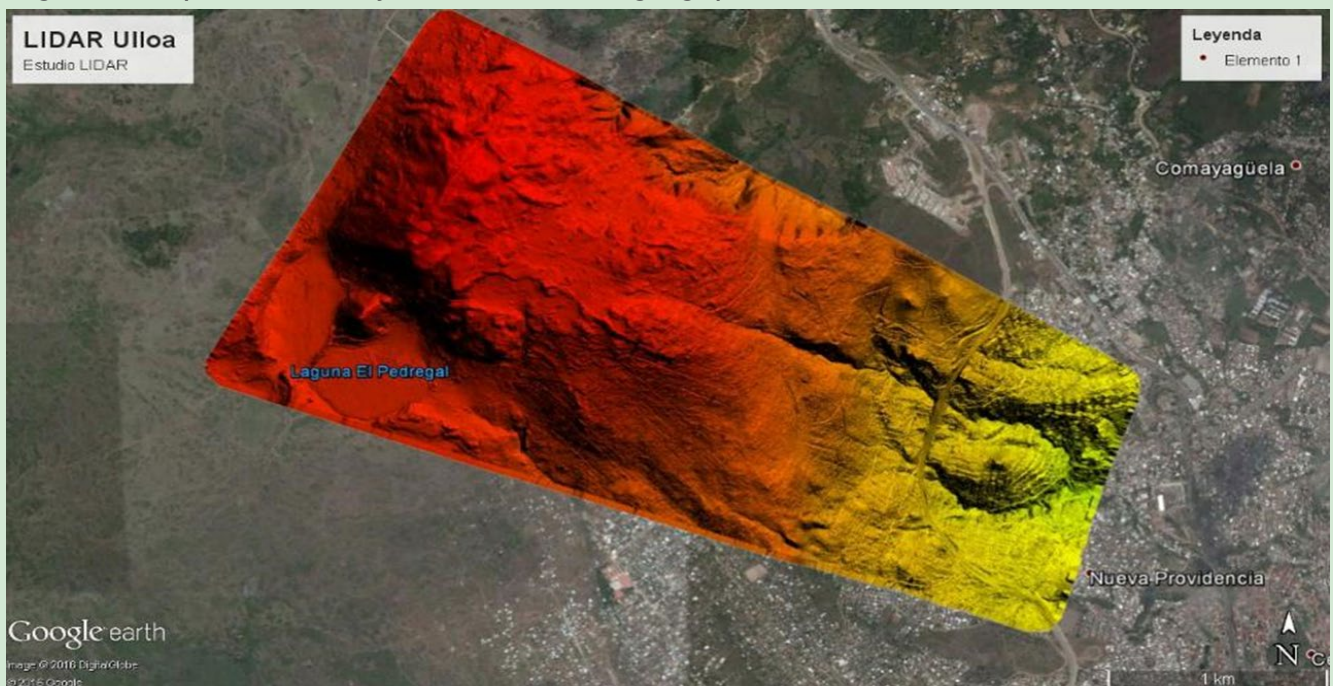
12.6 Update the Information Obtained. Risk assessment determination should be regularly updated, including updating technical and scientific studies, community consultation, census of families at risk, etc. At a minimum RINA recommends that risk determination is updated every 2 to 3 years or when there is a significant change or event that occurs that would change the risk profile of the neighborhood. RINA also recommends updating neighborhood level information every six months with the support of community emergency committees by assessing hazards, vulnerable areas and housing, evacuation routes, etc.

Case Study 8: Partnerships to Develop Scientific Studies.

In 2016, the Central District Municipality in Tegucigalpa, Honduras established a technical committee to undertake risk assessments in the “Ulloa” sector of the city which is a landslide prone area. The technical committee was made up of members from different units of the local government (e.g., construction control unit, risk evaluation unit, disaster risk management unit, municipal emergency committee and the water and sanitation management unit).

The technical committee led risk assessments in close collaboration with community-based organizations, public and private sector actors and with Barrio Resiliente (Resilient Neighborhood) program support, 2013 - 2021, implemented by GOAL with USAID support. The assessment process began by conducting a topographical survey and contour mapping using Drone/LIDAR over an 8 sq. km area. To determine the site’s geology and terrain stability, geological and geotechnical surveys were undertaken. In addition, a geophysical study was carried out in collaboration with the Earth Sciences Institute of the National Autonomous University of Honduras. In addition, hydrological modeling was undertaken to model surface water movement under different scenarios and risk mitigation measures. Information gathered from these scientific studies was used in a number of ways including to develop hazard maps, to strengthen the operationalization of the city’s Early Warning and Response System to landslides and flooding, and to identify families at extreme risk and who were priority to be relocated. Studies also facilitated the development of a surface water drainage master plan and the identification of priority areas for mitigation measures to reduce landslides and flood risk and informed the development of RINA Neighborhood Master Plans (RNMP) in the Ulloa sector. Finally, this process demonstrated that partnerships and advanced technology offer new opportunities to increase resilience for informal and precarious urban settlements and urban watersheds.

Figure 20. Sample of LIDAR study in the Ulloa Sector, Tegucigalpa, Honduras



Source: GOAL, 2016

Note: Green indicates the areas of lower altitude of the terrain, yellow indicate the areas of intermediate altitude, and red represents very high areas.

For more information contact GOAL at resilience@goal.ie.

Step 13. Selection of Critical Socio-Economic Systems for Neighborhood Resilience and Inclusion



MCR Essential Seven: Understand and Strengthen Societal Capacity for Resilience

13.1 Identify and Prioritize Critical Socio-Economic Systems for Resilience and Inclusion. Through this step, the RT will identify and prioritize the socio-economic systems most critical to building resilience and inclusion of the target neighborhoods. A socio-economic system can be characterized as one in which individuals or organizations come together in an interacting, interrelated, and interdependent way, coordinating their actions and connections intentionally or unintentionally, producing their own patterns of behavior, to affect a specific outcome⁸⁸.

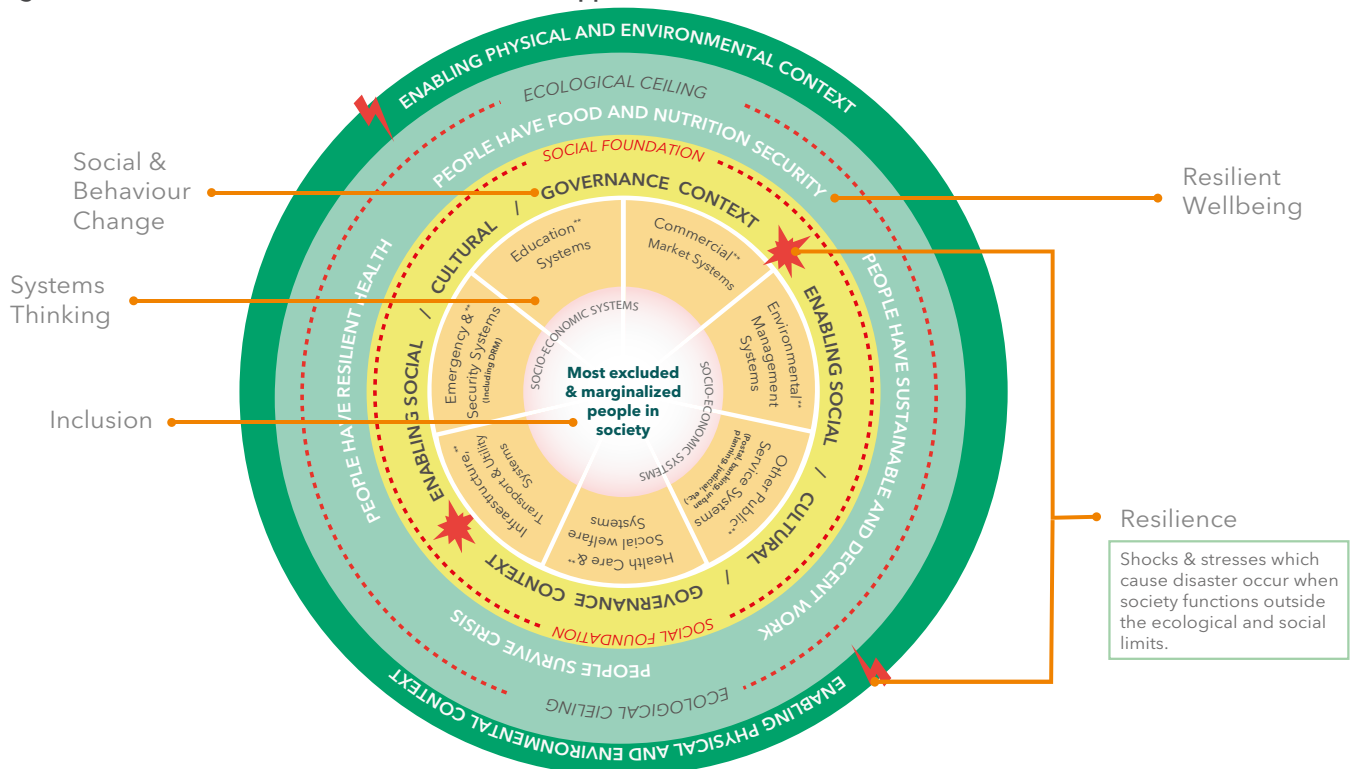
RINA is informed by the Resilience Lens taken from *Tool 20: The Resilience for Social Systems (R4S) Approach Guidance Manual*⁸⁹ published by GOAL, and which describes an overall framework for applying systems thinking and behavior change to build resilient and inclusive communities (See Figure 21). This Resilience Lens shows marginalized and excluded populations in the central focus point of the lens, which in the case of RINA, are vulnerable communities living in informal and precarious urban settlements. The next ring in the lens highlights the importance of the connectivity for marginalized and excluded communities to socio-economic systems. The more these systems are inclusive of marginalized populations, the more resilient these communities will be. The Resilience Lens shows 7 different categories of socio-economic systems including; education systems; emergency and security systems; infrastructure, transport and utility systems; health and social welfare systems; commercial market systems;

environmental management systems; and other public administration systems (e.g. urban planning, justice system, etc). The lens also shows two outer rings relating to the enabling social/cultural/governance contexts and the physical and environmental context.

RINA recommends holding workshops in each target neighborhood with representatives from all stakeholder groups to list out all the relevant socio-economic systems under the 7 categories listed above. Once this list is complete, the systems should be prioritized based on the opportunity they offer to progress resilience and inclusion at scale; the feasibility to deliver change within the RINA intervention resources; and the relevance to the target population and the contribution to the resilience of the target neighborhoods in the face of the main risk scenarios identified in *Step 12 - Neighborhood Risk Assessment* (See Figure 22). The final prioritization should feed into iterations of the RINA work planning in *Step 8 - Plan the RINA Intervention*. Table 12 shows a Traffic Light Matrix as an example of a tool that could be used for selecting critical socio-economic systems.

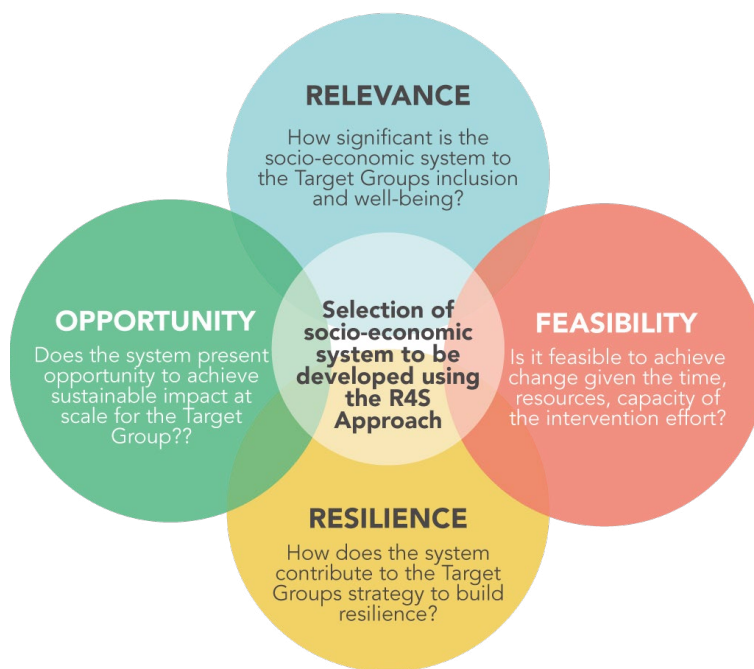
For further guidance on identifying and selecting socio-economic systems for intervention please refer to *Tool 20: The Resilience for Social Systems (R4S) Approach Guidance Manual*⁹⁰ developed by GOAL.

Figure 21. Resilience Lens taken for the GOAL R4S Approach.



88 Javier Aracil. (1995). *Dinámica de Sistemas*. Publicaciones de Ingeniería de Sistemas. Madrid, España. Isdefe. 1r Edicion. Retrieved from: https://www.academia.edu/8563256/Din%C3%A1mica_de_sistemas_Javier_Aracil
 89 GOAL. (2019). *Resilience for Social Systems (R4S) Approach Guidance Manual*. Retrieved from: <https://resiliencenexus.org/r4s/>
 90 GOAL. (2019). *Resilience for Social Systems (R4S) Approach Guidance Manual*. Retrieved from: <https://resiliencenexus.org/r4s/>

Figure 22. Basis for Socio-Economic System Selection, adapted from the Making Markets Work for the Poor (M4P) Approach.



Source: Resilience for Social Systems (R4S) Approach, GOAL, 2019.

Table 12. Matrix for selecting critical socio-economic systems.

Description of socio-economic system under consideration:		Traffic Light			Comments
		Low	Medium	High	
<i>Note: The questions below are illustrative: the R4S User should formulate key questions to investigate Relevance, Opportunity, Feasibility and Resilience in order to score these for each critical socio economic system.</i>		1 Point	2 points	3 points	
Relevance	Are marginalized and vulnerable populations dependent on this goods or services provided by this system?				
	To what degree would the improved functioning of this system reduce vulnerability and enhance wellbeing of the Target Group?				
	Are the target group engaged in this system currently or would they be in the future if they had access to it?				
	Does the system have a significant role to play in empowering women within the Target Group?				
	What portion of the Target Group are currently engaged in this system?				
Opportunity	What portion of the target group could potentially benefit from an intervention to improve the functioning of this system?				
	Potential for attracting the participation of the private sector in the improvement of the system?				
	Potential for obtaining the government's active engagement?				
	Potential for creating a "crowding in" effect?				
	Degree of poverty reduction of Target Group due to improved resilience and inclusion?				
	Opportunity to reach large numbers of women?				
Feasibility	Opportunity to reach large percentage of the target group?				
	Can the system be changed in a significant way during the available timeframe?				
	Are there barriers to change that can not be influenced by the proposed intervention?				
	Is the scale of resources (funding, technical assistance, etc) sufficient to achieve significant change?				
	Are there other interventions in the same area or with the same population that could have a distortionary influence and hence prevent systemic change?				
	Possibility of getting key players on board?				
	Is there sufficient level of stability to effectively engage permanent stakeholders on working towards longerterm system change?				
In the case of displaced persons, is the current settlement a temporary arrangement and if so is there the motivation to work towards longerterm systemic improvements? This question can also apply to relevance?					
Resilience (past)	Does the system development contribute to the Target Groups Strategy to become more resilient to risk scenarios?				
	Does proposed system's intervention have any negative consequences on Target Group's resilience? If so, to what degree?				
	Degree of criticality of the system in times of crisis?				
	Degree of impact of the system in reducing the Target Group's vulnerability to shocks and stresses?				
	Total Score				

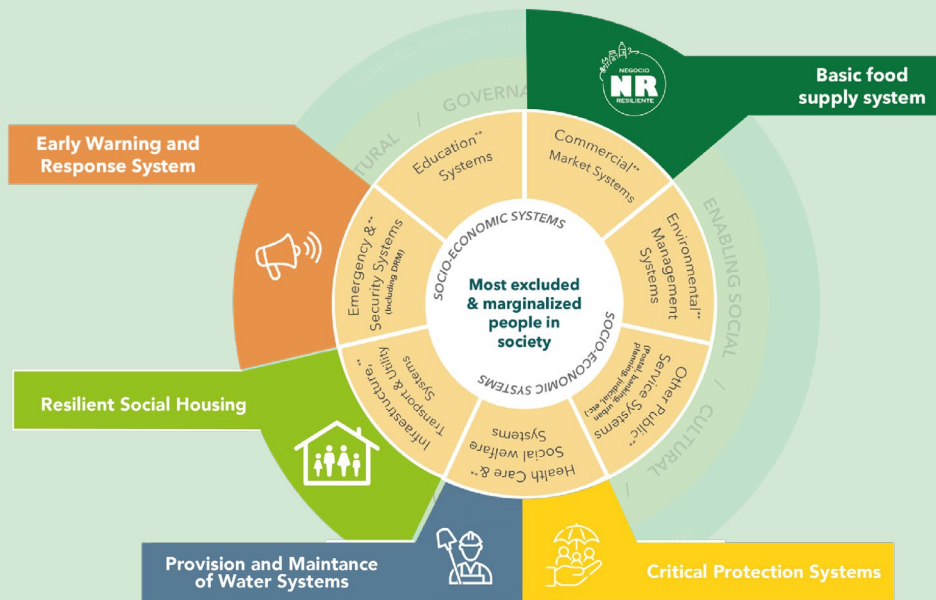
Source: Resilience for Social Systems (R4S) Approach, GOAL, 2019.

Case Study 9: Systems selection for a Barrio Resiliente project in Tegucigalpa.

In 2013, GOAL began executing an urban resilience focused intervention entitled “Operationalizing the Neighborhood Approach to Reduce Urban Disaster Risk in 3 High Risk Neighborhoods of Tegucigalpa.” During the implementation phase, a comprehensive participatory diagnostic of the target neighborhoods was completed which prioritized 5 key areas for a more systemic approach: (1) Market System for Social and Affordable Housing, (2) System for Provision and Maintenance of Neighborhood Surface Water Drainage, (3) Critical Market Systems for Neighborhood Basic food supply, (4) Neighborhood Landslide and Flooding Early Warning and Response Systems, and (5) Critical Protection Systems.

Impact evaluations, including by Florida International University (FIU), demonstrated strong evidence that the project’s neighborhood approach has succeeded in increasing resilience and life satisfaction in the targeted neighborhoods.

Figure 23. Priority local systems to increase resilience and inclusion for the Barrio Resiliente Program in Tegucigalpa.



Source: GOAL, 2018

For more information, the full report of FIU can be found [HERE](#). | Contact GOAL at resilience@goal.ie

13.2. Map the Current State of Each of the Prioritized System(s). For each of the prioritized socio-economic systems, the RT should map the current state of the system to understand how it functions, including the role of the various actors in each system and their relationship to each other. The RT should conduct a consultation process with system actors and key partners and identify what their role is in the system, their current performance, their gaps, and opportunities for improving the functioning of each system. For an example, refer to the case study from Sierra Leone below which describes the system map for faecal sludge management in informal and precarious urban settlements in the city of Freetown.

For further guidance on mapping and analyzing socio-economic systems please refer to:

- [Tool 20: The Resilience Approach for Social Systems “R4S” Approach Guidance Manual](#)⁹¹ developed by GOAL.
- [Tool 67: Market Systems Resilience: A Framework for Measurement](#)⁹² published by USAID.
- [Tool 68: Local Systems: A Framework for Supporting Sustained Development](#)⁹³ developed by USAID.
- [Tool 69: Local Capacity Strengthening Policy](#)⁹⁴ by USAID.

A summary note should be completed for each selected socio-economic system including the systems map, description of how the system functions, and an analysis of how the current system hinders or enables resilience and inclusion in the target neighborhoods. Note that this system analysis can cover a number of neighborhoods or even the entire city and it is not necessary to conduct a separate systems analysis for each system in each neighborhood.

13.3. Validate and Share the Results. Once the RT has completed the mapping and analysis of priority socio-economic systems, the RT should present and validate the findings to the stakeholders within the city management, the Neighborhood RINA Committee, partners, and other stakeholders. Any feedback or recommendations should be noted and assessment reports updated accordingly.

The planning of interventions to improve how these systems contribute to resilience and inclusion is described in later Steps of this Guidance Manual which address specific socio-economic systems (e.g., *Step 16 - Design and Operationalize Early Warning Systems*).

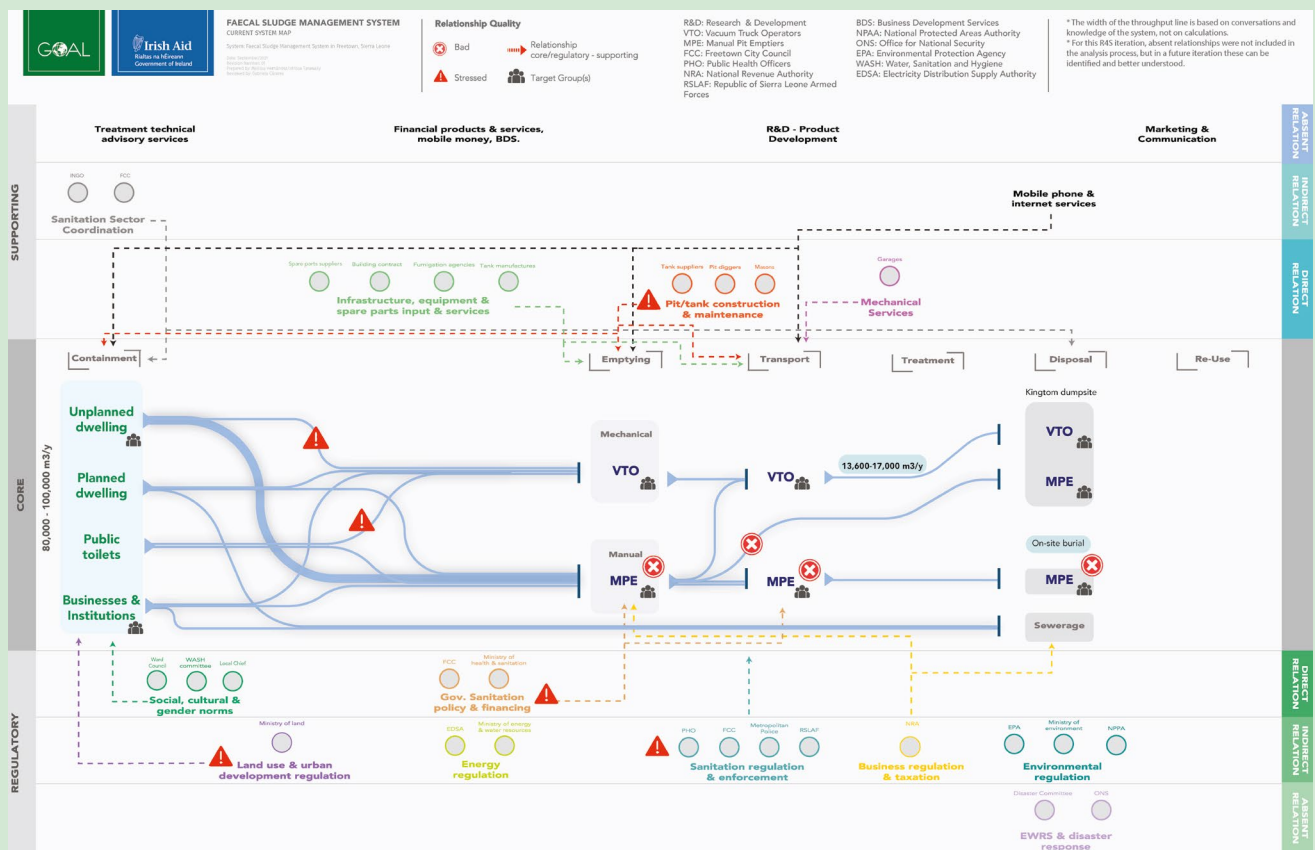
91 GOAL. (2019). Resilience for Social Systems (R4S) Approach. Retrieved from: <https://resiliencenexus.org/r4s/>
 92 USAID. (2018). Market Systems Resilience: A Framework for Measurement. Retrieved from: https://beamexchange.org/uploads/filer_public/f7/60/f76077bc-40c0-4da8-aa3e-92a4982db25b/market-systems-resilience-measurement-framework-report_compressed.pdf
 93 USAID. (2014). Local Systems: A Framework for Supporting Sustained Development. Washington, D.C. Retrieved from: <https://www.usaid.gov/policy/local-systems-framework>
 94 USAID. (2022). Local Capacity Development Policy. Version 8. Retrieved from: <https://www.usaid.gov/policy/local-capacity-strengthening>

Case Study 10: Systems Mapping of Faecal Sludge Management (FSM) in Informal Settlements in Freetown, Sierra Leone.

In partnership with the GOAL, Freetown City Council (FCC) works to stimulate sustainable and scalable solutions for Faecal Sludge Management. Effective management of faecal sludge is one of Freetown's most critical public health issues, especially in informal settlements. Since 2016, FCC and GOAL have collaborated to enhance the collection, transport and treatment services within Freetown's FSM system, partnering with actors such as Manual and Mechanical Pit Emptiers, Vacuum Truck Operators, and others.

In 2020, GOAL began applying the R4S Approach to further understand how the FSM system was functioning as an inclusive system and to determine the level of resilience of the system to main hazards such as heavy rainfall and unplanned urbanization. The map in Figure 24 shows the Faecal Sludge Management system and includes the central transaction chain, supporting functions, and regulatory functions. The transaction chain refers to the core relationships and actors that deliver the collection, transport and treatment service. The supporting functions include the provision of inputs, financial services, technical assistance, training, among others and the regulatory functions are those which set the rules that condition the functioning of the system including laws, formal and non-formal agreements, etc.

Figure 24. System Map of the Faecal Sludge Management System in Freetown, Sierra Leone.



Source: GOAL, 2021

Note: The system map was used to analyze the impact of risk scenarios and identify strategic interventions and stakeholder engagement to enhance the resilience and inclusion outcomes from this systems.

For more information contact GOAL at resilience@goal.ie.

Step 14. RINA Neighborhood Master Plans (RNMPs)



MCR Essential Four: Pursue Resilient Urban Development and Design

14.1 Preparation and Organization. Through this step, the RT will support the development of RINA Neighborhood Master Plans (RNMPs) using a participatory approach for each neighborhood. The RT should take the city level stakeholder mapping completed in the *Step 7 - Establish Strategic Alliances in Target Neighborhoods* and develop this to include the full contextualized list of stakeholders for each neighborhood and identify all potential partners for the implementation of RINA using the same level of interest/level of influence tool to develop a neighborhood specific stakeholder engagement strategy. The RT should collect all neighborhood specific secondary information including the baseline assessment and risk assessments mentioned previously. The RT should then prepare an initial characterization of the neighborhood and use this to design the content and format of consultation workshops and identify the need for any additional primary information to be collected from the neighborhoods.

14.2 Complete a Neighborhood Diagnosis. The RT should complete a detailed characterization of the neighborhoods through focus group discussions with neighborhood residents and other stakeholders, inspection visits to the target neighborhoods, key informant interviews including at neighborhood level, and review all available secondary and primary information. For further guidance, the RT should consult *Tool 70: Urban profiling toolbox for crisis-affected cities*⁹⁵ published by UN Habitat. To further inform the diagnostic process for contexts affected by prolonged displacements, RINA recommends referring also to *Tool 71: Settlement Profiling Tool*⁹⁶ published by UN Habitat. The RT should summarize the physical, environmental, sociocultural, economic, and administrative conditions and dynamics of each neighborhood as the first section of the RNMP.

14.3 Set out a Strategic Vision of Each Neighborhood.

Again, through focus group discussions and workshops with the neighborhood's residents and key stakeholders, the RT should facilitate the development of a future vision for each target neighborhood. The design of this process should be informed by the Theory of Change described in *Step 8 - Plan the RINA Intervention*, and all other relevant municipal territorial planning for the city. Aligning visions at the level of informal and precarious urban settlements and the city level will support new zoning and/or rezoning actions where feasible, especially where there is continuous growth of the city.

14.4 Action Planning with Neighborhoods. As part of the participatory focus group discussions and workshops, the RT should facilitate the prioritization of actions for solutions to the challenges facing the neighborhood. Again, the RT should maximize alignment with city wide planning and government programs at the local, regional, and national level. In line with Guiding Principle 4 of RINA, the RT should focus on actions that are within the project's mandate and scope and can be achieved and scaled using resources that are available within the neighborhoods, city management, and through partner agreements. RINA recommends that community led actions are prioritized using methodologies such as *Tool 72: Projects Executed by Communities (PEC) Manuals*⁹⁷ developed by the Honduran Social Investment Fund (FHIS), USAID, KfW, and GOAL. Proposed actions should be based on the prioritized systemic changes described under *Step 13 - Selection of Critical Socio-Economic Systems for Neighborhood Resilience and Inclusion*.

The RT should complete a full report setting out the RINA Neighborhood Master Plan and present this to the neighborhood residents, relevant department managers within the city administration, and other stakeholders for their validation. The process of formulating RNMPs should align with the formalized process of urban planning for each city. The degree to which this is possible in each city will depend on the status of formality of the neighborhood and the urban planning process. It is envisaged that the RNMP will assist informal settlements in progressing towards formality.

Case Study 11. Developing Disaster Risk Management Plans for Local Governments in the Greater Guatemala City Area.

Under the Barrio Mio Project, from 2016 to 2022, PCI worked with local governments, ministries, and communities in Guatemala to build local capacity to conduct risk and hazard mapping, including creating a national inter-ministerial working group to support local governments to use tools like GIS to map risk. This led to the creation of municipal risk atlases designed to inform planning and risk management strategies.

For more information, contact Global Communities at resilience@globalcommunities.org

95 UN Habitat. (2021). Urban Recovery Framework - Urban Profiling Toolbox: Analysis tools for urban profiling in crisis-affected cities. Retrieved from: https://unhabitat.org/sites/default/files/2021/03/toolbox_v11.pdf

96 UN Habitat. (2020). Settlement Profiling Tool. Retrieved from: <https://unhabitat.org/settlement-profiling-tool>

97 FHIS. (2006). Proyectos Ejecutados por la Comunidad (PEC). Tegucigalpa, Honduras. Retrieved from: <https://resiliencenexus.org/urban-resilience/urban-shelter-and-settlements/>

Case Study 12: Developing Master Plans for Disaster Risk Reduction in Tegucigalpa, Honduras.

Between 2017-2020, GOAL and the Central District Municipality, together with community-based organizations and other local stakeholders, co-produced Disaster Risk Reduction Master Plans for 7 informal neighborhoods in Tegucigalpa, Honduras. The Neighborhood Disaster Risk Reduction Master Plan is an planning tool at the neighborhood level that portrays the current conditions of the community and a future vision for neighborhood configuration which incorporates resilience and inclusion.

The development of these plans involved workshops, field visits, and secondary data revision from existing scientific risk studies and other sources to develop a multisectoral diagnosis of target neighborhoods and gather their risk knowledge to identify zones and priorities for action. The diagnosis, followed by a prioritization of issues and opportunities with community-based organizations gave a clear picture of the interventions that were needed to achieve their development goals with a focus on resilience and inclusion. The future vision for the 7 neighborhoods was defined, and 5 strategic themes were established; 1) Early Warning and Response System, 2) Sustainable housing, 3) Food security, 4) Water and Sanitation, and 5) Mobility and Public Spaces. Once plans were completed, these were validated and approved by the different technical units of the local government. The plans were then rolled out with the target neighborhoods for implementation.

This process strengthened communities' leadership as well as the level coordination and collaboration between their different community-based organizations and with external actors. This process strengthened the integration of resilience and inclusion into communities' development planning and has better-informed decision-making in relation to areas of greatest vulnerability within of the neighborhoods. Furthermore, the development process of Neighborhood Master Plans was documented in a methodological guide and in a training course, which was designed and rolled out in collaboration with the National Autonomous University of Honduras (UNAH). To date, more than 50 technical staff from various municipalities and national agencies been trained to replicate these plans in other cities in Honduras.

For more information, the full case study and other relevant information visit: [Here](#) | Contact GOAL at resilience@goal.ie



For further guidance on developing neighborhood master plans for informal and precarious urban settlements the RT should refer to [Tool 73: Methodological Guide for the Development of Neighborhood-Level Disaster Risk Reduction Master Plans](#)⁹⁸, published by GOAL.

Step 15. Communication Campaigns for Social and Behavior Change



MCR Essential Seven: Understand and Strengthen Societal Capacity for Resilience

15.1 Identify Behaviors for Change. While a significant emphasis of RINA is often on changing the neighborhoods and the systems that support them—water and sanitation systems, access to safer housing on safe sites, improving access and egress, for instance—an equally essential part of urban resilience hinges on changing behaviors associated with resilience and inclusion. The RT should identify and prioritize challenges to be addressed through Social and Behavior Change (SBC) in each neighborhood based on findings and propo-

sals outlined in the RNMP, systems analysis, baseline data, and other sources of information. SBC will be relevant to address aspects of all the implementation steps of RINA. For each challenge, propose at least one behavior that helps address it. For example, if drains are full of garbage and this contributes to flooding in the neighborhood, one behavior to help address it would be that neighbors clean the drains of their street regularly. Then define and describe in detail the priority group(s) where behavior change is required. Note: A behavior is a specific action that can be observed and measured. Behaviors should be written in the present tense in one place and with a specific duration and frequency. For example, parents of children under 5 years of age implement home gardens. For more guidance on SBC, RINA recommends referring to [Tool 74: Design manual for Behavior Change in Agriculture, Natural Resource Management, Health and Nutrition](#)⁹⁹ developed by the Food Security and Nutrition Network Social and Behavioral Change Task Force 2013, and the article from [Behavior change 101 series: Five steps to select the right behavior/s to target](#)¹⁰⁰ by Peter Slattery from Monash University.

98 GOAL. (2021). Guía Metodológica para la elaboración de PM-RRD. Estrategia de Barrio Resiliente. Retrieved from: <https://resiliencenexus.org/urban-resilience/urban-shelter-and-settlements/>

99 Food Security and Nutrition Network Social and Behavioral Change Task Force (2013). Designing for Behavior Change For Agriculture, Natural Resource Management, Health and Nutrition. Washington, DC: Technical and Operational Performance Support (TOPS) Program. Retrieved from: <https://www.fsnnetwork.org/resource/designing-behavior-change-agriculture-natural-resource-management-health-and-nutrition>

100 Peter Slattery. (n.d.). Behavior Change 101 Series: Five steps to select the right behaviour/s to target. Monash University, Behavior Works Australia. Retrieved from: <https://www.behaviourworksaustralia.org/blog/behaviour-change-101-series-five-steps-to-select-the-right-behaviour-to-target>

Social and Behavioral Change (SBC): Experience shows that creating sustainable change that positively impacts wellbeing requires a careful, evidence-based approach. With RINA, actions are designed and implemented to reduce context specific negative behaviors and promote positive behaviors. RINA promotes the design of interventions based on social research, that identify and analyze the motivators or barriers that influence the target actors towards a certain behavior (e.g., social norms, cultural, and political practices) key to the transformation to more resilient and inclusive neighborhoods. RINA recommends using communications methods and tools for developing SBC strategies or campaigns. Good communication increases knowledge and awareness of a problem; influences perceptions, beliefs, and attitudes; encourages action; strengthens self-efficacy and develops or creates individual, community, organizational capacities and the necessary environment. SBC and systems change are essentially two sides of the same coin: one cannot be achieved without the other. That is, to make changes in a socio-economic system fundamentally involves influencing human behaviors. Therefore, RINA advocates for applying both systems approach and SBC approach to progress resilient and inclusive neighborhoods. In the long run, this is most effective in reducing dependence on external aid (including during times of crisis) and building resilience and inclusion. Importantly, RINA recommends that SBC is applied across all actors at all levels including in city management, central government, civil society organizations and private sector business and neighborhood residents.

Figure 25. Systems Change and Social Behavior Change relation.



Source: GOAL, 2019

15.2 Identify Barriers and Bridges for the SBC. The RT should conduct a barrier analysis to identify the determinants that prevent or facilitate (barriers vs motivators) certain behaviors from the priority group. This requires consultation with the priority group(s), through surveys, focus group discussions, key informant interviews, etc. For sample tools and more information, please refer to [Tool 75: Practical Guide to Conducting a Barrier Analysis](#)¹⁰¹ by Bonnie L. Kittel, and refer to [Tool 76: Barrier Analysis Questionnaires](#)¹⁰² developed by the Food Security and Nutrition Network.

15.3 Design, Execute, and Monitor the SBC Strategy. Draw up a plan for the SBC strategy by using the results from the barrier analysis. Some suggestions to include on this plan are

peer group exchanges of experience, success story sharing, advising on the consequences of not integrating positive behaviors which support resilience and inclusion, recreational tools to communicate key messages such as theatrical plays, and “prevention preachers” campaigns.

Prevention Preachers: These are neighborhood leaders, volunteers or others engaged in community outreach who are trained to communicate key messages and disseminate these with a target population including on public transport routes, public places such as markets, health centers, schools, etc, and also through door to door visits. Prevention Preachers use art, comedy and entertainment to engage and connect with the target population and transfer important messaging to influence behavior.

RINA recommends that for developing an effective SBC strategy, the RT should take advantage of community events to disseminate messaging such as assemblies, fairs, etc. and target physical locations such as businesses, schools, churches, or offices of community organizations and consider the appropriate mechanisms with each priority group. The RT should define and incorporate relevant metrics in the monitoring and evaluation plan related to the SBC strategy and agree with other stakeholders on the frequency of the actions listed in the SBC strategy. For further guidance on monitoring and evaluating social and behavior change please see [Tool 77: Social and Behavior Change Monitoring Guidance](#)¹⁰³ published by Breakthrough Action. For developing a campaign for the SBC through social media networks consult [Tool 78: Social Media for Behaviour Change Toolkit \(SM4BC\)](#)¹⁰⁴ published by IFRC.

[An SBC online course and other resources from the Health Communication Capacity Collaborative on how to design campaigns for the SBC can be accessed at the SBCC online learning platform](#)¹⁰⁵.

15.4 General SBC Campaign for Public Awareness on Neighborhood Resilience and Inclusion. RINA recommends undertaking regular SBC campaigns for public awareness on resilience and inclusion for informal and precarious urban settlements working together with key stakeholders including the National Disaster Risk Management Agency and other relevant actors to formulate and agree on key messages. The RT should ensure that key messages are aligned with the SBC strategy and roll this out in the target neighborhoods. These messages can also often be shared city-wide at low cost. General SBC campaigns are a great way to expand the impact of the RINA initiative beyond the initial focus areas. The RT should ensure communications reach the different population groups within the neighborhood, ensuring that the messages are transmitted through the most appropriate channel, place, day and time. Communications should be tailored to the diverse vulnerabilities and resources that different community members have—children, youth, people with disabilities, older adults, men and women. For additional guidance on public awareness campaigns using SBC, RINA recommends reviewing [Tool 79: Guide for Public Awareness and](#)

101 Kittel, B.L. (2017). A Practical Guide to Conducting a Barrier Analysis. 2nd Edition. New York, NY: Hellen Keller International. <https://www.fsnnetwork.org/resource/practical-guide-conducting-barrier-analysis>

102 The Technical and Operational Performance Support (TOPS) Technical and Operational Performance Support Program. (2014). Barrier Analysis Questionnaires. Retrieved from: <https://www.fsnnetwork.org/resource/barrier-analysis-questionnaires>

103 Breakthrough Action. (n.d.). Social and Behavior Change Monitoring Guidance. Retrieved from: <https://breakthroughactionandresearch.org/social-and-behavior-change-monitoring-guidance/>

104 International Federation of Red Cross and Red Crescent Societies (IFRC). (2021). Social Media for Behavior Change Toolkit (SM4BC) - For Disaster Preparedness and Disaster Risk Reduction in Latin America and the Caribbean. Retrieved from: <https://preparecenter.org/wp-content/uploads/2020/05/Social-Media-for-Behavior-Change-Toolkit-EN-Changes-2022-Def.pdf>

105 Health Communication Capacity Collaborative (HC3). (n.d.). Implementation Kits to integrate SBCC Strategies into programs. SBCC Online Learning. Retrieved from: <https://healthcommcapacity.org/health-communication/sbcc-online-courses-2/>

*Education on Disaster Risk Reduction*¹⁰⁶, published by IFRC, and *Tool 80: Journalists for Disaster Risk Management Guidance*¹⁰⁷ by Carlos Morales Monzón.

Figure 26. The behavioral ladder includes five stages of change.



Case Study 13: Knowledge and Risk Reduction Program, Mixco, Guatemala City.

Global Communities designed a communication and risk reduction strategy with a neighborhood approach to increase resilience to disasters at the community level. To raise awareness about risk management, with the support of 500 volunteers, the “My House as a Safe Space” campaign was carried out, where 2,319 households were addressed to measure the risk in household and neighborhoods and propose preventive and corrective measures to enhance knowledge and preparation for disasters.

For more information, contact Global Communities at resilience@globalcommunities.org



106 IFRC. (2011). Public awareness and public education for disaster risk reduction: a guide. Retrieved from: <https://www.ifrc.org/es/media/13323?msclid=05bec772b69411ec9bddd14dcc604dce>

107 Monzón, C.M., (2006). Manual Periodistas por la gestión del riesgo de desastres. Guatemala. Retrieved from: <http://desastres.medicina.usac.edu.gt/documentos/docgt/pdf/spa/doc0107/doc0107-parte01.pdf>

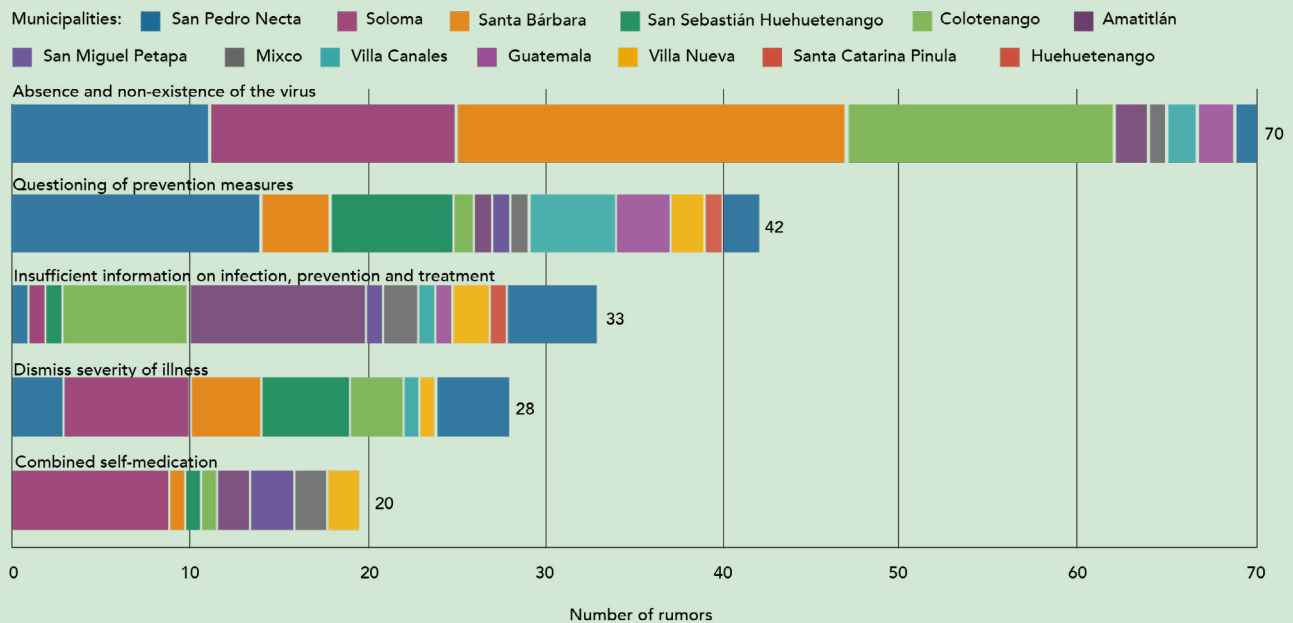
Case Study 14: Tracking Rumors, Addressing Misinformation and Influencing Positive Behaviors.

Like SBC strategies, the ability of local governments and their partners to identify harmful rumors and misinformation that may cause harm to residents—particularly during crises—can be an essential part of a successful RINA intervention. Developed in its first instance with leadership from InterNews during the Ebola outbreak in Liberia, PCI’s approach to rumor tracking includes using innovative technological platforms and robust technical capacity to work with vulnerable individuals, households, communities, and broader social systems (such as in the health sector) to identify and address misinformation. This includes a rigorous assessment of how different stakeholders such as women, older adults, youth, or vulnerable populations for example, get their information, and how to develop effective (and often interactive) means to address misinformation that can result in risk behaviors or be a barrier to positive behavior change. For example, in the event that youth receive information via social media suggesting that “outbreaks of disease (such as COVID or cholera) are not real or are caused by corrupt actors looking to manipulate underserved communities,” project stakeholders can develop focused and impactful methodologies to engage youth in understanding factors associated with the spread of disease and transform them into community leaders on the subject matter.

PCI collaborated with the Guatemalan Ministry of Health and USAID to track and address rumors and misinformation relating to the COVID 19 pandemic in urban and rural areas of Guatemala.

Figure 27. Category of rumors related to COVID-19 response prioritized by local governments of origin.

Prioritized rumor categories by municipalities of origin COVID-19 Response



Source: PCI

In a related experience, also based on learning from the Ebola outbreak in West Africa, GOAL developed the Community Led Action (CLA) approach for influencing positive behavior in response to infectious disease outbreak. Similar to tracking rumors and misinformation, CLA looks to influence positive behaviors that are evidence based. CLA engages community leaders and other influencers within communities to communicate messaging for effective outbreak response. CLA was adopted and rolled out at national level by the Government of Sierra Leone in response to the COVID 19 pandemic. For more information on CLA please refer to [Tool 81: Community Led Action \(CLA\) Approach for COVID-19](#)¹⁰⁸.

For more information, contact Global Communities at resilience@globalcommunities.org, and GOAL at resilience@goal.ie

108 GOAL. (2022). Community Led Action (CLA) Approach for COVID-19. Retrieved from: <https://goalglobal.wpengine.com/wp-content/uploads/2020/04/ENGLISH-Community-Led-Action-Covid-19-Field-Manual-.pdf>

Case Study 15: Prevention Preachers SBC Action.

Starting in 2010, GOAL began implementing the “Prevention Preachers” methodology in vulnerable informal settlements of Tegucigalpa. Prevention Preachers” raise awareness on specific topics amongst families living in high-risk areas, youth and children in schools, people working in markets, family stores and neighborhood businesses, health centers, and people in bus stations or buses in transit. Prevention Preachers are community members actively involved in community-based organizations such as youth or emergency committees that were trained teaching methods and in delivering key messaging relating to resilience and inclusion..

The Social and Behavior Change Campaign rolled out through Prevention Preachers included the following steps: 1) Definition of campaign objective; 2) Target population definition (e.g., Increase knowledge of adult head of households on evacuation routes and emergency shelter); 3) Definition of target population and territories (e.g., families living at high and medium level of disaster risk in communities “X” and “Y”); 4) Definition of campaign duration (e.g. a short but intensive campaign during 4 weeks before hurricane season starts, with home visits of no more than 15 minutes at time when there is less demand from domestic work); and 5) Design and develop materials (e.g., designing and preparing Prevention Preacher’s script and promotional materials such as risk maps, portable flipcharts, brochures, etc.). Topics addressed by Prevention Preachers in Tegucigalpa included: DRR, livelihood protection, fire prevention, practices for environmental conservation, early warning and response system, disaster preparedness and response at household level including focus on persons with disability, protecting domestic pets / animals, etc. To date, over 100,000 have been reached through direct engagement with the Prevention Preachers’ campaigns in high-risk neighborhoods in Tegucigalpa.



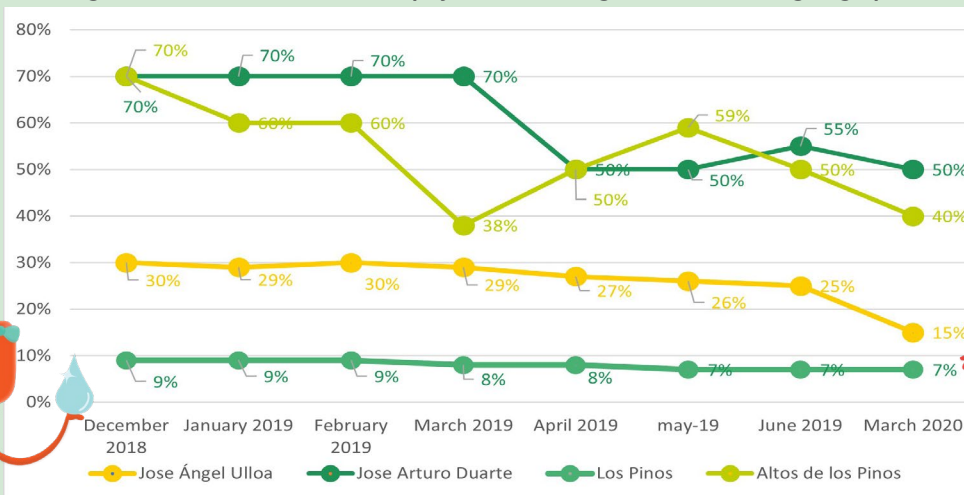
For more information contact GOAL at resilience@goal.ie.

Case Study 16: Social and Behavior Change Campaign to Improve Water Services in Informal Settlements.

In 2018, the Barrio Resiliente (Resilient Neighborhood) program (2013 - 2022) implemented by GOAL with USAID support, led an SBC campaign as part of its strategy to enhance the service performance of community water administration boards in 4 informal neighborhoods at risk from landslide and flooding. The SBC campaign’s objective was to promote on-time water service payment with the water administration boards and increase their economic capacity to invest in the piped water supply network maintenance and surface water drainage in their neighborhoods. Improved management of water supply leaks and drainage system was a key part of the strategy to reduce risk of landslide due to soil saturation and flooding.

The target group was women and men aged between 18-70 years with weekly incomes between 33 and 100 USD. Based on barrier analysis, it was discovered that according to the stages of behavior change, the target group was at the “contemplation” stage and that the main constraints for on-time payment were: 1) location of water boards’ offices (e.g., too far from clients’ households, insecurity issues), 2) income limitations, and 3) time constraints to make the payment. However, health, improved services, doing good (from a religious view) and family wellbeing were identified as motivators for change. Based on these, an SBC campaign was developed. This campaign included using communication messages disseminated through social media and activities in key public places within target neighborhoods. Motivational workshops and trainings aimed at water board members were developed to enhance their performance, empathic abilities, organizational capacities, social media usage and customer services. Additionally, a positive deviation exercise was held among different water board members to share their experiences, problems and discuss solutions. As a result, the target groups behavior went from the “contemplation” stage up to the “action” stage. To date, water boards increased their performance (organizational structure, planning, service delivery, data management, accountability, management) 49% on average and from December 2018 to March 2020, arrears in payment of the water administration boards was reduced by 36%.

Figure 28. Percentage of arrears in water service payment in 4 neighborhoods in Tegucigalpa, 2018 - 2020.



Source: GOAL, 2020

For more information contact GOAL at resilience@goal.ie.

Step 16. Design and Operationalize Early Warning and Response Systems (EWRS)



MCR Essential Nine: Ensure Effective Disaster Response

Early warning and early action to disasters is an essential part of urban disaster risk management and resilience. EWRS not only protect loss of life and assets, they also guard against the loss of hard won development gains and the tendency for shocks and stresses to undermine resilience and inclusion. In many cases, countries will have systems already developed nationally for early warning and response. To the greatest degree possible the RT should seek to utilize, extend, and contribute to these existing systems rather than propose new or alternative systems. There are also internationally supported systems for early warning (such as the Famine Early Warning System Network (FEWSNET)¹⁰⁹ concerning food insecurity and the National Hurricane Centers hurricane/cyclone forecasting), that can provide significant value to local governments in their efforts to be proactive about alerting communities to hazards. However, local governments should also recognize that these systems generally need to be adapted to and complemented by context specific systems at the community level that are responsive to population-specific hazards, utilize optimal channels to reach a diverse range of people in a timely and effective manner, and are owned and maintained by a diverse group of stakeholders that benefit from them.

RINA recommends that EWRS should mobilize effective responses, minimizing inadequately planned actions that may have unintended consequences in a crisis and that undermine recovery or miss unique opportunities to address lasting vulnerabilities. EWRS emphasize the importance of people returning to their neighborhoods as quickly as possible rather than the use of emergency shelters and long-term camps.

As mentioned previously, EWRS are socio-economic systems which involve a range of actors at different levels collaborating to ensure the functionality of the system. The RT should map each EWRS as an economic system, whether it is an existing, modified, or proposed new system, so that it is clear what the role is of each actor in the system and what change is required to ensure the EWRS is fully operational to protect vulnerable communities. While many stakeholders will have a role to play in the operation of an EWRS it is also important to clearly define which local actor is responsible for the administration of the EWRS and coordinate all the contributions from other actors. Generally, for a localized EWRS which is contained within the limits of the city, it will be the city level emergency committee who will be the administrator of the EWRS. For systems that extend beyond the city or in the case of health emergencies it will be the national level risk management agency or the ministry for health who will administer the EWRS.

RINA subscribes to best practice in relation to EWRS recognizing the following four principal components: 1) Risk Awareness, 2) Monitoring of Alert Thresholds, 3) Communication of Alerts, and 4) Response Capacity.

16.1 Define the Scope of the Proposed EWRS.¹¹⁰ Based on the risk assessment and hazard mapping developed in Step 12 - *Neighborhood Risk Assessment*, the RT should ensure that there is a clear understanding of the hazards to which the population of the target neighborhoods are exposed to. EWRS can address multiple hazards, grouping together related hazards or can be specific to a single hazard. The number and type of EWRS must be clearly defined by the RT in consultation with neighborhood residents and other stakeholders. While different EWRS may be required, there will still be opportunities to share some operational components. EWRS can be designed for landslides, flooding, hurricanes/cyclones, food insecurity, conflict, disease outbreak, tsunamis, volcanic eruptions, storm surges, and many other hazard events. EWRS for earthquakes is more challenging and emphasis is placed more heavily on earthquake readiness and resistant infrastructure than early warning. For additional guidance on EWRS, RINA recommends reviewing:

- [*Tool 82: Multi-hazard Early Warning Systems: A Checklist*](#)¹¹¹ by the World Meteorological Organization (WMO).
- [*Tool 83: Practical Guide: Early Warning and Response Systems Design for Social Conflicts*](#)¹¹² by Organization of American States (OAS) and the United Nations Development Programme (UNDP).

16.2 Risk Awareness (Component 1). The RT must work to ensure that first responders and populations at risk are aware of the risks to which they are exposed. Previous steps have described the process for participatory risk assessment and hazard/resource mapping. Under this step awareness of risks must be disseminated to first responders and to affected at risk communities. RINA recommends that this should be part of the SBC campaign described in the previous step. In fact, RINA would highlight that raising awareness of risks is one of the fundamental steps to not only operationalizing EWRS but also to influence behaviors for the overall achievement of the aims of RINA in target neighborhoods. Models such as the Prevention Preachers, social media campaigns, posting hazard mapping within neighborhoods, sign-posting at-risk areas, etc., are all tools that can be used as part of an SBC campaign to raise awareness of risks within the target neighborhoods. Awareness of risk should be one of the key indicators in the RINA Monitoring and Evaluation Strategy.

16.3 Monitoring of Alert Thresholds (Component 2). For each of the risk scenarios that the EWRS will respond to, the RT working with neighborhood residents, and other stakeholders should identify key monitoring points for tracking the progression of triggers for risk event. For example, in the case of an EWRS against flooding, the system may be designed to track rainfall forecasting, river level, upstream reservoir levels, etc. Or in the case of an EWRS against risk of food insecurity resulting from drought, the system may be designed to monitor market prices for critical food items, reserves of food stocks, soil moisture level, and climate forecasting. Each risk scenario will have different triggers that can be monitored against threshold levels which can indicate the evolution of a risk scenario. Alert levels should be defined in alignment with national risk management system protocols. As an example, in many cases early warning and response systems use Red, Amber, Green protocols: At Green Alert a hazard is present

¹⁰⁹ Created in 1985 by the United States Agency for International Development (USAID) in response to devastating famines in East and West Africa, FEWS NET provides unbiased, evidence-based analysis to governments and relief agencies who plan for and respond to humanitarian crises. FEWS NET analyses support resilience and development programming as well. FEWS NET analysts and specialists work with scientists, government ministries, international agencies, and NGOs to track and publicly report on conditions in the world's most food-insecure countries. For more information visit: <https://fewsn.net/>

¹¹⁰ Component 1 of the EWRS "Knowledge of Risk" begins to be addressed in Step 2 but especially in Step 12 and 14.

¹¹¹ World Meteorological Organization (WMO). (2017). *Multi-hazard Early Warning Systems: A checklist*. Outcome of the first Multi-hazard Early Warning Conference. Cancún, Mexico. Retrieved from: https://library.wmo.int/doc_num.php?explnum_id=446

¹¹² OAS, UNDP. (2016). *Practical Guide: Early Warning and Response Systems Design for Social Conflicts*. Retrieved from: https://www.oas.org/es/sap/pubs/GuiaAlerta_e.pdf



In the Barrio Resiliente project in Tegucigalpa, Honduras, alerts messaging were displayed on shop fronts of neighborhood stores.

and preparatory actions should be undertaken; Yellow alert - hazard impact is imminent and evacuation measures should be initiated; and Red Alert - hazard is impacting and response actions such as search and rescue and distribution of aid should be undertaken. Each monitoring point should be assigned a threshold level relating to each alert level. The RT and partners should identify what monitoring equipment is required and take measures to put in place this equipment and the coordination mechanism for continuous monitoring. Equipment and the monitoring mechanisms must be robust and maintained fully operational if they are to function as needed to save lives when risk events occur.

16.4 Communication of Dissemination of Alerts (Component 3). To ensure that alert messages are trusted and reach first responders and the population at risk in a timely manner, they must be transmitted in a clear and actionable way to the target audience. RINA recommends: a) Establishment of an alert communication chain which sets out the protocol for who communicates what to who to declare and disseminate an alert; (b) Put in place inter-agency agreements and protocols that ensure common understanding and consistency in the language of alerts and communication channels; and, (c) Ensure communication and dissemination methods and language are tailored to the target audience. On this last point, RINA recommends the use of social networks (e.g., WhatsApp, Twitter, Instagram, Facebook, others) as part of the overall alert communication strategy to effectively reach large populations quickly. However, it is important to recognize that dissemination by “word of mouth” is often the most trusted and effective in a crisis situation. RINA recommends targeting key focal points for dissemination of alerts within neighborhoods such as owners of neighborhood stores; churches and their religious leaders; leaders of community organizations, etc.; and local emergency committees.

16.5 Response Capacity (Component 4). The roles of each stakeholder in response to alerts should be clearly defined in

the EWRS. The RT should assess the capacity of each actor to carry out their role and prepare a training program including simulation drills to address gaps in capacity and ensure the operation of the EWRS. Under the national risk management system or civil defense system there is normally mandated decentralized response structures at municipal and community levels. RINA recommends that at neighborhood level a focused practical and interactive training program be carried out with local Emergency Response Committees and should be led by the Municipal Emergency Response Committee. Examples of training components for local emergency committees include: a) Identify and condition emergency shelters according to international standards; (b) Damage assessment and needs evaluation; (c) Planning and delivery of humanitarian aid; (d) Marking of safe sites and evacuation routes; (e) Evacuation mechanisms; and, (f) Search and rescue processes. For more information on developing response capacities for EWRS please refer to *Tool 84: The Community Early Warning Systems (CEWS) Training Toolkit - Field Guide*¹¹³ published by the IFRC and the *Catalog of Tools and Informative Resources for Strengthening Local Response Capacities*¹¹⁴ from the Regional Center for Disaster Information for Latin America and the Caribbean (CRID).

The RT should work with the neighborhood residents and municipal emergency response committees to develop risk management plans at the municipal, community, family, school, health facility, and business levels. Further guidance on developing family and community risk management plans is available from the following references: *Tool 85: Methodological Guide for Developing Community Risk Management Plans and Community Risk Management Plan Template*¹¹⁵ developed by GOAL, and *Tool 86: Methodological Guide for Developing Family Risk Management Plans*¹¹⁶ developed by GOAL. RINA also recommends referring to *Tool 87: Practical Guide for Mental Health in Disaster Situations*¹¹⁷ prepared by the Pan American Health Organization (PAHO).



Front page of a simplified version of community contingency plans installed in public places within neighborhoods in Tegucigalpa, Honduras.

113 IFRC. (2014). Community Early Warning Systems (CEWS) Training Toolkit - Field Guide. Retrieved from: <https://reliefweb.int/report/world/community-early-warning-systems-cews-training-toolkit-field-guide>

114 Centro Regional de Información sobre Desastres América Latina y el Caribe (CRID). (2009). Catálogo de Herramientas y Recursos de Información para el Fortalecimiento de Capacidades Locales de Respuesta. Retrieved from: <https://www.preventionweb.net/publication/catalogo-de-herramientas-y-recursos-de-informacion-para-el-fortalecimiento-de>

115 GOAL. (2020). Methodological Guide for Developing Community Risk Management Plans, Community Risk Management Plan format, Methodological Guide for Developing Family Risk Management Plans and Family Risk Management Plan format. Retrieved from: <https://resiliencenexus.org/urban-resilience/ewrs/>

116 GOAL. (2020). Methodological Guide for Developing Family Risk Management Plans and Family Risk Management Plan format. Retrieved from: <https://resiliencenexus.org/urban-resilience/ewrs/>

117 Pan-American Health Organization (PAHO). (2006). Guía práctica de salud mental en situaciones de desastres. Serie Manuales y Guías sobre Desastres No. 7. Retrieved from: https://www3.paho.org/disasters/index.php?option=com_docman&view=download&category_slug=books&alias=22-guia-practica-de-salud-mental-en-situaciones-de-desastres&Itemid=1179&lang=en

In supporting the design and operation of EWRS, the RT should ensure good coordination between the Community Level Emergency Response Committee, the Municipal Level Emergency Response Committee, and the National Disaster Risk Management Agency. Also, the RT should ensure the protection and well-being of vulnerable groups is incorporated into the design and operation of EWRS, including compliance with international standards for humanitarian aid based on *guidelines, policies and documents to inform humanitarian preparedness and response activities*¹¹⁸ from the Inter-Agency Standing Committee (IASC), *Tool 88: Sphere Standards Handbook*¹¹⁹ by Sphere Project, and *Tool 89: Core Humanitarian Standard on Quality and Accountability*¹²⁰ and its *Updated Guidance Note and Indicators of 2018*¹²¹ by Sphere Project and CHS Alliance.

Technology. Technology is changing the way we live and work in cities. Technology not only refers to digital technology, but also to other types of technological advances, such as in healthcare, transportation, energy, etc. Technology creates the potential for at-risk neighborhoods to leapfrog urban communities of the future that operate within smart cities. However, technology can present new risks and challenges, including the risk of digital exclusion of marginalized populations and misinformation. RINA aims to maximize the potential of technology to accelerate the transformation of urban communities. Innovations in technology that can be leveraged are alert messages using mobile phones for early warning and response, the use of technology in mapping and simulation for risk analysis and mitigation and urban planning, increasing financial inclusion and increasing access to life-changing products, etc.

Case Study 17: RIMAC-DRR Project by COOPI, CARE Peru, IRD in The District Municipality of Rimac Colombia.

Between 2014 and 2017, the RIMAC-DRR Project by COOPI, CARE Peru, IRD in collaboration with the District Municipality of Rimac, formulated the Community Education Plan to strengthen the emergency preparedness capacities of neighborhoods. It was implemented in the Leticia Neighborhood, which allowed the district to have community risk maps that identified the main hazards and resources available to the community, as well as evacuation routes.

Figure 29. Strengthening response capacities, RIMAC-DRR Project. Lima, Peru.



For more information, the full case study: [Here](#) | Contact Barbara Bannetta, COOPI: pm.rimac@coopi.org

118 Inter-Agency Standing Committee (IASC). (1999-2022). IASC Products. Retrieved from: <https://interagencystandingcommittee.org/resources/iasc-products>

119 Sphere Project. (2008). The Sphere Handbook. Retrieved from: <https://spherestandards.org/handbook-2018/>

120 CHS Alliance, Group URD and the Sphere Project. (2014). Core Humanitarian Standard on Quality and Accountability. Retrieved from: <https://corehumanitarianstandard.org/files/files/Core%20Humanitarian%20Standard%20-%20English.pdf>

121 CHS Alliance, Sphere Project. (2018). Core Humanitarian Standard on Quality and Accountability (Updated Guidance Notes and Indicators 2018). Retrieved from: <https://reliefweb.int/report/world/core-humanitarian-standard-quality-and-accountability-updated-guidance-notes-and?msclid=1a507150b6a411ec-861604baad6a1b0>

16.6 Prepare an Operation and Maintenance Manual for each EWRS. The RT should support the administrator of the EWRS to develop an Operation and Maintenance (O&M) Manual which will contain all the relevant information such as the description of the risk scenarios, hazard mapping, alert thresholds, details of monitoring equipment, communication protocols, templates for alert declarations, Emergency Management Plans, training plans, names and contact details of key personnel and particularly first responder agency leads, etc. The O&M Manual should include details and specifications for monitoring equipment and details of any maintenance requirements for each. RINA recommends that the technical requirements for monitoring equipment aligns with the skills

of the people who will be responsible for their management and that they receive continuous and up-to-date training for the proper use and maintenance of this equipment. For more information on the operation of EWRS please consult [Tool 90: Manual For the Design and Implementation of an Early Warning System for Flooding in Smaller Basins](#)¹²² developed by the OAS and the Government of Ireland, or view the [Catalogue of Tools and Resources on Early Warning and Response Systems](#)¹²³ published by the Latin American and Caribbean Regional Information Center (CRID). Another great source of information is the [Famine Early Warning Systems Network \(FEWS NET\)](#), who is a leading provider of early warning and analysis on acute food insecurity around the world.

Case Study 18: Co-production of Early Warning and Response System (EWRS) in Tegucigalpa, Honduras.

Since 2010, GOAL has been supporting the Local Government of Tegucigalpa in the co-production and operationalization of an EWRS with communities, academia, and public and private sector actors. To co-produce the EWRS, international standards were consulted and a local systems approach was followed. Actions undertaken under each EWRS component were as follows:

- **Component 1: Risk Awareness-** The local government led hazard studies and mapping in high-risk neighborhoods to landslides and flooding; a census of families living in high-risk was undertaken and a social and behavior change campaign was rolled out through prevention preachers.
- **Component 2: Monitoring of Alert Thresholds-** Different governmental agencies and academic institutions collaborated to establish and validate alert thresholds; a network of automated monitoring stations were strengthened, and rain gauges were installed in houses of neighborhood volunteers who were trained on how to use and adequately record and communicate rainfall levels.
- **Component 3: Communication and Dissemination of Alerts-** Communication protocols were co-produced and agreed upon relevant first responder agencies; emergency lines were established and promoted among populations living in high-risk areas; social media and neighborhood businesses (e.g., grocery stores or “pulperias” in Honduras) were incorporated as means for alert dissemination.
- **Component 4: Response Capacity-** Establishing and strengthening of community and municipal structures for emergency response as well as the development of contingency plans at the household, community, school, neighborhood businesses, and city level.

Capacities for emergency preparedness and response were strengthened and evacuation routes and emergency shelters in at-risk neighborhoods were upgraded. The co-production process of the EWRS allowed for more accurate and relevant risk and alert information for communities which in turn enabled the design of more effective methods of communication and early action. On a scale of 1 to 100, the performance of each local emergency committee was evaluated against five criteria: organizational structure, risk awareness, monitoring and forecasting, risk communication, and response capability. Populations at risk in the target neighborhoods have strengthened their knowledge of EWRS and local emergency committees have increased their performance from 58% (2018) to 80% (2021). More than 40 neighborhoods covering a population in excess of 100,000 have contingency planning and emergency information and maps placed in public spaces and the majority of neighborhood residents are risk aware. Based on an assessment in 2021, at least 69.5% of neighbors reported that they know what to do in the case of an alert.

The infographic is divided into several sections:

- NIVELES DE ALERTA (Alert Levels):**
 - Alerta verde:** In case of rain, check for leaks in roofs, pipes, or electrical outlets and prepare for an emergency in case of a flood within 72 hours.
 - Alerta amarilla:** In case of rain, check for leaks in roofs, pipes, or electrical outlets and prepare for an emergency in case of a flood within 24 hours.
 - Alerta roja:** In case of rain, check for leaks in roofs, pipes, or electrical outlets and prepare for an emergency in case of a flood within 24 hours.
- TIPO DE ALARMA (Type of Alarm):**
 - Alerta verde: 3 veces.
 - Alerta amarilla: 5 veces.
 - Alerta roja: de forma permanente.
- MIEMBROS DEL CODEL (CODEL Members):**

COMISION	NOMBRE
Comunidad 0104	Elvys Mejuto
Comunidad 0105	Alvaro Estrella
Comunidad 0106	Luisa Carolina Quiroz Lopez
Comunidad 0107	Miguel Parra
Comunidad 0108	Alfreda Chiriac
- INFORMACION GENERAL DE LA COLONIA (General Information of the Colony):**

AÑO DE FUNDACION	AREA DE SUPERFICIE	NUMERO DE HABITANTES
1982	2,688	3,032
TOTAL DE POBLACION		5,720 Habitantes
- ALBERGUES (Shelters):**

Nombre del Centro	Ubicacion	nº	Responsable
IGLESIA MESAS DE AGUA VIVA	Colonia José Angel Ulloa, Calle Principal Sector 3	209	BELKIS MATUTE
ESCUELA ALEJANDRO ALVARADO	Colonia José Arturo Duarte Tron, debajo de la Pista Policial	330	KATHYA BONILLA
- YIVIENDAS EN RIESGO (Homes at Risk):**

AREA DE SUPERFICIE	NUMERO DE HABITANTES	
69	259	
TOTAL DE POBLACION		552 Habitantes
- Mapa de Preparación y Respuesta (Preparation and Response Map):** A map showing the layout of the colony with various points of interest and emergency routes.

Source: GOAL, 2022.

Note: On one side the plan shows the community risk map and on the other, (this figure) includes the different actions to be undertaken according for each type of alert, emergency phone numbers, key information on community population and families at risk, emergency shelters available, and local emergency committee members. For more information on simplified neighborhood Emergency Preparedness and Response Planning and hazard mapping please see the [Resilience Nexus Website](#).

For more information contact GOAL at resilience@goal.ie.

122 OAS, Government of Ireland. (2001). Manual para el Diseño e Implementación de un Sistema de Alerta Temprana de Inundaciones en Cuenca Menores. Retrieved from: <http://www.oas.org/dsd/publications/unit/oea91s/manual.pdf>

123 Centro Regional de Información sobre Desastres América Latina y el Caribe (CRID). (2009). Catálogo de herramientas y recursos de información sobre Preparativos para Desastres en Educación. San José, C.R. Retrieved from: <http://desastres.medicina.usac.edu.gt/documentos/docgt/pdf/spa/doc0248/doc0248.pdf>

Step 17. Increase the Resilience of Vital Infrastructure



MCR Essential Eight: Increase infrastructure resilience

Robust infrastructure is essential for resilient and inclusive neighborhoods. Infrastructure resilience and inclusion can take many forms: infrastructure for access and egress for people of differing abilities; potable water systems, drainage and sanitation systems, electrical networks, access roads, retaining walls and other risk mitigation infrastructure; schools, health facilities; and areas for livelihood activities, etc. This infrastructure may be neighborhood specific or extend across multiple neighborhoods, requiring larger municipal infrastructure interventions.

17.1 Identify and Map the Vital Infrastructure of the Neighborhood. Previous steps started the process of identifying and mapping vital infrastructure in each neighborhood, its status and suitability, and the degree of exposure of this infrastructure to hazards. The RT should ensure that all vital infrastructure is fully recorded for each neighborhood, summarizing the condition of each, and identifying any important gaps in infrastructure necessary for the resilience and inclusion. Key questions to consider could be:

- Is infrastructure effective and mitigating risks to shocks and stresses?
- Is it effective and usable by all residents, including older adults and people with disabilities?
- Is it effective all year around—such as during the rainy season or in storms? Does it break down often or require repair or better maintenance?
- Will the infrastructure be able to keep up with increasing demands on its use, such as those posed by population growth?
- It also is helpful to determine what municipal or national agency is responsible for different infrastructure, any existing plans to upgrade it, and the engagement of private sector companies in construction or maintenance.

17.2 Prioritize Vital Infrastructure. Together with the neighborhood residents and other key stakeholders, the RT should prioritize infrastructure requirements considering both upgrading of existing infrastructure and requirements for new infrastructure. Where possible, the RT should seek out partnerships with academic institutions, professional associations, and other public and private partners that can support in evaluating potential neighborhood upgrading projects through community outreach and assist in the development of preliminary infrastructure project designs. RINA recommends considering green or blue infrastructure works as described in *Step 18 - Environmental Management in Neighborhoods*. The RT should carry out site inspections with relevant qualified engineers to analyze the proposed upgrading or new infrastructure. In line with the fourth Guiding Principle of RINA - Cost Effective and Scalable, the RT should assess available local resources for investing in neighborhood infrastructure. The RT should facilitate workshops with neighborhood residents and other stakeholders to review and prioritize infrastructure investments, and develop criteria to inform prioritizations, including from an equity and inclusion perspective, making sure that all voices are heard in determining what infrastructure projects are prioritized and that the most vulne-



Barrio Mio project in Mixco Guatemala, a drainage system was designed to meet the needs of the immediate community and communities, and account for 30 years of population growth.

nable benefit from them. For further guidance on prioritizing community infrastructure works, please refer to *Tool 91: Community Infrastructure Projects Prioritization Process*¹²⁴ developed by GOAL.

17.3 Feasibility Assessment for Infrastructure Projects. Once projects are prioritized and selected, the RT should conduct feasibility assessments for each. This may involve technical expertise from a range of stakeholder organizations and look at different factors, such as cost and technical complexity. The RT should ensure that all infrastructure project proposals are assessed from the perspective of risks, making sure they are suitable to the location and ensure that no new risks are introduced as a result of the project. For example, landslide prone areas require careful consideration of soil stability, and flood mitigation needs to consider potentially creating new flood risks in downstream or upstream neighborhoods. An example of a helpful resource in this regard is *Tool 65: Manual for Evaluating Risks in Sites and Built Environment*¹²⁵ by Ginés Suárez.

17.4 Project Design and Implementation. Once infrastructure projects have been prioritized and risk assessed, the RT should engage as necessary with relevant local or central government agencies, NGOs, academic institutions, private sector companies (such as in the construction or finance businesses), technical experts and others to develop detailed design, resourcing, and implementation plans for each project. This includes assessing necessary financial resources, in kind contributions, technical assistance, and approvals and certifications, etc. The RT should oversee this process, ensuring projects designed are cost effective, realistic, and meet the needs of neighborhoods. The RT should ensure that infrastructure is designed and constructed to be robust and resilient and also that they make a positive impact in reducing risk within the neighborhoods without generating negative unplanned consequences. The RT should organize and strengthen the capacities of the leaders in the neighborhood to fully engage and take ownership of these projects. In line with the first Guiding Principle of RINA - Community Centered, RINA recommends using community led approaches for implementing vital infrastructure unless the scale and complexity of the project requires

124 GOAL. (2020). Community Infrastructure Projects Prioritization Process. Retrieved from: <https://resiliencenexus.org/urban-resilience/urban-shelter-and-settlements>

125 Ginés Suárez. (2013). Manual para la Evaluación del Riesgo del Emplazamiento y del Medio Construido para Edificios, Viviendas y Lotificaciones. Retrieved from: <https://dipecholac.net/docs/herramientas-proyecto-dipecho/honduras/manual-emplazamiento-seguro.pdf>

professional engineering and construction companies. For community led projects RINA recommends using *Tool 72: Projects Executed by Communities (PEC) Manuals*,¹²⁶ which is designed to strengthen the capacities of communities to lead the management of social infrastructure projects. The PEC model incorporates a social auditing mechanism including a Social Auditing Committee (SAC) which monitors the proper and transparent execution of a project. The PEC model has been extremely successful over nearly two decades in significantly enhancing the capacities of local organizations and ensuring the efficient use of funds and leveraging local resources. It is also a very relevant model for advancing the Localization Agenda.¹²⁷

A number of examples of designs for neighborhood vital infrastructure are available for innovative low cost solutions relevant to informal and precarious urban settlements. The following is a list of design guidance recommended by RINA:

- *Tool 92: Tyre Wall Construction and Maintenance Manual in Popular Neighborhoods of Tegucigalpa*¹²⁸ published by the Inter-American Development Bank (IDB) and the Nordic Development Fund (NDF).
- *Tool 93: Construction and Maintenance Manual of Steps and Drainage Channels*¹²⁹ published by the Inter-American Development Bank (IDB) and the Nordic Development Fund (NDF).
- *Tool 94: Guide for Drainage Provision and Maintenance*¹³⁰ developed by GOAL.
- *Tool 95: Water Quality Manual for Neighborhood Water Management Committees*¹³¹ developed by GOAL.

17.5 Strengthen Community Leadership for Urban Upgrading. Local community leadership for urban upgrading is essential for the success of RINA and the RT should approach all urban resilience and inclusion program activities with an eye towards reinforcing leadership at the community level, including within community-based organizations. The RT should agree with community leaders and community-based organizations on how RINA can strengthen their roles within the neighborhood. The RT should ensure that leadership platforms within community-based organizations are representative, that all community members are heard and have a say in decisions and planned activities. For further guidance on strengthening community leadership and improved governance within communities the RT should refer to the following:

- *Tool 96: Building Leadership*¹³² and *Tool 97: Encouraging Involvement in Community Work*¹³³ from the University of Kansas Community Toolbox.
- *Tool 98: Urban Action Kit*¹³⁴ published by IFRC which includes guidance on practical and low-cost actions for urban resilience led by community based organizations.
- *Tool 72: Projects Executed by Communities (PEC) Manuals*¹³⁵, developed by the Honduran Social Investment

Fund (FHIS) and GOAL is a model for community contracting for implementing community projects designed to strengthen communities leadership, participative decision making, and social auditing.

17.6 Sustainability of Vital Community Infrastructure.

Completed infrastructure projects should be formally handed over to the neighborhood residents or other local actors, including a certificate of delivery of the work and a Maintenance Plan. Stakeholders who will be involved in the maintenance of infrastructure should be consulted on maintenance plans, and the plans should be socialized as part of the handover process. The Maintenance Plan should identify which community-based organizations or other stakeholder are responsible for the ongoing maintenance and operation of the infrastructure. For example, if it is an upgrading to water services, then the Neighborhood Water Committee will likely be responsible for aspects of maintenance (perhaps in conjunction with other public or private actors that are also charged with aspects of maintenance; or if it relates to upgrading of evacuation routes, it may be the Local Emergency Committee who is named responsible). Where possible, the RT should ensure that the investment in the infrastructure works is financed by local government funds which may provide additional insurance coverage and risk transfer and reduce the cost to community organizations if the infrastructure becomes damaged.

A fundamental consideration for the sustainability of vital infrastructure is understanding the permanent local socio-economic system that enables the ongoing provision and maintenance of this infrastructure. For example, this could be the socio-economic system for the provision and maintenance of surface water drainage, the socio-economic system for investment and maintenance of public access roads, etc. The RT should ensure that all vital infrastructure is clearly tied to local systems for ongoing investment and maintenance, and implementation of infrastructure works is done in a way to strengthen local systems. These socio-economic systems may extend to and include actors beyond the boundaries of the target neighborhoods. As described in Fourth Guiding Principle of RINA – Partnership through Systems Approach and *Step 13 – Selection of Critical Socio-Economic Systems for Neighborhood Resilience and Inclusion*, the RT should identify, map, and analyze relevant local systems for vital infrastructure and facilitate improved collaboration between neighborhoods and the wider spectrum of system actors to ensure these systems are robust and continue to function in providing and maintaining vital infrastructure. See case study below on the development of the local system for provision and maintenance of water services in high risk neighborhoods in Tegucigalpa by using the Project Executed by the Community model.

126 FHIS. (2006). Proyectos Ejecutados por la Comunidad (PEC). Retrieved from: <https://resiliencenexus.org/urban-resilience/urban-shelter-and-settlements/>

127 In 2016, at the World Humanitarian Summit (WHS), international humanitarian aid actors called out the need for humanitarian response to be “as local as possible and as international as necessary”, thus committing to giving more support and tools to local and national actors. Read more about it on IFRC’s Localization Policy Brief: IFRC, (n.d). IFRC Policy Brief: Localization - what it means and how to achieve it. Retrieved from: <https://resourcecenter.undac.org/wp-content/uploads/2020/12/Localization-external-policy-brief-4-April-2.pdf>.

128 Antúnez, B. (2019). Manual de Construcción y Mantenimiento de Muro de Llantas - en Barrios Populares de Tegucigalpa. BID, NDF, GOAL, Proyecto Planificación de Adaptación de Activos al Cambio Climático en Barrios Populares de Tegucigalpa, Honduras. Retrieved from: <http://dx.doi.org/10.18235/0001862>

129 Paredes, Gabriela; Munguia, Sindy. (2019). Manual de construcción y mantenimiento de gradas y cunetas en barrios populares de Tegucigalpa. BID, NDF, GOAL, Proyecto Planificación de Adaptación de Activos al Cambio Climático en Barrios Populares de Tegucigalpa, Honduras. Retrieved from: <http://dx.doi.org/10.18235/0001668>

130 GOAL. (2020). Guía Práctica Provisión y Mantenimiento de Drenajes, Estrategia de Barrio Seguro. Retrieved from: <https://resiliencenexus.org/urban-resilience/urban-shelter-and-settlements/>

131 GOAL. (2020). Plan de Calidad de Agua en Juntas Administradoras de Agua - Sistema de Provisión y Mantenimiento de Drenajes. Retrieved from: <https://resiliencenexus.org/urban-resilience/urban-shelter-and-settlements/>

132 University of Kansas. (2014-2022). Building Leadership. Lawrence, KS. Toolkits. Community ToolBox. Retrieved from: <https://ctb.ku.edu/en/building-leadership>

133 Kansas University. (2014-2022). Chapter 7, Encouraging Involvement in Community Work. Lawrence, KS. Communications to Promote Interest and Participation. Community ToolBox. Retrieved from: <https://ctb.ku.edu/en/table-of-contents/participation/encouraging-involvement>

134 International Federation of Red Cross Red Crescent Societies. (n.d.) Urban Action Kit. Retrieved from: <https://preparecenter.org/toolkit/urban-action-kit/?msclid=25a1d1fcb67f11ecb334563550780730>

135 Fondo Hondureño de Inversión Social (FHIS). (2006). Proyectos Ejecutados por la Comunidad (PEC). Tegucigalpa, Honduras. Retrieved from:

Case study 19: Application of the Projects Executed by the Community Model in Tegucigalpa, Honduras.

The Local Government of Tegucigalpa, Honduras led infrastructure projects implemented by community leaders in collaboration with the Barrio Resiliente (Resilient Neighborhood) program (2013-2021), implemented by GOAL with USAID support. To do this, they used the Model "Projects executed by the Community" (PEC), developed by the Honduran Social Investment Fund (FHIS) which was applied in 5 high-risk neighborhoods. The first step was training the local government staff in PEC and then, with GOAL support, communities were trained in the approach. The PEC training process includes community organization, social auditing, administration, financial control and supervision of infrastructure projects, infrastructure maintenance, among other. A project development committee (CEP) and a social auditing committee (CCS) were chosen following a participative process during a community assembly in each target neighborhood.



These committees led a process to prioritize one infrastructure project based on their community needs. The CEP identified skilled workers who could lead the construction process, they were responsible to keep the construction site log and take care of the construction materials and supervised the project development. The CCS verified the transparency of the entire process and that everything was developed as planned. Information boards were used so that all neighbors were informed of the work to be carried out. The local government supported community committees in their roles and supervised the quality of infrastructure being constructed. Once projects were finished, a maintenance committee was established and trained in the PEC methodology, and this committee follows a maintenance plan that was drawn up in collaboration with GOAL. As a result, more than 16,000 people in the five neighborhoods have directly benefited from key infrastructure such as drainage, water provision, sanitation, and accessibility. PEC contributed to the strengthening of capacities to lead projects, as well as accountability and transparency practices. PEC enabled employment opportunities for local trades people, and increased investment cost-effectiveness and reach.

For more information, see PEC guidance manuals [Here](#) | Contact GOAL at resilience@goal.ie

Step 18. Environmental Management in Neighborhoods



MCR Essential Five: Safeguard natural buffers to enhance the protective functions offered by natural ecosystems

Climate change and environmental degradation have a significant impact on the resilience and inclusion of informal and precarious urban settlements. Developing urban settlements that are sustainable and that exist in harmony with the natural environment is a key ambition of RINA.

18.1 Identify and Understand the Main Ecosystems and their Services. The RT should identify with the neighborhood residents and other key stakeholders, the key urban ecosystems¹³⁶ or environmental resources including watercourses, watersheds, parks, wooded areas (including those associated with preventing erosion and reducing flood and landslide

risk), wetlands, bodies of water, other animal habitats, etc. The RT should raise awareness on the need to protect these resources highlighting the services provided by these ecosystems (ecosystem services),¹³⁷ their relationship with people's well-being, and the causes of their degradation.¹³⁸ Some examples of ecosystem services relevant to urban settlements are water retention and infiltration, forestation, urban vegetation, floodplains, dunes, mangroves and other coastal vegetation, and pollination. The RT should generate a list of the main ecosystems and for each one answer: how does the neighborhood depend on or influence these ecosystems (positively or negatively), and what is the role of these ecosystems in the disaster resilience and inclusion in the target neighborhood/city. The RT should prioritize those ecosystems that contribute most to disaster resilience and inclusion for intervention by RINA.

18.2 Investigate Status of Ecosystems/ Environmental Resources and Existing Policies and Regulations in Place for their Management. In consultation with neighborhood resi-

¹³⁶ Ecosystem is the interaction between the species of a given area and its environment (local and non-biological) that work together to sustain life. Urban ecosystem- is any ecological system located within a city or other densely populated area as an entire metropolitan area. Urban ecosystems, like all ecosystems, are composed of biological (e.g. plants, animals) and physical (e.g. soil, water, climate) components. These components interact with each other within a specific area. In this case, the biological complex also includes human populations and their behaviors, their institutional structures, and the social and economic tools they employ. The physical complex includes buildings, transport networks, modified surfaces and energy use and the import, transformation and export of materials (Renner, 2019). Therefore, the urban ecosystem contains in turn individuals, as nested systems of three spheres: the natural, the built and the socio-economic (Jha, Miner, & Stanton-Geddes, 2013).

¹³⁷ Ecosystem services are the beneficial functions that nature provides to people. That is, the various ways in which we depend on nature. The ecosystem services approach focuses on the ways in which ecosystems support, enable and enhance human well-being (Renner, 2019).

¹³⁸ Jha, A. K., Miner, T. W., & Stanton-Geddes, A. Z. (2013). Building Urban Resilience: Principles, Tools, and Practice. World Bank. Washington, DC: Directions in Development. doi:10.1596/978-0-8213-8865-5

dents, government and private environmental agencies and other stakeholders, the RT should investigate the current status of the prioritized ecosystems and environmental resources (Renner, 2019). For example, for water sources within the neighborhood the RT should investigate whether there has been a trend towards the reduction in the quantity or quality of water produced and examine the impact on water sources due to increase in demand from an increase in population or destruction of water catchments with expansion of urbanization and uncontrolled management of waste disposal. Vegetation within neighborhoods can provide critical protections against landslide and erosion. The RT should investigate the trends in removal of this vegetation including deforestation and the implications of this for disaster risks and climate adaptation. Also, the RT could review secondary data or key informant interviews to identify existing policies and regulations in place for the identified ecosystems and environmental resources.

Finding Synergies Between Restoring and Protecting Ecosystems, Reducing Risk to Disasters, and Reinforcing Livelihoods.

Some of the best opportunities to improve urban resilience and inclusion lie in accomplishing multiple objectives at once, for example, identifying strategies to move households out of high-risk areas to nearby places that are safer, with better access, and formal land tenure; repurposing those same dangerous areas to rehabilitate watersheds and ecosystem services, as well as creating spaces for more environmentally sustainable alternatives such as urban agriculture or recreation.

18.3 Identify and Implement Strategies that Protect Ecosystems and Environmental Resources. For each prioritized ecosystem, the RT should identify the actors, local governance, and socio-economic systems that protect or degrade ecosystem services. This exercise will allow the RT to identify opportunities, resources (such as funds, technical expertise, or supplies in kind provided by environmental agencies), and strategies, as well as possible conflicts/risks that could arise when carrying out the interventions to improve environmental management. This can be developed through participatory workshops with neighborhood residents and other key national and local stakeholders. Strategies should aim to protect or improve the health and performance of ecosystems and their services taking into account human activities and other forces that affect or could affect them. Likewise, strategies must offer a balance between conservation and the equitable use and distribution of resources, since this contributes to their sustainability. While strategies are ecosystem-dependent and context specific, this manual suggests pursuing nature-based solutions,¹³⁹ including ecosystem-based adaptation (EbA)¹⁴⁰ and ecosystem-based DRR or Eco-DRR.¹⁴¹ This may include, but is not limited to: community ma-

agement, protection/conservation of natural areas or ecosystem services; watershed management; urban landscape design; integration of green and blue infrastructure with conventional engineering “Grey” infrastructure.¹⁴² For more information on EbA and Eco-DRR RINA recommends *Tool 99: Disasters and Ecosystems: Resilience in a Changing Climate Source Book*¹⁴³ published by the UN Environment Programme (UNEP). Green and Blue infrastructure options can cost less than Grey infrastructure, and to support this, there are various methods of economic valuation, see Chapter 3 of *Tool 100: The Economy of Ecosystems and Biodiversity for Local and Regional Policy Makers (TEEB)*¹⁴⁴ published by UNEP.

The RT should undertake a series of workshops with neighborhood residents and other key stakeholders to prioritize strategies to protect and enhance ecosystems and environmental resources. The RT should define selection criteria for proposed strategies including cost-benefit, maintenance costs, potential for DRR and / or adaptation, and ensuring that the vulnerable populations obtain tangible benefit in terms of resilience and inclusion. On how to include youth in environmental protection and how to make crafts from recycled materials refer to *Tool 101: Environmental Aspects*¹⁴⁵ developed by Global Communities. The RT should facilitate the design and implementation of the prioritized strategies to enhance local systems for improved environmental management, as well as ensure that the RINA Monitoring and Evaluation Plan includes relevant indicators and targets to measure progress towards increased protection of ecosystems and environmental resources.

This process can be undertaken with an eye towards finding synergies with other neighborhood priorities. For example, high risk land not suitable for housing can be reforested as well as repurposed for environmentally friendly livelihood activities or landscapes that enable a combination of recreation areas, urban gardening, and environmental spaces. Note that most strategies will likely identify some change to a local socio-economic system in order to increase protection of urban ecosystems and environmental resources. This may be, for example, addressing the socio-economic system for waste management or change to livelihood practices within a market system. In all cases of socio-economic system changes, the approach described in *Step 13 - Selection of Critical Socio-Economic Systems for Neighborhood Resilience and Inclusion*, and the *Second Guiding Principle 2 - Partnerships for Local Systems*, should be applied to plan and implement systemic change. See case study below from Colombia on developing the circular economy for waste management in urban coastal communities.

139 Nature-based solutions is an over-the-box term that includes various types of ecosystem-based approaches to addressing societal challenges such as disasters and climate risks (PEDRR, 2021).

140 EbA is defined as “the use of biodiversity and ecosystem services as part of an overall adaptation strategy to help people adapt to the adverse effects of climate change” (CBD, 2009 cited by (Sudmeier-Rieux, Nehren, Sandholz, & Doswald, 2019)

141 Eco-DRR is the sustainable management, conservation and restoration of ecosystems to reduce disaster risk, with the aim of achieving sustainable and resilient development (PEDRR, 2021). Well-managed ecosystems, such as wetlands, forests, and coastal systems, act as natural infrastructure, reduce physical exposure to many hazards, and increase the socio-economic resilience of people and neighborhoods by maintaining local livelihoods and providing essential natural resources such as food, water, and building materials (Renaud et al. 2013, Renaud et al. 2016, cited by PEDRR, 2021).

142 Green infrastructure includes, for example: greening of streets, squares, platforms and roads; greening of roofs and facades, development of urban agriculture, creation of urban green corridors, replacement of impermeable surfaces, natural water filtration, restoration of natural channels of urban rivers and embankments. Blue infrastructure includes: river corridors, wetlands and other waterways (UNISDR, 2017)

143 Sudmeier-Rieux, K., Nehren, U., Sandholz, S. and Doswald, N. (2019). *Disasters and Ecosystems, Resilience in a Changing Climate - Source Book*. Geneva: UNEP and Cologne: TH Köln - University of Applied Sciences. Retrieved from: https://postconflict.unep.ch/DRR/EcoDRR_Source_Book.pdf

144 TEEB. (2010). *TEEB - The Economics of Ecosystems and Biodiversity for Regional and Local Authorities*. United Nations Environment Programme (UNEP). Retrieved from: http://www.teebweb.org/wp-content/uploads/Study%20and%20Reports/Reports/Local%20and%20Regional%20Policy%20Makers/D2%20Report/TEEB_Local_Policy-Makers_Report.pdf

145 Global Communities. (2022). *Aspectos Ambientales*. Retrieved from: http://gcuqate.org/BMSU/KITBJGIR_archivos/4%20KIT%20BJGIRD.pdf

Case Study 20: Circular Economy in Coastal Communities in Colombia.

The Barrio Resiliente (Resilient Neighborhood) program in Colombia (2020 - 2023), supported by USAID is leading a strategy of "Circular Economy" in coastal urban communities of Uribia, Manaure and Riohacha, in the department of La Guajira and with urban fishers in the Ciénaga de Mallorquín in the City of Barranquilla of the department of Atlántico.

This strategy promotes coastal communities to reuse, repair, renew and recycle bioproducts and waste generated by fishery and household activities in their communities (e.g., old tires, metal and plastic waste generated by fishing nets, buoys, ropes, oil containers, plastics, and organic waste resulting from fishing activities). Together with fishing communities, indigenous boats that were damaged or abandoned have been repaired using recycled materials, while low-cost and artisanal techniques which have less environmental impact are being promoted. In the city of Barranquilla, markets for organic bioproducts from the fisheries sector are being explored including potential uses in agriculture, construction, pharmaceuticals, or handcraft. Approximately 100 small scale fishing boats have been repaired benefiting families in Wayuu indigenous communities supporting responsible fishing practices as well as improved food and economic security.

For more information contact GOAL at resilience@goal.ie



18.4 Increase Sustainability of Environmental Management for Resilience and Inclusion.

The RT should ensure that learning on the protection of ecosystems and environmental resources are included into the RINA Neighborhood Master Plan (RNMP) and that environmental protection is mainstreamed throughout the implementation activities for RINA. The RNMP should establish objectives and resources for environmental management and ensure that land use plans include an assessment of risk to ecosystems and environmental resources. The RNMP should also include an inventory of ecosystem resources to help neighborhoods understand which ecosystem services are available to support urban resilience and inclusion and which are being degraded by poorly planned urban growth.¹⁴⁶ The RT should support the management of critical ecosystems and environmental resources, whether these are located within or outside their neighborhood¹⁴⁷ and support collaboration and/or transboundary agreements for watershed management. The RT should also advocate for modifying and/or updating policies, laws, or instruments for improved management of ecosystems. Local policies, laws, or instruments may adopt an incentive-based approach rather than being purely regulatory (e.g., granting preferential tax treatment in exchange for improved protection to natural resources). The RT should undertake awareness-raising with neighborhood residents and other

stakeholders on the protection of ecosystems and ecosystem services, as well as on their relevance to people's well-being, resilience, and inclusion. The RT should work to strengthen the capacities of local government, neighbors, and other key stakeholders in evaluation, economic valuation, management, and monitoring of ecosystems and ecosystem services. For more information on protecting urban ecosystems to enhance Climate Change Adaptation and Disaster Risk Reduction please refer to:

- *Tool 102: Voluntary Guidelines for the Design and Effective Implementation of Ecosystem-based Approaches to Climate Change Adaptation and Disaster Risk Reduction*¹⁴⁸ published by the Secretariat of the Convention of Biological Diversity (CBD)
- *Tool 103: Integrating Ecosystem Services into Urban Planning and Management*¹⁴⁹ published by GIZ
- *Tool 104: Climate-Resilient Biodiverse Cities in Latin America and the Caribbean*¹⁵⁰ published by the IDB
- *Tool 105: Guidelines for the application of IUCN Red List of Ecosystems Categories and Criteria*¹⁵¹ developed by IUCN for assessing ecosystem risks
- *Tool 106: TEEB Manual for Cities: Ecosystem Services in Urban Management*¹⁵² by UNEP

146 Jha, A. K., Miner, T. W., & Stanton-Geddes, A. Z. (2013). Building Urban Resilience: Principles, Tools, and Practice. World Bank. Washington, DC: Directions in Development. doi:10.1596/978-0-8213-8865-5

147 Importantly, remember that many of these ecosystem services relevant to the resilience of the city can also be offered outside the limits of the city, such as watersheds, special protection areas, among others (UNISDR, 2017).

148 Secretariat of the Convention on Biological Diversity. (2018). Voluntary guidelines for the design and effective implementation of ecosystem-based approaches to climate change adaptation and disaster risk reduction. 22nd meeting. Montreal, Canada. Retrieved from: <https://www.cbd.int/doc/c/3f7a/4589/5cc-1b7058bf52427fa9bae84/sbstta-22-inf-01-en.pdf>

149 German Agency for International Cooperation (GIZ). (2019). Integración de los servicios ecosistémicos en la planificación y gestión urbana- Un enfoque sistémico en pasos para profesionales. Retrieved from: <https://iki-alliance.mx/wp-content/uploads/Manual-ISE-CiClim-low-resolution-stand-01.10.2019.pdf>

150 Inter-American Development Bank (IADB). (2020). Ciudades biodiversas y resilientes en América Latina y el Caribe. Red de Ciudades BID. Retrieved from: <https://publications.iadb.org/publications/english/document/Climate-Resilient-Biodiverse-Cities-in-Latin-America-and-the-Caribbean.pdf>

151 Bland, L.M., Keith, D.A., Miller, R.M., Murray, N.J. and Rodríguez, J.P. (eds.) (2016). Guidelines for the application of IUCN Red List of Ecosystems Categories and Criteria, Version 1.0. Gland, Switzerland: IUCN. ix + 94pp. Retrieved from: <https://portals.iucn.org/library/sites/library/files/documents/2016-010.pdf>

152 TEEB (2011). TEEB Manual for Cities: Ecosystem Services in Urban Management. The United Nations Environment Programme (UNEP). Geneva. Retrieved from: <http://teebweb.org/publications/other/teeb-cities/>

Case Study 21: Reforesting Hillsides in Lima, Peru, to Reduce the Risk of Vulnerable Neighborhoods.

Between 2014 and 2017, the Center for Studies and Disaster Prevention - PREDES worked with members of the El Volante II and El Volante III neighborhoods to reforest hillsides with 3,500 trees to stabilize the soil and prevent the expansion of informal settlements. The intervention improved the environmental quality of the area, the management of the territory, and the mitigation of the impacts of climate change.

For more information, see full case study: [Here](#) | Contact José Sato, PREDES, at josemsato@predes.org.pe



Source: PREDES

Case Study 22: Developing Hydrological Modelling of Urban Watersheds to Reduce Urban Disaster Risk in Honduras.

In 2017, the Local Government of Tegucigalpa, Honduras led an advanced hydrological modelling in collaboration with the Hydrologic Research Center (HRC) to determine flood and landslide mitigation measures in three high-risk neighborhoods (Jose Angel Ulloa, Jose Arturo Duarte, and Nueva Providencia).

HRC reviewed existing studies and data on floods, meteorological information, rainfall, geotechnical studies, etc. Field visit to the neighborhoods were carried out with HRC to collect primary information, discuss the methodology with key actors, form an Inter-Agency Technical Committee, and agree on the role of each agency for the assessment. After training the National Disaster Management Authority in Honduras (COPECO) and the local government personnel, all data was analyzed and HRC in collaboration with these key actors adapted and calibrated the numerical models. The assessment prioritized three strategic flood and soil saturation mitigation measures: 1) Installation of Gabion baskets for erosion protection; 2) Incorporating enhancement to the operation of flood and landslide early warning and response; and 3) reforestation and planing to reduce erosion and increase soil stability. The study was developed under a learning-by-doing approach, local actors' capacities were strengthened and so far the Municipality has replicated the hydrological modelling of urban watersheds in two additional areas outside the program intervention area: "Quebrada El Sapo" in Tegucigalpa and Rosalinda watershed, in north Honduras.

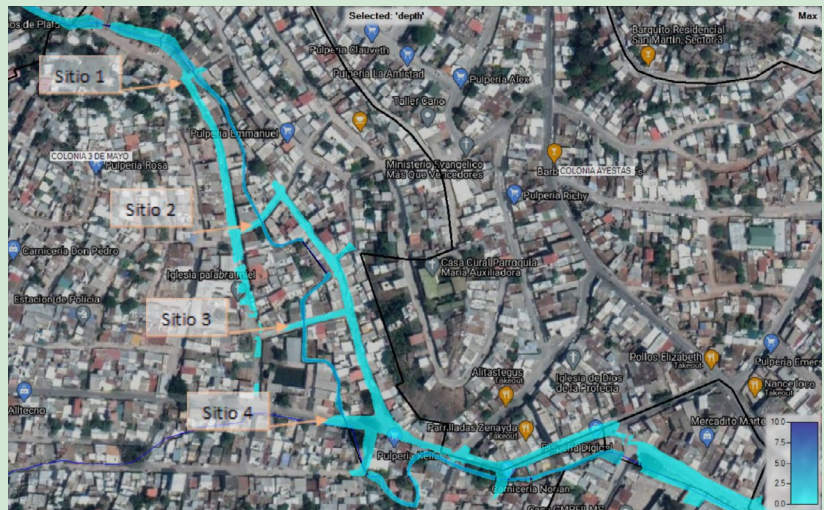


Figure 30. Flood stain for a 25-year return period in the current scenario. Tegucigalpa, Honduras

For more information contact GOAL at resilience@goal.ie

Step 19. Local Market Systems for Resilience and Inclusion



MCR Essential Three: Strengthening financial capacity for resilience

Local market systems play a key role in the resilience and inclusion of informal and precarious urban settlements in terms of creating employment opportunities for vulnerable households and in ensuring access to essential goods and services. The role of small and micro-enterprises is highlighted by RINA due to the critical role that they play in strengthening local market systems and the local economy in informal and precarious urban settlements.

19.1 Market Systems Development for Neighborhood Resilience and Inclusion. Based on the neighborhood's risk scenarios, local governments can identify the critical market system(s) which will have most impact on the neighborhood's resilience and inclusion. These should have already been identified in *Step 12 - Neighborhood Risk Assessment*, but should be verified and fully described under this Step. In accordance with RINA's systems approach, each prioritized market system should be mapped and analyzed, identifying all the key actors within the market system's value chain and supporting and regulatory functions. For each market system the RT should investigate how these market systems are performing in terms of delivering essential goods and services (e.g. such as provision of basic food supplies) and creating income generation opportunities for the residents and businesses of the neighborhoods. RINA recognizes that micro, small and medium enterprises (MSMEs) play a critical role in ensuring the economic resilience of neighborhoods and enabling access to critical market systems for poor and marginalized families. The RT should identify the main categories of MSMEs and investigate their role within prioritized market systems using the market systems maps and analysis mentioned above. For each market system and category of MSME the RT should set out a strategy to improve how markets and businesses are contributing to resilience and inclusion in each neighborhood. For more information on categorizing MSMEs in formal and precarious urban settlements please refer to *Tool 107: Business Categorization Instrument*¹⁵³ developed by GOAL.

Also for further guidance on developing resilient market systems please refer to:

- *Tool 20: Resilience for Social Systems (R4S) Approach Guidance Manual*¹⁵⁴ developed by GOAL.
- *Tool 67: Market Systems Resilience: A Framework for Measurement*¹⁵⁵ developed by USAID.
- *Tool 68: Local Systems: A Framework for Supporting Sustained Development*¹⁵⁶ developed by USAID.

19.2 Strengthen MSME Capabilities and Business Networks. Based on the market system and MSME analysis carried out above, the RT should arrange for training workshops for MSMEs to improve basic business management skills in collaboration with formal recognized training agencies including vocational training institutes and training centers, chambers of commerce, etc. Where possible, RINA should look to identify and support MSMEs which are owned or led by women and youth. The RT should endeavor to provide business owners with basic skills and tools for administering, operating, and financing their business at all times, including to prepare them for emergency situations. The key topics that should be covered in the trainings are customer service, sales, stock management, basic accounting, business continuity planning, EWRS operation, and Disaster Risk Reduction for businesses. Ensure that the trainings include practical exercises for administrative and financial understanding and the use and management of basic book-keeping. For more information on how to strengthen the role of neighborhood stores and other micro and small enterprises within informal settlements including during emergencies, please refer to *Tool 108: Practical Guide for Resilient Business*¹⁵⁷ developed by GOAL.

19.3 Support the Establishment or Strengthening of Business Networks. The RT should support the establishment or strengthening of existing business networks in the target neighborhoods. Business networks are crucial to strengthening coordination and promoting collaboration between businesses, progressing opportunities for growth and resolve common challenges that limit their operation both in normal times and during emergencies. By facilitating the establishment of Savings and Loans Groups, RINA can support the formation of business networks. This fosters social cohesion among the MSMEs, creates a financial reserve that can support resi-



153 GOAL. (2020). Business Categorization Instrument. Retrieved from: <https://resiliencenexus.org/urban-resilience/resilient-urban-businessess/>

154 GOAL. (2019). Resilience for Social Systems (R4S) Approach. Retrieved from: <https://resiliencenexus.org/r4s/>

155 USAID. (2018). Market Systems Resilience: A Framework for Measurement. Retrieved from: https://beamexchange.org/uploads/filer_public/f7/60/f76077bc-40c0-4da8-aa3e-92a4982db25b/market-systems-resilience-measurement-framework-report_compressed.pdf

156 USAID. (2014). Local Systems: A Framework for Supporting Sustained Development. Washington, D.C. Retrieved from: <https://www.usaid.gov/policy/local-systems-framework>

157 GOAL. (2021). Practical Guide for Resilient Business. Retrieved from: <https://resiliencenexus.org/urban-resilience/resilient-urban-businessess/>

lience of businesses in times of adversity, increases access to low interest credit which enables sustainability and growth of MSMEs, and provides a stepping stone towards more formal financial inclusion. Please see the following case study from Tegucigalpa in Honduras where large business networks were established through strategic support to MSMEs.

19.4 Link Business Networks with Suppliers. One of the key advantages of supporting the establishment of MSME business networks is the strengthening of supply chains of critical goods and services into informal settlements. This can include obtaining better prices for commodities with large suppliers, while at the same time transferring these prices to customers including during and after crisis situations. The RT should support business networks to strengthen strategic linkages, develop their relationship with larger scale suppliers, and develop strategies to strengthen the resilience of these supply chains in the face of shocks and stresses.

19.5 Provide Seed Capital to MSMEs. The RT should investigate options for seed capital for MSMEs either through local or national government programs in place to support MSMEs or through financial service providers, private companies,

cooperatives, foundations, or development and humanitarian aid agencies. The RT should support MSMEs to invest this seed capital to make strategic investments in their businesses to diversify their operations, strengthen stock management, improve the disaster resilience of their business including relevant infrastructure and equipment, and strengthen the continuity of their businesses in the face of shocks and stresses. In many cases, enabling MSMEs to associate with business networks will increase their access to seed capital, other business assets, and capacity building programs.

19.6 Promote Diversification of MSME Business Operation. The RT should support MSMEs in informal and precarious urban settlements to diversify their business operations and this will create increased potential for growth and also enhance the business resilience and contribution to the resilience of the neighborhood. The RT should prioritize supporting MSMEs to increase availability of products such as basic food basket items and other products that are critical for disaster preparedness and response including telephone recharges, water, medicines, hygiene products, prepared food, among others. The more that businesses diversify their products and/or services, the greater the sales and profits and

Case Study 23: Resilient Neighborhood through Resilient Businesses in Tegucigalpa, Honduras.

The Barrio Resiliente (Resilient Neighborhood) program (2013-2022) implemented a Resilient Business strategy targeting 392 micro and small enterprises in 8 high-risk neighborhoods in Tegucigalpa. Neighborhood small and micro enterprises (grocery stores, shops, and other neighborhood MSMEs) are generally owned by women, are focal points for social cohesion in communities, and have a critical role in providing basic supplies, particularly to the most vulnerable. Therefore, the Resilient Business Strategy aimed to develop and strengthen the role of businesses their neighborhoods. To do this, the program created alliances with key local actors, including financial institutions, input providers, academic institutions, the chamber of commerce, private enterprises, local government, the municipal disaster preparedness units, the national institute for professional development (INFOP), and government social programs and security agencies. The strategy included two perspectives: (1) disaster risk reduction (DRR) and (2) economic improvement of neighborhood businesses.



In terms of DRR, business continuity plans were developed, and businesses were supported in implementing DRR measures (e.g., upgrading access and electrical systems, and the installation of fire extinguishers). To date, 100% of businesses supported have implemented at least 1 to 3 DRR measures in their continuity plans. Additionally, women led businesses were trained and linked to support the operation of early warning and response systems in their neighborhood. EWRS. To date, 107 MSMEs are focal points for raising awareness of disaster risk and disseminating alert information during emergencies, which was particularly crucial in the face of the COVID-19 pandemic and the impact of two hurricanes in Honduras in November 2020. It is important to emphasize that none of the 392 MSMEs supported closed their operations despite the widespread economic impact caused by the pandemic. Instead, they became the main food suppliers in their neighborhoods due to the restriction of circulation resulted from the COVID-19 pandemic lockdown. They also became points for food distribution as part of humanitarian aid actions and information provision related to the pandemic (e.g., biosecurity recommendations, circulation regulations, etc.).

In terms of economic improvement, relevant local actors supported the training process of MSMEs on various issues (e.g., customer service, sales, pricing structure, financial control, profit recording, etc.), with all businesses showing improved operational capacities. Among these MSMEs, ten business networks were formed to facilitate their access to financial services and new input suppliers to obtain lower prices for the benefit of customers in their neighborhoods. Further to this, the business networks created a multi-service company with support from the Chorotega Cooperative. To date, 91% of the MSMEs have diversified their services and products (especially those related to the basic food basket and others that are critical during emergencies) and 74 new jobs have been generated. Finally, according to the evaluation of the resilient business index developed by GOAL in 2021, 91% of MSMEs had improved performance in comparison to the initial evaluation carried out in 2019. The Resilient Neighborhood strategy is being replicated in five additional cities between Honduras and Colombia.

For more information, see case studies: [Here](#) | Contact GOAL at resilience@goal.ie



the greater the contribution to the disaster resilience of their neighborhoods. For further guidance on supporting the resilience of MSMEs in informal and precarious urban settlements please refer to *Tool 109: Sustainable Business Plan Guideline*¹⁵⁸ developed by GOAL.

19.7 Promote Job Skills and Income Generation. Based on the analysis of prioritized market systems completed, the RT should coordinate vocational training programs to enhance skills for employment or income generation within the target neighborhoods. This requires collaborating with actors such as chambers of commerce or vocational training institutions. vocational training programs should be designed based on a labor market survey to identify specific skills in demand within local markets and dignified employment opportunities. The RT should ensure that these training programs are targeted at women and youth from low-income families and other vulnerable groups, such as migrants or displaced persons.

19.8 Business Fairs. The RT should promote business fairs to influence employment and income generation opportunities within the neighborhood. This can include supporting product and service diversification for MSMEs linking them with large suppliers and other business partnerships in order to

promote new business opportunities. These fairs are also an opportunity for businesses to advertise employment opportunities and for entrepreneurs to identify new income generation opportunities. The RT should solicit participation from the Ministry for Labor, relevant local government departments, private business associations, credit agencies, etc.

19.9 Link MSMEs to EWRS. The RT should coordinate with administrators of EWRS in the target neighborhoods, including those administered by the National Disaster Risk Management Agency, to leverage the role of community stores and other MSMEs as focal points to disseminate key information and alerts in relation to early warning. This can include disseminating information on store fronts and at business premises and vehicles including hazard maps, alert levels and response actions, and emergency lines of communication and contact details. These same businesses can also play a critical role in enabling access to essential goods and services during times of crisis to affected populations through cash transfer or other humanitarian aid distribution programs.

19.10 Promote a culture of resilience and inclusion. The RT should work to promote a culture of resilience and inclusion. among businesses within the target neighborhoods and

Case Study 24: "I Manage Risk, I Strengthen My Business" Program in Medellín, Colombia.

Between 2017 and 2020, as part of the Program "I Manage Risk, I Strengthen My Business" financed by USAID, FENALCO supported disaster risk management (DRM) for both the formal and most vulnerable and informal MSMEs in the city of Medellín. A pedagogical model in DRM and business continuity was developed according to the needs of the target population, and associativity and dialogue spaces were promoted for micro and small business owners to find their voice as a DRM actor in the territory. As a result, 3,600 merchants from different economic sectors in 220 vulnerable neighborhoods of the city of Medellín benefited.

For more information, see the full case study: [Here](#) | Contact: Lida Gonzalez, FENALCO, lgonzalez@fenalcoantioquia.com; Andres Hincapie, FENALCO, ahincapie@fenalcoantioquia.com



158 GOAL. (2020). Sustainable Business Plan. Retrieved from: <https://resiliencenexus.org/urban-resilience/resilient-urban-businesses/>

with the wider business community of the city. This may involve collaboration with the Chamber for Commerce, national or regional level business associations, and other public and private sector agencies, and include promoting measures such as installation and maintenance of fire extinguishers and smoke detectors, evacuation routes signs, upgrading of electrical systems and other services to meet national codes, evaluation of risks (internally and externally), and development of business continuity plans. For further guidance on building resilience of businesses within informal and precarious urban settlements the RT should refer to the following Tools:

- [Tool 110: Business Continuity Plan](#)¹⁵⁹ a template developed by GOAL.
- [Tool 111: Basic Guide to Begin a Business Continuity Plan for Convenience Stores](#)¹⁶⁰ developed by FENALCO.
- [Tool 112: Risk Matrix](#)¹⁶¹ developed by FENALCO.
- [Tool 113: Business Emergencies Basic Plan](#)¹⁶² developed by FENALCO.
- [Tool 114: Guide for Analyzing Business Impact](#)¹⁶³ developed by FENALCO.
- [Tool 115: Business Continuity Plan](#)¹⁶⁴ focused on pharmacies, groceries, clothing manufacturers and hardware store developed by FENALCO.
- [Tool 116: COVID 19 Small Business Continuity and Recovery Planning Toolkit](#)¹⁶⁵ published by UNDRR
- [Tool 119: Global Compendium of Practices on Local Economic and Financial Recovery](#)¹⁶⁶ published by UN Habitat.

Step 20. Financial Inclusion



MCR Essential Three: Strengthen financial capacity for resilience

Financial inclusion for vulnerable families living in informal and precarious urban settlements is one of the key building blocks for resilient and inclusive neighborhoods. There are a number of challenges to be addressed in order to improve financial inclusion including lack of formal salaried employment, security risks limiting the presence of financial institutions, lack of recognized residential address and documents of land tenure which can be used to access credit, lack of credit history, lack of access to insurance schemes, etc. This can leave families vulnerable to exploitation from unregulated finance agencies charging excessively high interest rates and unfair conditions attached to loans. It also means that families have little or no access to finance to prepare for or recover from shocks and stresses. As a result incidents such as illness to the main bread winner of a household or unforeseen financial expenses can have disastrous consequences on vulnerable households. The following activities are designed to assist local governments reinforce financial inclusion in informal and precarious urban settlements.

20.1 Facilitate Neighborhood Saving and Loans Groups (NSLG). This is a practical and often very effective measure to build financial capacity to cope with shocks and stresses and increase resilience and social capital in informal settlements. The RT should facilitate the creation of Savings and Loans groups within each neighborhood prioritizing the participa-

Case Study 25: Empowered Women Savers Demand Water Sanitation Project in Mixco, Guatemala.

The Barrio Mio Program by PCI and the City of Guatemala had the key objective of generating a demonstrative and replicable process for Mixco Municipality, leading them to coordinate a participatory mapping of San Andresito community. From this mapping, women leaders and entrepreneurs -organized as a Women's Saving-Group - began to get involved with the project.

The Women's Saving Group advocated in favor of their community and demanded an approach to the problem of sanitation. The process allowed women to take responsibility for overseeing waste management and enhance water quality in their community.

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159 GOAL. (2015.). Plan de Continuidad de Negocios. Retrieved from: <https://resiliencenexus.org/urban-resilience/resilient-urban-businessess/>
 160 FENALCO. (n.d.). Guía Básica para Iniciar un Plan de Continuidad de Negocio, Sector Tiendas. Programa GRFN. Retrieved from: <https://gestionoriesgos.com/iframe-plan-de-continuidad-de-negocio-sector-tiendas/>
 161 FENALCO. (n.d.). Risk Matrix. Retrieved from: <https://gestionoriesgos.com/download/2338/>
 162 FENALCO. (n.d.) Business Emergencies Basic Plan. Programa GRFN. Retrieved from: <https://gestionoriesgos.com/download/2343/>
 163 FENALCO. (n.d.). Guide for Analysing Business Impact. Retrieved from: <https://gestionoriesgos.com/download/2360/>
 164 FENALCO. (n.d.). General Business Continuity Plan. Retrieved from: <https://gestionoriesgos.com/download/2370/>
 165 UNDRR. (2020). COVID-19 small business continuity and recovery planning toolkit. Documents and publications. Retrieved from: <https://www.undrr.org/publication/covid-19-small-business-continuity-and-recovery-planning-toolkit>
 166 UN Habitat. (2021). Global Compendium of Practices on Local Economic and Financial Recovery: Building Urban Economic Resilience during and after COVID-19. UN Habitat City Resilience Program. Retrieved from: <https://unhabitat.org/sites/default/files/2021/03/global-compendium-of-practices-covid-19.pdf>

tion of women. Similar to previous comments on how SLG can foster social cohesion within business networks, these groups can also foster cohesion among women leaders and the wider population within communities. NSLG will not only help foster social inclusion but will also increase economic resilience, establish culture of savings, reduce dependency on high interest loans, and further empower women as change leaders within their neighborhoods.

20.2 Engage Formal Financial Service Providers and Government Programs. Financial services is a market system similar to any other market system. In order to fully understand this system the RT should undertake a full assessment of financial services relevant to the target neighborhoods and map out all the relevant actors and their role within this system including relevant government programs to enhance financial inclusion. The RT should also include in this assessment social protection systems which are accessible to residents of the target neighborhoods. Within this system map the residents of the target neighborhoods should be clearly identified and the options open to them to access financial services. This analysis should also assess what micro-insurance schemes are available to informal and precarious settlements and what are the options to be able to access these. As mentioned previously, to carry out this type of analysis will require technical expertise using systems analysis approaches as described in *Tool 20: Resilience for Social Systems (R4S) Approach Guidance Manual*¹⁶⁷ published by GOAL and *Tool 67: Market Systems Resilience: A Framework for Measurement*¹⁶⁸ developed by USAID. These tools can be used to develop very comprehensive mapping and analysis and RINA recommends developing simplified maps focused on the financial services that are relevant and potentially accessible to informal and precarious urban settlements. The RT should use this analysis to engage key actors within the financial services sector to advocate for and develop solutions that will increase financial inclusion considering both normal times and times of crisis. In many cases, there are government programs, micro-insurance schemes, and social protection schemes that are available to low income families living in informal and precarious urban settlements but there is a disconnect due to misinformation, misperceptions of risk, or just a lack of understanding. The RT can play a very important role in addressing these barriers and significantly enhancing financial inclusion.

20.3 Cash Transfer Programs. Cash Transfer programs, including those affiliated with national social protection programs, are an effective way to assist vulnerable households in need of income to meet immediate needs, reinforce economic empowerment, leverage local markets and in some cases, support communities themselves to be involved directly in addressing urban challenges. These are many sources of information on best practices and minimum standards for how to implement it effectively are available (see below for suggestions), RINA recommends exploring the use of cash programming as a dignified and effective way to support vulnerable families in informal settlements. These programs can be new, extend, or complement other existing cash programs already in place.

Cash programming can address critical issues of shared concern, such as conditional and unconditional cash programs to meet immediate needs of recently arrived households in ur-



ban areas fleeing disasters or supporting vulnerable households with conditional cash while mobilizing them to support the upgrading of essential services; or they can be used in the wake of a crisis to support recovery and rebuilding. Depending on the specifics of the planned RINA intervention the RT should consider options for cash transfer programs as an effective and dignified mechanism to provide aid to families in need. Figure 31 shows an example of the process for implementing conditional vouchers through neighborhood stores as part of the humanitarian response to the COVID-19 pandemic in informal urban neighborhoods of Tegucigalpa. Short term cash transfer projects (including voucher assistance) can also be an effective measure to increase connectivity between vulnerable households and financial service providers. The RT should consider advocating for shock responsive social protection where social protection systems work together with national risk management agencies to provide financial support to families prior to an expected impact of a risk event to undertake preparatory actions or during the recovery phase. For more information on shock responsive social protection RINA recommends to refer to *Tool 118: Shock-Responsive Social Protection in the Caribbean Handbook*¹⁶⁹ developed by WFP and the *Tool 119: Shock-Responsive Social Protection Systems Toolkit*¹⁷⁰ developed by O'Brien, C., et al.

Where nationally supported cash programs are already functioning in country, local governments should coordinate cash transfer programming with national cash working groups and utilize government guidelines (such as for transfer amounts which are often set in relation to an assessment of minimum wage rates and minimum household expenditure baskets) and should include a risk assessment of cash transfer delivery mechanisms. The RT should also consider adopting effective cash transfer modalities already in use in country (such as through mobile money and Fintech solutions, which can be more feasible in urban contexts than in rural areas).

The financial services system map mentioned previously will inform strategies to engage social protection services to increase their coverage to informal settlements. A lot of guidance is available on effective cash transfer programs and RINA recommends the course *Basic Fundamentals of Cash Transfer Programs*¹⁷¹ from the CALP Network. Figure 32 presents a sample of the content that can be part of a training process to local governments on how to institutionalize cash transfer programs as a humanitarian aid tool.

167 GOAL. (2019). Resilience for Social Systems (R4S) Approach. Retrieved from: <https://resiliencenexus.org/r4s/>

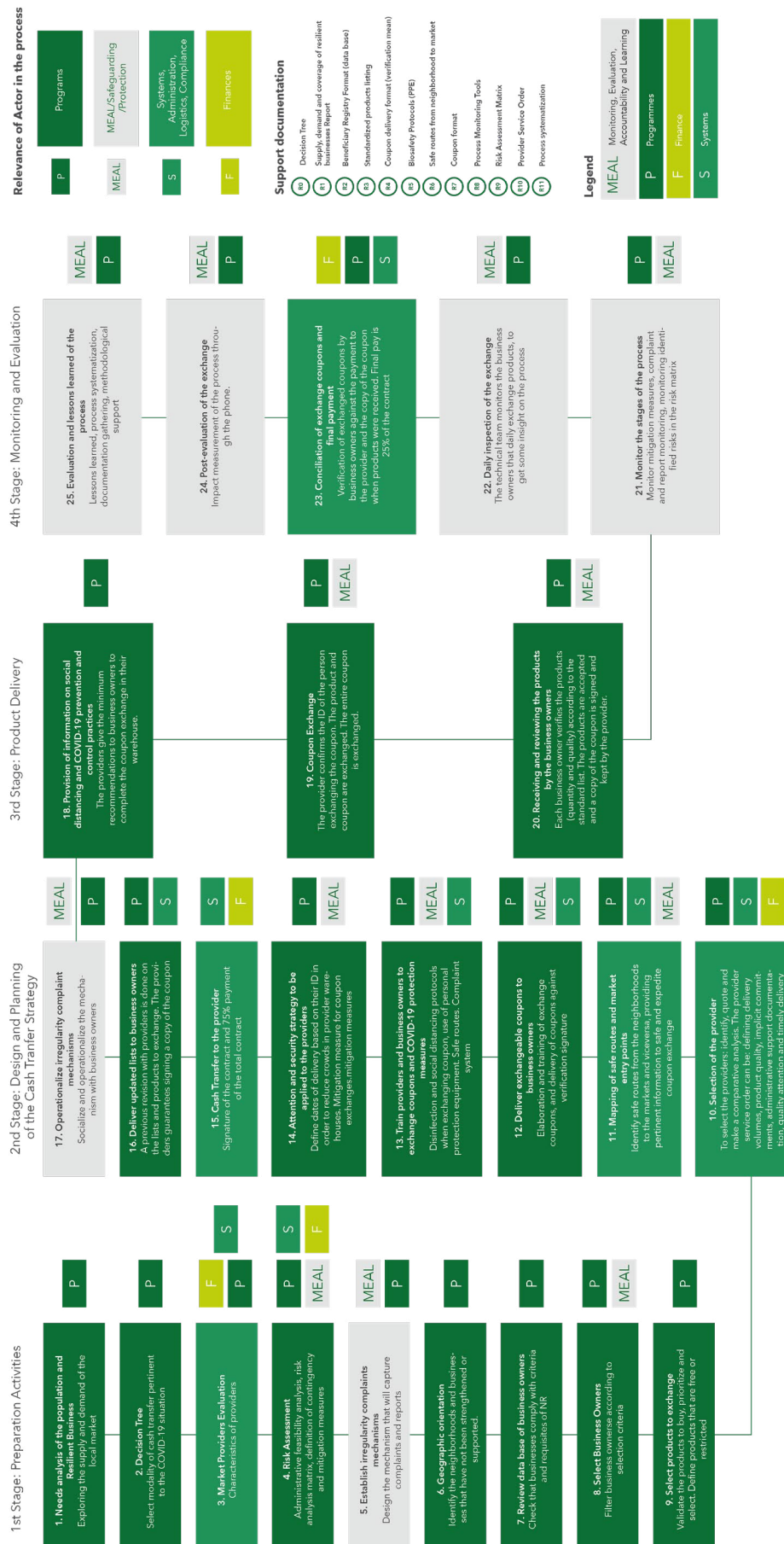
168 USAID. (2018). Market Systems Resilience: A Framework for Measurement. Retrieved from: https://beamexchange.org/uploads/filer_public/f7/60/f76077bc-40c0-4da8-aa3e-92a4982db25b/market-systems-resilience-measurement-framework-report_compressed.pdf

169 WFP. (2021). Shock-Responsive Social Protection in the Caribbean Handbook. Retrieved from: <https://www.calpnetwork.org/publication/shock-responsive-social-protection-in-the-caribbean-handbook/>

170 O'Brien, C., Holmes R. and Scott, Z., with Barca, V. (2018). Shock-Responsive Social Protection Systems Toolkit—Appraising the use of social protection in addressing largescale shocks. Retrieved from: <https://www.opml.co.uk/files/Publications/a0408-shock-responsive-social-protection-systems/srsp-toolkit.pdf?noredirect=1>

171 CALP Network. (n.d.). Fundamentos Básicos de los Programas de Transferencias Monetarias (PTM)

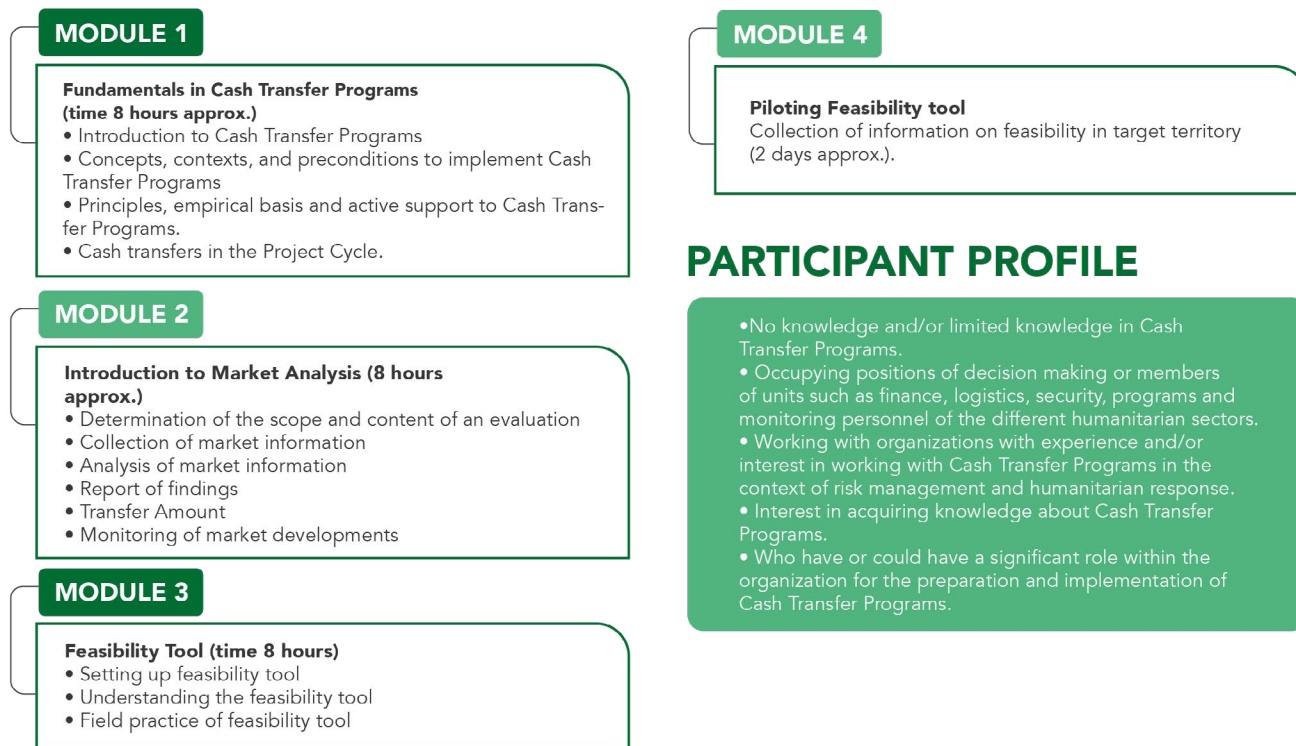
Figure 31. *Flowchart for implementing conditional vouchers through neighborhood stores as part of the humanitarian response to the COVID-19 pandemic in informal urban neighborhoods of Tegucigalpa.*



Source: GOAL, 2020. Find it [here](#).

Note: The flowchart describes all the steps followed and teams involved in the implementation of vouchers through neighborhood stores in response to the COVID-19 humanitarian response by GOAL in 2020. The process was structured into four stages: 1) preparation, 2) design and planning, 3) implementation, and 4) monitoring and evaluation.

Figure 32. Sample of training content and participant profile for increased adoption of Cash Transfer Programming in local governments proposed by RINA.



20.4 Neighborhood Fairs Promoting Financial Inclusion and Asset Protection. Neighborhood fairs on financial inclusion can be a very effective and practical way to build new connections and bring about change in financial inclusion in

the target neighborhoods. The RT should organize interactive events for families, enterprises, and financial service providers to meet, interact, and share information on services that are offered and address barriers to financial inclusion.

Case Study 26: Increased Access of Micro and Small Enterprises to Financial Services in Tegucigalpa, Honduras.

The Barrio Resiliente implemented by GOAL with USAID support, contributed to increasing access to financial services for neighborhood stores in high-risk neighborhoods in Tegucigalpa. As a first step, neighborhood stores (“pulperias” in Honduras) mostly led by women, were mapped and their capacities assessed. It was found that these micro and small enterprises faced numerous obstacles including the high risk of landslides, high levels of insecurity, limited access to transportation, limitations on access to support due to the informality of their business, and low income. Consequently, access to credit and input suppliers was very low. In collaboration with training agencies, the operational capacities were strengthened (e.g., cash management, accounting, marketing, credit management, etc.), and in 2016, with the participation of 21 pulperias, a savings and loan group (SLG) was established. Since then, the SLG has managed to create significant savings and has enabled its members to access loans with affordable rates and terms. To date, despite the occurrence of the COVID-19 pandemic, the SLG has continued to grow and support its members and other small businesses in their neighborhoods. Additionally, to increase access to other financial services and products, the program mapped the different financial services providers and 8 service providers confirmed their willingness to formal financial services to existing businesses in target neighborhoods. These providers were invited to a fair where they presented their products and services to the neighborhood stores. To date, 70% of the pulperia owners have successfully accessed loans with amounts ranging from \$208 to \$4,000, which they have invested in their businesses.



For more information, see case studies: [Here](#) | Contact GOAL at resilience@goal.ie

Step 21. Resilient Shelter Solutions (Upgrading and Relocation)



MCR Essential Four: Pursue resilient urban development and design

Safe and dignified shelter is a key component of resilient and inclusive neighborhoods. Housing in informal and precarious urban settlements is often built on land unsuitable for development, that is poorly serviced, exposed to risks of landslide, flooding, and other hazards, and constructed with unskilled labor using recycled and poor-quality materials. Moreover, households living in high risk settlements don't have a clear pathway to gain land tenure. The following actions can assist local governments and their partners to increase access to affordable and safer housing with pathways to land tenure.

21.1 Identify Shelter Infrastructure Options within the Neighborhood. The RT should assess the requirement for upgrading of shelter stock in each neighborhood considering two different categories of intervention: house improvement (HI) or house resettlement (HR). The risk assessment and planning for target neighborhoods completed in previous *Step 12 - Neighborhood Risk Assessment*, *Step 14 - RINA Neighborhood Master Plans (RNMPs)* and *Step 17 - Increase the Resilience of Vital Infrastructure*, will significantly influence the category of shelter intervention. The analysis of housing should consider neighborhood and settlement level factors, such as essential infrastructure located in risk zones, access, evacuation routes, water and sanitation systems, electrical networks, areas for recreation, lighting and public safety infrastructure, for instance, and identify areas where HI or HR should be carried out in line with each RINA Neighborhood Master Plan. As covered elsewhere, communities themselves can provide invaluable insights into the status of broader neighborhood level infrastructure and strategies for how to improve upon it.

In accordance with the risk assessments conducted already, shelter maps should identify "Green Zones" - areas that are safe and suitable for shelter; "Amber Zones" - areas that can be suitable for shelter provided that necessary mitigation works and other upgrades are completed; and "Red Zones" - areas that are unsafe and not suitable for shelter. As mentioned previously, one of the fundamentals to progress with RINA is that there must be a realistic expectation of permanency of the settlement and that the level of risk is acceptable to allow for this.

21.2 Assessment of the Social and Affordable Shelter Market. In many cases, households living in informal and precarious urban settlements face many barriers to accessing the formal shelter market due to high costs, uncertainty of land tenure, lack of access to credit or perceptions by financial actors that residents of high risk areas have low creditworthiness; and the administrative complexity of the formal housing market. However, there are often government social housing programs and programs from other agencies (such as Habitat for Humanity) that provide dignified and safe housing solutions for vulnerable families in informal and precarious settlements. Using the tools described in *Step 13- Selection of Critical Socio-Economic Systems*, the RT should coordinate an assessment of the social and affordable housing market system as it relates to the target neighborhoods. Again, these tools can guide the development of a comprehensive mapping and analysis of local systems but in most cases a simplified mapping and analysis of this system will be sufficient. See in Figure 33 below for an example of a simplified system mapping for social housing in Tegucigalpa in Honduras which

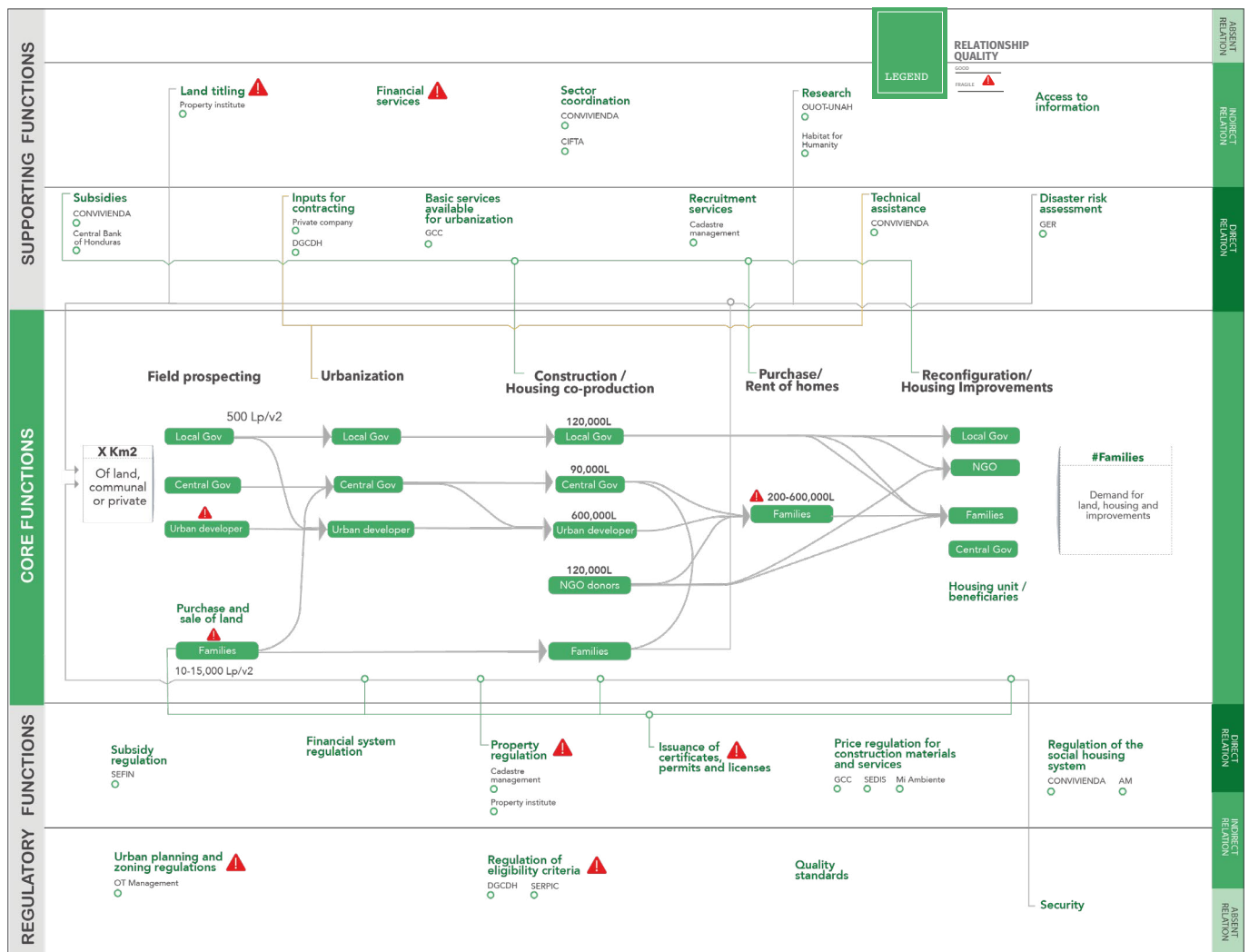
shows the key actors for and the relationship between them. Based on this analysis the RT should develop a strategy for stakeholder engagement to increase access for social and affordable housing for neighborhood residents. The RT should explore opportunities to engage the private sector to develop solutions to improve access to improved housing including exploring the development of financial options with finance service providers and market solutions to improve access to reputable building firms and developers. The RT should review opportunities for extending/modifying the use of subsidies for relocation and housing upgrading. Innovative solutions such as "Rent to Buy" and cooperative housing should also be explored. The RT should develop a strategy with partners for housing in the target neighborhoods and include for a series planning workshops with key stakeholders including neighborhood representatives

In the case of Barrio Mio (2012 - 2022) PCI and partners (including CORDAID) conducted an analysis of creditworthiness in high-risk urban areas and developed sample financial products that banks could use to extend affordable loans to households for upgrading existing housing or purchasing new. These financial products were designed to be able to be used in conjunction with subsidies from the national and municipal government, contributions from the private sector (such as low-cost construction materials and technical assistance), and implemented in conjunction with initiatives such as support for women's savings groups. While all public and private partners approved of the products and overall strategies, the partners confronted barriers to getting the initiative to take root and scale.

One of the main challenges to resolving housing in informal and precarious urban settlements is uncertainty or lack of land tenure. This is usually a complex legal issue that requires specialist legal advice. The RT should ensure that the RINA intervention leverages the inhouse legal capacity of the local government and that of national housing programs, as well as look to other organizations that can provide specialized legal advice.

21.3 Establish a Resettlement Protocol. The RT should support voluntary and participatory resettlement of residents from housing sites which are deemed unsafe and develop and follow a transparent protocol to guide the process that lays out the conditions and rationale for resettling households, the process of resettlement, the standards, and checks and balances in place to protect vulnerable households. In most cases, resettling households should occur within the same neighborhood or as close as possible to the residents' livelihood activities and social network. However, in some cases local governments will find that households don't have a strong preference for staying in a nearby neighborhood and may be able to find more suitable solutions elsewhere that are closer to work, extended family, or schools, for example. The RT should consider using a case management approach to relocation that examines equitable and low cost solutions to support households to find safe housing. In cases where staying within the same neighborhood is not possible due to safety, or other barriers, the RT should analyze together with other stakeholders and with each individual family what is the most suitable resettlement option with the available resources from participating partners and the household itself. In making this assessment the RT should consider protection issues, healthcare and education services, transport services, proximity to economic and social activities and other considerations. For more guidance refer to [Tool 120: Resettlement](#)

Figure 33. Social Housing System Map in Tegucigalpa, 2020.



*Guide for Populations at Risk of Disaster*¹⁷² published by the International Bank for Reconstruction and Development or refer to *Tool 121: Protocol for Resettling Families living in High Risk Areas in the Urban Context*¹⁷³ developed by GOAL and United Nations Development Programme.

Question the assumption that urban communities always want to be resettled together—and avoid resettling communities far away from their livelihoods, social and family networks, and schools.

Both in the wake of disasters and as part of urban planning, municipalities can consider that not all urban communities feel a strong need to be resettled nearby one another. In some cases, residents' social and family networks are not nearby, and this can enable the development of agile case by case solutions that decrease the cost and complexity of resettling residents. Similarly, municipalities should question "green field" construction projects that remove people from their places of work, schools, health services, and social networks. This is particularly the case when municipalities can identify existing housing stock that that can be made accessible or suitable at lower cost.

21.5 Strengthen Community Level Awareness and Buy In.

Since infrastructure projects associated with resettling households are highly sensitive, the RT should develop carefully designed communication campaigns and other mechanisms to raise awareness of the issues relating to housing upgrading and relocations, provide assurances on the process, the final outcomes, and equity and inclusion, prevent misinformation, and to foster support and gather input from neighborhood residents on the housing intervention.

21.6 Strengthen Institutional and Neighborhood Technical Capacities.

Not all infrastructure projects are highly technical and complicated, and communities can play important roles in contributing to improving infrastructure, as well as project monitoring and support. Infrastructure and housing interventions also benefit from broad networks of partners who have the capacity to contribute and ensure projects meet their objectives. Where possible, the RT should engage as many partners as appropriate in infrastructure upgrading, including from within the community, and build their capacities. For example, the RT can work with technical staff to delineate between housing infrastructure works that can be done with little or no technical expertise and those that require professional technical specialists and formal approval by appropriate authorities. Where they can be done largely without highly technical staff, the RT should build the capacity of communi-

172 Correa, Elena. (2011). *Populations at Risk of Disaster: A Resettlement Guide*, with Fernando Ramírez and Haris Sanahuja. Washington, DC. The World Bank: GFDRR. 142 p. xii. Retrieved from: <https://documents1.worldbank.org/curated/en/612501468045040748/pdf/653550WP0Box360settlement0guide0150.pdf?msckid=49cf8d0bb6d111ec8c767aa9dee1ba1>

173 GOAL, United Nations. (n.d.) *Protocol for Resettling Families living in High-Risk Areas in the Urban Context*. Retrieved from: <https://resiliencenexus.org/urban-resilience/urban-shelter-and-settlements/>

ties to be engaged in elements of the work. The RT should also organize training workshops on housing upgrading and relocation with key stakeholders -including members of the RINA Neighborhood Committees from the target neighborhoods and technical staff, such as municipal construction officials, licensed technicians, design professionals, construction sector workers, social workers, etc. In addition, the RT should facilitate training for neighborhood residents on supervision and oversight of HI and HR and ensure that all construction projects are accompanied by safety and protection plans for vulnerable residents. The RT should take care to guarantee all construction professionals have the appropriate technical capabilities and inspection, monitoring and evaluation systems to avoid mistakes that negatively affect structural quality, and that they comply with municipal building standards and good construction practices.

In the case of Barrio Mio, PCI/GC found that there were few local small construction companies with adequate capacity to assess, bid on, and complete infrastructure projects to an acceptable standard. This increased the cost and time of infrastructure work. Municipalities can consider partnering with organizations and private companies in the construction sector to identify and/or build the capacity of small construction companies (including from within target neighborhoods). This initiative can not only increase the number of companies able to complete work within the target areas, but it can reinforce local livelihoods and assist the initiative as it scales to new areas.

21.7 Design and Execute Housing Upgrading. The RT should coordinate with technical staff within the local government and with home owners to design housing upgrading

works addressing the potential risks described previously in *Step 12 - Neighborhood Risk Assessment* and *Step 17 - Increase the Resilience of Vital Infrastructure*. The RT should ensure that household residents are involved from the beginning of the upgrading process and fully informed throughout including of their expected contribution to the upgrade works. The RT should establish commitments and co-investment with the household residents and other partners in a written letter of agreement and prepare a plan for executing the works. The RT should ensure the level of commitment of the main parties: household residents, local government and other partners such as national government social housing programs. The RT should ensure there is a signed record of delivery of the completed works when the works are handed over to the household resident.

The following tools provide more detailed guidance on specific elements of housing infrastructure works:

- [*Tool 122: Latrine construction and maintenance manual in Neighborhoods*](#)¹⁷⁴ published by IDB, GOAL, and NDF.
- [*Tool 123: Rainwater Harvesting System Construction and Maintenance Manual in Informal Neighborhoods*](#)¹⁷⁵ published by IDB, GOAL, and NDF.
- [*Tool 124: Household Construction and Maintenance Manual in Informal Neighborhoods*](#)¹⁷⁶ published by IDB, GOAL, and NDF.
- [*Tool 64: Matrices for Disaster Risk Assessment in family buildings*](#)¹⁷⁷ developed by GOAL.
- [*Tool 125: Practical Guide for Social Housing*](#)¹⁷⁸ developed by GOAL.
- [*Tool 126: Toolkit for Municipal Housing Entities*](#)¹⁷⁹ developed by Global Communities.
- [*Tool 127: Tools for Processes Linked to Housing Solutions*](#)¹⁸⁰ developed by Global Communities.

Case Study 27: Partnership for Housing Infrastructure in Tegucigalpa, Honduras.

Under the Barrio Resilience program in Tegucigalpa in Honduras (2013 to 2022) the Municipality of Central District, neighborhood residents, the national social housing program - CONVIVIENDA, GOAL and private sector partners developed a solution which enabled the relocation and upgrading of more than 1240 houses. The solution enabled families to access a safe and dignified house and included a social housing grant from CONVIVIENDA, land, roof and flooring materials and service upgrading from the municipality, unskilled labor contribution from household residents, private sector construction expertise and efficiencies and additional support and funding to accompany process ensuring protection of families from GOAL and USAID BHA.

For more information, see the full case study in Spanish: [Here](#) | Contact GOAL at resilience@goal.ie



174 Antúnez, Brenda. (2019). Manual de Construcción y Mantenimiento de Letrinas. Retrieved from: <http://dx.doi.org/10.18235/0001766>

175 Paredes, G., Munguía, S. (2019). Manual de construcción y mantenimiento de cosecha de aguas lluvia en barrios populares de Tegucigalpa. Retrieved from: <http://dx.doi.org/10.18235/0001861>

176 Alemán, A. (2019). Manual para la Construcción y Mantenimiento de Vivienda. Retrieved from: <http://dx.doi.org/10.18235/0001669>

177 GOAL. (n.d.). Matrices for Disaster Risk Assessment in Family Buildings. Retrieved from: <https://resiliencenexus.org/urban-resilience/urban-shelter-and-settlements/>

178 GOAL. (n.d.). Practical Guide for Social Housing. Retrieved from: <https://resiliencenexus.org/urban-resilience/urban-shelter-and-settlements/>

179 Global Communities. (2022.). Set de herramientas para entidades municipales de vivienda. Retrieved from: <http://gcuate.org/BMSU/KITEMUVI.htm>

180 Global Communities (2022). Herramientas para Procesos Vinculados a Soluciones Habitacionales En Guatemala. Retrieved from: <http://gcuate.org/BMSU/KITVIVIENDA.htm>

Case Study 28. Retrofitting Housing Stock in Guatemala City.

Together with its partner Build Change, PCI assessed the risk associated with building practices and materials in areas across Guatemala City and then demonstrated strategies to retrofit existing housing stock against hazards associated with seismic activity and other hazards. These pilots were used to determine the materials, techniques, technical qualifications, and cost of retrofitting, as well as to engage with ministries and private sector partners in the construction and financial sectors to develop potential strategies to help households to cover the costs of retrofitting their houses. This includes adapting national subsidy programs to allow for retrofitting programs, providing low cost financing, low cost materials and technical support, and assisting households to consider strategies to generate income associated with the retrofit. As an example, the initiative found that retrofitting existing houses could not only make them safer at reasonable cost, but also safely add a second floor to many structures allowing them to generate rental income.

For more information, contact Global Communities at resilience@globalcommunities.org

Step 22. Resilience of Neighborhood Health Services



MCR Essential Eight: Increase infrastructure resilience

The status of health facilities in informal and precarious urban settlements plays an important role in resilient and inclusive neighborhoods. Health facilities can be considered critical infrastructure and RINA recommends the following measures to ensure health facilities are functioning to ensure the resilience and inclusion of neighborhoods.

22.1 Evaluate Neighborhood Healthcare Services. The RT should facilitate an assessment of how the health care system is functioning within the target neighborhoods, including the role of community health workers and the status of health facilities which service these neighborhoods. In addition to the tools previously recommended by RINA for local systems analysis the RT should also consider applying *Tool 128: Disaster Resilience Scorecard for Cities Public Health System Resilience Addendum*¹⁸¹ published by UNDRR. For assessing health facilities the RT should consider the four components of low-complexity neighborhood health facilities: Component 1 - geographical location, which characterizes the location of the health facility in relation to potential hazards, Component 2 - structural safety, evaluate whether the physical structure complies with the standards to provide quality services to the population, including in disasters contexts, Component 3, non-structural safety evaluate architectural elements, equipment, critical services, and access and circulation security, and Component 4 - assesses the technical, operational and administrative capacity of the facility both before, during and after a disaster. For assessing the status of health facilities is *Tool 129: Hospital Safety Index: Guide for Evaluators*¹⁸² by the World Health Organization and the Pan American Health Organization (PAHO). These assessments should be undertaken by suitably qualified health and building experts. Based on the results of assessments, the RT should coordinate with relevant health service providers, community health workers, ministry of health counterparts, and other partners to promote

community action and agree what support is required from the RINA intervention. The RT should coordinate and oversee a capacity building process that includes SBC campaigns at the neighborhood level with health service providers and other partners.

For additional guidance on evaluating healthcare services in informal settlements the RT should refer to *Tool 88: Sphere Standards Handbook*¹⁸³ and *Tool 130: Evaluation of Damages and Needs in Health for Disaster Situations (EDAN): Guide for Response Teams*¹⁸⁴ published in Spanish by PAHO, which can be used and integrated into evaluation of the operation and safety of health facilities.

22.2 Implement Measures to Ensure that Neighborhood Health Facilities are Operational and Safe in Emergency Situations. Based on the evaluation described above the RT should work with the administrators of the health facilities and community health workers (CHW) to adapt, develop or execute instruments or processes that will ensure response capacity and the continuity of essential services before, during and after emergency situations in the health facilities. These include emergency preparedness and response plans, standard operating protocols, evacuation routes, equipment operation manuals, accessories and safety tools, and training processes for all health personnel. The RT should coordinate with health facilities and CHW to strengthen capacities to protect mental health in disaster situations as described in *Tool 131: Mental Health and Psychosocial Support in Disaster Situations in the Caribbean*¹⁸⁵ by PAHO and also *Tool 132: Mental Health and Psychosocial Support in Humanitarian Emergencies*¹⁸⁶ by IASC. The RT should coordinate training for other relevant actors inside or outside the health facilities, including community health workers and neighborhood residents involved with implementing healthcare instruments or processes. When working with indigenous people, consult *Guidance Note on Health Disaster Risk Management with Indigenous Peoples*¹⁸⁷ developed by PAHO.

22.3 Learning from Previous Emergency Health Response Actions. Emergency situations are valuable, important learning opportunities for the various actors involved. The RT should coordinate with health service providers to document

181 UNDRR. (2020). Public Health System Resilience Scorecard. Consultative Version 2.0. Retrieved from: <https://program.unisdr.org/campaign/resilientcities/toolkit/article/public-health-system-resilience-scorecard.html?msclkid=131ae1dbb6d311ec9f40edb5efcb6a46>

182 PAHO, WHO. (2019). Hospital Safety Index: Guide for Evaluators. 2nd Edition. Retrieved from: <https://iris.paho.org/handle/10665.2/51448>

183 Sphere. (2018). The Sphere Handbook. Retrieved from: <https://spherestandards.org/handbook-2018/>

184 PAHO. (2010). Evaluación de daños y análisis de necesidades de salud en situaciones de desastre: Guía para equipos de respuesta. Panamá. Retrieved from: https://www.paho.org/disasters/dmdocuments/ER_EDAN.pdf

185 PAHO. (2012). Mental Health and Psychosocial Support in Disaster Situations in the Caribbean. Retrieved from: <https://iris.paho.org/handle/10665.2/3188>

186 IASC (IASC Reference Group for Mental Health and Psychosocial Support in Emergency Settings. (2010). Mental Health and Psychosocial Support in Humanitarian Emergencies: What Should Humanitarian Health Actors Know? Geneva. Retrieved from: <https://cms.emergency.unhcr.org/documents/11982/49286/Mental+Health+and+Psychosocial+Support+in+Humanitarian+Emergencies.+What+should+Humanitarian+Health+actors+know/227c3771-01ac-45ee-88ce-e810430b6f14>

187 PAHO. (2019). Guidance Note on Health Disaster Risk Management with Indigenous Peoples. Retrieved from: <https://iris.paho.org/handle/10665.2/51383>



each experience responding to health emergencies within the target neighborhoods and disseminate good practices or lessons learned to key stakeholders at the community level and with other stakeholders. Also, the RT could promote simulation exercises with health service providers, not only to test their emergency response capacity, but to identify gaps and further develop these before an actual emergency occurs. To do this refer to [Tool 133: WHO Simulation Exercise Manual](#)¹⁸⁸ developed by WHO. When working with indigenous people, consult [Improving Health Disaster Risk Management with Indigenous Peoples: Methodology for Simulation Exercises using Parallel Perspectives](#)¹⁸⁹ developed by PAHO.

Step 23. Resilience of Education Facilities

MCR Essential Eight: Increase infrastructure resilience

Equal access to quality education is inseparable from resilient and inclusive. Local governments can use the opportunity of urban upgrading programming to engage directly with education stakeholders: ministries, state and municipal officials, school staff, communities, and students themselves to examine trends associated with access to quality education in target communities. They can also look for synergies and opportunities to align and reinforce shared goals by sharing resources, technical expertise, examining synergies with other project elements (such as increasing the availability of community space for educational activities), community mobilization and awareness, and data collection and analysis, for example.

Education can also be severely disrupted for extended periods when crises occurs particularly if education facilities are utilized as emergency shelters for evacuated families. Children have a right to education and every effort must be made to ensure the

continuity of education with minimal disruption. Additionally, education facilities must be safe locations that provide protection to children and schools' staff. For these reasons RINA recommends the following actions to increase the resilience of education facilities.

23.1 Evaluate the Safety of Educational Facilities. The RT should coordinate with the Ministry for Education and other relevant education service providers to apply [Tool 134: School Safety Index](#)¹⁹⁰ published by UNICEF for all schools and education centers servicing the target neighborhoods. This index is comprised of five key components: **Component 1** evaluates the physical environment of the educational premises and, its exposure to hazards; **Component 2** evaluates the social environment and its exposure to social conditions that generate vulnerability in the educational community; **Component 3** evaluates structural elements of the education facility to determine if the structure meets the specifications to provide services safely; **Component 4** evaluates non-structural elements including architectural elements, equipment, and systems necessary for the operation of the educational premises and that are critical to the life or integrity of the people in the building; and **Component 5** evaluates functional elements, or operational and administrative capacities of the educational community to face or respond to damaging events.

23.2 Implement Measures to Ensure that Educational Facilities are Functional and Safe in Emergency Situations. The RT should share the results of the School Safety Index with the school administrators and neighborhood residents. The RT should support each school and educational facility to develop a School Disaster Prevention and Preparedness Committee - if this committee does not already exist. The RT should coordinate with the school administrators and the RINA Neighborhood Committee to identify and prioritize measures to address the findings of the School Safety Index. The RT should formalize agreements with partners and develop a work plan with the

188 WHO. (2017). Simulation Exercise Manual. Geneva: World Health Organization; 2017. Licence: CC BY-NC-SA 3.0 IGO. Retrieved from: <https://www.who.int/publications/i/item/WHO-WHE-CPI-2017.10>

189 PAHO. (2019). Improving Health Disaster Risk Management with Indigenous Peoples: Methodology for Simulation Exercises using Parallel Perspectives. Retrieved from: <https://iris.paho.org/handle/10665.2/51514>

190 United Nations Children Fund (UNICEF). (2012). Índice de Seguridad Escolar (ISE). Retrieved from: <https://inee.org/es/recursos/indice-de-seguridad-escolar-ise>

stakeholders involved addressing functional, physical or non-physical elements. Refer to [Tool 135: Standard Operating Procedures for Disasters and Emergencies in Schools](#)¹⁹¹ developed by IFRC and also its [Preparedness checklist for schools](#)¹⁹² and [Emergency provisions checklist for schools](#).¹⁹³

23.3 Strengthen Preparedness and Response capacities in Education Facilities. The RT should coordinate with the municipal emergency committee, national risk management agency, and other partners to establish a regular training program in each education facility for staff and students on Integrated Risk Management (IRM), and in preparation and response to the prioritized risk scenarios. This training programme should use training materials available from the municipal or national emergency risk management agency or that of the Ministry for Education. If none exist the RT should refer to the [Catalog of Tools and Information Resources on Disaster Preparedness in the Education Sector](#)¹⁹⁴ from the Regional Center for Disaster Information for Latin America and the Caribbean (CRID).

23.4 Develop School Safety Plans. The RT should coordinate with the same stakeholders to support educational facilities to develop a School Safety Plan and Disaster Preparedness and Response Plan and put in place a mechanism for these to be reviewed and updated regularly. It is recommended that School Safety Plans and Preparedness and Response Plans are reviewed annually to ensure they are functioning properly and that capacities are being maintained. The RT and partners should assist school administrators in developing a monitoring and evaluation mechanism including regular emergency simulation drills as a training exercise and also to test the functionality of the School Safety Plan and Emergency Preparedness and Response Plans. For further guidance the RT could refer to the [Comprehensive School Safety Global Framework](#)¹⁹⁵ published by UNISDR and [Tool 136: Protected School Manual](#)¹⁹⁶ published by IFRC. For more information and technical support on safe schools, the RT should refer to the [Worldwide Initiative for Safe Schools \(WISS\)](#)¹⁹⁷ by UNICEF, UNISDR, the Global Alliance for DRR and Resilience in the Education Sector, and other partners.

Step 24. Transform Public Spaces and Enhance Solid Waste Management



MCR Essential Four: Pursue resilient urban development and design

Informal and precarious urban settlements are typically inadequately planned at the outset or unplanned in their entirety and therefore there are often no designated public spaces within the neighborhoods to foster social cohesion or arrangements in place for solid waste management. RINA recommends the following actions to enhance solid waste management and transform public spaces, including areas that are high risk and unsuitable for housing into positive public spaces which support neighborhood resilience and inclusion.

24.1 Prioritize the Community Spaces to Transform. The RINA Neighborhood Master Plans developed under *Step 14 – RINA Neighborhood Master Plans (RNMPs)*, includes maps of the current and planned neighborhood layout and characterizes and prioritizes public spaces. Further design will be required to fully define plans for transforming these public spaces within the target neighborhoods. The RT should facilitate further planning workshops with neighborhood residents and other stakeholders to identify and prioritize projects to develop in public spaces. These public spaces may be located in high risk areas (including vacated lots of residents relocated from high risk areas) with potential to be transformed and contribute to neighborhood social cohesion. For further guidance on designing public spaces in the target neighborhoods the RT should consult [Tool 137: Handbook for Urban Interventions by Citizens: Strategies towards Better Public Spaces](#)¹⁹⁸ published by the Avina Foundation, Ocupa tu Calle and UN-Habitat.

24.2 Mobilize the RINA Neighborhood Committee (RNC). The RNC has been established under previous RINA Steps and will play a key role in supporting the successful execution of projects to transform public spaces. One of the roles that the RNC should undertake in relation to the public space projects will be the ongoing maintenance of these spaces. These projects can also be an important motivation for the RNC and other neighborhood residents to continue to collaborate for the RINA intervention and the ongoing efforts towards achieving resilient and inclusive neighborhoods. For additional design ideas on “Livable Cities” and continued engagement of neighborhood residents in these projects the RT should consult [Tool 98: The Urban Action Kit](#)¹⁹⁹ published by IFRC.

24.3 Participatory Design and Implementation of Projects. With support from the Neighborhood RINA Committee, the RT should convene neighborhood assemblies to present proposals for the transformation of public spaces, brainstorm design options, and solicit feedback for different stakeholder groups, and also request their support during the implementation of the projects. The RT should aim to validate the proposed designs or agree modifications during these meetings. The RT should fully investigate any disputes in relation to land tenure and ensure the space is either in public ownership or there is clear legal agreement in place with the landowner regarding the use of the property as a public space. After confirming the designs and land tenure issues the RT should formalize commitments between the various stakeholders, including organizations that implement or finance the project, landowner, RNC, and neighborhood residents. The RT should coordinate the completion and signing of formal written letters of agreement between all parties. The RT should support neighborhood residents to coordinate their contributions in labor, materials or financial resources, and their ongoing social auditing during the implementation and handover of the projects. RINA recommends that where possible these neighborhood projects should be implemented using community centered approaches such as the [Tool](#)

191 IFRC. (2021). Standard Operating Procedures for Disasters and Emergencies in Schools. Retrieved from: <https://www.ifrc.org/document/standard-operating-procedures-disasters-and-emergencies-schools>

192 IFRC. (2021). Preparedness checklist for schools. Retrieved from: <https://www.ifrc.org/document/preparedness-checklist-schools>

193 IFRC. (2021). Emergency provisions checklist for schools. Retrieved from: <https://www.ifrc.org/document/emergency-provisions-checklist-schools>

194 Centro Regional de Información sobre Desastres América Latina y el Caribe (CRID). (2009). Catálogo de herramientas y recursos de información sobre Preparativos para Desastres en Educación. Retrieved from: <https://higieneyseguridadlaboralcvcs.files.wordpress.com/2013/01/herramientas-y-recursos-de-informacion-3b3n-sobre-preparativos-para-desastres-en-educacion-3b3n.pdf>

195 UNDRR. (2017). Comprehensive School Safety: A global framework in support of the Global Alliance for Disaster Risk Reduction and Resilience in the Education Sector and The Worldwide Initiative for Safe Schools. Retrieved from: <https://www.unisdr.org/conference/2019/globalplatform/programme/side-events/assets/pdf/5cd546e7ec6aaCSS-Framework-2017.pdf?msclid=d6af2623b6d811ec95e608b403469341>

196 IFRC. (n.d.). Escuela Protegida. Retrieved from: <https://www.eird.org/cd/toolkit08/material/proteccion-infraestructura/escuela-protegida/manual.pdf>

197 UNICEF, UNISDR, The Global Alliance for DRR & Resilience in the Education Sector. (n.d.) Iniciativa Mundial para las Escuelas Seguras. Retrieved from: <https://www.unicef.org/lac/media/2351/file/PDF%20Publicaci%C3%B3n%20Iniciativa%20mundial%20para%20escuelas%20seguras.pdf>

198 Ocupa Tu Calle, ONU-Habitat y Fundación Avina. (2018). Intervenciones Urbanas Hechas por Ciudadanos: Estrategias Hacia Mejores Espacios Públicos. Lima: Ocupa Tu Calle, ONU-Habitat y Fundación Avina. Retrieved from: <https://www.avina.net/wp-content/uploads/2019/08/Manual-de-Intervenciones-Urbanas.pdf>

199 International Federation of Red Cross Red Crescent Societies. (n.d.) Urban Action Kit. Retrieved from: <https://preparecenter.org/toolkit/urban-action-kit/>



*72: Projects Executed by Communities Model*²⁰⁰ developed by the Honduran Social Investment Fund, USAID, GOAL and other partners. The RT should ensure ongoing regular communication with residents and other stakeholders through the RNC and neighborhood assemblies throughout the execution of these projects to address potential areas of conflicts and avoid any misunderstandings.

The design workshops and project implementation are an important opportunity to engage youths and other neighborhood residents and demonstrate how they can use their skills and creative talents for functional and constructive projects to transform their neighborhood, ensuring their meaningful participation as users of these spaces. For further guidance on participatory design approaches and to ensure gender mainstreaming for these projects the RT should consult *Tool 138: The Multidisciplinary Guide for Municipal Design and Intervention in Public Spaces with a gender focus*²⁰¹ published by the Local Development Feminist Collective and *Tool 139: The Methodological Guide for Intervention of Community Spaces*²⁰² developed by GOAL and focused on informal and precarious urban settlements and *Tool 140: A Practical Guide to Implementing "Achieving Together"*²⁰³ developed by GOAL.

24.4 Agree on a Maintenance Plan for Public Spaces. The RT should engage as broad of participation of neighborhood residents and other stakeholders as possible in the development of these projects and also in collaborating for ongoing maintenance. The RT should support the development of maintenance plans for each space in close coordination with the RNC. The RT should arrange for a formal inauguration of each project including a small ceremony in which an Acceptance and Work Handover Act is signed along with the maintenance plan and both documents should be read in the presence of attendees.

24.5 Improving Solid Waste Management. Solid waste management services are generally provided by local government or private business. Often in informal and precarious urban settlements there is poor management of solid waste and inadequate collection services. The RT should coordinate with municipal authorities and neighborhood leaders to improve waste collection services. The RT should coordinate neighborhood clean-up campaigns, ensuring in particular that drains are cleared of rubbish in advance of rainy seasons. The RT should explore with neighborhood residents the use of recycled materials for the construction of public spaces described above. For example, old tires, and plastic bottles, etc can be used in innovative ways to construct community parks, benches, retaining walls and walkways, neighborhood art, etc. which can significantly enhance the landscape of informal settlements. The RT should develop plans and ensure that commitments are agreed upon with neighborhood residents to improve solid waste management including regular clean-up campaigns and other anti-littering campaigns. Other improvements to solid waste management infrastructure should be considered under *Step 17- Increase the Resilience of Vital Infrastructure* and *Step 19 - Local Market Systems for Resilience and Inclusion*. For further guidance on solid waste management the RT should consult *Tool 141: Manual on Solid Waste Management in Informal Neighborhoods*²⁰⁴ published by the InterAmerican Development Bank in collaboration with GOAL.

Step 25. Interim and Final Evaluation



Essential Six: Strengthen institutional capacity for resilience

25.1 Conduct Interim and Final Evaluations: Throughout the implementation of RINA, the RT should undertake regular participatory interim evaluations of progress as described in the RINA Monitoring and Evaluation Plan. Evaluations may be undertaken at key milestones -such as at the completion of a phase of the initiative, as well as at the end of the initiative

200 FHIS. (2006). *Projects Executed by the Community Model*. Honduras. Retrieved from: <https://resiliencenexus.org/urban-resilience/urban-shelter-and-settlements/>

201 Colectiva Feminista para el Desarrollo Local. (2020). *Guía Multidisciplinaria para el diseño e intervención municipal en espacios públicos*. San Salvador, El Salvador. Retrieved from: <https://www.fad.es/wp-content/uploads/2019/05/Guia-multidisciplinaria-para-la-intervencion-en-espacios-publicos.pdf>

202 GOAL. (2020). *Guión Metodológico para la intervención de Espacios Públicos Comunitarios*. Retrieved from: <https://resiliencenexus.org/urban-resilience/urban-shelter-and-settlements/>

203 GOAL. (2020). *Guía Práctica para la implementación de Logrando Juntos*. Retrieved from: <https://resiliencenexus.org/urban-resilience/urban-shelter-and-settlements/>

204 Rischmagui, G. (2019). *Manual de manejo de desechos sólidos en barrios populares de Tegucigalpa*. Retrieved from: <http://dx.doi.org/10.18235/0001855>

ted *Neighborhood Improvement Projects*²¹⁴ developed by Global Communities.

*Knowledge Dissemination Strategy*²¹⁵ published by the Inter-American Development Bank. This strategy will be useful in determining the types of materials and formats to prepare based on the different audiences or groups the RT aims to reach. The RT should pay particular attention to key decision makers in the city administration and other stakeholders who may be interested in replicating or supporting the replication of RINA in additional neighborhoods or additional cities.

26.3 Communicate Learning with Neighborhood Residents and other Key Stakeholders. Lessons learned from implementing RINA are relevant not only to the RT, but also to the target population and other key stakeholders. To better guide the communication and dissemination of the learnings it is recommended that the RT design a knowledge dissemination strategy as described in *Tool 145: Guide for*

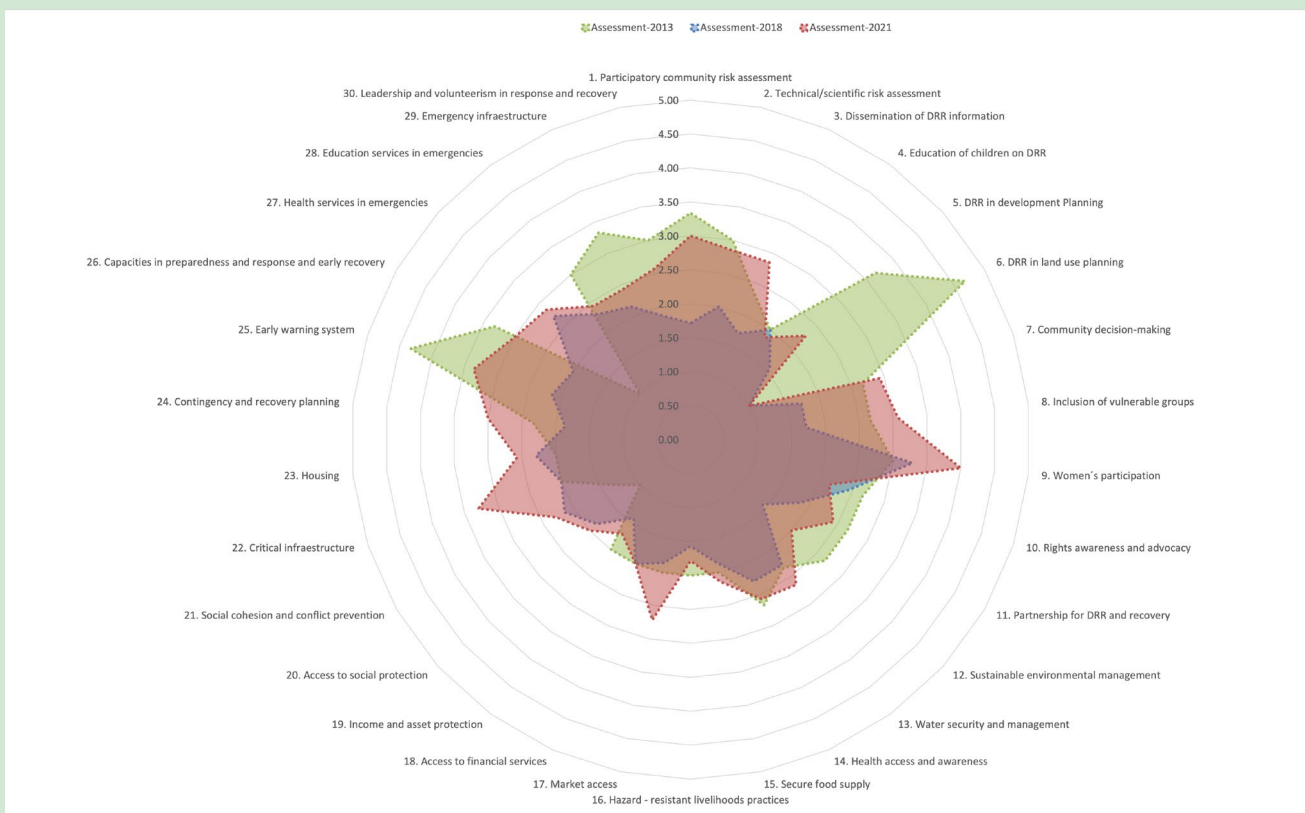
Case Study 29: Measuring Neighborhood Resilience using the ARC-D Toolkit.

The “Analysis of the Resilience of Communities to Disaster (ARC-D)” Toolkit developed by GOAL can be used to measure the level of resilience of communities through the analysis of 30 resilience components and 5 levels of resilience. GOAL applied the ARC-D toolkit in 8 neighborhoods under the Barrio Resiliente Project in Tegucigalpa to deepen understanding of the context of each neighborhood and their level of disaster resilience to prioritized risk scenarios.

The ARC-D toolkit was peer reviewed in the *“Practitioner approaches to measuring community resilience: The analysis of the resilience of communities to disasters toolkit”* academic article developed in collaboration with Harvard Humanitarian Initiative and RAND Corporation published in 2020. This article used, as a case study, ARC-D assessments made by the Barrio Resiliente program in 2013 and 2018. The assessments helped to identify and monitor strategic interventions to increase communities’ resilience.

The ARC-D measures demonstrated a continual increase in resilience score from 51% in 2013 (in 3 assessed neighborhoods), to 39% in 2018 and 51% in 2021 (of 8 assessed neighborhoods). These scores indicate a shift from level 2, low resilience (“certain awareness of the problems, willingness to act, some actions taken, but actions are fragmented and only short-term solutions”) to level 3, medium resilience (“Awareness of the problems and longterm actions taken, but not related to a long-term strategy or addressing all aspects of the problems”).

Figure 34. Communities’ resilience score by each 30 ARC-D resilience components - 2013, 2018 and 2021 assessments



Note: The assessment made in 2013 studied the Jose Angel Ulloa, Jose Arturo Duarte and Nueva Providencia neighborhoods’ level of resilience. The assessments made in 2018 and 2021 studied the Jose Angel Ulloa, Jose Arturo Duarte, Nueva Providencia, Betania, Las Brisas, Nora de Melgar, Los Pinos, and Villanueva neighborhoods’ level of resilience.

For more information, see the Analysis of Resilience of Communities to Disasters (ARC-D) Toolkit: [Here](#) | Contact GOAL at resilience@goal.ie

214 Global Communities. (2022). *Aplicativo para Sistematizar Proyectos de Mejoramiento Integral de Barrios*. Retrieved from: http://gcuate.org/BMSU/KITMIB_archivos/12%20KIT%20MIB.pdf
 215 IADB. (n.d.). *Guía para estrategia de diseminación de conocimiento*. Retrieved from: https://docs.google.com/document/d/18hYU9-Hh7niY-S2r_Y19nyKz3I-S2IXdguAYjZgy7djE/pub

PHASE IV.

ADAPT & SCALE AT THE CITY LEVEL

Step 27. Integrate RINA into Strategic Planning



MCR Essential Four: Pursue resilient urban development and design

RINA should be seen as a strategic approach for transforming informal and precarious urban settlements. City management can adapt this approach to make it relevant to their particular context. It is recommended that the strategies developed for, and lessons learned from RINA be incorporated in whole or part into strategic planning frameworks to support resilient and inclusive cities.

27.1 Assess How Urban Planning at City Level Addresses the Needs of Informal and Precarious settlements. The RT and their partners can investigate how the local government incorporates planning in relation to informal and precarious urban settlements within wider city level planning processes. This includes carrying out rapid diagnosis of the city's current planning processes such as development planning, land use planning, development of regulations and public policies, processes for formalizing urban settlements, etc. and how these address the issues relating to informal and precarious urban settlements.

27.2 Keep Inventories of Informal and Precarious Urban Settlement Up to Date. Informal and precarious urban settlements are constantly changing and, as described, many cities are undergoing rapid expansion and therefore inventories of informal and precarious settlements will need to be updated regularly. The RT can regularly update a map of these settlements and also update the inventory of settlements completed under *Step 2 - Preliminary diagnostic of high-risk urban areas*, by identifying, mapping and delimiting areas of informal and precarious settlements. This includes those that are newly established or are undergoing expansion, as well as those that are well-established in the city. Ensuring the quality and accuracy of this inventory will be a key advocacy tool for incorporating the needs of informal and precarious urban settlements in ongoing and future city planning.

27.3 Define Trends in Expansion and Occupation of Informal and Precarious Urban Settlements. Local governments and their partners can also collect information from secondary sources and by conducting interviews with key informants to define trends in urban expansion. Additionally, they can carry out workshops with key stakeholders to analyze the growth patterns of the city. This information can be compared with the inventory of informal neighborhoods. Further analyses can also be conducted to define trends in expansion informal neighborhoods.

27.4 Adapt Design Codes and Regulations for Urban Development. In order to transition informal urban settlements to into being formally recognized within cities, existing urban

planning regulations and design codes can be adapted to the reality of informal settlements. For example, international design codes in relation to surface water drainage places very high restrictions on gradients to protect against erosion to pipelines. However, this can restrict investment in putting in place basic drainage for controlling surface water in informal settlements built into steep mountain slopes. Insisting on very high standards of design codes can therefore prevent investment in improving conditions of informal settlements. In many cases, an intermediate standard which is "good enough" can be applied. Local policies, laws or instruments may more effectively incorporate an incentive-based approach rather than being purely regulatory (e.g., granting preferential tax treatment in exchange for providing protection to natural areas). Further, design codes rarely incorporate the infrastructure needs of informal and precarious settlements. For example, cities normally formally adopt internationally design standards for sanitation, but many informal settlements often use latrines with no established design standard. Similarly, in relation to rainwater harvesting, small scale timber house construction, retaining walls built with recycled tyres, etc. Informal settlements often need an intermediate design standard that is more relevant and attainable and enables informal settlements to progress to improve living conditions and reduce disaster risks.

27.5. Advocating for Inclusion of Informal and Precarious Urban Settlements in City Planning. The RT should engage planning departments and city management to point out where informal and precarious settlements are overlooked in planning processes and explore ways to address this. This can involve facilitating visits for planners and management to see and know the reality being faced by neighborhood residents. The RT should engage with professional bodies such as the college of engineers and college of architects to put forward design standards that are "good enough" and more appropriate for informal settlements. The RT should develop an action plan of measures that will ensure that city planning is more inclusive of informal and precarious settlements. For further guidance on developing strategies for planning processes more inclusive of informal and precarious urban settlement the RT should consult *Tool 146: Managing Comprehensive Neighborhood Improvement Projects: A Methodological Guide for Local governments*²¹⁶, developed by Global Communities and *Tool 147: Practical Guide for Urban Planning for Informal Settlements*²¹⁷ developed by GOAL.

Where local governments do not yet have a dedicated budget for resilience and inclusion in informal and precarious urban settlements, the RT should advocate for the integration of resilience and inclusion in these settlements into development plans of the local government and subsequently, in the Annual Operating Plans (AOP) and the municipal budget.

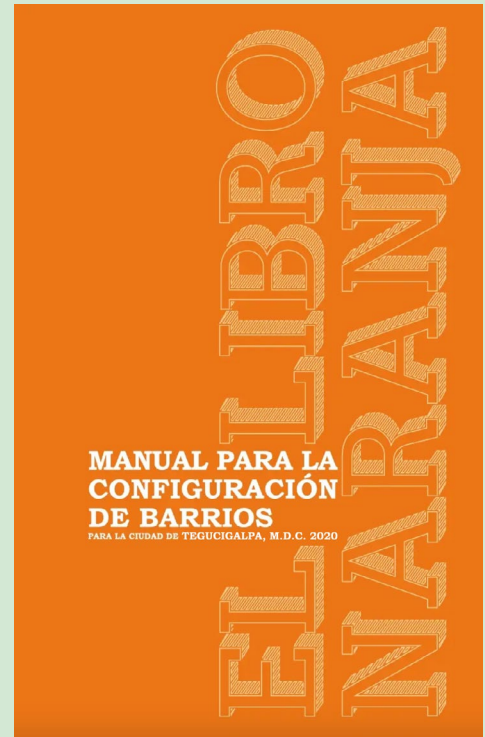
216 Global Communities (2022). Gestionando proyectos de mejoramiento integral de barrios: una guía metodologica para municipalidades guatemaltecas. Global Communities: Guatemala City. Retrieved from: http://gccuate.org/BMSU/KITMIB_archivos/3%20KIT%20MIB.pdf

217 GOAL. (2021). Guía Práctica de Planificación Urbana. Retrieved from: <https://resiliencenexus.org/urban-resilience/urban-shelter-and-settlements/>

Case Study 30. The Neighborhood Configuration Manual (The Orange Book) - Tegucigalpa, Honduras.

The Neighborhood Configuration Manual was developed for the city of Tegucigalpa to set out design standards inclusive of informal and precarious urban settlements. In December 2016, the local government of the Municipality of the Central District in Honduras approved "*The Orange Book*" as a complementary and support tool for urbanization in its territory. The Orange Book brings together existing rules and regulations in the city which are necessary to plan, design, and execute urban projects. Its purpose is to improve decision-making in the design stage of urbanization projects and mitigate disaster risk in the city, especially in informal and precarious urban settlements. The Orange Book is aimed at professionals: those responsible for urban planning; civil engineers; or architects; who develop, design, execute, or supervise urbanization projects. It includes general indications for the execution of an urbanization; selection of a safe site; configuration of urbanizations; access roads; water supply systems, sewerage, rainwater harvesting systems, electric power networks, public lighting, and solid waste management.

The development of the Orange Book was led by the local government and GOAL under the Barrio Resiliente (Resilient Neighborhood) program, (2013-2021), supported by USAID. It was developed in close collaboration with different technical units within the local government, national government agencies, academic institutions, and civil society organizations. An exhaustive process of data collection and analysis was carried out. This process identified a number of key gaps in design standards including for surface water drainage, construction and maintenance of rainwater harvesting, integration of environmental practices and climate change adaptation, urban landscaping, low cost disaster mitigation works, and latrine and low cost sanitation design. To address these gaps, the Orange Book proposes design standards based on international and local best practices. Finally, to institutionalize the Orange Book, the local government reviewed and certified it, followed by a dissemination process. The Orange Book was made available to the public on the local government's website, and forums were held with university students and professionals from public and private institutions. Also, the local government made presentations on the Orange Book to developers and professionals linked to the Honduran Building Code and professional associations.

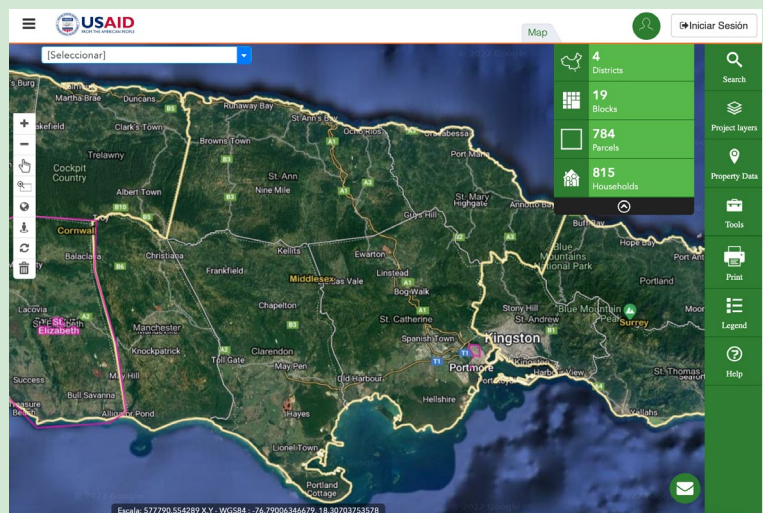


For more information, refer to [The Orange Book](#) | Contact GOAL at resilience@goal.ie

Case Study 31: Building Resilience and Capacities for Emerging Disasters (BRACED) in Jamaica.

Faced with the insecurity of land tenure, the BRACED project, 2014-2019, implemented by Habitat for Humanity with USAID support, developed the *Territorial Information Management System Platform*, which is an open source land management tool to reduce the incidence of security of tenure. With improved safety, families now have the opportunity to secure the occupation of their land and invest in their homes against disasters with resilient building skills developed by the project.

For more information, the full case study: [Here](#) | Contact: Maria Luisa Zanelli, Habitat for Humanity International, MZanelli@habitat.org or Monica Ramirez, Habitat for Humanity International, MRamirez@habitat.org



Step 28. Promote RINA Scale Up



Essential Six: Strengthen institutional capacity for resilience

As mentioned above, RINA is intended to be implemented with an intention to scale and replicate to other informal and precarious neighborhoods throughout the city. Some additional considerations that are inseparable from effective efforts to scale the approach are described in this step.

28.1 Document RINA Experience. The information generated from the implementation of RINA will serve to inform the potential scale up of the approach and its formal adoption by cities including roll out to additional neighborhoods. The RT should collate and document all relevant information during the implementation of RINA and ensure that materials developed are appropriate and relevant for different audiences that may wish to or are in the process of adopting RINA. Documentation should focus not only on project accomplishments, but also on its challenges and lessons learned.

28.2 Advocate with Stakeholders for Adoption of RINA. The RT should organize planning and coordination meetings with key stakeholders to share the experience of RINA and advocate for its adoption and scaling. The RT should support the elaboration of written signed commitments to scale RINA, and support future initiatives within neighborhoods. Advocacy should also be directed to stakeholders from both the public and private sector, including financial institutions, government institutions, multi-lateral investment banks, UN Agencies, and programs such as the Making Cities Resilient Campaign and the UN Habitat Urban Agenda.

28.3 Facilitate Exchange of Experience. The RT can facilitate exchanges of experience between neighborhoods, between cities, and with other stakeholders to share the learning from RINA and to promote its replication and scale up. The scale of these exchanges will be determined by the resources available to the RT.

An Example of Planning for Scale From Day 1: Where possible, municipalities should plan for scaling their initiatives from the outset. In Barrio Mio, PCI collaborated with ministries, private partners, and the municipality to demonstrate the neighborhood approach for urban upgrading in two communities that were different from one another, but collectively representative of many of the challenges faced in other areas of the city. Once work was well underway, the strategies and lessons learned from those communities were used to replicate upgrading in an additional 15 communities, and later scaled to inform work on a larger city-wide scale.

Step 29. Accelerate Disaster Recovery and Build Back Better



MCR Essential Ten: Expedite recovery and build back better

The RINA manual focuses on reinforcing the resilience and inclusion of informal and precarious urban area. Local governments often initiate engagement in high risk informal settlements as a result of a disaster. RINA should also be used to inform and guide response and recovery actions from impact of a disaster event. While there are many sources of informa-

tion and helpful tools on urban humanitarian assistance, the following broad considerations are intended to inform thinking about how to integrate disaster planning and response using the RINA approach.

BEFORE DISASTER

29.1 Strengthen Existing Systems for Disaster Preparation and Response. In most cases, countries have existing systems in place outlined by national policies for how disaster preparation and response is intended to be managed by government agencies and other actors at all levels—national, regional, state, municipal, and local community. It is important that local governments work with and through these systems to make sure preparedness and response structures (particularly at the community and municipal levels) are operational, following national guidance for who is represented on committees, and how they are trained and equipped.

An essential first step for disaster response planning is to make sure municipal and community committees are formed and strengthened. In some cases, national ministry staff may be able to provide trainings directly to communities—or better—to do trainings of trainers at the municipal level so that the local government can replicate them across many neighborhoods. Local governments should consider several priorities for these trainings: 1) strengthen the inclusive governance of preparedness and response committees and their emergency response plans; 2) ensure they are tightly linked to communities on the ground and able to represent their needs; 3) look for opportunities to strengthen how they work with other nearby communities in emergencies; and 4) strengthen how they work vertically with municipal committees, and in turn, how local governments work with higher state, regional, and national levels so that all actors in the system are aligned, have clear protocols, and are familiar with how they will respond to crises together.

Local governments can further strengthen these trainings by using the data and information already collected by urban upgrading projects to make sure they are context specific and relevant. For example, they can use the specific crisis scenarios generated in earlier steps to train neighborhood committees on specific disaster events that are most likely to impact them; develop specific strategies to meet the unique needs of a diversity of people in the community—such as marginalized households, youth, women, older adults and people with disabilities; and utilize existing zoning and risk maps to inform strategies about where people can be safely sheltered in the wake of crises, and areas that are not safe to utilize for shelter, for example. To the degree that local governments can adapt, tailor, and complement official training strategies so they are highly contextualized and applied to communities, they are more likely to be effective and sustained.

Local governments should consider creating simulations that are tailored to the local context (such as simulations of most likely disasters), and involve community members, community DRM committees, and participation of municipal, state, regional and national officials.

29.2 Foster Alliances and Citizen Participation. To complement the steps above to strengthen official committees dedicated to disaster response, the RT should can raise awareness within communities and among a broader range of public and private actors in the immediate area. This includes on likely disaster scenarios, how the national system for disaster response works and the roles of formal bodies within it, the important roles individuals, households, community committees, local institutions (such as schools and health clinics), and private enterprise can play when emergencies happen, and the benefits of pre-disaster recovery planning. To ensure a broad participation and commitment of key actors, the RT should refer to the stakeholder map developed under *Step 7 - Establish Strategic Alliances*, and ensure this map includes all relevant stakeholders who can support post-disaster reco-

very of the target neighborhoods (e.g., public service agencies, private sector businesses, academic institutions, local or international NGOs, Community Based Organizations, etc.).

Where possible, the RT should consider establishing Memorandums of Understanding with essential stakeholders that describe what actions they can take in support of disaster recovery and building back better. For further guidance the RT should refer to [Tool 148: Disaster Recovery Framework Guide](#)²¹⁸ published by UNDP.

The RT can also work with its partners to gather and analyze key data and information to inform recovery planning, such as technical studies, land use plans, data on education, health, WASH. As an example, municipalities can determine those areas that are suitable for reconstruction, those that require mitigation before they can be used for specific purposes, and areas that can be redeveloped; areas that require replanning to improve access and egress and public safety, for example.

29.3 Strengthen Capacity for Disaster Needs Assessments:

The RT should define what tools and technological platforms are to be used for needs assessments following a disaster and what measures can be incorporated into these tools to capture relevant information that will inform early recovery and building back better. In all cases, these assessment tools should utilize or incorporate approved national tools for emergency damage assessments. This will ensure that the data requested by ministries are collected and transmitted in the right format so that they can program national emergency resources as quickly as possible. However, local governments will often find that the basic data required by ministries is inadequate to inform the more comprehensive emergency responses required at the municipal level. Therefore, local governments should consider developing (or often easier, *adapting* existing assessment tools) that they can utilize in emergencies. In many cases, local governments will find that these tools are most helpful when they can inform a broad range of interventions that support individuals, households, communities as a whole—and critical systems—so that as many public and private resources can be mobilized as fast as possible to meet immediate needs on a large scale and accelerate recovery. As an example of a tool local governments can work from, RINA recommends [Tool 149: Post-Disaster Needs Assessment \(PDNA\)](#)²¹⁹ developed by the Global Facility for Disaster Reduction and Recovery (GFDRR) or other similar tools.

29.4 Recovery Planning. The RT can facilitate recovery planning (planning that is done *before* disasters to guide how local governments will lead the recovery process after disasters) with broader public and private actors through the multi stakeholder group. For example, this can include representation from across many government agencies—health, education, transportation, and basic infrastructure; the private sector (such as from the finance and construction sectors); universities; and other local and international organizations. Again, even at the higher administrative level, this planning is best done using context specific risk scenarios as a basis such that the resulting strategies are highly relevant.

The RT should ensure that the recovery plans are consistent with the broader and longer-term development goals for the target neighborhoods and local government and seek to close both pre-existing development gaps and any new gaps caused by the disaster (GFDRR, 2020). And, similar to the recommendations of the UN Global Framework for Disaster Risk Reduction, RINA suggests that recovery planning address five main elements: how to “build back better” in the wake of disasters; improve gender equity and inclusiveness; reduce vulnerability to shocks and stresses; protect natural resources and the environment; and adapt to the challenges associated with climate change.

Other key features of recovery plans include (i) transparent criteria for when neighborhoods affected by crisis are eligible for recovery assistance; (ii) establishment with key public and private partners; (iii) identification of financing mechanisms and reserve funds for recovery programming; (iv) and defining the roles and responsibilities of public sector partners, private sector partners, civil society organizations and the neighborhood residents. The RT should facilitate reviews and updating of recovery plans as new information or resources become available. For more information on pre-disaster recovery planning, the RT should refer to [Tool 150: Guidance Note on Recovery: Pre-Disaster Recovery Planning](#)²²⁰ from the International Recovery Platform. For further guidance on how to develop a disaster recovery framework see the [Tool 151: Build Back Better in Recovery, Rehabilitation and Reconstruction](#)²²¹ developed by UNISDR.

29.5 Institutionalize Broad Disaster Recovery Agreements in Advance of Crises:

Based on the above recovery planning, the RT can draft agreements with key partners that outline these critical pathways to building back more resilient communities. For example, they can draft agreements with public and private partners (such as through MOUs) that document the intention to rebuild according to or informed by updated land use plans—avoiding resettling people into high risk areas and instead finding participatory ways to resettle them in safe spaces nearby livelihoods, social networks and schools; they can outline the intention to ensure all structures are rebuilt using building codes and that public areas should receive required improvements for access and egress and disaster mitigation infrastructure. The case study presented previously on the compendium of design standards for the city of Tegucigalpa published as the [Tool 152: Orange Book: Neighborhood Configuration Manual](#)²²² is a good example of advocacy for policy change to increase resilience and inclusion.

DURING DISASTER

29.6 Needs assessment and early recovery. There are many sources of information and tools to assist local governments and their partners in conducting assessments of the impacts of shocks and stresses. As mentioned above, local governments play critical roles in conducting assessments of the impact of disasters in their territories and/or facilitating the assessments of others. This includes making sure that the assessment protocols outlined by the national disaster response system are being followed in all affected areas of the local government; that the information being collected is inclusive, equitable, and transparent; and is shared with municipal stakeholders and the higher levels of the national disaster response system so that it informs national responses. Local

218 EU, GFDRR, UNDP. (2020). Disaster Recovery Framework Guide: Revised Version March 2020. Retrieved from: <https://reliefweb.int/report/world/disaster-recovery-framework-guide-revised-version-march-2020>

219 UNDP. (2013). Post-Disaster Needs Assessments (PDNA). Volume A Guidelines. Retrieved from: <https://www.gfdr.org/sites/default/files/publication/pdna-guidelines-vol-a.pdf>

220 IRP. (2012). Guidance Note on Recovery: Pre-Disaster Recovery Planning. Retrieved from: https://www.preventionweb.net/files/31963_predisasterrecoveryweb.pdf

221 UNISDR. (2017). Build Back Better in Recovery, Rehabilitation and Reconstruction. Retrieved from: https://www.unisdr.org/files/53213_bbb.pdf

222 Parra, Javier. (2020). El Libro Naranja: Manual para la configuración de barrios para la ciudad de Tegucigalpa, M.D.C. AMDC, GOAL, USAID. Retrieved from: <https://resiliencenexus.org/fr/urban-resilience/ewrs/>

governments will often need to rely on more in-depth assessments of the impacts of disasters than those conducted by ministries at the outset of responses. As mentioned above, it is often best to adapt assessment tools already designed for this purpose. A common assessment toolkit is *Tool 153: Initial Multi-Cluster/Sector Initial Rapid Assessment (MIRA) Guidance*²²³ published by the Inter-Agency Standing Committee (IASC). Similarly, for the assessment of recovery, another point of reference is *Tool 149: Post-Disaster Needs Assessment (PDNA)*²²⁴ by the Global Facility for Disaster Reduction and Recovery (GFDRR) and *Tool 154: Global Rapid post-disaster Damage Estimation (GRADE) Approach*²²⁵ by GFDRR.

In addition to directly assessing disaster impacts, local governments can facilitate other agencies to conduct rigorous assessments, such as professionalized humanitarian assistance groups, ministries, and local NGOs. This includes not only facilitating access to impacted areas but assisting agencies to access the many types of data and information on hand in the local government that can inform analyses of the context and humanitarian and early recovery planning. Where international and national response agencies are responding to crises, a primary role local governments play is helping them to access data, information, and stakeholders that can inform effective responses. In turn, humanitarian agencies should be willing to share all appropriate and sharable data and information with local governments (in accordance with their beneficiary privacy and safeguarding policies.)

Assessments that collect information to inform the roles of many public and private partners in reconstruction—even those that relate to longer-range reconstruction matters—often have implications for actions taken early on in disaster response. Therefore, they should begin immediately after disasters and take place concurrently with disaster assessment and response.

Local governments can consider that while emergency response agencies are collecting data intended to inform immediate responses, municipal staff and partners can also be collecting data and information intended to inform decisions that need to be made in the near term that have bearing on longer-range recovery outcomes, as well as inform the actions of a broad range of partners not typically considered part of humanitarian assistance. For example, local governments and their partners can immediately begin to assess the impacts of disasters on infrastructure related to the provision of basic services, such as water and sanitation, determine how best to restore services in partnership with other public and private partners, how to use the resources associated with HA (such as TA and funding) to accelerate these efforts, and in accordance with rebuilding plans and “building back better” strategies referenced above, determine what changes and

improvements to the systems will be made as part of rebuilding such that they are more effective and resilient in the future. Similarly, assessments used to determine housing reconstruction strategies based in land use plans and technical risk studies can inform where emergency response agencies build temporary shelter versus where they immediately re-purpose land, such as for recreation, protection or storing of rubble.

As covered above, assessments intended to inform the design and implementation of programs for early recovery should adequately incorporate cross-cutting themes including gender equality and inclusion, environmental protection, human rights, disaster risk reduction and resilience, conflict sensitivity, among others. For more guidance on early recovery the RT should refer to *Tool 155: Guidance Note on Early Recovery*²²⁶ developed by the Cluster Working Group on Early Recovery (CWGER) and consult *The 15 Basic Ideas about Recovery After a Disaster*²²⁷ published by UNDP. To ensure the maximum impact of the early recovery activities, the *United Nations Inter-Agency Standing Committee (IASC) developed the “cluster approach”*²²⁸.

29.6 Adapt the Disaster Recovery Framework. Where local governments already have a Disaster Recovery Framework developed prior to the disaster event, the assessment process informs the ability for them to update and adapt them as soon as the humanitarian response begins. The disaster recovery framework or strategy (DRF) provides a detailed sequence, prioritization, financing, and implementation of short-, medium- and long-term recovery activities. To adapt the recovery framework, the multi-disciplinary team should organize a consultative and participatory process with residents of affected neighborhoods and other stakeholders. This will facilitate ownership by the various stakeholders for the DRF and define relevant strategies for the recovery. To help facilitate this process the RT should refer to the International Recovery Platform (IRP) on *Guidance for Disaster Recovery*²²⁹. Specifically on education, the RT should refer to *Tool 156: Disaster Recovery Guidance Series: Education Sector Recovery*²³⁰ by GFDRR and *Tool 157: Roadmap for Safer and more Resilient Schools (RSRS)*²³¹ published by The World Bank. The RT should also consult recreational and psychosocial methodologies such as *Tool 158: The Return to Joy*²³², published by UNICEF or *Tool 159: Minimum Standards for Education: Preparation, Response, Recovery*²³³ by the Inter-Agency Network for Education in Emergencies (INEE):

29.7 Manage Recovery for Disaster Resilience. Depending on the scale and scope of shocks and stresses, the process of recovery can take months to years and translates into designing, executing, monitoring, and evaluating programs and projects that comply with the disaster recovery framework in order to avoid rebuilding risks, increasing vulnerability to disasters, and ensuring that recovery investments are protec-

223 IASC. (2015). Multi-Sector Initial Rapid Assessment (MIRA) Guidance. Retrieved from: https://interagencystandingcommittee.org/system/files/mira_manual_2015.pdf

224 UNDP. (2013). Post-Disaster Needs Assessments (PDNA). Volume A Guidelines. Retrieved from: <https://www.gfdr.org/sites/default/files/publication/pdna-guidelines-vol-a.pdf>

225 GFDRR. (2018). Methodology Note: The Global Rapid post-disaster Damage Estimation (GRADE) approach. Washington, DC. Retrieved from: <https://www.gfdr.org/en/publication/methodology-note-global-rapid-post-disaster-damage-estimation-grade-approach>

226 CWGER.(2008). Guidance Note on Early Recovery. Retrieved from: https://inee.org/sites/default/files/resources/Cluster_Working_Group_on_Early_Recovery_2008_Guidance_note_on_early_recovery.pdf

227 UNDP. (n.d.). 15 ideas básicas sobre la recuperación temprana. Retrieved from: <https://www.undp.org/es/honduras/publications/15-ideas-b%C3%A1sicas-sobre-la-recuperaci%C3%B3n-temprana>

228 Thematic groups are groups of humanitarian organizations (Whether UNITED Nations or not) in each of the main sectors of humanitarian action, for example, water, health and logistics. These are designated by the IASC and have clear coordination responsibilities. At the country level, it aims to clearly define the roles and responsibilities of humanitarian organizations within sectors. Each group will incorporate early recovery from the beginning of the humanitarian response (GFDRR, 2020). For more information see: <https://interagencystandingcommittee.org/working-group/iasc-guidance-note-using-cluster-approach-strengthen-humanitarian-response-2006>

229 International Recovery Platform. (n.d.). Guidance for Disaster Recovery. Build Back Better. Retrieved from: <https://recovery.preventionweb.net/build-back-better/guidance-disaster-recovery>

230 Shah, R., Henderson, C., Couch, D., (2019). Disaster Recovery Guidance Series: Education Sector Recovery. Retrieved from: https://www.gfdr.org/sites/default/files/publication/EDUCATION_NOTE_01042019_web.pdf

231 The World Bank. (n.d.). Global Program for Safer Schools (GPSS). Retrieved from: <https://gpss.worldbank.org/en/roadmaps/rsrs-glance>

232 UNICEF Dominican Republic. (2009). El Programa Retorno de la Alegría: manuales temáticos - República Dominicana. Retrieved from: <https://inee.org/es/recursos/el-programa-retorno-de-la-alegría-manuales-tematicos-republica-dominicana>

233 Inter-agency Network for Education in Emergencies. (2010). INEE Minimum Standards for Education: Preparedness, Response, Recovery. Handbook. Retrieved from: <https://inee.org/resources/inee-minimum-standards>

Case Study 32: KATYE Project in Barrio Ravine Pintade, Port-au-Prince, Haiti.

The KATYE project, implemented by PCI and CHF (now both Global Communities) with USAID support, developed replicable neighborhood reconfiguration strategies for long-term recovery and reconstruction in Ravine Pintade. A holistic approach to community recovery was implemented, getting earthquake-affected neighbors back to their homes in an improved neighborhood through their own efforts.

A Post-Project Sustainability Study of The KATYE Project published in 2020, revealed that the project increased the value of land and housing, increased the presence of small businesses, and implemented drainage systems that significantly decreased flooding and mud that was common before the earthquake, which reduced vectors for disease. Also, temporary shelters erected by the program had been formalized into more permanent houses and had outlived their original intended lifespan by five years. It was concluded that community involvement was the key to the project sustainability (Global Communities).



Source: USAID

For more information, the full case study: [Here](#) and find the follow-up study: [Here](#) | Contact Global Communities at resilience@globalcommunities.org

ted and resilient from future risks, and integrate DRR strategies (UNDP, 2017). The RT should advocate with all key stakeholders for the management and follow-up of funds designated for recovery; as well as the management of information, transparency, accountability, monitoring, and evaluation throughout the recovery process (UNICEF, 2017). For more guidance on planning or implementing economic or livelihood programs in a humanitarian context the RT can consider *Tool 160: Minimum Economic Recovery Standards (MERS)*²³⁴ developed by The SEEP Network.

Step 30. Incorporate RRR²³⁵ into the Formal and Non-Formal Education System



MCR Essential Seven: Understand and strengthen societal capacity for resilience

30.1 Building Alliances for Education in Disaster Risk Reduction. To promote resilient and inclusive neighborhoods for future generations it is critical to incorporate disaster resilience and Integrated Disaster Risk Management into the curriculum of formal and non-formal education, at all levels. The RT should establish partnerships with the Ministry for Education, National Vocational Training Agencies, third level academic institutions, professional bodies, the National Disaster Risk Management Agency and other agencies, and civil society organizations engaged in the education sector. For example, the RT can play a very important role working with vocational training agencies and the curriculum for certification of construction workers to ensure that this includes training modules on disaster risk reduction construction methods, and building back better.

30.2 Support the inclusion of Integrated Disaster Risk Management and Resilience into training and educational curricula. The RT should engage with the partners mentioned

above to explore how the RINA intervention can support the development and revision of training and education curricula and support instructors and teacher training programs. The RT can play a key role in bringing together educational and training institutions with organizations specializing in risk management to facilitate reviews and upgrading of educational and training materials. The RT should ensure that revised educational and training materials respond to the different needs of the target population according to age, sex and disabilities (GADRRRES, 2017).²³⁶ The RT should ensure that this process benefits the school community in the target neighborhoods. For additional guidance on ensuring minimum standards of education are being met in emergency situations the RT should refer to *Tool 159: Minimum Standards for Education: Preparation, Response, Recovery*²³⁷ by INEE and recreation and psychosocial methodologies such as *Tool 158: The Return to Joy*²³⁸ published by UNICEF.

30.3 Teacher and Instructor Training. The RT should agree with key stakeholders to carry out capacity assessments for training and teaching professionals and together design and implement training programs including the development of relevant Trainer of Trainer tools and resources. The RT should support the formulation of strategies to motivate teachers and instructors to incorporate risk management and disaster resilience and inclusion not only into the official curriculum but through other means within the education facility (e.g., extracurricular activities at the neighborhood level, school events, thematic week on disaster resilience, participation in disaster management at school and after-school clubs, recreational and theatrical activities to raise awareness of disaster risk, etc.) (GADRRRES, 2017). The RT together with educational and training institutions and other partners should undertake community outreach activities to raise awareness and advocate with the wider community on risk management, resilience, and inclusive neighborhoods.

234 The SEEP Network. (2017). Minimum Economic Recovery Standards. Third Edition. Retrieved from: <https://handbook.spherestandards.org/en/mers/#ch001>
235 Risk Reduction and Resilience (RRR) in accordance with the Comprehensive Global Framework for School Safety.
236 GADRRRES. (March 2017). What We Do: Global Alliance for Disaster Risk Reduction and Resilience in the Education Sector (GADRRRES). Obtained from Global Alliance for Disaster Risk Reduction and Resilience in the Education Sector (GADRRRES) Web Site: <https://www.preventionweb.net/go/55548>
237 Inter-agency Network for Education in Emergencies. (2010). INEE Minimum Standards for Education: Preparedness, Response, Recovery. Handbook. Retrieved from: <https://inee.org/resources/inee-minimum-standards>
238 UNICEF Dominican Republic. (2009). El Programa Retorno de la Alegría: manuales temáticos - República Dominicana. Retrieved from: <https://inee.org/es/recursos/el-programa-retorno-de-la-alegría-manuales-tematicos-republica-dominicana>

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ACRONYMS

Acronym	Complete Name
AOP	Annual Operating Plans
ARC-D	Analysis of the Resilience of Communities to Disasters
CBD	Convention on Biological Diversity
CHS	Core Humanitarian Standard
BSR	Business for Social Responsibility
CBO	Community-Based Organization
CEPREDENAC	Coordination Center for Disaster Prevention in Central America and the Dominican Republic
COOPI	Cooperation International
CRID	Regional Center for Disaster Information for Latin America and the Caribbean
DCED	Donors' Committee for Enterprise Development
DRF	Disaster Recovery Framework
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
DRR-MP	Disaster Risk Reduction Master Plan
EbA	Ecosystem-based adaptation
ECHO	European Civil Protection and Humanitarian Aid Operations
Eco-DRR	Ecosystem-based Disaster Risk Reduction
EWARS	Early Warning, Alert and Response Systems
EWRS	Early Warning and Response Systems
FENALCO	National Federation of Merchants in Colombia
FCAC	Fragile and Conflict-affected Contexts
FSM	Faecal Sludge Management
GBV	Gender-Based Violence
GC	Global Communities
GFDRR	Global Facility for Disaster Reduction and Recovery
GIRD	Integrated Risk and Disaster Risk Management
GIS	Geographic Information Systems
GIZ	German Development Agency
GOAL	Irish based international humanitarian agency
GRADE	Global Rapid Post-Disaster Damage Estimation
HSI	Hospital Safety Index
IASC	Inter-Agency Standing Committee
ICRC	International Committee of the Red Cross
ICSC	International Coalition of Sites of Conscience
ISDR	International Strategy for Disaster Risk Reduction
IDB	Inter-American Development Bank
IFRC	International Federation of Red Cross and Red Crescent Societies
INEE	Inter-Agency Network for Education in Emergencies
IRD	International Relief and Development
IPGARAMSS	Integrated Participation of Environmental and Risk Management in Development and Territorial Planning of San Salvador Metropolitan Area Program
Irish Aid	Irish Government's Programme for Overseas Development
IOM	International Organization for Migration or UN Migration Agency
IRM	Integrated Risk Management
IRP	International Recovery Platform
IUCN	The International Union for Conservation of Nature
MEAL	Monitoring, Evaluation, Accountability and Learning
M4P	Approach Making Markets Work for the Poor
MCR	Making Cities Resilient 2030 Campaign

Acronym	Complete Name
MIB	Integral Neighborhood Improvement
MIRA	Rapid Initial Multi-Cluster/Sector Assessment
MoU	Memorandums of Agreement
MSME	Micro, Small and Medium Enterprises
NDF	Nordic Development Fund
NDRMA	National Disaster Risk Management Agency
NDRMS	National Disaster Risk Management System
NGO	Non-Governmental Organization
NSLG	Neighborhood Savings and Loans Groups
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
OECD	Organisation for Economic Co-operation and Development
PAHO	Pan American Health Organization
PWD	People with Disabilities
PCI	Project Concern International, now Global Communities
PDNA	Post-Disaster Needs Assessment
PEC	Projects Executed by the Community
PEFA	Public Expenditure and Financial Accountability Program
PREDES	Center for Studies and Disaster Prevention
PTSD	Post-Traumatic Stress Disorder
RINA	Resilient and Inclusive Neighborhood Approach
RNC	RINA Neighborhood Committee
RNMP	RINA Neighborhood Master Plans
RRR	Risk Reduction and Resilience
RT	RINA Team
SAC	Social Auditing Committee
SBC	Social and Behavioral Change
SBCC	Social and Behavioral Change Campaign
SDG	Sustainable Development Goals
SEEP	The Small Enterprise, Education and Promotion Network or The SEEP Network
SLA	Savings and Loan Association
SRE	The Sustainable and Resilient Enterprise Platform
SWOT	Strengths, Weaknesses, Opportunities, and Threats
TEEB	The Economics of Ecosystems and Biodiversity
UN	United Nations
UNDP	United Nations Development Programme
UNDRR	United Nations Office for Disaster Risk Reduction (now UNDRR)
UNEP	United Nations Environment Program
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	The United Nations Population Fund
UNHCR	United Nations High Commissioner for Refugees or UN Refugee Agency
UNISDR	United Nations International Strategy for Disaster Risk Reduction
UNICEF	United Nations International Children's Emergency Fund
USAID BHA	USAID Office of Humanitarian Assistance (BHA)
USAID	United States Agency for International Development
VCA	Vulnerability and Capacity Analysis
WASH	Water, Sanitation and Hygiene
WB	World Bank
WFP	World Food Programme
WHO	World Health Organization
WMO	World Meteorological Organization
WISS	Worldwide Initiatives for Safe Schools

GLOSSARY OF TERMS

A

Accountability: The process of using power responsibly, taking account of, and being held accountable by, different stakeholders, and primarily those who are affected by the exercise of such power (CHS Alliance, Group URD and the Sphere Project, 2014).

Assessment: The set of activities necessary to understand a given situation, entails the collection, up-dating and analysis of data pertaining to the population of concern (needs, capacities, resources, etc.), as well as the state of infrastructure and general socio-economic conditions in a given location/area (UNHCR, 2006).

B

Build Back Better: “the use of the recovery, rehabilitation and reconstruction phases after a disaster to increase the resilience of nations and communities through integrating disaster risk reduction measures into the restoration of physical infrastructure and societal systems, and into the revitalization of livelihoods, economies and the environment” (United Nations Assembly, 2016). Coined in the aftermath of the 2004 Indian Ocean Tsunami, “Build back better” is an approach to post disaster recovery that aims to reduce vulnerability and improve living conditions; it seeks to not only restore what existed previously, but to go beyond, seizing the moral, political, managerial, and financial opportunities the crisis has offered governments to set communities on a better and safer development path (Office of the UN Secretary-General’s Special Envoy for Tsunami Recovery, 2006).

Building code: A set of ordinances or regulations and associated standards intended to control aspects of the design, construction, materials, alteration and occupancy of structures that are necessary to ensure human safety and welfare, including resistance to collapse and damage (UNISDR, 2009). According to the HABITAT III, building codes are regulations established by a recognized government agency and local building codes are often based on a national model code known as the International Building Code, or one of its predecessors (United Nations, 2016).

Blue Infrastructure: See Ecological infrastructure. Blue infrastructure includes river corridors, wetlands and other waterways (UNISDR, 2017).

C

Cash Transfer: The provision of assistance in the form of money (either physical currency/cash or e-cash) to beneficiaries (individuals, households or communities). Cash transfers as a modality are distinct from both vouchers and in-kind assistance (CALP Network, 2017).

Cash Transfer Programming: Or CTP, “refers to all programs where cash (or vouchers for goods or services)

is directly provided to beneficiaries. In the context of humanitarian assistance, the term is used to refer to the provision of cash transfers or vouchers given to individuals, household or community recipients, not to governments or other state actors. CTP covers all modalities of cash-based assistance, including vouchers. This excludes remittances and microfinance in humanitarian interventions (although microfinance and money transfer institutions may be used for the actual delivery of cash)” (CALP Network, 2017).

Capacity: According to the International Strategy for Disaster Reduction (ISDR), capacity is defined as the “combination of all the strengths, attributes and resources available within a community, society or organization that can be used to achieve agreed goals”. The concept of capacity may include physical, institutional, social or economic means, as well as personal or collective qualities such as leadership and management. Capacity can also be described as capability (UNISDR).

Capacity Building: A process by which individuals, institutions and societies develop abilities, individually and collectively, to perform functions, solve problems and set and achieve their goals (UNHCR, 2006).

Capacity Development: According to UNISDR, is the process by which people, organizations and society systematically stimulate and develop their capacities over time, in order to achieve their social and economic goals, through improved knowledge, skills, systems and institutions, among other things. Capacity development is a concept that broadens the term of capacity building to encompass all aspects of creating and sustaining capacity building over time. The concept includes learning and various types of training, as well as a continuing effort to develop institutions, public awareness, financial resources, technological systems, and the broader social and cultural enabling environment (UNISDR, 2009).

Circular Economy: It refers to an economic system designed with the intention that maximum use is extracted from resources and minimum waste is generated for disposal (Deutz, 2020). It aims to reshape resource use by decoupling growth from material extraction (World Economic Forum, 2020). This has profound implications for both the design and use of products. It means that manufacturer of a product accepts responsibility for its disassembly, refurbishment or recycling at the end of its useful life. The circular economy implies moving away from owning products to leasing or sharing them. Apart from improving the utilization of products, leasing, or sharing incentivizes the design of more reliable products that are easier to maintain and repair, which in turn reduces waste (Bell, 2021).

Climate Change: The Inter-governmental Panel on Climate Change (IPCC) defines climate change as: “a change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the

mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or external forcings, or to persistent anthropogenic changes in the composition of the atmosphere or in land use". On the other hand, The United Nations Framework Convention on Climate Change (UNFCCC) defines climate change as "a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods". According to UNISDR, both definitions can be used for disaster risk reduction purposes, and it's mentioned that the UNFCCC definition is the more restricted one as it excludes climate changes attributable to natural causes. For popular communications climate change definition can be paraphrased as "A change in the climate that persists for decades or longer, arising from either natural causes or human activity" (UNISDR, 2009).

Community: In conventional emergency management, communities are seen in spatial terms: groups of people who live in the same area or close to the same risks (i.e., a village or an urban neighbourhood). This overlooks other significant dimensions of the "community" which are to do with common interests, values, activities and structures. From a hazard's perspective, the spatial dimension is essential in identifying communities at risk. However, this must be linked to an understanding of the socio-economic differentiations, linkages and dynamics within the area at risk, not only to identify vulnerable groups but also to understand the diverse factors that contribute to vulnerability (GOAL, 2016). In other words, community can be understood as "1) a group of people who 1) live in the same area and are exposed to the same risks and 2) have the same governance or decision-making structures and socio-economic fabric and 3) experience a set of shocks" (Clark-Gingsberg et al, 2020).

Communities and people affected by crisis: The totality of women, men, girls and boys with different needs, vulnerabilities and capacities who are affected by disasters, conflict, poverty or other crises at a specific location (CHS Alliance, Group URD and the Sphere Project, 2014).

Conflict: A state of open, often prolonged fighting; a battle or war. Conflict can apply both to open fighting between hostile groups and to a struggle between opposing forces (Turnbull et al., 2013). It refers to the use of armed force between two or more parties, and conflict-affected contexts as those in active or post-conflict stages (D. Carment, Y. Samy, S. Prest cited by Sonny S. Patel, et al, 2021).

Contingency planning: A management process that analyses specific potential events or emerging situations that might threaten society or the environment and establishes arrangements in advance to enable timely, effective and appropriate responses to such events and situations. Contingency planning results in organized and coordinated courses of action with clearly identified institutional roles and resources, information processes, and operational arrangements for specific actors at times of need. Based on scenarios of possible emergen-

cy conditions or disaster events, it allows key actors to envision, anticipate and solve problems that can arise during crises. Contingency planning is an important part of overall preparedness. Contingency plans need to be regularly updated and exercised (UNISDR, 2009).

Coping capacity: The ability of the population, organizations, and systems, through the use of available resources and skills, to cope with and manage adverse conditions, emergency situations or disasters. Coping capacity requires ongoing awareness, resources, and management, both in normal times and during crises or adverse conditions. Coping capacities contribute to disaster risk reduction (UNISDR, 2009).

Cost-Benefit Analysis: Compares the value of a program's net impacts on final outcomes, expressed in monetary terms, with the extra costs associated with implementing the program, also expressed in monetary terms (CALP Network, 2017). According to cost-benefit analysis, a project will be profitable when the cost-benefit ratio is greater than the unit.

Critical Infrastructure: The physical structures, facilities, networks and other assets which provide services that are essential to the social and economic functioning of a community or society both in usual and extreme circumstances during an emergency (UNDRR). These include transportation systems, air and seaports, electricity, water supply and communication systems; hospitals and health clinics; and fire, police and public administration services (UNISDR, 2009).

D

Decentralization: A process through which powers, functions (such as planning, administration and procurement), responsibilities and resources are transferred from central to local governments and/or to other decentralized entities, striking a balance between the claims of the periphery and the demands of the centre (UNPOG). This can be done from central government to: (a) local units of central government ministries or agencies; (b) units or areas subordinate to the government; (c) semi-autonomous public institutions or corporations; (d) regional or functional institutions covering a particular area; and (e) private or voluntary sector organizations (Rondinelli, D., 1981 cited by FAO).

Disaster: A serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources. Disasters are often described as a result of the combination of the exposure to a hazard; the conditions of vulnerability that are present; and insufficient capacity or measures to reduce or cope with the potential negative consequences. Disaster impacts may include loss of life, injury, disease and other negative effects on human physical, mental and social wellbeing, together with damage to property, destruction of assets, loss of services, social and economic disruption, and environmental degradation (UNISDR, 2009).

Disaster risk: The potential disaster losses, in lives, health status, livelihoods, assets and services, which could occur to a particular community or a society over some specified future time (UNISDR, 2009).

Disaster Risk Reduction: The concept and practice of reducing disaster risks through systematic efforts to analyze and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events (UNISDR, 2009). Specifically, the purpose of disaster risk reduction is to minimize vulnerabilities and disaster risks throughout a society in order to avoid (prevent) or to limit (mitigate and prepare for) the adverse impacts of natural hazards, and facilitate sustainable development (UNICEF, 2012).

E

Early Warning and Response System: An integrated system of hazard monitoring, forecasting and prediction, disaster risk assessment, communication and preparedness activities systems and processes that enables individuals, communities, governments, businesses, and others to take timely action to reduce disaster risks in advance of hazardous events. Effective “end-to-end” and “people-centered” early warning systems may include four interrelated key elements: (1) disaster risk knowledge based on the systematic collection of data and disaster risk assessments; (2) detection, monitoring, analysis and forecasting of the hazards and possible consequences; (3) dissemination and communication, by an official source, of authoritative, timely, accurate and actionable warnings and associated information on likelihood and impact; and (4) preparedness at all levels to respond to the warnings received. These four interrelated components need to be coordinated within and across sectors and multiple levels for the system to work effectively and to include a feedback mechanism for continuous improvement. Failure in one component or a lack of coordination across them could lead to the failure of the whole system (UNDRR).

Multi-hazard early warning systems address several hazards and/or impacts of similar or different type in contexts where hazardous events may occur alone, simultaneously, cascadingly or cumulatively over time, and considering the potential interrelated effects. A multi-hazard early warning system with the ability to warn of one or more hazards increases the efficiency and consistency of warnings through coordinated and compatible mechanisms and capacities, involving multiple disciplines for updated and accurate hazards identification and monitoring for multiple hazards (UNDRR).

Ecosystem: An ecosystem is a functional unit consisting of living organisms, their non-living environment, and the interactions within and between them (IPCC, 2012). Ecosystems are nested within other ecosystems and often have no fixed boundaries. Depending upon the scientific, management, or policy question being examined, a single lake, a watershed, or an entire region could be considered an ecosystem (US EPA, 2005). In

the current era, most ecosystems either contain people as key organisms, or are influenced by the effects of human activities in their environment. Ecosystems are critical in supporting human well-being, and the importance of their preservation under anthropogenic climate change is explicitly highlighted in Article 2 of the United Nations Framework Convention on Climate Change, or UNFCCC (IPCC, 2012).

Ecosystem-based Adaptation: Or EbA, is defined as “the use of biodiversity and ecosystem services as part of an overall adaptation strategy to help people adapt to the adverse effects of climate change” at local, national, regional and global levels (CBD, 2009 cited by (Sudmeier-Rieux, Nehren, Sandholz, & Doswald, 2019). Any initiative that reduces human vulnerabilities and enhances adaptive capacity in the context of existing or projected climate variability and changes through sustainable management, conservation, and restoration of ecosystems (IUCN). (Convention on Biological Diversity, 2016)

Ecological Disaster Risk Reduction: Or Eco-DRR, is the sustainable management, conservation, and restoration of ecosystems to reduce disaster risk, with the aim of achieving sustainable and resilient development (PEDRR, 2021). Well-managed ecosystems, such as wetlands, forests, and coastal systems, act as natural infrastructure, reduce physical exposure to many hazards, and increase the socioeconomic resilience of people and neighborhoods by maintaining local livelihoods and providing essential natural resources such as food, water, and building materials (Renaud et al. 2013, Renaud et al. 2016, cited by PEDRR, 2021). Decision-making activities that take into consideration current and future human livelihood needs and bio-physical requirements of ecosystems and recognize the role of ecosystems in supporting communities to prepare for, cope with and recover from disaster situations. Sustainable ecosystem management for disaster risk reduction is based on equitable stakeholder involvement in land management decisions, land-use-trade-offs and long-term goal setting. (Convention on Biological Diversity, 2016).

Ecological infrastructure: As defined by UN HABITAT (2012), it is “the network of the environment formed by elements of space with vegetation / and unsealed spatial patterns. It offers a range of uses that includes the provision of ecosystem services”. Blue infrastructure or aquatic ecosystems is part of the ecological infrastructure. Examples of green and blue infrastructure include reforestation patches, retention ponds, bioswales, green roofs and vertical gardens. It is defined by the European Union as a strategically planned, designed, and managed network of natural and semi-natural areas and other environmental features to provide a wide range of ecosystem services (CONAMA, 2016).

Ecosystem Services: UNISDR defines ecosystem services as the benefits that people and communities obtain from ecosystems. The benefits that ecosystems can provide include “regulating services” such as regulation of floods, drought, land degradation and disease, along with “provisioning services” such as

food and water, “supporting services” such as soil formation and nutrient cycling, and “cultural services” such as recreational, spiritual, religious and other non-material benefits. Integrated management of land, water and living resources that promotes conservation and sustainable use provide the basis for maintaining ecosystem services, including those that contribute to reduced disaster risks (UNISDR, 2009). The ecosystem services approach focuses on the ways in which ecosystems support, enable and enhance human well-being (Renner, 2019). Ecosystem services relevant to the resilience of a city can also be offered outside the limits of the city, such as watersheds, special protection areas, among others (UNISDR, 2017).

Empowerment: A process/phenomenon that allows people to take greater control over the decisions, assets, policies, processes, and institutions that affect their lives (UNHCR, 2006 cited by United Nations, 2016).

Engagement: Is defined as “the processes by which organizations communicate, consult and/or provide for the participation of interested and/or affected stakeholders, ensuring that their concerns, desires, expectations, needs, rights and opportunities are considered in the establishment, implementation and review of the programs assisting them” (CHS Alliance, Group URD and the Sphere Project, 2014).

Evacuation: Moving people and assets temporarily to safer places before, during or after the occurrence of a hazardous event in order to protect them. Evacuation plans refer to the arrangements established in advance to enable the moving of people and assets temporarily to safer places before, during or after the occurrence of a hazardous event. Evacuation plans may include plans for return of evacuees and options to shelter in place (UNDRR).

Evaluation: A systematic and objective analysis and assessment of the organization’s policies, programs, practices, partnerships, and procedures, focused on planning, design, implementation and impacts (UNHCR, 2006).

Environmental Degradation: The reduction of the capacity of the environment to meet social and ecological objectives and needs. Environmental degradation can alter the frequency and intensity of natural hazards and increase the vulnerability of communities. The types of human-induced degradation are varied and include land misuse, soil erosion and loss, desertification, wildland fires, loss of biodiversity, deforestation, mangrove destruction, land, water and air pollution, climate change, sea level rise and ozone depletion (UNISDR, 2009).

Exposure: People, property, systems, or other elements present in danger zones that are therefore subject to potential losses (UNISDR, 2009). Although UNISDR defines exposure only in relation to location, the resilience discourse develops this term further to include the *magnitude, frequency, and duration* of the event. Exposure is a component of vulnerability, not only to

the extent to which a system is subject to a disturbance, but also the degree and duration of these disturbances. Exposure generally means being physically in, or dependent on, assets, systems, institutions or other people that are in the area affected by the hazard or climate events (Turnbull et al, 2013).

F

Financial Inclusion: Financial inclusion means that a full suite of financial services is provided, with quality, to all who can use them, by a range of providers, to financially capable clients (CALP Network, 2017).

Financial Service Provider: An entity that provides financial services, which may include e-transfer services. Depending upon your context, financial service providers may include e-voucher companies, financial institutions (such as banks and microfinance institutions), mobile network operators (MNOs). Also, investment funds, insurance companies, accountancy firms, among others (CALP Network, 2017).

Fragility: Fragility is often used interchangeably with conflict, but is conceptually distinct, referring to situations where official state governance and institutions are weak and the state lacks basic functional authority to provide basic security and/or secure social needs (D. Carment, Y. Samy, S. Prest cited by Sonny S. Patel, et al, 2021).

Fragile and Conflict Affected Areas (FCAC): incorporates areas affected by fragility – situations where the state is unable or unwilling to apply authority and does not provide basic services to the population – and conflict – the use of armed force between parties (Peters, et al., 2022).

G

Gender: Refers to the socially constructed roles, behaviors, activities and attributes that a given society at a given time considers appropriate for certain groups of people with reference to their sex and sexuality, such as women and men (UN Women).

Gender-based Violence: or GBV, is an umbrella term for any harmful act that is perpetrated against a person’s will and that is based on power imbalances and socially ascribed (i.e., gender) differences between women, girls, men, and boys. It includes acts that inflict physical, sexual, or mental harm or suffering, threats of such acts, coercion and other deprivations of liberty. These acts can occur in public or in private. Examples include rape; intimate partner violence and other forms of domestic violence; forced and/or coerced prostitution; child, early and forced marriage; female genital mutilation/cutting (FGM/C); female infanticide; trafficking for sexual exploitation and/or forced labor; and sexual violence including rape (IASC, 2017). While women, men, boys and girls can be victims of gender-based violence, because of their subordinate status in many places of the world, women and girls are the primary victims (Reliefweb, 2008).

Governance: Is the process of decision making and subsequent implementation (or non-implementation) of those decisions (IRP, 2010). According to UNDP (1997) is defined as the *“the exercise of economic, political and administrative authority to manage a country’s affairs at all levels. It comprises the mechanisms, processes and institutions through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations and mediate their differences”*. Governance includes the state, but transcends it by taking in the private sector and civil society organizations (UNDP, 1997). In the development literature, the term ‘good governance’ is frequently used. Good governance is expected to be participatory, transparent, accountable, effective, and equitable and promotes rule of law (IBE-UNESCO).

Green infrastructure: See Ecological infrastructure. Green infrastructure includes, for example: greening of streets, squares, platforms, and roads; greening of roofs and facades, development of urban agriculture, creation of urban green corridors, replacement of impermeable surfaces, natural water filtration, restoration of natural channels of urban rivers and embankments (UNISDR, 2017).

H

Hazard: A dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage. Hazards are described quantitatively by the likely frequency of occurrence of different intensities for different areas, as determined from historical data or scientific analysis (UNISDR, 2009). For the purposes of RINA Manual, “hazards” and “shocks” are synonymous terms.

Hazard mapping: The process of establishing geographically where and to what extent particular hazards are likely to pose a threat to people, property, or the environment (Jha et al, 2010). ARC-D Toolkit

I

Inclusion: Inclusion is appreciating and valuing human differences by creating an atmosphere that promotes a sense of belonging where everyone feels respected and valued for their uniqueness. In an inclusive environment each person is recognized and developed, and their skills are routinely utilized. In an inclusive environment, people are valued because of, not in spite of, their differences so everyone can fully participate and thrive (Multicultural Council of Saskatchewan (MCoS), 2017). Inclusion is seen as a universal human right that aims to embrace all people irrespective of race, gender, disability, medical or other need. It is about giving equal access and opportunities and getting rid of discrimination and intolerance or any barriers (Inclusion.Me Company, 2008).

Actions taken to reverse social exclusion. An inclusive society should firstly rise above differences of race, gender, skin color, religion, age, wealth, knowledge, etc., and of-

fer to all its groups an equitable access to opportunities, resources, goods and services, accompanied by changes in economic and political power exercise (GOAL, 2019).

Institutions: UNDRR defines institutions as “central, state and local government organizations that provide public services (depending on the location, these services could include water, electricity, telephone, health care, road and highway operations, and garbage collection, among others, as well as institutions that volunteer their skills or equipment in case of disasters); owners and operators of industrial facilities, building owners (individual or corporate), NGOs, professional, labor and employer organizations; and cultural and civil society organizations” (UNDRR, 2017, p.46). For purposes of neighborhood-oriented resilience, academic and/or research institutions are added to this list. All institutions mentioned here are intended to build capacity in the five areas of disaster risk reduction: understanding, prevention, mitigation, response and recovery planning (UNDRR, 2017, p.46).

Informality: Informality is, by definition, a question of the relationship of individuals and communities with the law: informal being in some way not in compliance with recognized law. In many urban areas, significant proportions (often a majority) of the population are affected by informality in their employment, housing or tenure status. These informal sectors are characterized by an absence of legal licenses, titles, and regulatory supervision. Residents in informal housing may have no recognized rights, making eviction an ever-present threat. Informal businesses operate without licenses and do not pay taxes. Informality is frequently the result of inadequate, inappropriate or ineffective formal policies or legal frameworks that regulate activities based on assumptions regarding the socio-economic environment that do not reflect realities on the ground. This results in a situation in many cities where the laws, institutions, and policies governing economic, social, and political affairs deny a large part of society the chance to participate on equal terms. Most poor people do not live under the shelter of the law and the opportunities it affords. Because the poor lack recognized rights, they are vulnerable to abuse. It is the minority of the world’s people who can take advantage of legal norms and regulations.²⁵ Despite this vulnerability, it is important to note that informality does not mean that there is no system, merely that what does exist is not formally recognized. Informal local norms and institutions, including those of a traditional or customary nature, govern lives and livelihoods (United Nations, 2016).

Informal settlements: “Residential areas where 1) inhabitants have no security of tenure vis-à-vis the land or dwellings they inhabit, with modalities ranging from squatting to informal rental housing, 2) the neighborhoods usually lack, or are cut off from, basic services and city infrastructure and 3) the housing may not comply with current planning and building regulations and is often situated in geographically and environmentally hazardous areas” (UN Habitat, 2015).

L

Land tenure: The relationship, whether legally or customarily defined, among people, as individuals or groups, with respect to land and associated natural resources (water, trees, minerals, wildlife, etc.). Rules of tenure define how property rights in land are to be allocated within societies. Land tenure systems determine who can use what resources for how long, and under what conditions (FAO cited by United Nations, 2016).

Land use planning: The process undertaken by public authorities to identify, evaluate and decide on different options for the use of land, including consideration of long-term economic, social and environmental objectives and the implications for different communities and interest groups, and the subsequent formulation and promulgation of plans that describe the permitted or acceptable uses. Land-use planning is an important contributor to sustainable development. It involves studies and mapping; analysis of economic, environmental and hazard data; formulation of alternative land-use decisions; and design of long-range plans for different geographical and administrative scales. Land-use planning can help to mitigate disasters and reduce risks by discouraging settlements and construction of key installations in hazard-prone areas, including consideration of service routes for transport, power, water, sewage and other critical facilities (UNISDR, 2009).

Local system: Local system refers to those interconnected sets of actors—governments, civil society the private sector, universities, individual citizens and others—that jointly produce a particular development outcome. These development outcomes may occur at many levels, local systems can be national, provincial or community-wide in scope (USAID, 2014).

Localization: “Localization means increasing international investment and respect for the role of local actors, with the goal of reducing costs and increasing the reach of humanitarian action. It is also a way of re-thinking the humanitarian sector from the ground up—recognizing that the overwhelming majority of humanitarian assistance is already provided by local actors. An effective international humanitarian ecosystem would invest in both local and international capacities according to their areas of comparative advantage” (IFR, n.d.).

M

Market System: Market System refers to all the players or actors, and their relationships with each other and with support or business services as well as the enabling environment – or rules and norms that govern the way that system works. Market systems are interconnected when they share the same set of enabling environment/rules/norms and business/support services, for instance when they operate within one country. (CALP Network, 2011)

Mitigation: The lessening or limitation of the adverse impacts of hazards and related disasters. The adverse impacts of hazards often cannot be prevented fully, but their scale or severity can be substantially lessened by

various strategies and actions. Mitigation measures encompass engineering techniques and hazard-resistant construction as well as improved environmental policies and public awareness. It should be noted that in climate change policy, “mitigation” is defined differently, being the term used for the reduction of greenhouse gas emissions that are the source of climate change (UNISDR, 2009).

N

Nature-based Solutions: Are actions to protect, sustainably manage, and restore natural and modified ecosystems that address societal challenges effectively and adaptively, simultaneously benefiting people and nature. Nature-based Solutions address societal challenges through the protection, sustainable management, and restoration of both natural and modified ecosystems, benefiting both biodiversity and human well-being. Nature-based Solutions are underpinned by benefits that flow from healthy ecosystems. They target major challenges like climate change, disaster risk reduction, food and water security, biodiversity loss and human health, and are critical to sustainable economic development (IUCN, s.f.).

Neighborhood: Are geographic areas of cities typically defined by social, economic, and physical features, which often serve as the basis for administrative and political recognition within larger jurisdictions. Neighborhoods provide their residents with an identity and foothold in the larger urban arena, thereby providing some measure of security, safety, and familiarity in an often-chaotic urban world. Neighborhoods become even more valuable to their residents in the wake of humanitarian crises and natural disasters precisely because of these valued social and economic features (USAID, 2011).

Neighborhood Approach: It is an area-based means of responding to multi-sector needs that is informed by a community based decision-making process reflective of the social, economic, and physical features of the delimited area. This approach is shelter-led, but settlement-focused, based on the notion that the short-term recovery of neighborhoods can be best achieved through adoption of a long-term view of configuring and reconfiguring land to best accommodate shelter and related services, disaster risk reduction, livelihoods, social connections, and the health and security of the disaster-affected population. While addressing short-term humanitarian needs, this approach can also pave the way for post-crisis recovery, i.e., neighborhoods can also serve as platforms for recovery. The Neighborhood Approach holds significant relevance to the design and implementation of large-scale disaster responses, particularly those oriented to shelter in densely populated settings. It enables an understanding of available local resources, emergent opportunities, and potential constraints regarding the sheltering of people, the recovery of affected economies, and the reduction of risks associated with vulnerability to natural hazards. It provides a framework for coordinated, integrative efforts towards sustainable reconstruction and improvement

of communities by defining the framework within which housing, infrastructure, transport, environmental management, and future growth occur (USAID, 2011).

Neighborhood Master Plan with a focus on DRR: It is an urban planning tool that shows a photograph of the current conditions and a future approach to the community vision for the configuration of the neighborhood. It brings together the knowledge of the risk of urban inhabitants and the multi-sectorial diagnosis of the territory that comprises it to identify areas and priorities for carrying out the tangible and intangible actions or measures that will allow the development of these areas in response to the risk that conditions them (GOAL, 2021).

P

Participation: One or more processes in which an individual (or group) takes part in specific decision-making and action, and over which s/he may exercise specific controls. It is often used to refer specifically to processes in which primary stakeholders take an active part in planning and decision-making, implementation, learning and evaluation. This often has the intention of sharing control over the resources generated and responsibility for their future use (IFAD). Participation involves enabling crisis-affected people to play an active role in the decision-making processes that affect them. It is achieved through the establishment of clear guidelines and practices to engage them appropriately and ensure that the most marginalized and worst affected are represented and have influence (CHS, 2014).

Partners: Organizations working jointly within a formal arrangement to achieve a specific goal, with clear and agreed roles and responsibilities (CHS Alliance, Group URD and the Sphere Project, 2014)

Preparedness: The knowledge and capacities [...] to effectively anticipate, respond to, and recover from, the impacts of likely, imminent, or current hazard events or conditions. Preparedness aims to build the capacities needed to efficiently manage all types of emergencies and achieve orderly transitions from response through to sustained recovery. Preparedness is based on a sound analysis of disaster risks and good linkages with early warning systems, and includes such activities as contingency planning, stockpiling of equipment and supplies, the development of arrangements for coordination, evacuation and public information, and associated training and field exercises. These must be supported by formal institutional, legal and budgetary capacities. The related term "readiness" describes the ability to quickly and appropriately respond when required (UNISDR, 2009).

Prevention: The outright avoidance of adverse impacts of hazards and related disasters. Prevention expresses the concept and intention to completely avoid potential adverse impacts through action taken in advance. Examples include dams or embankments that eliminate flood risks, land-use regulations that do not permit any settlement in high-risk zones, and seismic engineering designs that ensure the survival and function of a critical

building in any likely earthquake. Very often the complete avoidance of losses is not feasible, and the task transforms to that of mitigation. Partly for this reason, the terms prevention and mitigation are sometimes used interchangeably in casual use (UNISDR, 2009).

Private Sector: The private sector includes any actors which generate income / profit through their business operations. This includes small individual traders and micro-enterprises, small firms employing temporary labour, cooperatives with numerous 'members' or shareholders, through to multinational companies. The absolute criteria for what is / isn't the private sector is blurred, as many private firms are owned by governments, and some enterprises - for instance 'social enterprises' - have business plans that generate a profit which is invested back in to society (CALP Network, 2011).

Protection: According to the Essential Humanitarian Standard on Quality and Accountability, protection refers to "all those activities aimed at guaranteeing full respect and equality of the rights of all people, without distinction of any age, sex, ethnicity, social class or religion, among others" (CHS Alliance, Group URD and the Sphere Project, 2015). These rights must be respected and guaranteed at all times, especially in situations of disasters and other contexts of violence (CEPRENAC, ECHO, NRC, Plan International, Save the Children, World Vision, 2015). All activities aimed at ensuring the full and equal respect for the rights of all individuals, regardless of age, gender or ethnic, social, religious or other background. It goes beyond the immediate life-saving activities that are often the focus during an emergency (CHS, 2014). It is a concept that encompasses all activities aimed at obtaining full respect for the rights of the individual in accordance with the letter and spirit of human rights, refugee and international humanitarian law. Protection involves creating an environment conducive to respect for human beings, preventing and/or alleviating the immediate effects of a specific pattern of abuse, and restoring dignified conditions of life through reparation, restitution and rehabilitation (Reliefweb, 2008).

R

Reconstruction: The medium- and long-term rebuilding and sustainable restoration of resilient critical infrastructures, services, housing, facilities and livelihoods required for the full functioning of a community, or a society affected by a disaster, aligning with the principles of sustainable development and "build back better", to avoid or reduce future disaster risk (United Nations General Assembly, 2016).

Recovery: The restoring or improving of livelihoods and health, as well as economic, physical, social, cultural and environmental assets, systems and activities, of a disaster-affected community or society, aligning with the principles of sustainable development and "build back better", to avoid or reduce future disaster risk (United Nations Assembly, 2016).

Rehabilitation: The restoration of basic services and facilities for the functioning of a community or a society affected by a disaster (United Nations General Assembly, 2016)

Retrofitting: Reinforcement or upgrading of existing structures to become more resistant and resilient to the damaging effects of hazards. It requires consideration of the design and function of the structure, the stresses that the structure may be subject to from particular hazards or hazard scenarios, and the practicality and costs of different retrofitting options. Examples of retrofitting include adding bracing to stiffen walls, reinforcing pillars, adding steel ties between walls and roofs, installing shutters on windows, and improving the protection of important facilities and equipment (UNISDR, 2009).

Resilience: The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions. The resilience of a community in respect to potential hazard events is determined by the degree to which the community has the necessary resources and is capable of organizing itself both prior to and during times of need (UNISDR, 2009). To the UNISDR definition, GOAL has added to its understanding of resilience *“without compromising their (people within a given system, community or society) long-term prospects, ultimately improving their well-being”* (GOAL, 2016).

Response: The provision of emergency services and public assistance during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected. Disaster response is predominantly focused on immediate and short-term needs and is sometimes called *“disaster relief”*. The division between this response stage and the subsequent recovery stage is not clear-cut. Some response actions, such as the supply of temporary housing and water supplies, may extend well into the recovery stage (UNISDR, 2009).

Risk: Probability of harmful consequences or expected losses (deaths, injuries, property, livelihoods, economic disruption or environmental degradation) resulting from interactions between natural or man-made hazards and conditions of vulnerability. Conventionally, risk is expressed by the expression $\text{Risk} = \text{Hazards} \times \text{vulnerability}$. Some disciplines also include the concept of exposure to refer mainly to the physical aspects of vulnerability. Beyond expressing a possibility of physical harm, it is crucial to recognize that risks may be inherent, appear or exist within social systems. It is equally important to consider the social contexts in which risks occur, and therefore people do not necessarily share the same perceptions of risk and its underlying causes (ISDR, n.d., p. 7).

Risk Assessment: A methodology to determine the nature and extent of risk by analyzing potential hazards and evaluating existing conditions of vulnerability that together could potentially harm exposed people, property, services, livelihoods and the environment on

which they depend (UNISDR, 2009).

Risk Scenarios: The negative consequences that may occur as a result of combining and interacting shocks and stressors and the related probability of occurrence. It means the graphic representation of the interaction between the different risk factors (hazards and vulnerabilities) and their possible causes and effects. The risk scenario is constructed from the identification and analysis of the characteristics of the two factors that interact to form the risk in the study site: hazards (component extrinsic to the communities) and vulnerabilities (component intrinsic to the communities). In a risk scenario, the severity of damage is located precisely in those places where social, economic and environmental susceptibility is greatest. From this point of view, precariously settled spaces related to social groups of greater concentration, with high levels of poverty and where resilience is lower, contribute to the severity of such risk scenarios. Risk scenarios must take into consideration different possibilities, depending on the potential intensity of each hazard. Constructing these scenarios means projecting what the impact of a hazard may be, for example, the possible effects of an earthquake when buildings are earthquake resistant and when they are not, the possible effects of this earthquake with a certain intensity, and how it can affect the social fabric and organizational or inter-institutional relations. The construction of the risk scenario is not only the description of how the relationship between the locality and its environment is today, but also a retrospection to understand why or what happened and a prospection or questioning of what would happen if the hazards and vulnerability factors changed in one way or another (SGRD, 2014).

Risk Transfer: The process of formally or informally shifting the financial consequences of particular risks from one party to another whereby a household, community, enterprise or state authority will obtain resources from the other party after a disaster occurs, in exchange for ongoing or compensatory social or financial benefits provided to that other party (UNISDR, 2009).



Security of tenure: It is understood as a set of relationships with respect to housing and land, established through statutory or customary law or informal or hybrid arrangements, that enables one to live in one's home in security, peace and dignity. It is an integral part of the right to adequate housing and a necessary ingredient for the enjoyment of many other civil, cultural, economic, political, and social rights. All persons should possess a degree of security of tenure that guarantees legal protection against forced eviction, harassment, and other threats (United Nations, 2016).

The certainty that a person's rights to land will be protected. People with insecure tenure face the risk that their rights to land will be threatened by competing claims, and even lost as a result of eviction. The attributes of security of tenure may change from context to context: investments that require a long time before benefits

are realized require secure tenure for a commensurately long time (FAO cited by United Nations, 2016).

Housing is not adequate if its occupants do not have a degree of tenure security which guarantees legal protection against forced evictions, harassment, and other threats. When a person or household is protected from involuntary removal from their land or residence, except in exceptional circumstances and then only by means of legal procedures (Committee on Economic, Social and Cultural Rights, 1991 cited by United Nations, 2016). Ideally, security of tenure should capture the range of possible forms of land and property tenure including formal and less formal conceptions of tenure, such as customary rights to land or long-term property rental. It should also include recognizing different forms of ownership or contractual documentation as proof of these rights and uses (UN HABITAT, 2011 Cited by United Nations, 2016).

Shocks: Are sudden events that impact the vulnerability of the system and its components. There are many different types of disaster-related shocks that can strike at different levels. These include disease outbreaks, weather-related and geophysical events including floods, high winds, landslides, droughts or earthquakes. There can also be conflict-related shocks, such as outbreaks of fighting or violence, or shocks related to economic volatility (DFID, 2013). Note that drought is not a sudden event, as the definition would suggest, however, once a drought surpasses the tipping point into an extreme event, it is classified as a shock (GOAL,2016).

Shelter: Also called emergency housing, it provides temporary overnight living accommodations. Shelters often are not open during the day (United Nations, 2016).

Social and Behavior Change: Or SBC aims to empower individuals and communities, and lower structural barriers that hinder people from adopting positive practices and societies from becoming more equitable, inclusive, cohesive and peaceful. Drawing on various disciplines, SBC encompasses any set of strategies and interventions that influences drivers of change and supports local action towards better societies. It helps development practitioners and policymakers design more effective programs for reducing poverty and inequity. And it blends scientific knowledge with community insights, most importantly, to expand people's control over the decisions that affect their lives (UNICEF).

Social and Behavior Change Communication: Or SBCC, uses communication strategies that are based on behavior science to positively influence knowledge, attitudes and social norms among individuals, institutions, and communities. It uses a variety of communication channels to drive and sustain positive behavior among individuals, communities, and societies. It employs a systematic process that includes formative research and behavior analysis; communication planning, implementation, and monitoring; creating an environment that supports desired outcomes; and evaluation (Centre for Social and Behaviour Change Communication).

Social Capital: describes the interpersonal networks of relationships among people who live and work in a society, often based on common interests. Social capital can be classified as "bridging" (across different demographic divides), "bonding" (the strength of relationships between individuals), or "linking" (trust between individuals and government or other institutions)" (100 Resilient Cities, 2019).

Social Cohesion: founded on the strength of social relationships, is characterized by the presence of trust and participation among individuals within that society. It more than the mere existence of positive social relationships; social cohesion also describes the sense of belonging and connection felt by those individuals. This is predicated on the inclusion of all groups in the society - within formal governance processes, in informal networks, and in day-to-day social interactions. Social cohesion therefore takes account of the strength of relationships within and across demographic divides, ensuring that all residents of a city or community are connected to one another and to the broader institutions that make up society. It is inherently based on the existence of social equity: without equitable access to opportunities and resources, and without inclusion in civil life, a sense of alienation has a chance to grow, and the fabric of society weakens (100 Resilient Cities, 2019).

Social Cohesion is a broader concept that includes social capital. It encompasses not only the presence of interpersonal relationships, but results in positive quality of relationships that is rooted in equal and just treatment, respect, and care for one another. This inherently requires an equitable distribution of resources and opportunities across individuals that can lend itself to stronger bonds across demographic divides (100 Resilient Cities, 2019).

Social Exclusion: is defined as "a complex and multi-dimensional process involving the lack or denial of resources, rights, goods and services, and the inability to participate in the normal relationships and activities available to the majority of people in a society, whether in the economic, social, cultural or political sphere" (Levites and others, 2007).

Social Protection: Actions carried out by the state or privately, to address risk, vulnerability, and chronic poverty. Social protection refers to comprehensive systems including safety nets, social assistance, labor market policies, social insurance options (e.g., contributory pensions, health insurance), and basic social services (e.g. in education, health and nutrition) (CALP Network, 2011).

Shock Responsive Social Protection: There is no single definition of 'shock-responsive social protection'. All social protection interventions are in some sense shock-responsive, in that they deal ex-ante or ex-post with chronic or sudden events that negatively affect households' livelihoods. However, most social protection is designed to support households experiencing shocks as a result of life cycle events such as a loss of jobs, illness or death (idiosyncratic shocks). 'Shock-re-

sponsive social protection' instead focuses on shocks that affect a large proportion of the population simultaneously (covariate shocks). It encompasses the adaptation of routine social protection programs and systems to cope with changes in context and demand following largescale shocks. This can be ex-ante by building shock-responsive systems, plans and partnerships in advance of a shock to better prepare for emergency response; or ex-post, to support households once the shock has occurred. In this way, social protection can complement and support other emergency response interventions (C., O'Brien et al, 2018).

Socio-economic System: Systems where individuals or organizations come together, in an interacting, interrelated and interdependent way, coordinating their actions and connections intentionally or unintentionally, producing their own patterns of behavior, to affect a specific outcome. They can pertain to social or economic factors (GOAL, 2019). For this manual purposes, "critical" socio-economic are those relevant to reduce poverty and increase access to basic services for vulnerable populations in a way that enables these populations move towards resilient wellbeing.

Stakeholder: Any party (individual or collective) that is actively involved in a process; has interests that may be positively or negatively affected by the performance or completion of a given effort or project, and is able to exert influence over it, its deliverables, or its participants (Project Management Institute, 1996 cited by Turnbull et al, 2013). The more they stand to benefit or lose by it, the stronger their interest is likely to be. The more heavily involved they are in the effort or organization, the stronger their interest as well. Stakeholders can be characterized by their relationship to the effort in question (The University of Kansas).

Systematization: Systematization of experience is a method aimed at improving practice based on a critical reflection and interpretation of lessons learnt from that practice. It encompasses the identification, documentation and transfer of experiences and key lessons extracted from a project or an initiative, or group of projects or initiatives for the purpose of advocacy, learning and replication/scaling up. Systematization does not end with the description of the experience and results but involves a deeper insight into how it was possible to achieve what was achieved in order to facilitate the exchange and use of development solutions. Systematizations can be done at any point in a project or initiative. The knowledge products because of a systematization process include but are not limited to guidelines, toolkits, how to briefs, roster of experts, and case studies (Schunter, s.f.).

Stress: Stresses are long-term trends that undermine the potential of a given system or process and increase the vulnerability of actors within it. These can include natural resource degradation, loss of agricultural production, urbanization, demographic changes, climate change, political instability, and economic decline (DFID, 2013).

Structural and Non-structural measures: *Structural measures* refer to any physical construction to reduce or avoid possible impacts of hazards, or application of engineering techniques to achieve hazard resistance and resilience in structures or systems. Common structural measures for disaster risk reduction include dams, flood levies, ocean wave barriers, earthquake-resistant construction, and evacuation shelters. *Non-structural measures* refer to any measure not involving physical construction that uses knowledge, practice or agreement to reduce risks and impacts, in particular through policies and laws, public awareness raising, training and education. Common non-structural measures include building codes, land use planning laws and their enforcement, research and assessment, information resources, and public awareness programs. Note that in civil and structural engineering, the term "structural" is used in a more restricted sense to mean just the load-bearing structure, with other parts such as wall cladding, and interior fittings being termed non-structural.

U

Urban ecosystems: Is defined as any ecological system located within a city or other densely populated area as an entire metropolitan area. Urban ecosystems, like all ecosystems, are composed of biological (e.g., plants, animals) and physical (e.g., soil, water, climate) components. These components interact with each other within a specific area. In this case, the biological complex also includes human populations and their behaviors, their institutional structures, and the social and economic tools they employ. The physical complex includes buildings, transport networks, modified surfaces and energy use and the import, transformation, and export of materials (Renner, 2019). Therefore, the urban ecosystem contains in turn individuals, as nested systems of three spheres: the natural, the built and the socioeconomic (Jha, Miner, & Stanton-Geddes, 2013).

V

Vulnerability: The characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard. Comment: There are many aspects of vulnerability, arising from various physical, social, economic, and environmental factors. Examples may include poor design and construction of buildings, inadequate protection of assets, lack of public information and awareness, limited official recognition of risks and preparedness measures, and disregard for wise environmental management. Vulnerability varies significantly within a community and over time. This definition identifies vulnerability as a characteristic of the element of interest (community, system, or asset) which is independent of its exposure. However, in common use the word is often used more broadly to include the element's exposure (UNISDR, 2009).

Vulnerability Capacity Analysis (VCA): An analytical and planning process (and associated tool of the same

name), originally developed by IFRC and used to facilitate community-led assessment of local disaster risk. The process uses participatory techniques (mapping, seasonal calendars, transect walks, FGDs, interviews, etc.) to develop a comprehensive picture of exposure, vulnerability, and capacities and to prioritize actions to reduce disaster risk. VCA and its variations are increasingly used for broader analysis and development planning processes, including for climate change adaptation (Turnbull et al, 2013).

Vulnerable groups: Vulnerable groups are physically, mentally, or socially disadvantaged persons who may be unable to meet their basic needs and may therefore require specific assistance. Persons exposed to and/or displaced by conflict or natural hazard may also be considered vulnerable (UN High Commissioner for Refugees (UNHCR), 2006). Vulnerable groups may experience a higher risk of poverty and/or social exclusion.

Many local governments have their own methods of vulnerability profiling, but they sometimes focus more on physical vulnerabilities and less on social vulnerabilities, or their scope is limited to women, youth, the elderly, the disabled and people living on the official poverty line. It is worth considering here that vulnerable groups may also include tenants, the LGBT community, ethnic minorities, migrants (both economic and forced migrants), nomadic or transitional communities, people living in areas known for high crime rates, etc. Of course, it is not enough simply to identify vulnerable groups, but also to understand what they are vulnerable to, why, and how vulnerabilities affect their ability to access trust and support networks and services within the neighborhood and city.

LIST OF TOOLS FOR **OPERATIONALIZING RINA**

Sub Step	Tool #	Tool Name	Aurthor(s)	Link
2.2	1	Analysis of Resilience of Communities to Disasters (ARC-D) Toolkit	GOAL	https://resiliencenexus.org/arc_d_toolkit/what-it-is/
2.4				
5.4				
8.4				
11.1				
12.2				
25.1				
2.2	2	Climate Change, Vulnerability and Risk: A Guide for Community Assessments, Action Planning and Implementation	UN Habitat	https://unhabitat.org/sites/default/files/2020/05/climatechange_vulnerabilityandriskguide.pdf
2.3	3	Vulnerability and Capacity Analysis (VCA)	IFRC	https://www.rcrc-resilience-southeastasia.org/document/what-is-vca-2006-ifrc/
2.4	4	Quick Risk Estimation (QRE) Tool	UNDRR	https://mcr2030.undrr.org/quick-risk-estimation-tool
2.4	5	Developing Scenarios for Disaster Risk Reduction	University of Cambridge	https://reliefweb.int/report/world/scenario-best-practices-developing-scenarios-disaster-risk-reduction
2.5	6	Urban profiling Toolbox: Analysis tools for urban profiling in crisis-affected cities	UN Habitat	https://unhabitat.org/sites/default/files/2021/03/toolbox_v11.pdf
14.2				
3.1	7	SWOT Analysis: Strengths, Weaknesses, Opportunities and Threats	Kansas University	https://ctb.ku.edu/en/table-of-contents/assessment/assessing-community-needs-and-resources/swot-analysis/main
3.1	8	Instrument to Measure Capacities of a Local government to Manage Comprehensive Neighborhood Improvement Projects (MIB)	Global Communities	https://gcuqate.org/BMSU/KITMIB_archivos/3%20KIT%20MIB.pdf
3.2	9	Disaster Resilience Scorecard for Cities	UNDRR	https://mcr2030.undrr.org/disaster-resilience-scorecard-cities
11.1				
5.4	10	Guide for Community Characterization from the Municipal Level and its Matrix of selection criteria for precarious communities	Global Communities	http://gcuqate.org/BMSU/KITMIB_archivos/8%20KIT%20MIB.pdf
7.1	11	Actor Mapping Guide	FSG Consulting	https://www.fsg.org/wp-content/uploads/2021/08/Guide-to-Actor-Mapping.pdf

Sub Step	Tool #	Tool Name	Aurthor(s)	Link
7.2	12	Stakeholder Engagement Strategy handbook	BSR	https://www.bsr.org/reports/BSR_Stakeholder_Engagement_Series.pdf
7.2	13	Five-Step Approach to Stakeholder Engagement	BSR	https://prod-edxapp.edx-cdn.org/assets/courseware/v1/9c75b1f4b668f786d32a777261529227/asset-v1:DelftX+RI102x+2T2019+type@asset+block/BSR_Five-Step_Guide_to_Stakeholder_Engagement.pdf
7.2	14	Stakeholder Mapping Toolkit in Public Private Dialogue (PPD)	The World Bank	https://documents.worldbank.org/en/publication/documents-reports/documentdetail/842721467995900796/public-private-dialogue-ppd-stakeholder-mapping-toolkit-a-practical-guide-for-stakeholder-analysis-in-ppd-using-the-net-map-method
8.1	15	Safer Access Guide	ICRC	https://shop.icrc.org/safer-access-a-guide-for-all-national-societies-includes-3-case-studies-pdf-en.html
8.2	16	Developing an Action Plan	Kansas University	https://ctb.ku.edu/en/table-of-contents/structure/strategic-planning/develop-action-plans/main
8.2	17	Guide to Community Engagement and Accountability	IFRC	https://www.ifrc.org/sites/default/files/2021-11/20211020_CEAGuidelines_NEW1.pdf
8.2	18	Designing a Results Framework for Achieving Results: A How-to Guide	The World Bank	http://hdl.handle.net/10986/32158
8.2	19	Results Framework Indicator Annex	USAID	https://usaidlearninglab.org/sites/default/files/resource/files/cleared_ah_rf_indicator_annex.pdf
8.2	20	Resilience for Social Systems (R4S) Approach Guidance Manual	GOAL	https://resiliencenexus.org/r4s/
13.1				
13.2				
19.1				
20.2				
8.2	21	Building a Results Framework Tips	USAID	https://www.ndi.org/sites/default/files/Performance%20Monitoring%20and%20Evaluation%20Tips%20Building%20a%20Results%20Framework.pdf
8.2	22	The DCED Standard for Measuring Results In Private Sector Development	Donors' Committee for Enterprise Development	https://enterprise-development.org/wp-content/uploads/DCED_Standard_versionVII_Apr15_bluecover.pdf
8.2	23	Theory of Change as a tool for participatory planning	Casetti & Paredes-Carbonell	https://doi.org/10.1016/j.gaceta.2019.06.002
8.2	24	Building Theories of Change in Social Programs and Projects	Parque Científico de Innovación Social	https://isfcolombia.uniandes.edu.co/images/Vacaciones2021/PCIS_2020_Guia_para_elaborar_una_teor%C3%ADa_del_cambio.pdf
8.4	25	Guidelines to the DCED Standard for Results Measurement: Defining indicators of change and other information needs	Donors' Committee for Enterprise Development	https://www.enterprise-development.org/wp-content/uploads/2_Implementation_Guidelines_Defining_Indicators.pdf
8.5	26	Monitoring and Evaluation Toolkits	USAID	https://usaidlearninglab.org/mel-toolkits
8.5	27	Participatory Evaluation	University of Kansas	https://ctb.ku.edu/en/table-of-contents/evaluate/evaluation/participatory-evaluation/main

Sub Step	Tool #	Tool Name	Aurthor(s)	Link
8.5	28	Participatory Evaluation Tools	Community of Practice and Learning for Participatory Evaluation for Latin America and the Caribbean.	https://evalparticipativa.net/en/resources/participatory-evaluation-tools/
8.5	29	Handbook for Building Participatory Accountability Systems for City Policies	UN Habitat	https://unhabitat.org/sites/default/files/2021/06/210618_the_building_participatory_accountability_systems_for_city_policies.pdf
8.5	30	Core Humanitarian Standard on Quality and Accountability	CHS Alliance, Group URD and the Sphere Project.	https://corehumanitarianstandard.org/files/files/Core%20Humanitarian%20Standard%20-%20English.pdf
16.5		Core Humanitarian Standard on Quality and Accountability: Updated Guidance Note and Indicators of 2018	CHS Alliance and Sphere Project	https://reliefweb.int/report/world/core-humanitarian-standard-quality-and-accountability-updated-guidance-notes-and?msclkid=1a507150b6a411ec861604baad6a1b0
9.4	31	Public Expenditure and Financial Accountability (PEFA) Program and Assessment Process	The World Bank	https://www.pefa.org/resources/volume-i-pefa-assessment-process-second-edition
9.4	32	Finance for City Leaders Handbook	UN Habitat	https://unhabitat.org/finance-for-city-leaders-handbook-2nd-edition
10.1	33	Integrated Questionnaire for Measuring Social Capital	The World Bank	https://openknowledge.worldbank.org/bitstream/handle/10986/15033/281100PAPER0Measuring0social0capital.pdf?sequence=1&isAllowed=y
10.1	34	Guide for Organizations for Measuring Social Capital	Cité-ID Living Lab	http://cite-id.com/documents/atelier-mesurer-le-capital-social-guide-destin%C3%A9-aux-organisations/Guide-de-mesure-du-CS-Espagnol.pdf
10.1	35	Social Skill Scale Questionnaire	Arnold Goldstein	https://resiliencenexus.org/urban-resilience/social-capital/
10.4	36	Training Manual on Conflict Prevention and Resolution	UNDP	https://www.undp.org/es/latin-america/publications/manual-formativo-en-prevenci%C3%B3n-y-resoluci%C3%B3n-de-conflictos
10.4	37	Prevention and Conflict Resolution Trainer Manual	UNDP	https://www.undp.org/es/honduras/publications/manual-del-capacitador-prevenci%C3%B3n-y-resoluci%C3%B3n-de-conflictos
10.4	38	Handbook on the Transformation of Community Conflicts	UNDP	https://www.undp.org/es/latin-america/publications/manual-del-capacitador-transformaci%C3%B3n-de-conflictos-comunitarios
10.4	39	Community Toolbox Training for Conflict Resolution	University of Kansas	https://ctb.ku.edu/en/table-of-contents/implement/provide-information-enhance-skills/conflict-resolution/main
10.4	40	Developing a Plan for Communication	University of Kansas	https://ctb.ku.edu/en/table-of-contents/participation/promoting-interest/communication-plan/main

Sub Step	Tool #	Tool Name	Aurthor(s)	Link
10.4	41	Promoting Behavior Changes by Making it Easier and More Rewarding: Benefits and Costs	University of Kansas	https://ctb.ku.edu/en/table-of-contents/sustain/social-marketing/promote-behavior-change/main
10.5	42	Minimum Standards for the Protection of Children and Adolescents in Humanitarian Action	The Alliance for Child Protection in Humanitarian Action	https://alliancecpha.org/en/CPMS_home
10.5	43	Guide for Engaging Children and Youth in Disaster Risk Reduction and Resilience Building	UNDRR	https://www.preventionweb.net/files/67704_67704wiachildyouthdrr202067704undrr.pdf
10.5	44	The Gender Manual for Humanitarian Action	IASC	https://www.gihahandbook.org/
10.5	45	The Minimum Standards for Programming on Gender-Based Violence in Emergencies	UNFPA	https://www.unfpa.org/sites/default/files/pub-pdf/19-200_Minimun_Standards_Report_ENGLISH-Nov.FINAL_.pdf
10.5	46	Standards for the Inclusion, Protection and Care of Persons with Disabilities in Emergencies and Disasters	UNICEF & CEPREDE-NAC	https://www.unicef.org/lac/sites/unicef.org.lac/files/2018-06/P.2.3.%20Documento-Normas-Inclusion-Proteccion_13.08.2016-WEB.PDF
10.5	47	Manual for Inclusive Emergency Management	Carlos Kaiser, Armando Vásquez and Daniela Vásquez	https://reliefweb.int/sites/reliefweb.int/files/resources/Manual_de_ddhh_personas_con_discapacidad_en_emergencias.pdf
10.5	48	Humanitarian Inclusion Standards For Older People And People With Disabilities	CBM International, HelpAge International, and Handicap International	https://reliefweb.int/report/world/humanitarian-inclusion-standards-older-people-and-people-disabilities
10.5	49	Operational Guide and Toolkit for Incorporating Protection Principles into Integrated Disaster Risk Management Processes	CEPREDE-NAC (Co-ordination Center for Disaster Prevention in Central America and the Dominican Republic) and ECHO	https://reliefweb.int/sites/reliefweb.int/files/resources/Guia_Operativa_CEPREDENAC_ECHO.pdf
10.5	50	Social Cohesion: A Practitioner's Guide to Measurement Challenges and Opportunities	100 Resilient Cities	https://resilientcitiesnetwork.org/downloadable_resources/UR/Social-Cohesion-Handbook.pdf

Sub Step	Tool #	Tool Name	Aurthor(s)	Link
10.5	51	Violence Prevention Dialogue Toolkit	The International Coalition of Sites of Conscience (ICSC)	https://www.conareg.org/wp-content/uploads/2021/08/Violence-Prevention-Dialogue-Toolkit-EN.pdf
10.6	52	Guide to Local Inclusion of Migrants and Refugees	UN Habitat	https://unhabitat.org/sites/default/files/2021/01/local_inclusion_multipartner_guidance_.pdf
11.1 25.1	53	Life Satisfaction Index	People in Need	https://www.indikit.net/indicator/362-life-satisfaction-index
11.1 25.1	54	Better Life Index	OECD	https://www.oecdbetterlifeindex.org/#/11111111111
11.1 25.1	55	Self-assessment of Essentials for Resilient Neighborhood	GIZ	https://www.eird.org/americas/docs/aspectos-esenciales-barrios-comunidades.pdf
11.1 25.1	56	Welcoming and Inclusive Communities (WIC) Toolkit	Multicultural Council of Saskatchewan (McoS)	https://mcos.ca/wp-content/uploads/2017/07/wic_toolkit_final_july_2017-1.pdf
11.1 25.1	57	Methodological Worksheet for the Urban Inclusion Scorecard	UNHCR, IOM, and UN Habitat	https://ciudadesincluyentes.org/wp-content/uploads/2022/02/Ficha-metodologica-Marcador-de-Inclusion-Urbana.pdf
12.1	58	Methodological Guide for the Elaboration of Cartographies of Natural Risks	Government of Spain	https://xeologosdelmundu.org/wp-content/uploads/2015/01/GUIA_CARTOGRAFIAS_RIESGOS_NATURALES.pdf
12.1	59	Methodological Manual for the Evaluation of Hillside Movements in the Metropolitan Area of San Salvador	IPGARAMSS	https://xeologosdelmundu.org/wp-content/uploads/2015/01/3-vManual-metodologico-laderas2008.pdf
12.2	60	Enhanced Vulnerability and Capacity Assessment	IFRC	https://www.ifrcvca.org/
12.3	61	Guide to Digital Community Mapping, aimed at young people	Global Communities	http://gcguate.org/BMSU/KITBJGIR_archivos/6%20KIT%20BJGIRD.pdf
12.3	62	Instructions to Apply Participatory Enumeration Developed	Global Communities	http://gcguate.org/BMSU/KITMIB_archivos/5_KIT_MIB.pdf
12.4	63	Census of Families At Risk Format	GOAL	https://resiliencenexus.org/urban-resilience/ewrs/
12.4 21.7	64	Matrices for Disaster Risk Assessment in Family Buildings	GOAL	https://resiliencenexus.org/urban-resilience/urban-shelter-and-settlements/

Sub Step	Tool #	Tool Name	Author(s)	Link
12.5	65	Manual for Evaluating Risks in Sites and Built Environment	Gines Suarez - Expert Geologist, Inter American Development Bank	https://dipecholac.net/docs/herramientas-proyecto-dipecho/honduras/manual-emplazamiento-seguro.pdf
17.3				
12.5	66	Basic Manual for Risk Estimation	National Institute of Peru Civil Defense Agency	http://bvpad.indec.gov.pe/doc/pdf/esp/doc319/doc319-contenido.pdf
13.2	67	Market Systems Resilience: A Framework for Measurement	USAID	https://beamexchange.org/uploads/filer_public/f7/60/f76077bc-40c0-4da8-aa3e-92a4982db25b/market-systems-resilience-measurement-framework-report_compressed.pdf
19.1				
20.2				
13.2	68	Local Systems: A Framework for Supporting Sustained Development	USAID	https://www.usaid.gov/policy/local-systems-framework
19.1				
13.2	69	Local Capacity Development Policy	USAID	https://www.usaid.gov/policy/local-capacity-strengthening
14.2	70	Urban Profiling Toolbox For Crisis-Affected Cities	UN Habitat	https://unhabitat.org/sites/default/files/2021/03/toolbox_v11.pdf
14.2	71	Settlement Profiling Tool	UN Habitat	https://unhabitat.org/settlement-profiling-tool
14.4	72	Projects Executed by Communities (PEC) Manuals	Honduran Social Investment Fund (FHIS) and GOAL	https://resiliencenexus.org/urban-resilience/urban-shelter-and-settlements/
17.4				
17.5				
24.3				
14.4	73	Methodological Guide for the Development of Neighborhood-Level Disaster Risk Reduction Master Plans	GOAL	https://resiliencenexus.org/urban-resilience/urban-shelter-and-settlements/
15.1	74	Design manual for Behavior Change in Agriculture, Natural Resource Management, Health and Nutrition	Food Security and Nutrition Network Social and Behavioral Change Task Force	https://www.fsnnetwork.org/resource/designing-behavior-change-agriculture-natural-resource-management-health-and-nutrition
15.2	75	Practical Guide to Conducting a Barrier Analysis	Bonnie L. Kittle	https://www.fsnnetwork.org/resource/practical-guide-conducting-barrier-analysis
15.2	76	Barrier Analysis Questionnaires	Food Security and Nutrition (FSN) Network	https://www.fsnnetwork.org/resource/barrier-analysis-questionnaires
15.3	77	Social and Behavior Change Monitoring Guidance	Break-through Action	https://breakthroughactionandresearch.org/social-and-behavior-change-monitoring-guidance/
15.3	78	Social Media for Behaviour Change (SM4BC) Toolkit	IFRC	https://preparecenter.org/site/sm4bc-toolkit/

Sub Step	Tool #	Tool Name	Aurthor(s)	Link
15.4	79	Guide for Public Awareness and Public Education For Disaster Risk Reduction: A Guide	IFRC	https://www.ifrc.org/es/media/13323?msclkid=05bec772b69411ec9bddd14dcc604dcc
15.4	80	Manual Journalists for Disaster Risk Management	Carlos Morales Monzón	http://desastres.medicina.usac.edu.gt/documentos/docgt/pdf/spa/doc0107/doc0107-parte01.pdf
15.4	81	Community Led Action (CLA) Approach for COVID-19	GOAL	https://goalglobal.wpengine.com/wp-content/uploads/2020/04/ENGLISH-Community-Led-Action-Covid-19-Field-Manual-.pdf
16.1	82	Multi-hazard Early Warning Systems: A Checklist	WMO	https://library.wmo.int/doc_num.php?explnum_id=4463
16.1	83	Practical Guide: Early Warning and Response Systems Design for Social Conflicts	OAS, UNDP	https://www.oas.org/es/sap/pubs/GuiaAlerta_e.pdf
16.5	84	Community Early Warning Systems (CEWS) Training Toolkit - Field Guide	IFRC	https://reliefweb.int/report/world/community-early-warning-systems-cews-training-toolkit-field-guide
16.5	85	Methodological Guide for Developing Community Risk Management Plans Community Risk Management Plan format	GOAL	https://resiliencenexus.org/urban-resilience/ewrs/
16.5	86	Methodological Guide for Developing Family Risk Management Plans Family Risk Management Plans Format	GOAL	https://resiliencenexus.org/urban-resilience/ewrs/
16.5 22.2	87	Practical Guide for Mental Health in Disaster Situations	PAHO	https://www3.paho.org/disasters/index.php?option=com_content&view=article&id=665:practical-guide-for-mental-health-in-disaster-situations&Itemid=924&lang=en
16.5 22.1	88	Sphere Standards Handbook	Sphere Project	https://spherestandards.org/handbook-2018/
16.5	89	Core Humanitarian Standard on Quality and Accountability	CHS Alliance, Group URD and the Sphere Project	https://corehumanitarianstandard.org/files/files/Core%20Humanitarian%20Standard%20-%20English.pdf
16.6	90	Manual For the Design and Implementation of an Early Warning System for Flooding in Smaller Basins	OAS, Government of Ireland	http://www.oas.org/dsd/publications/unit/oea91s/manual.pdf
17.2	91	Community Infrastructure Projects Prioritization Process	GOAL	https://resiliencenexus.org/urban-resilience/urban-shelter-and-settlements/

Sub Step	Tool #	Tool Name	Aurthor(s)	Link
17.4	92	Tyre Wall Construction and Maintenance Manual in Popular Neighborhoods of Tegucigalpa	IDB, GOAL, NDF	http://dx.doi.org/10.18235/0001862
17.3	93	Construction and Maintenance Manual of Steps and Drainage Channels	IDB, GOAL, NDF	http://dx.doi.org/10.18235/0001668
17.4	94	Guide for Drainage Provision and Maintenance	GOAL	https://resiliencenexus.org/urban-resilience/urban-shelter-and-settlements/
17.4	95	Water Quality Manual for Neighborhood Water Management Committees	GOAL	https://resiliencenexus.org/urban-resilience/urban-shelter-and-settlements/
17.5	96	Building Leadership	University of Kansas Community	https://ctb.ku.edu/en/building-leadership
17.5	97	Encouraging Involvement in Community Work	University of Kansas Community	https://ctb.ku.edu/en/table-of-contents/participation/encouraging-involvement
17.5	98	Urban Action Kit	IFRC	https://preparecenter.org/toolkit/urban-action-kit/
24.2				
18.3	99	Disasters and Ecosystems: Resilience in a Changing Climate Source Book	UNEP	https://postconflict.unep.ch/DRR/EcoDRR_Source_Book.pdf
18.3	100	TEEB - The Economy of Ecosystems and Biodiversity for Regional and Local Authorities	UNEP	http://www.teebweb.org/wp-content/uploads/Study%20and%20Reports/Reports/Local%20and%20Regional%20Policy%20Makers/D2%20Report/TEEB_Local_Policy-Makers_Report.pdf
18.3	101	Environmental Aspects	Global Communities	http://gcqate.org/BMSU/KITBJGIR_archivos/4%20KIT%20BJGIRD.pdf
18.4	102	Voluntary Guidelines for the Design and Effective Implementation of Ecosystem-based Approaches to Climate Change Adaptation and Disaster Risk Reduction	Secretariat of the Convention of Biological Diversity (CBD)	https://www.cbd.int/doc/c/3f7a/4589/5cc1b7058bf52427fa9bae84/sbstta-22-inf-01-en.pdf
18.4	103	Integrating Ecosystem Services into Urban Planning and Management	German Development Agency (GIZ)	https://iki-alliance.mx/wp-content/uploads/Manual-ISE-CiClim-low-resolution-stand-01.10.2019.pdf
18.4	104	Climate-Resilient Biodiverse Cities in Latin America and the Caribbean	IDB	https://publications.iadb.org/publications/english/document/Climate-Resilient-Biodiverse-Cities-in-Latin-America-and-the-Caribbean.pdf

Sub Step	Tool #	Tool Name	Aurthor(s)	Link
18.4	105	Guidelines for the Application of IUCN Red List of Ecosystems Categories and Criteria	IUCN	https://portals.iucn.org/library/sites/library/files/documents/2016-010.pdf
18.4	106	TEEB Manual for Cities: Ecosystem Services in Urban Management	UNEP	http://teebweb.org/publications/other/teeb-cities/
19.1	107	Business Categorization Instrument for Informal Settlements	GOAL	https://resiliencenexus.org/urban-resilience/resilient-urban-businessess/
19.2	108	Practical Guide for Resilient Business	GOAL	https://resiliencenexus.org/urban-resilience/resilient-urban-businessess/
19.6	109	Sustainable Business Plan Guidelines for Informal Settlements	GOAL	https://resiliencenexus.org/urban-resilience/resilient-urban-businessess/
19.1	110	Business Continuity Plan	GOAL	https://resiliencenexus.org/urban-resilience/resilient-urban-businessess/
19.1	111	Basic Guide to Begin a Business Continuity Plan for Convenience Stores	FENALCO	https://gestionoriesgos.com/iframe-plan-de-continuidad-de-negocio-sector-tiendas/
19.1	112	Risk Matrix	FENALCO	https://gestionoriesgos.com/download/2338/
19.1	113	Business Emergencies Basic Plan	FENALCO	https://gestionoriesgos.com/download/2343/
19.1	114	Guide for Analyzing Business Impact	FENALCO	https://gestionoriesgos.com/download/2360/
19.1	115	Business Continuity Plan (focused on pharmacies, groceries, clothing manufacturers and hardware store)	FENALCO	https://gestionoriesgos.com/download/2370/
19.1	116	COVID19 Small Business Continuity and Recovery Planning Toolkit	UNDRR	https://www.undrr.org/publication/covid-19-small-business-continuity-and-recovery-planning-toolkit
19.1	117	Global Compendium of Practices on Local Economic and Financial Recovery	UN Habitat	https://unhabitat.org/sites/default/files/2021/03/global-compendium-of-practices-covid-19.pdf
20.3	118	Shock-Responsive Social Protection in the Caribbean Handbook	World Food Programme (WFP)	https://www.calpnetwork.org/publication/shock-responsive-social-protection-in-the-caribbean-handbook/
20.3	119	Shock-Responsive Social Protection Systems Toolkit	Clare O'Brien, Rebecca Holmes and Zoë Scott, with Valentina Barca	https://www.opml.co.uk/files/Publications/a0408-shock-responsive-social-protection-systems/srsp-toolkit.pdf?noredirect=1

Sub Step	Tool #	Tool Name	Aurthor(s)	Link
21.3	120	Resettlement Guide for Populations at Risk of Disaster	Elena Correa	https://documents1.worldbank.org/curated/en/612501468045040748/pdf/653550WP0Box360settlement0guide0150.pdf?msclid=49cf8d0bb6d111ec8c767aaa9dee1ba1
21.3	121	Protocol for Resettling Families Living in High-Risk Areas in the Urban Context	GOAL and UNDP	https://resiliencenexus.org/urban-resilience/urban-shelter-and-settlements/
21.7	122	Latrine Construction and Maintenance Manual in Neighborhoods of Tegucigalpa	Brenda Antúnez	http://dx.doi.org/10.18235/0001766
21.7	123	Rainwater Harvesting System Construction and Maintenance Manual in Informal Neighborhoods of Tegucigalpa	Gabriela Paredes and Sindy Mun-guia	http://dx.doi.org/10.18235/0001861
21.7	124	Household Construction and Maintenance Manual in Informal Neighborhoods of Tegucigalpa	Alejandra Alemán	http://dx.doi.org/10.18235/0001669
21.7	125	Practical Guide for Social Housing	GOAL	https://resiliencenexus.org/urban-resilience/urban-shelter-and-settlements/
21.7	126	Toolkit for Municipal Housing Entities	Global Communities	http://gcuqate.org/BMSU/KITEMUVI.htm
21.7	127	Tools for Processes Linked to Housing Solutions in Guatemala	Global Communities	http://gcuqate.org/BMSU/KITVIVIENDA.htm
22.1	128	Disaster Resilience Scorecard for Cities Public Health System Resilience Addendum	UNDRR	https://program.unisdr.org/campaign/resilientcities/toolkit/article/public-health-system-resilience-scorecard.html?msclid=131ae1dbb6d311ec9f40edb5efcb6a46
22.1	129	Hospital Safety Index: Guide for Evaluators	WHO and PAHO	https://iris.paho.org/handle/10665.2/51448
22.1	130	Evaluation of Damages and Needs in Health for Disaster Situations (EDAN): Guide for Response Teams	PAHO	https://www.paho.org/disasters/dmdocuments/ER_EDAN.pdf
22.2	131	Mental Health and Psychosocial Support in Disaster Situations in the Caribbean	PAHO	https://iris.paho.org/handle/10665.2/3188
22.2	132	Mental Health and Psychosocial Support in Humanitarian Emergencies: What Should Humanitarian Health Actors Know?	IASC	https://cms.emergency.unhcr.org/documents/11982/49286/Mental+Health+and+Psychosocial+Support+in+Humanitarian+Emergencies.+What+should+Humanitarian+Health+actors+know/227c3771-01ac-45ee-88ce-e810430b6f14

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22.3	133	WHO Simulation Exercise Manual	WHO	https://www.who.int/publications/i/item/WHO-WHE-CPI-2017.10
23.1	134	School Safety Index	UNICEF	https://inee.org/es/resources/indice-de-seguridad-escolar-ise
23.2	135	Standard Operating Procedures for Disasters and Emergencies in Schools	IFRC	https://www.ifrc.org/document/standard-operating-procedures-disasters-and-emergencies-schools
23.4	136	Protected School Manual	IFRC	https://www.eird.org/cd/toolkit08/material/proteccion-infraestructura/escuela-prottegida/manual.pdf
24.1	137	Handbook for Urban Interventions by Citizen: Strategies Towards Better Public Spaces	Ocupa Tu Calle, UN Habitat and Avina Foundation	https://www.avina.net/wp-content/uploads/2019/08/Manual-de-Intervenciones-Urbanas.pdf
24.3	138	Multidisciplinary Guide for Municipal Design and Intervention in Public Spaces with a Gender Focus	Local Development Feminist Collective	https://www.fad.es/wp-content/uploads/2019/05/Guia-multidisciplinaria-para-la-intervencion-en-espacios-publicos.pdf
24.3	139	Methodological Guide for Intervention of Community Spaces in Informal Settlements	GOAL	https://resiliencenexus.org/urban-resilience/urban-shelter-and-settlements/
24.3	140	A Practical Guide to Implementing "Achieving Together"	GOAL	https://resiliencenexus.org/urban-resilience/urban-shelter-and-settlements/
24.5	141	Manual on Solid Waste Management in Informal Settlements of Tegucigalpa	Gabriela Rischmagui	http://dx.doi.org/10.18235/0001855
26.1	142	Learning Agenda	USAID	https://usaidlearninglab.org/qrg/learning-agenda
26.1	143	Know How Now: Methodologies for collaboration and knowledge exchange	IDB	https://publications.iadb.org/publications/english/document/Know_How_Now_Methodologies_for_Collaboration_and_Knowledge_Sharing.pdf?msclkid=03837a98b6e811e8cae0bf3c83cdf8c28
26.2	144	Application to Systematize Integrated Neighborhood Improvement Projects	Global Communities	http://gcguate.org/BMSU/KITMIB_archivos/12%20KIT%20MIB.pdf
26.3	145	Guide for a Knowledge Dissemination Strategy	IDB	https://docs.google.com/document/d/18hYU9-Hh7niY-S2r_Y19nyKz3IS2IXdguAYjZgy7djE/pub
27.5	146	Managing Integrated Neighborhood Improvement Projects: A Methodological Guide for Local governments	Global Communities	http://gcguate.org/BMSU/KITMIB_archivos/3%20KIT%20MIB.pdf

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27.5	147	Practical Guide for Urban Planning	GOAL	https://resiliencenexus.org/urban-resilience/urban-shelter-and-settlements/
29.2	148	Disaster Recovery Framework Guide	UNDP	https://reliefweb.int/report/world/disaster-recovery-framework-guide-revised-version-march-2020
29.3 29.6	149	Post-Disaster Needs Assessment (PDNA)	GFDRR, UN Development Group	https://www.gfdr.org/sites/default/files/publication/pdna-guidelines-vol-a.pdf
29.4	150	Guidance Note on Recovery: Pre-Disaster Recovery Planning	International Recovery Platform (IRP)	https://www.undrr.org/publication/guidance-note-recovery-pre-disaster-recovery-planning
29.4	151	Build Back Better in Recovery, Rehabilitation and Reconstruction	UNISDR	https://www.unisdr.org/files/53213_bbb.pdf
29.5	152	Orange Book: Neighborhood Configuration Manual	Javier Parra	https://resiliencenexus.org/urban-resilience/ewrs/
29.6	153	Initial Multi-Cluster/Sector Initial Rapid Assessment (MIRA) Guidance	Inter-Agency Standing Committee (IASC)	https://interagencystandingcommittee.org/system/files/mira_manual_2015.pdf
29.6	154	Global Rapid post-disaster Damage Estimation (GRADE) Approach	GFDRR	https://www.gfdr.org/en/publication/methodology-note-global-rapid-post-disaster-damage-estimation-grade-approach
29.6	155	Guidance Note on Early Recovery	Cluster Working Group on Early Recovery (CWGER)	https://inee.org/sites/default/files/resources/Cluster_Working_Group_on_Early_Recovery_2008_Guidance_note_on_early_recovery.pdf
29.6	156	Disaster Recovery Guidance Series: Education Sector Recovery	Dr. Ritesh Shah, Chris Henderson, and Daniel Couch	https://www.gfdr.org/en/publication/education-sector-recovery
29.6	157	The Roadmap for Safer and More Resilient Schools	The World Bank	https://gpss.worldbank.org/en/roadmaps/roadmap-safer-and-resilient-schools-rsrs
29.6 30.2	158	Return to Joy Thematic Manuals	UNICEF	https://inee.org/es/recursos/el-programa-retorno-de-la-alegria-manuales-tematicos-republica-dominicana
29.6 30.2	159	Minimum Standards for Education: Preparedness, Response, Recovery	INEE	https://inee.org/resources/inee-minimum-standards
29.7	160	Minimum Economic Recovery Standards (MERS)	The SEEP Network	https://handbook.spherestandards.org/en/mers/#ch001

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