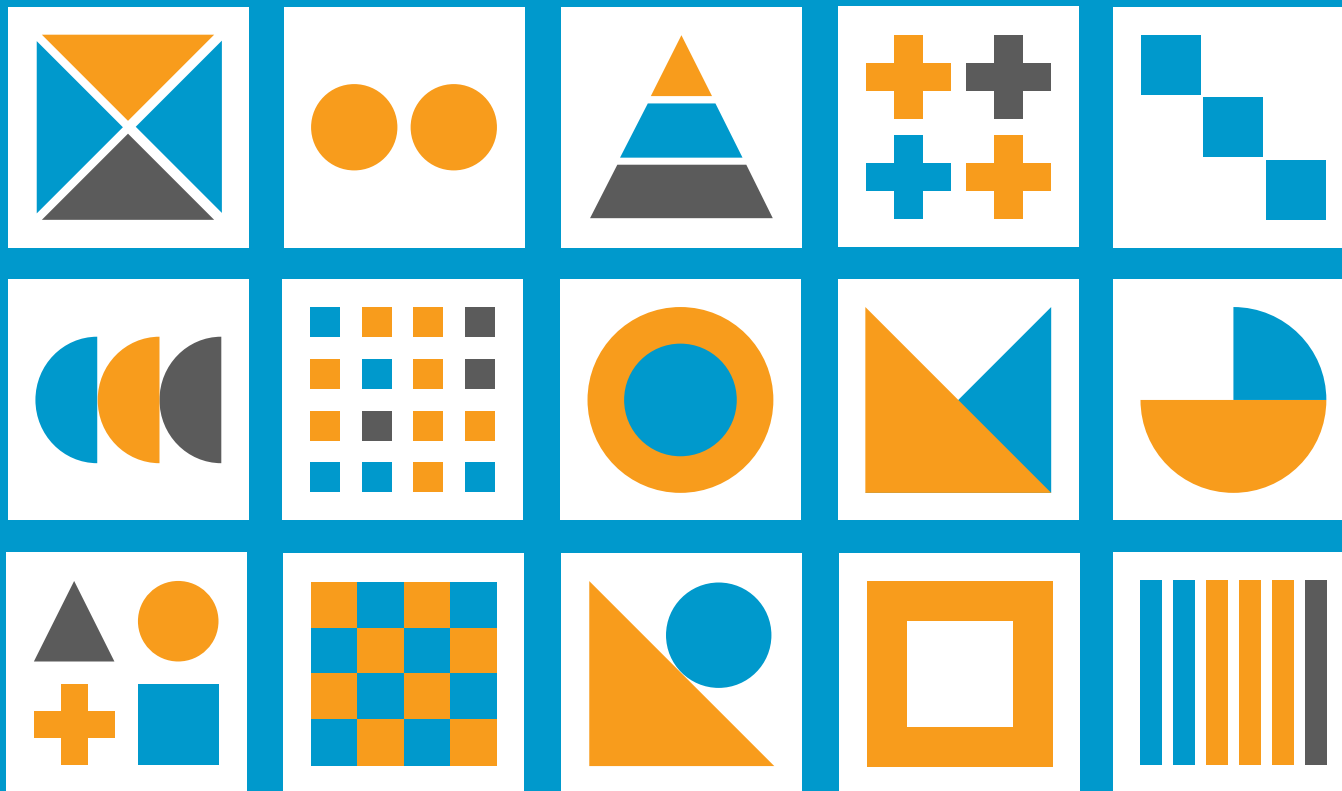


Risk-Informed Development Guide



A practical approach for civil society organisations and communities most at risk



SUKANTI BEHRA

India

“Cyclones are a major threat here. Most of the families are engaged in farming and paddy is the main crop of the season. We lose our crops in cyclones.

“We attend the Gram Sabha (village council) but we are not able to give any input because we do not have sufficient knowledge about local government plans.”

Photo: Sarika Gulati/GNDR



Introduction

5	What is risk-informed development?
11	How to use this guide
16	The risk-informed development approach
22	The role of civil society organisations
25	Guiding principles
29	The three key phases of risk-informed development

Key stages

34	Stage 1: Engage with communities most at risk
39	Stage 2: Organise around the vision of the community most at risk
44	Stage 3: Understand context and risks
50	Stage 4: Risk prioritisation and development impact assessment
54	Stage 5: Strategic foresight and scenario planning
59	Stage 6: Strategise with communities most at risk
65	Stage 7: Action with communities most at risk
70	Stage 8: Accountability to communities most at risk and learning with them
74	Stage 9: Repeat and strengthen

Tools

77	Tool 1: From vision to goals template
79	Tool 2: Checklist on what data to gather and how to record it
86	Tool 3: Contextual analysis of geophysical susceptibility to hazards
92	Tool 4: Relationship mapping exercise
95	Tool 5: Reflective questions on the resilience of people, place and systems
98	Tool 6: Risk-informed development analysis options
102	Tool 7: SWOT analysis

THIS IS AN INTERACTIVE PDF

- Hyperlinks go to additional [resources](#).
- Chapter titles above go to that page.
- Menu button returns to contents. →



ACKNOWLEDGEMENTS

Background

This guide aims to consider how we can integrate risk-informed development into all aspects of development, disaster risk management, climate adaptation and crises response work. It builds on the work of GNDR in community-based disaster risk management and coherence to measure civil society's success in engaging with communities most at risk.

'[Risk-informed development: From crisis to resilience](#)' (UNDP, p. 34) is a guiding reference to evolve the process of risk-informed development planning, alongside existing GNDR approaches and resources.

We have also received input from GNDR members who have shared risk-information and planning tools they currently use and places where they have identified gaps in their work.

The content is a product of multiple resources, best practices and research on disaster management, risk drivers and development planning, including participatory and community-led development planning.

Funder

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INTRODUCTION

What is risk-informed development?



What is risk-informed development?

Risk-informed development prioritises the risks faced by communities living in the most vulnerable situations. It works through the perspective of people most at risk themselves. Communities most at risk come up with development solutions that mitigate their risks and builds resilience.

Prioritise communities most at risk

GNDR wants to prevent hazards from becoming disasters. As a global network of civil society organisations we can easily think that we are 'all in this together' as we respond to the hazards, risks and challenges that cause disasters.

However, when taking a closer look at communities and the risks they face, it becomes apparent that we are not 'all in this together' in the same way. Threats, risks or challenges discriminate.

Risk-informed development prioritises the risks faced by communities living in the most vulnerable situations. It works through the perspective of people most at risk themselves.

Communities most at risk come up with development solutions that mitigate their risks and their build resilience. Their reality, lived experience, knowledge, organisation and action allows us to be truly risk-informed in planning for development. It is an approach which enables more sustainable and resilient development overall.



Base development on community perspectives of risk

The primary aim of risk-informed development is to prepare the most vulnerable communities for future risks, take up proactive measures to mitigate risks and to build the resilience of communities and the landscapes they occupy and depend on - and do this through a process led by them.

Risk factors are part of the places in which we live, such as the environmental capacity and the ecosystem service provided. Unfortunately, risk factors are also linked to people's actions and social, economic and psychological factors that put certain people more at risk than others.

When development is not risk-informed, communities most at risk report that far from offering progress, this so-called 'development' actually creates risk, increases existing risk and wipes out potential development gains. It challenges everyone involved to recognise that development choices create risk as well as opportunity.

Risk-informed development can only be achieved if the development planning process is informed by the knowledge of risk and acts to then mitigate the risk. Risk-informed development planning therefore must involve multiple stakeholders with multiple objectives and agendas so as to streamline action and decisions through coherence and collaboration.

The purpose is to arrive at documented strategic actions and mutually agreed decisions that will:

- Avoid creating complex risks through poor development choices
- Reduce complex risks by using development to reduce vulnerability and exposure, and increase resilience
- Promote iterative and constant learning to improve sustainable development and resilience

Most importantly, if development planning considers local risk from the perspective of those most at risk, its potential for positive impact on the lives, livelihoods and assets is substantially strengthened.





Source info: UNDP report on risk-informed development: from crisis to resilience 2019



Six drivers of risk

GNDR has identified [six risk drivers](#): these are the contexts in which reducing disaster risk has become more challenging as the world changes. They are interconnected and have the potential to amplify existing risk and negatively impact the development of communities most at risk, as well as society at large.


Understanding these risk drivers and how they operate or influence communities, especially from the perspective of those most at risk, can help make effective and relevant decisions to be more risk-informed.

A localised understanding of the intrinsic factors that increase peoples' vulnerability to these risk drivers across diverse geographies, socio-cultural and economic contexts is vital.


Risk-informed development integrates this risk perspective by embedding risk drivers and hazards into the development planning process across each stage.



Climate change



Forced displacement



Urbanisation



Gender inequality



Food and water insecurity



Conflict



Risk-informed development planning

Development planning is a decision-making tool. When this process is applied by communities most at risk and those around them, it allows them to make informed decisions to realise their aspirations as a community, for themselves and their place.

Risk-informed development resolves issues and roadblocks in their progress and growth – especially risk from risk drivers and hazards.

Conventional planning practices are now being replaced by more dynamic and iterative processes as landscapes and communities rapidly transform. This is partly due to hazards and their associated risk drivers becoming more complex, intense and frequent.

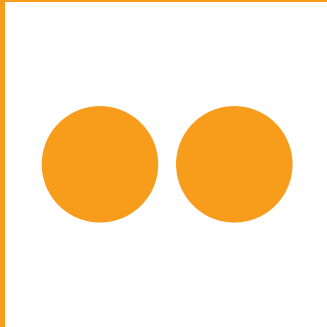
The GNDR community-led and participatory risk-informed development planning process involves nine stages. As development plans and strategies are reviewed on a regular basis, revisit the nine stages. Always ask: How can communities most at risk and everyone around them work together to strengthen resilience and prevent hazards from becoming disasters?

Prevent hazards from becoming disasters

GNDR hopes that local knowledge, expertise and realities from the perspective of the communities most at risk will contribute to the development plans of all actors, including government, international institutions and the private sector, so that policies and practices are more risk-informed and hazards are prevented from becoming disasters.

The GNDR risk-informed development guide and toolkit sets out the principles, approaches, stages and steps to complete risk-informed development planning.

Conventional planning practices are now being replaced by more dynamic and iterative processes as landscapes and communities rapidly transform.



OVERVIEW

How to use this guide



How to use this guide

This risk-informed development guide and toolkit aims to strengthen the capacity of civil society organisations to engage in transformative risk-informed development planning with communities most at risk.

What is included in this guide?

The guide highlights key approaches to strengthen risk-informed development and recommends the stages necessary to deliver risk-informed development planning.

It aims for risk-informed development that is localised, community-led and participatory. It highlights ways in which risks created by hazards and risk drivers (e.g. climate change, urbanisation, food and water insecurity, forced displacement, gender inequality and conflict) can be mitigated.

It should not be seen as an exhaustive manual. Its purpose is to point in the right direction, give an overview of the complexities involved and highlight the multi-sectoral nature of development planning. This guide should not be seen as a replacement for the formal development planning processes in various countries and regions.

It is intended to introduce or strengthen the capacities of communities most at risk on the use of risk information and encourage greater participation by those most at risk in development processes.

Each stage recommends ways to integrate aspects of risk information into a community-led development planning framework. This guide suggests ways to:

- Gather, integrate and use information around risks (specifically related to hazards and risk drivers)
- Read and analyse multiple factors and their impacts on places, people and systems (both physical and social)
- Prepare for anticipated risks in the future and build resilience by harnessing environmental, social and economic potential

A central approach and guiding principles for carrying out risk-informed development planning is provided, as well as structured advice for each stage of the process. Objectives, key steps, as well as relevant tools are given at each stage.



Who is this guide for?

This guide is for civil society organisations working together with communities most at risk to strengthen their participatory development planning, so that it is risk-informed and results in strengthened resilience.

Civil society or non-governmental organisations working at national and regional levels can also use the guide to ensure those most at risk are able to advocate for policies at the national level, and to support localised and risk-informed development planning that is accountable to those most at risk.

Development and planning require institutional support through policies, financing mechanisms and technical capacity.

Those involved at national, regional or state levels could further use this guide to advocate for policies, national action plans and strategies that:

- Support localised and participatory approaches which actively involve the most at risk communities in the larger development planning and decision-making process
- Take into consideration the use of local knowledge and data, localised scientific data on climate change, and the localised implications of disasters
- Support localised and indigenous methods for resilience building and risk-mitigation

This guide is for civil society organisations working together with communities most at risk.



How to use this guide

Community-led and participatory methods and models of development planning should be carried out at a local scale. This means that whether you are in a mega-city, town or village, the scale of engagement has to start at the neighbourhood level to identify those most at risk and engage them in a process of learning and knowledge gathering which can inform development plans and decisions at regional and national levels.

It is recognised that there are multiple entry points for this guide. Risk-informed development can start at any point, including in the immediate response to disasters.

If work is already underway but you need to know more of a community's vision or engage them further, refer to stages one and two of this guide.

If you know that amongst the six prioritised risk drivers one is more prominent, take measures to focus your risk-informed development process accordingly.

For example, if gender imbalance is a major issue, carry out each stage with a gender lens before moving on to address other risks. If food and water insecurities have been highlighted, then gather information and look out for evidence and issues specific to this. Stage three will help you understand this context.

If you are working well with the community and have lots of ideas for collaboration, perhaps look at stage four to prioritise risk actions.

If you are negotiating with national plans, use stage eight to conduct learning and accountability measures to strengthen and build on existing work.

Risk-informed development can start at any point, including in the immediate response to disasters.



MUWAMUNYA PATIENCE

Uganda

“We face poverty, hunger and famine. My local government have not helped us. The water we have is unsafe although we use it for drinking and cooking. We are not included in community planning and decision making.”



Photo: Jjumba Martin/GNDR





APPROACH

The risk-informed development approach



The risk-informed development approach

Risk-informed development enables communities most at risk to be leaders and key decision makers of development - and their future. It empowers individuals and communities at risk to take action today and in future to prevent risks and build resilience. It captures local knowledge and better understands the localised implications of various global and local factors of influence. It aims to ensure that no one is left behind.

Key considerations

The central approach of risk-informed development planning integrates participatory action and embeds risk information into existing planning processes. It is therefore necessary to consider:

- How we incorporate the risk perspective of those most at risk while carrying out the development planning exercises
- How we use risk information, including from the perspective of those most at risk, while planning for community development such that communities most at risk have better resilience against various risks as they progress into the future

A rights-based approach

When identifying those individuals and community groups most at risk, it must be remembered that whatever circumstances they face, people deserve their human rights - the basic standards every person deserves to live a life of dignity.

Rights are economic, social, cultural, civil and political. They are universal and indivisible. One person is not owed more or fewer rights than another person. They should be seen with collective responsibility. It is the primary responsibility of the state to respect, protect, promote and fulfil human rights.

However, where rights are denied, the issue should be addressed to tackle the root causes and empower people to achieve or claim their rights, and enable duty-bearers to meet their obligations.

The rights-based approach within risk-informed development takes the side of people who suffer injustice and inequality, seeing them as active rights-holders who can be empowered to change their situation.



Build power to achieve risk-informed development

Risk-informed development aims to address the fact that communities are at risk because their human rights are being denied.

They don't have access to, or equitable control over, the resources or rights they need to be resilient and lead a life of dignity.

When individuals' rights are denied, their experience of risk starts. What begins with a loss of self-confidence or hope, leads to further displacement from the power needed to address their situation.

Once displaced from resources or the decision-making processes connected to them, it becomes easier for individuals at risk to be criminalised, blamed, stigmatised, and eventually made invisible by those in authority - who are meant to protect, respect and promote their rights.

The multiple denial of rights increases as disasters strike. Risk drivers - including climate change, conflict, food and water insecurity, forced displacement, gender inequality and urbanisation - further deplete resources and amplify the multiple and complex risks faced.

Gender inequality or discrimination once again can prevent certain groups accessing the resources they need to rebuild their lives.

Patriarchy and social exclusion continue to reduce the collective or individual rights available.

Those most at risk are therefore prone to injustice, and left without the power to address their denial of rights. They are not considered when designing policies addressing risks.

It is essential that we strengthen and build power as part of risk-informed development, in order to address the fact that rights are denied.

If power is the ability to influence another's actions, then power imbalances that deny rights must be addressed.

Risk-informed development therefore aims to primarily include them so that in considering

their rights, power and the risk factors they face, development becomes risk-informed, sustainable and resilient.

Building power for risk-informed development means:

- People have control over their own lives
- Power is diffused to communities most at risk
- Skills and capacities are developed to build self-confidence and make decisions that improve life chances
- The anticipated futures of individuals and groups - especially those most at risk - define and shape the world around them (environmentally, economically, socially and systemically)



Put people at risk at the centre of development

People at risk are central to risk-informed development.

It is essential that risk-informed development is inclusive and this means involving those most at risk in the process. They are critical to understanding and assessing the complex threats, risks, challenges, opportunities, uncertainties and options faced by communities most at risk. Civil society must partner with them.

The foundation of any engagement with communities is built on trust and accountability. Building positive relationships with the community is a starting point. The role of civil society is not in directing or dictating to communities what to do, but in facilitating, building awareness and creating an enabling environment for community members to take leadership roles in risk-informed development planning.

Prioritise local perspectives of risk

Local considerations of risk are central to risk-informed development. With regards to risk-informed development planning, it is important to bring coherence between actions that communities take up and the actions already existing in the formal development planning frameworks, which are applicable or relevant to the community.

Risk-informed development planning at the community level has to leverage the provisions of existing plans, policies and actions across sectors and scales. At the same time, it must evolve to inform regional and national policies around disaster risk reduction, climate change adaptation and sustainable development. This bridges the gap between local, national and international plans and encourages localisation.

Build relationships with communities most at risk

Building relationships is key in all we do. These tips are a reminder of how to do this:

- Listen to different perspectives, especially those most at risk
- Connect with the people most at risk through one-on-one conversations to get to know them individually; when working with children and young people connect through schools or organisations, ensuring child safeguarding processes are followed
- Consult and communicate with community groups and individuals about the risk-informed development process to co-design how and when communities want to carry out development actions
- Encourage ideas and suggestions from community members about how they want to engage in risk-informed development planning
- Consult with leaders and community representatives before agreeing on the format for carrying out and completing each stage of the process to ensure a good relationship with them



Ensure inclusion in planning

Ensure that all groups in a community or neighbourhood, especially the most at-risk, are actively included and participate in every stage of the risk-informed development process in the following ways:

- Identify the most at-risk groups in the community that civil society organisations (CSOs) work with
- Organise focus group discussions with specific at-risk groups to further understand their perspective; at-risk groups could include women, people that identify as part of the LGBTQ+ community, people living with disabilities, minority groups, younger or older people, etc.
- Ensure that workshops, meetings and discussions are scheduled at times appropriate to those most at risk, and repeated if necessary to ensure inclusion, and at times that maximise participation
- Ask broad, open-ended questions (not yes or no questions); the intention is to encourage discussion between the members and share ideas
- Pay special attention to support the participation of the most at-risk groups when they are involved in conversations or events with others
- Accommodate different language and communication methods to ensure everyone understands and can contribute to the conversation
- Ensure that all community members have the opportunity to speak
- Be culturally sensitive, especially when working with diverse cultural groups
- Pay special attention and design appropriate communication methods for those who need it (e.g. children, youth, older people or people living with disabilities)
- Be flexible in allowing participants to take breaks during workshop sessions, focus group discussions or community forums
- Facilitate and encourage informal and ice-breaking sessions to enable diverse groups to work together and interact directly
- Ensure participatory exercises are flexible in schedule and conducted in places where all community members can comfortably and easily participate



Gender inclusion

Gender inequality arises from the expected roles of men and women in a society, which influences socio-economic status, the level of agency, and the way men and women prepare for, react to, are impacted by, and recover from disasters.

Natural hazards are gender neutral but the impacts are not. Men and women, and boys and girls face different levels of exposure and vulnerability to natural hazards, driven by gender relations and discrimination in society. Gender dynamics play a role in a wide range of factors associated with resilience – from preparedness levels to access to coping mechanisms that can support recovery.

We can build gender inclusion by ensuring:

- That women hold leadership positions
- That each stage and process of risk-informed development planning accommodates women's time and convenience
- Methods for meaningful participation and inclusion are incorporated

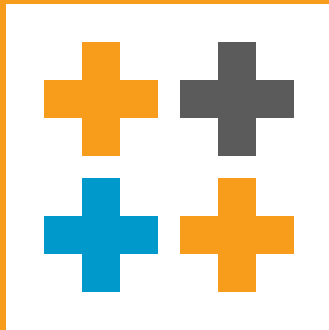
Ensure collaboration with multiple stakeholders

Effective risk-informed development, whilst primarily includes people most at-risk, needs to involve a range of stakeholders.

To ensure strong [collaboration](#):

- Identify local partners for collaboration, for example: experts and academics from the fields of geography, social sciences, natural sciences, development and health; private sector philanthropists, prominent local companies and industries; and local government units
 - Identify local institutions for collaboration during each of the stages, for example educational, technical and local government agencies
 - Include facilitators from already established community organisations (if present) to conduct the workshops or exercises
 - Explore the scope of local funding partners in sponsoring or supporting smaller activities and requirements in the risk-informed development process
- Explore continued sponsorships with larger corporate social responsibility funders; CSOs should ensure that community representatives and leaders in charge of risk-informed development planning are involved in these discussions





CIVIL SOCIETY

The role of civil society organisations in risk-informed development



The role of civil society organisations in risk-informed development

Facilitate and advocate for localisation

Civil society organisations (CSOs) engage in local and national risk-informed planning processes. While local-level development planning aims to capture, understand, plan and manage local aspects of various sectors, the development agenda for each sector is determined by sectoral policies and investment decisions which are typically made by national and state governments.

Risk information cuts across all sectors, and by extension, the government departments, ministries and private agencies associated with them. Development plans at national and regional levels can be sectoral or cross-sectoral.

Broadly speaking, the sectoral plans of a national or state government aim to bring growth for a given sector, to cater for the requirement of individuals and communities (i.e. physical and social requirements in terms of resources or service provision); generate employment and livelihood opportunities; ensure the flow of money in the supply chain; and generate revenue.

CSOs operating at national and regional levels can help drive the agenda of localisation. They can engage with national and regional decision makers to facilitate, promote and advocate for:

- Policies and legislation that support community-led risk-informed development planning processes
- Policies and legislation that orientate planning departments and agencies to support community-led risk-informed development planning
- Policies and legislation that integrates community-led risk-informed development planning into other legal documents of planning (e.g. city development plans or master plans)
- Policies and legislation that integrates community-led risk informed development planning into sectoral plans
- The integration of findings and outcomes of local level risk-informed development plans into national and regional adaptation plans, disaster management, mitigation plans and development regulations, so as to resolve conflicts and to bring coherence
- Schemes and funding opportunities to undertake community-led, risk informed development planning process, and implement specific actions and interventions proposed by communities

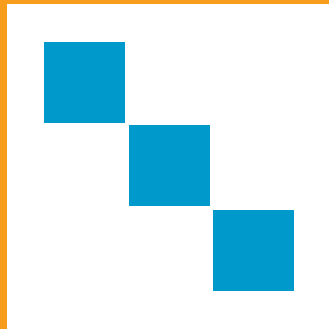


Practical steps for CSOs

Civil society organisation (CSOs) can take these practical steps to achieve their facilitating role in risk-informed development:

- Provide technical support and institutional recognition of grassroots level activities around community-led, risk-informed development planning processes
- Provide access to national and sectoral data platforms and research materials (which local communities can use in their development planning process)
- Be prepared to provide additional information and be aware of important current events, issues, and development-related activities in and around the community
- Encourage community members to lead various activities and exercises involved in risk-informed development planning
- Utilise a public place, community hall or classrooms in a local school (i.e. somewhere familiar and comfortable to community members, where ownership of place already exists)
- Get the necessary permissions for conducting the workshop at the venue (whether it is a town hall, school premises, or any other public open space like a market centre, town centre or village meeting ground)
- Ensure there is continued communication with community members throughout risk-informed development planning
- Empower community representatives through capacity building and training throughout risk-informed development planning
- Advocate for a risk-informed approach to development to national and regional decision makers (GNDR has published an [advocacy toolkit](#) to help guide the advocacy planning process at the national level)

Advocate for a risk-informed approach to development to national and regional decision makers.



PRINCIPLES

Guiding principles of risk-informed development



Guiding principles of risk-informed development

Five principles guide who is involved and how they participate in risk-informed development.

1. Owned by communities most at risk

Recognition of community custodianship of commons (i.e. cultural and natural resources accessible to all members of a society, including natural materials such as air, water and a habitable earth) by those who live there; the recognition of communities most at risk to take part in decisions and development processes that affect them.

2. Participatory

Meaningful and engaging spaces for multiple stakeholders to harness collective wisdom and capacities to make decisions together, diagnose challenges and chart a course of action to resolve them.

3. Inclusive

The inclusion of relevant and multiple stakeholders – particularly marginalised groups – for fair, equitable and effective results.

4. Gender transformative

Actively examine, question and change rigid gender norms and imbalances of power that advantage boys and men over girls and women.

5. Empowering

Remove barriers (individual, societal, systemic) that hinder people – especially those that are marginalised, denied rights or most at risk – from taking control of their own lives and the decisions that affect them.



Six principles guide how the risk-informed development process is approached and delivered.

1. Localised

Adaptable to ensure communities most at risk have the capacity, information, linkages, resources and power they need to decide how to strengthen their own resilience; this adaptation should be contextual and meet the requirements or unique conditions of a particular area.

2. Aspirational

Use imagined futures from individuals and groups themselves, especially those most at risk, to define and shape the world around them.

3. Anticipatory

Take proactive intervention based on forecasts of predicted risks on the lives and livelihoods of the most marginalised, or drivers of development and change.

4. Evidence-based

An approach that involves making evidence-based deductions and conclusions which are then tested and further studied to arrive at the best solution, while retaining the perspectives and the interests of the communities most at risk.

5. Adaptive

Flexible to make changes when appropriate and to not compromise risk-informed development (whether short term or long term).

6. Result-oriented

Ensure that the development vision is translated into action and that these decisions and strategic actions show the expected results; this requires regular monitoring and management wherein all stakeholders involved are accountable.



CHRISTINA ROSARIO DE OLIVEIRA

Brazil

“What can I do to improve the place I love so much? Some people will say the role of women is to wash, iron, tidy and cook. But no.

“There are many other important roles within society, within the community, that need to be valued. One is what we women do with the NUDEC (local civil defence centres).”

Photo: Julia Lemos Lima/GNDR





KEY PHASES

The three key phases of risk-informed development



The three key phases of risk-informed development

The risk-informed development planning process can be broken down into three main phases, each with three stages.

Phase I: Define (re-define)

Stage 1: Engage with communities most at risk

The starting point is with communities most at risk themselves: seek their vision and ensure their perspective is at the heart of all that is carried out.

Firstly, it is crucial to listen to them articulate what is happening in their context. The conversation should engage them with knowledge of what is happening around them - a wider perspective of the decisions taken elsewhere or wider phenomenon - that ultimately impacts their lives. From this, it is possible to capture their aspirations for the future.

Stage 2: Organise around the vision of the community most at risk

Community members, civil society organisations (CSOs) and other stakeholders prepare and organise themselves to work together for risk-informed development planning.

Stage 3: Understand context and risks

There is a need for communities most at risk to interact with scientific knowledge and emerging global contexts in order to gain a better understanding of the context-specific risks and relationships, and therefore develop through informed analysis and choices. This is achieved by gathering knowledge and data with the community most at risk and from other secondary sources. This stage covers key aspects around context and risk assessment and relationship mapping.



Phase II: Assess and anticipate

Stage 4: Risk prioritisation and development impact assessment

Community risk prioritisation enables communities to make decisions on what to prioritise and what the key challenges are in addressing risks and building resilience. For this stage, various conditional and impact assessments are recommended to gain a deeper understanding of complex risks and their impacts on communities and the landscape they occupy.

Stage 5: Strategic foresight and scenario planning

This stage is about helping communities to re-imagine their visions and goals based on a better understanding of future trends and emerging issues. It provides tools and methods to engage communities in foreseeing future trends. Mega-trend analysis, scenario imagining and back-casting the community vision are the key components of strategic foresight.

Stage 6: Strategise with communities most at risk

At this stage, communities (facilitated by CSOs) will be able to learn from examples and best practice, identify and agree on necessary action, and make decisions around prevention, and mitigation and resilience building. It is important that prioritisation by the communities most at risk is incorporated in the priorities of the wider communities. This is arguably where the biggest challenge of development lies.

It is important that prioritisation by the communities most at risk is incorporated in the priorities of the wider communities. This is arguably where the biggest challenge of development lies.



Phase III: Act and manage

Stage 7: Action with communities most at risk

Implement the necessary actions and interventions that communities have decided upon. Different modes to implement the actions and other aspects involved in realising action (such as finding coherence with other relevant projects, schemes and plans) need to be considered.

Stage 8: Accountability to communities most at risk and learning with them

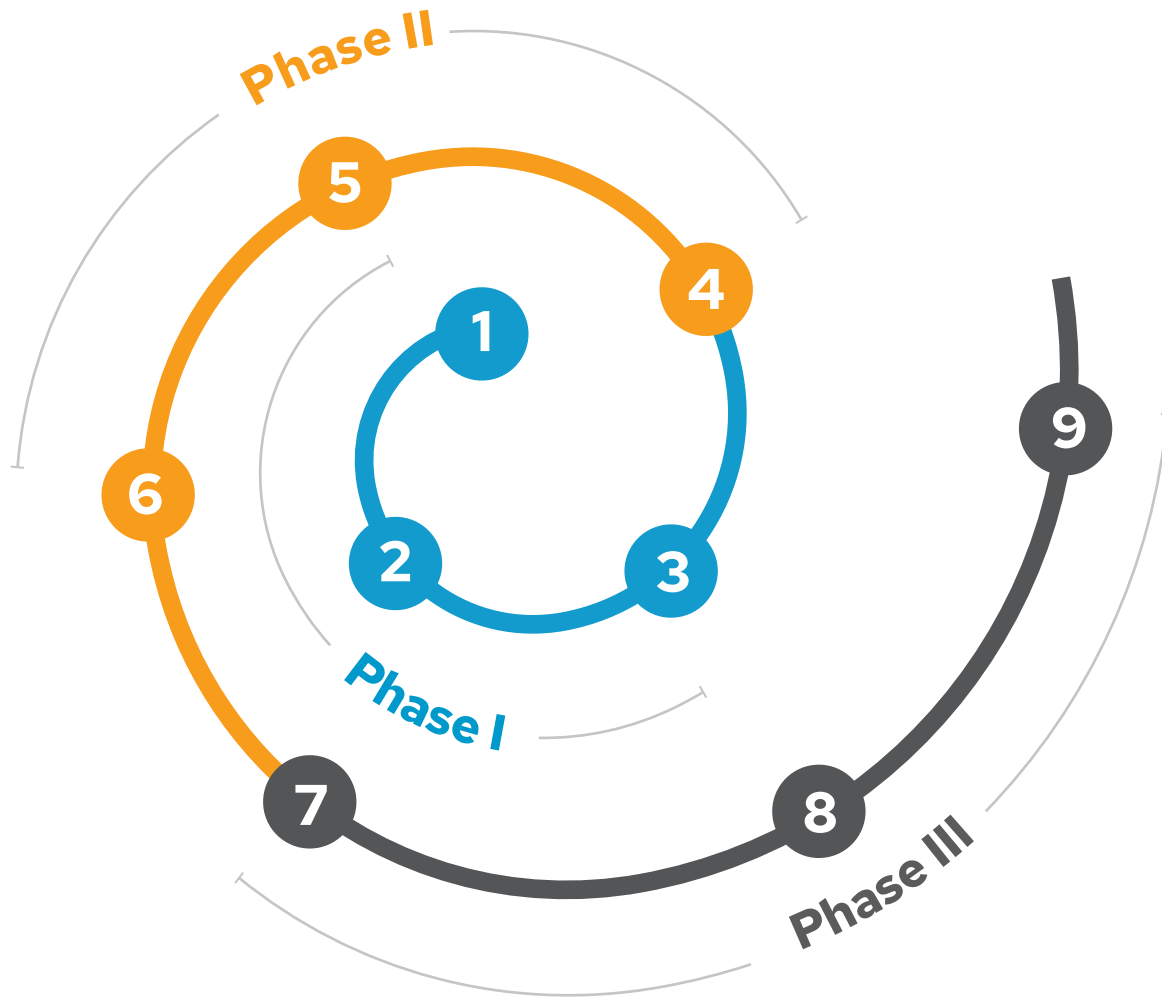
Whilst documented as stage eight, accountability to, and learning with, communities most at risk should take place across the entire process, as well as at the end. As momentum builds around what is taking place, it is hoped that more stakeholders will join the process and that shared learning - via formal and informal review processes - can lead to sustained progress. Accountability processes should mobilise a responsible use of power by duty bearers and stakeholder responsible for development.

Stage 9: Repeat and strengthen

Risk-informed development planning is not a one-time activity. Its success is anchored in sharing learning, strengthening action and revisiting the process to improve development. This is because risks and risk drivers are dynamic and so is development and growth. CSOs and communities can improve or expand the scale of their risk-informed development planning process in the next cycle based on insights gained by action and learning. GNDR hopes that through the success of a first risk-informed engagement, communities are empowered to address more complex issues, bigger risks or more powerful barriers.

As momentum builds around what is taking place, it is hoped that more people will join the process and that shared learning can lead to sustained progress.





Phase I: Define (re-define)

- **Stage 1:** Engage with communities most at risk
- **Stage 2:** Organise around the vision of the community most at risk
- **Stage 3:** Understand context and risks

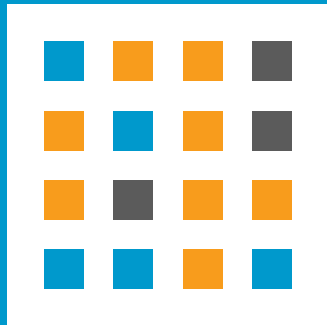
Phase II: Assess and anticipate

- **Stage 4:** Risk prioritisation and development impact assessment
- **Stage 5:** Strategic foresight and scenario planning
- **Stage 6:** Strategise with communities most at risk

Phase III: Act and manage

- **Stage 7:** Action with communities most at risk
- **Stage 8:** Accountability to communities most at risk and learning with them
- **Stage 9:** Repeat and strengthen





STAGE 1

Engage with communities most at risk



Engage with communities most at risk

This stage supports civil society organisations (CSOs) to initiate conversations with community members to identify the most at-risk and marginalised groups; introduce the risk-informed development planning process; and consider with community members how they want to engage.

Overview

To achieve this stage civil society organisations should aim to carry out initial conversations with all demographic groups – especially those most at risk. They should listen to their experiences and initiate the exploration of their vision for the future.

Aims

The aim of this stage is to capture their perspectives and aspirations to understand their vision, and also understand their apprehensions or concerns about the risks they face. It is also important to know their understanding of rights and cultural norms.

Visioning

The visioning process aims to:

- Strengthen relationships with communities or individuals most at risk
- Share understanding of global phenomena and its influence on local contexts
- Share understanding of rights, power, rights-holders and duty bearers
- Mobilise interest and engagement in risk-informed development planning processes
- Mobilise community members for the next stages
- Draw out the aspirations and apprehensions of all community groups
- Enable communities to articulate and translate visions into tangible and achievable goals through individual and collective action later



- Familiarise community members with their role and their scope for determining their future
- Provide a level platform and opportunity for all community members to voice their aspirations and concerns (related to risks, risk-drivers, as well as other issues)
- Encourage discussions to resolve conflicts and to better understand each other and the place they live in

Key steps in this stage

1. Identify key groups

Identifying those most at risk and local leaders and, crucially, building a relationship with them starts the risk-informed development process.

Those most at risk may include, for example, people that identify as part of the LGBTQ+ community, people living with disabilities, minority groups due to their social or economic status, older people, and children and youth.

Make a special effort to communicate directly with women and women leaders.

2. Prepare and mobilise communities

Agree with community members on when and how the visioning exercise can be carried out, including the preferred format, date, time and place. Plan and design the exercise.

Whilst civil society organisations might organise and advertise the event, identified community leaders or representatives of civil society groups are encouraged to take the lead in facilitating. Host the event within existing, neutral community spaces such as a school, community centre or town hall.

3. Introduce global trends

Take time to discuss with community members their rights, responsibilities and the roles of duty-bearers.

Highlight global risk drivers, such as climate change, and how it may impact their context. Be creative in how this is achieved: drama, song, street art and other methods can gain attention and engagement more than formal meetings.

Briefly discuss the broader risk-informed development planning framework and the purpose of seeking their vision for change.



4. Carry out the visioning exercise

Visioning is the process by which a community defines the future it wants. It should bring forward the voice of people in the community and it must be a platform for every community member to express their aspirations for where they live.

This exercise will help evolve targeted outcomes and mobilise communities to work towards common aspirations. It can also function as a platform for various groups to share perspectives, communicate and potentially resolve conflicts. This can be seen as the launch pad for the community-led risk-informed development planning process.

Draw out individual and community vision

The facilitators can invite every participant (including and especially children, elderly people, women and other marginalised people) to say or write down their aspirations.

Consider splitting the event into focus group discussions to build trust and confidence between different community members if appropriate.

Translate vision to goals

Prompt the participants to come up with ways and ideas that can help translate their visions to goals. If they want a particular aspiration fulfilled, what can they do (individually and as a community) over the next few months or years to realise these aspirations?

Encourage them to also identify what the roadblocks are in achieving these aspirations and goals.

5. Coming to an agreement

The purpose of this step is to find commonalities that are mutually beneficial, yet inclusive, with short- and long-term value to the community and its individuals.

The conversation should reflect on the outcomes of this vision exercise, with the facilitator seeking commonality between participants as well as helping resolve concerns or conflicts arising between ideas of what a joint vision might be for the community.

6. Overview of the risk-informed development planning stages

Once the above steps are completed, introduce and explain the next stages of the risk-informed development process with special reference to co-creation.

Additional resources

- [Incorporating Visioning into Comprehensive Planning](#) by Anna Haines
- Section 17 of [Participatory Incremental Urban Planning](#) (edition for fast growing small cities by UN-Habitat)



CORAZON BAJUYO CLARIN

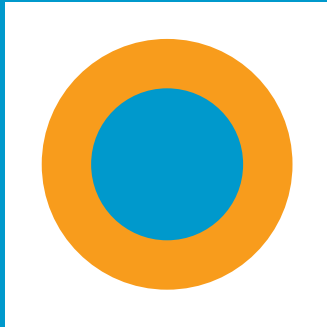
Philippines

“It is very important that the initiative of disability-inclusive disaster risk reduction is led by persons with disability. We always advocate: nothing about us without us.”



Photo: Jeremy Kruis/GNDR





STAGE 2

**Organise around the
vision of the community
most at risk**



Organise around the vision of the community most at risk

This stage of risk-informed development planning involves organising around the vision of the community most at risk. Success is seen when communities most at risk lead the process.

Overview

Time for the community to organise themselves to work together, connect with existing organisations and initiate communication about preparing and setting up mechanisms (communication, capacity building, leadership committees, knowledge generation and gathering) to implement the risk-informed development planning is required.

Secondly, a primary asset of risk-informed development planning is knowledge and data about risks (in terms of hazards, risk-drivers, vulnerability, resilience etc.), especially local risks that directly and indirectly impact communities.

This should also then indicate what additional support or collaboration from other stakeholders (like technical experts, institutions, other organisations and agencies, local government units, etc.) across the stages of the risk-informed development process are required.

To achieve this stage, collaboration established with communities most at risk needs to be in place. In communities where multiple civil society groups and organisations already engage and operate, it is important to also collaborate formally to facilitate the risk-informed development planning process with the community.



Aims

The aims of this stage of the process are to:

- Bring existing community representatives and leaders to the forefront of the process right from the beginning; forming community organisations is important for this, especially where other organisations (such as groups delivering [CBDRM](#) together) do not exist
- Encourage and initiate leadership from community groups most at risk to carry out risk-informed development planning, by creating space for them to take decisions about their roles in the overall planning process
- Create and identify collaboration opportunities with various stakeholders
- Prepare, co-create and adapt the details of risk-informed development planning to suit the community, for example putting in place necessary supporting resources or assets or mechanisms, so that the community themselves can be the flag bearers of the process
- Initiate preparatory activities in creating supporting mechanisms (such as community organisations, data library, mechanisms for gathering data etc.); speaking with community members and gathering secondary sources or openly available knowledge and data resources is fundamental in beginning to understand complexities around risks and development

Encourage and initiate leadership from community groups most at risk to carry out risk-informed development planning.



Key steps in this stage

1. Risk-informed development task force

The first step is to initiate discussions for the formation of a risk-informed development task force composed of members from the community. This taskforce should be gender balanced, include representatives of the most at risk groups and be supported by civil society organisations (CSOs).

Leverage on already existing community organisations, communication channels or modes of operation within a given community or region is important, as well as the role of the task force to mobilise the rest of the community. Consider sub-groups with key responsibilities, i.e. in research or in budgeting roles, if there are many people willing to help coordinate the process.

2. Stakeholder collaboration

Next, initiate collaboration with other stakeholders. Consider other stakeholders that could collaborate with the process. These groups could include other CSOs or groups from the area, private sector actors, media, community-elected leaders, academia, local researchers, and institutions for education, planning, development and technology, etc. Consider [formalising collaboration](#) with these groups.

3. Co-creation of process

Initiate detailed discussions with the community to co-create and evolve the details of a risk-informed development planning process that suits their context. Communities most at risk themselves can be flag bearers of the process. They should be able to explain the process, aligning it with their community context and take broad decisions on how to carry out each stage.

Consider preparatory tasks, leadership roles for different aspects, how to communicate with and operate at the convenience of all members, and outline what support is required by CSOs.

4. Quick risk estimation

If, amongst all [risk drivers](#), certain risk drivers are more prominent or resonate more with the communities most at risk, take measures to orientate and focus risk-informed development efforts accordingly.

The [quick risk estimation tool](#) is a multi-stakeholder engagement process to establish a common understanding of risk. The tool can be used to identify and understand current and future risks, stresses, shocks and exposure threats to both human and physical assets.

5. Co-design a data gathering plan

An agreement on how to gather data, when to gather data and who should be involved in the data gathering process should be discussed and agreed with the community members. If necessary, this can be a closed group discussion with those appointed by the taskforce for the purpose.



6. Co-create a data hub

A data hub is a virtual or physical storage point for relevant data which has been collected with the communities most at risk or via secondary sources. They should be stored in an organised manner so that it can be accessed at any time by the community members and civil society groups involved in the process. If viable, explore scope for collaboration with data management experts or local government data centres to develop the data hub (Usually local governments have emergency operating centres which keep data).

There are four sets of relevant data that need to be stored:

- Local community data
- Secondary data (which will be gathered from open sources, local government units, studies and reports, experts, etc.)
- Observations on contextual aspects of geophysical susceptibility to various hazards
- Data calendars: monthly and annual data calendars could be used to communicate and inform the community about various aspects of hazards, vulnerability and building resilience

7. Capacity strengthening

Strengthen capacity in maintaining a data hub and a community-led risk monitoring mechanism. This is to ensure the data hub remains active, updated and information analysed is on a regular basis to highlight changed or emerging risks. Ideally, it should be managed by community members within the locality.

To ensure this takes place, consider:

- Capacity strengthening of community members to carry out the task
- Clarity about what information to gather
- Clearly defining tasks and roles for community members involved
- Keeping a monthly record of the tasks taken up for risk monitoring
- Continued tracking to capture time-based variations (seasonal, monthly etc.) and dynamically evolving conditions

8. Wider communication

Communicate with the rest of the community members about the newly established data repository and data gathering method, to seek individual cooperation and contribution.

Additional resources

- [Open Data Infrastructure for City Resilience](#): A roadmap showcase and guide
- [Cookbook](#) on Institutionalising Sustainable CBDRM
- [Case studies](#) on community-based disaster risk management





STAGE 3

Understand context and risks



Understand context and risks

Stage three involves contextualising risk-informed development planning. That means gathering and generating relevant data or knowledge to understand how risk and resilience affect development in the community's context.

Overview

Links between various local, regional or global factors, how these affect different people, communities, places and social or physical systems, guides what action to take. A participatory relationship mapping exercise can help communities better understand complex linkages.

Similarly, the knowledge gathered can be examined against local aspects of susceptibility to hazards and resilience potential. This generates useful knowledge which is essential for the next stage of prioritising risks.

Various factors will all determine how communities can identify risks and adapt to build resilience through development decisions. These include: the social make-up; the socio-economic and socio-cultural background; the physical environment; governance structures of the larger society; access to basic infrastructure; and communities' awareness of their rights.

Understanding contextual aspects of a community are foundational to understanding risks and risk impacts better. Therefore, generating and gathering relevant data and knowledge should be in cognition of this context.



Aims

The aims of this stage are to:

- Generate relevant data around risks and resilience, understanding context, as well as understand relationships between various factors and aspects that will influence risks and resilience
- Gather relevant data, information and knowledge from various sources, based on the plan made in stage two
- Mobilise and engage community members to participate in gathering local data and knowledge
- Improve understanding of the interdependence of factors linked to hazards and [risk drivers](#)

Key steps in this stage

1. Gather knowledge and data with communities at risk

A starting point might be to create a map of the area, dividing it into smaller parts based on identifiable landmarks and assigning each area to a person or group to facilitate the knowledge gathering.

A variety of participatory techniques can be used to engage with residents of that specific locality: transect walks, photographs, sketches/illustrations, diagrams and notes. The [tips and tricks](#) for mapping tool is recommended for this exercise, alongside widely used online resources such as [transect profile images](#) from Google, freely available web-based [data platforms](#), and [apps](#).

Conducting focus group interviews, household interviews and surveys allows data to be gathered with communities most at risk. Suggested questions can be found in our Views from the Frontline [methodology](#). Storytelling or anecdotes of local knowledge is just as important. Collect stories of best practices and this will enrich the community's knowledge resource. Collect and gather local knowledge, especially via focus group discussions with community members most at risk and different community stakeholders.

Gathering secondary information from open sources is vital. As well as statistics or forecasts for the area, successful efforts in participatory development planning, risk-management and adaptation can also be helpful to learn from. This data should then be organised into the data library or hub, as planned for in stage two.

2. Research documentation

Each group or person responsible for gathering knowledge or data should update the data hub, ideally within one week of completing their task and referring regularly to the agreed plans and document storage process. The information gathered is a knowledge resource for development planning for years to come as the data hub stores this valuable information and knowledge for later use and analysis. Once baseline data is established, initiate the monitoring of risks using the indicators of hazards and risk-drivers.



3. Understand relationships between risks and impacts

Once knowledge is gathered, communities can begin to analyse it. This will lead to a better understanding of the common, as well as unique, contextual aspects and risks that the communities currently face and/or could face in the future.

The relationship mapping exercise is a collaborative exercise involving community members to initiate thinking/understanding in terms of relationship between people, place and systems, and their links to risk drivers. Experts or professionals in development planning, risks, disasters, socio-economics and environment should be involved.

4. Contextualise factors linked to risks and resilience

This step is to examine the data and knowledge gathered against contextual aspects of geophysical susceptibility and resilience.

Every community and the landscape they live in is unique. Here we focus on communities most at risk and living under various stressors - social, cultural, economical, political, environmental.

Whether people living in urban or rural settings, dwellings in coastal areas or in forests, are pastoralists or nomadic, there are rights, risks, resources, knowledge and solutions that make up their context.

Human mobility leads to populations who move due to social, economic and environmental reasons. Many lower income groups move between villages and neighbouring urban areas. They encounter constraints living in and navigating vulnerable parts of the city as they seek new opportunities.

Communities displaced due to disasters and conflict refugees also often live in areas with limited and unreliable resources. Communities displaced due to conflicts, or who are not citizens, may only have restricted rights, unlike citizens of the country, until they are normalised or integrated into the new system.

All these conditions and context determine the risks that communities are exposed to and it will also limit their agency in building resilience to, or adapting to avoid, these risks. These nuances are unique to each community, which is why contextualising risks and resilience are critical.

The local conditions of people, places and systems play an important role in determining vulnerability. Similarly, natural landscapes provide ecosystem services that enhance the resilience of any area. It is important to ensure that the data and observations gathered is relevant to the context.



To examine and ensure that critical contextual aspects of vulnerability and local factors of risks are considered, two checklists can be referred to:

- Contextual analysis of geophysical susceptibility to hazards
- Reflective questions to examine resilience of people, place and systems

Additional resources

- [Disaster Resilience Scorecard for Cities](#) by UNDRR
- [Addressing Disaster Displacement in Disaster Risk Reduction Policy and Practice: A Checklist](#) by UNDRR
- [Gender Dimensions of Disaster Risk and Resilience: Existing Evidence](#), 2021 by the International Bank for Reconstruction and Development/The World Bank
- [Gender Dimensions of Disaster Risk and Resilience](#)
- [Tool Kit on Gender Equality Results and Indicators](#)
- [Gender analysis of conflict](#)
- [Risk management and decision-making in relation to sustainable development](#), Chapter 7 of IPCC report 2021
- [Disability Inclusive Development Toolkit](#)
- [Baseline Resilience Indicators for Communities \(BRIC\)](#) by University of South Carolina
- [Participatory Asset Mapping: A Community Research Lab Toolkit](#) by Advancement Project
- [Community Mapping: A Tool for Community Organisation](#) by WaterAid
- [UNDRR Asia-Pacific COVID-19 Brief: Disaster-Responsive Social Protection](#)
- [UNDRR Asia-Pacific COVID-19 Brief: Leave No One Behind in Covid-19 Prevention, Response and Recovery](#)



PARANATI PATRA

India

“The industrial town of Paradip is just 22 km from our locality. Fifty percent of people living in the community suffer from respiratory and heart diseases. Air pollution causes itching, irritation, and discomfort in eyes.

“Even the fruits and vegetables we buy from the market have chemicals. There is no awareness programme on air pollution. We would like to know how we can reduce the risk of air pollution and remain healthy.”



Photo: Sarika Gulati/GNDR





STAGE 4

Risk prioritisation and development impact assessment



Risk prioritisation and development impact assessment

Stage four of the risk-informed developing planning involves communities most at risk prioritising risks and considering impact assessments against their vision and goals.

Overview

To achieve this stage, communities at risk need to gain a strengthened understanding of the impacts of development and how it adds to risks and vulnerabilities – as well as untangle complexities around rights, risk, resilience and capacity for adaptation.

This will support prioritising critical or complex/multiple risks in order to take focused decisions around development that can improve their adaptation and resilience.

Aims

Risk prioritising and development impact assessments aims to:

- Critically analyse and assess risk and vulnerability factors that reduce resilience
- Analyse impacts of development activities (of the past, present and future) that are directly relevant to the community and locality
- Understand the interplay of various regional and local factors of risks, especially disaster risk drivers, and analyse the impacts and consequences of hazards and risk drivers in the locality
- Critically analyse capacities and potential for resilience building and adaptation by identifying opportunities to mitigate risks and its consequence
- Prioritise risk to be addressed based on analysis, identifying key challenges in addressing risks and building resilience



Key steps in this stage

- Delineate landscapes that are: hazard prone; ecologically sensitive; and suitable and safe for development
- Identify the gaps in basic rights, needs, amenities and capacities in order to address them based on priority, and make decisions for sustainable development and adaptation
- Support communities most at risk, civil society groups and technical experts to effectively collaborate in their decision-making, ensuring information captured in the previous stages is utilised

1. Consolidating information

Scan the data hub or library for knowledge and information on the locality, region or topic which is being considered. Repeat research activities as outlined in stage three, if there are any gaps in what is required.

2. Consultation with experts

Identify technical advisory support. Identify local and regional institutions and/or experts to assist in analysis and seek advice on relevant data for carrying out analyses.

3. Set up a collaborative analysis process

Analysis and impact assessments using various participatory tools should ideally be collaborative with representatives of community members most at risk, civil society groups, local government representatives and technical experts. Invite those required to your analysis event.

Collaboration may be explored through technical institutions, or by developing proposals for accessing corporate social responsibility, government, organisational or global funds. In situations where collaboration with technical experts is not feasible, training of selected community members may be explored.



4. Participatory analysis

Carry out participatory exercises to analyse the information collected around a few of the above analysis methods. By using the data collected from the field and other open sources in stage three various assessments can be done.

Since the analysis methods for some of these assessments is technical, design participatory formats of analysis in collaboration with technical experts or ask them to present their own findings.

Participatory analysis methods to prioritise risks triggered by development impacts which communities can take part are:

- SWOT analysis
- Development impact assessment (environmental, social and economic impacts)
- Overlay analysis to identify multi-risk areas
- Land suitability analysis
- Degradation and fragmentation of resilience infrastructure analysis

Further information can be added to the process through applying the radius of influence technique, calculating carrying capacity and seeking indicators of unsustainable practices.

5. Decision-making

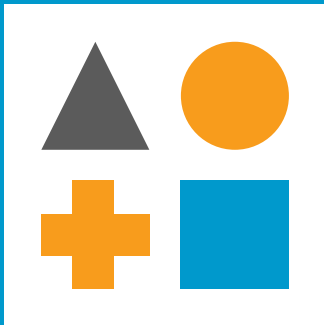
Record the proceedings of this stage by documenting the analysis process and the decisions made.

Additional resources

- Section 5.2, 5.3, 5.4 of [Inclusive and Sustainable Urban Planning: A guide for Municipalities: Volume 2](#)
- [Florida Keys Carrying Capacity Study: Carrying Capacity Analysis/Impact Assessment Model](#)

By using the data collected from the field and other open sources in stage three various assessments can be done.





STAGE 5

Strategic foresight and scenario planning



Strategic foresight and scenario planning

Exploring what is happening in the wider society and trying to foresee the many different plausible futures from multiple emerging trends allows communities most at risk to shape their risk-informed development plans.

Overview

Horizon scanning and recognising mega-trends can help inform and capture new risk drivers and other external forces of change. It can also help capture the changing nature of the six major risk drivers in the context of a country, region or cities.

The findings of participatory contingency planning and its process allows for the preparation of plans for various scenarios of hazards. Strategic foresights help capture signals of change and mega-trends at a global level, and in particular detect trends with respect to the six primary risk drivers. Together these two techniques can vastly improve insights for adaptation and future proofing.

To achieve this stage - and start influencing development - engage with communities most at risk to:

- Draw out signals of change
- Identify external trends in the wider society
- Identify relevant global phenomena
- Examine the identified risk drivers and emerging drivers of change

It is an opportunity for communities to look at their immediate and long-term development priorities through the lens of these larger more global trends. Importantly, facilitating conversations that re-imagine visions and goals in alignment with a better view and understanding of multiple trends should take place.



Aims

Strategic foresight and scenario planning aims to:

- Foresee how the community's future could look with respect to future trends and external factors of influence - including the six disaster risk drivers
- Re-imagine all possible risk scenarios (with respect to hazards and communities' vulnerabilities) under various future conditions and trends (including consequences for the locality and community members) to take anticipatory action

Key steps in this stage

1. Foresee the future exercise

Design a participatory group exercise for communities most at risk to foresee the future. This can be done through [foresight methods](#) using multiple alternative plausible futures based on their usefulness in developing robust, future-ready policy.

It is different from forecasting: forecasting attempts to predict a single 'correct' version of the future based on evidence and probability.

However, strategic foresight understands the future as an emerging entity that is only partially visible in the present, not a predetermined destiny that can be fully known in advance (i.e. predicted). The intent is not to get the future right, but to expand and re-frame the range of plausible developments that need to be taken into consideration.

There are broadly four types of foresight methods:

Horizon scanning

Seeking and researching signals of change in the present and their potential future impacts. Horizon scanning is the foundation of any strategic foresight process. It can involve desk research, expert surveys, and reviews of existing futures literature.

Mega-trends analysis

Exploring and reviewing large-scale changes in the present at the intersection of multiple policy domains, with complex and multidimensional impacts in the future.

Scenario planning

Developing multiple stories or images of how the future could look to explore and learn from them in terms of implications for the present.

Back-casting the vision for the community

Developing an image of an ideal (or undesirable) future state and working backwards to identify what steps to take (or avoid).

It should also involve, in collaboration with relevant experts, presentations on signals of change in the community and wider region, along with mega-trends (including the six drivers of risks which are global with local implications). Interactive discussion to present these findings to communities should strengthen discussions around these multiple, possible future scenarios.



2. Long-term trends

Aim to identify specific trends that the community thinks would affect them in the long run. Imagine how these trends could affect their basic needs, housing/shelter, safety and security, livelihoods, jobs, connectivity and access to various resources. Discuss and imagine how the community vision and aspirations for the future will be influenced by these global and regional trends. Examine and discuss if existing vulnerabilities and risks (as identified in the earlier stages of analysis) will be influenced by these future trends.

Examine and discuss if existing vulnerabilities and risks will be influenced by these future trends.

3. Review decisions

Stage four facilitated risk prioritisation and decisions were made to focus on certain risk factors, groups at risk or geographical areas. In this stage, the community should review this process against any emerging knowledge to strengthen those decisions.

Hold discussions to explore ways to prepare for all of these positive and negative trend-based scenarios. Discuss how communities can re-adapt both their vision for the future and existing practices (life and development activities), to be prepared to deal with any of these future scenarios.

Additional resources

- [Toolkit on Futures and Foresights](#) by OECD Observatory of Public Sector Innovation
- [Foresight as a Strategic Long-Term Planning Tool for Developing Countries](#) by UNDP
- [Practical Foresight Guide, Chapter 1 – Foresight](#)
- [Practical Foresight Guide Chapter 3 – Methods](#)
- [Game On: Foresight at Play with the United Nations](#)



JOHN MPHAYA

Malawi

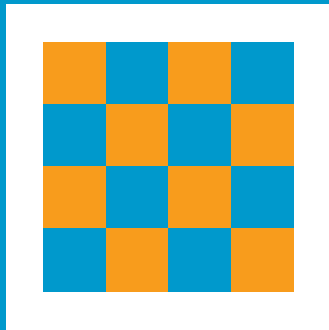
“They offered to build a weir and a scheme so we could irrigate our crops. I was involved in the construction of the scheme – mixing cement and bringing construction stones.

“Both men and women took part in the construction work because this is something that we had wanted for a long time.”



Photo: Homeline Media/GNDR





STAGE 6

Strategise with communities most at risk



Strategise with communities most at risk

Alongside communities most at risk, it is important to consolidate the decisions they have made to design appropriate and viable development actions, strategies or interventions around development, that build a sustainable and resilient future. The best course of action to address risk should be anchored in the mitigation or adaptation of that risk.

Aims

Strategising for action aims to:

- Define and agree on the actions required to enhance the resilience of people, places, and infrastructure systems
- Address gaps in basic rights, needs and amenities
- Collectively decide on adaptation actions to reduce the impacts and consequences of future risks, in order to build the resilience and sustainable development of communities
- Define appropriate anticipatory actions to establish effective response and revival mechanisms in possible risk scenarios
- Realise human and financial resources, and other mechanisms, to enable and facilitate the realisation of these actions and strategies

Key steps in this stage

1. Major takeaways

Draw out key takeaways from stages one to five and participatory contingency planning (if also underway).

2. Actions and interventions

Determine the necessary actions and interventions to address various issues of the present and future, and to drive sustainable and resilient development. Consulting and collaborating with development planners or expert organisations and institutions is useful and essential, if viable.

Some of the well-known and successful strategies for strengthening resilience, mitigating future risks, and adapting to risks through development interventions include:

Landscape and ecosystems

Resilience can be strengthened through landscape infrastructure development and



ecosystem service enhancement. Examples include blue-green infrastructure; buffer protection of landscape systems like river and natural drainage networks; wetland systems; and coastal buffers.

Integrated watershed management

Activities for integrated [watershed management](#) are anchored in: the understanding of watersheds of a given area; drainage paths and their health; the soil and environmental health of the watershed; social and cultural practices and mechanisms that enable healthy livelihoods; and sustainable resource harvesting by communities within the watershed.

Sustainable and climate-appropriate agricultural practices

Examples of practices include: water efficiency; use of local and native species that are drought and flood resistant; minimal use of polluting synthetic fertilisers; agroforestry practices; bees and birds conservation and protection practices; and organic farming.

Hazard specific interventions

These include: maintaining a protective buffer zone and a no-development zone; retro-fitting or rehabilitating existing developments or homes in hazard-prone areas to safer areas; and watershed management, redirection, and diversion of water to designed sinks or detention ponds in flood-prone areas.

Retrofitting

Retro-fitting existing infrastructure, human-occupied land and buildings to be resilient and future proof to various risks, especially increasing rainfall intensity, landslides, floods and storms. This can be achieved through actions such as: improving the capacity of drainage channels by creating vegetated buffers; detention ponds to divert floodwaters; stabilising the soils on steep terrains; and strengthening the structural stability of buildings.

Safe zones

Delineate or identify safe zones or areas that are hazard and risk-free. This is especially relevant in communities on the front lines of risks. These areas can accommodate the growth in future members of the community and their activities.

Life-cycle approaches

Support and facilitate life-cycle approaches while making decisions and choices around products, development decisions and even daily chores in every family. Often, most marginalised and indigenous communities have unique and efficient methods of resource management, living in sync with nature and innovatively adapting to changes. Identify and support such practices.

Entrepreneurial initiatives

Explore with community members and support entrepreneurial initiatives and consider village saving and loan groups, or community cooperatives.

Share local data

Share local data with local government units and regional and national agencies. This can bring a positive focus through policies, or prompt sustainable, resilient and climate appropriate activities.



Strengthen capacities

Strengthen the capacities of community members by investing in human resource development. Communities should be able to manage their own development through the risk-informed development planning process, and take action or adopt practices in their daily activities that build resilience.

3. Coherence

Ensure [coherence](#) between various policies, schemes, plans, programmes, actors and decision makers:

- Examine development plans, environmental regulation zones and rules, disaster management plans; review how they apply to the community and how they connect to national policies, or policies of other sectors
- Develop actions to strengthen horizontal coherence between plans addressing different risks or sectors, and vertical coherence between local government and national plans
- Ensure actions selected align with existing local and national policies and plans

4. Risk-informed development planning

Estimate the need for carrying out individual stages of risk-informed development planning and implementing the actions and strategic interventions around resilient and sustainable development, risk mitigation and adaptation.

The needs include:

- Financial support for implementing actions or strategic interventions proposed
- Human resources to implement actions
- Institutional support, for example from local government units, other regulatory agencies of the government (sector specific, national, regional or local agencies)

Ensure coherence between various policies, schemes, plans, programmes, actors and decision makers.



5. Funding

Identify funds from various financial modes to implement proposed actions/strategic interventions.

- Take the community agenda and proposed strategies, actions and interventions to other decision-making stakeholders (especially government departments, local government units, technical agencies and institutions, and private sector organisations)
- The roles of locally elected representatives or local government representatives are critical in supporting civil society organisations (CSOs) and community members to access necessary funds; directly request government implementation of proposed actions and strategic interventions
- Local government units and elected representatives can bridge communications and access to government funded plans that align with the community agenda for risk-informed, resilient and sustainable development; it will be very useful to engage with elected representatives and office holders
- For non-government funds, CSOs may explore corporate social responsibility funds, or funds from local businesses who may directly or indirectly benefit from risk-informed development in the locality and region; for this, organisations and communities have to bring out innovative models to engage local businesses
- Exploring in-situ funds generated via local cooperative and social enterprises based on grassroots economic organisation of community members

6. Monitoring mechanisms

Co-create a monitoring mechanism to monitor risk drivers, vulnerabilities, hazards and resilience with the community task force:

- Design of the monitoring mechanism must be collaborative and involve experts in disaster monitoring, forecasting and management; agreement has to be reached on who will take up the monitoring tasks, frequency of monitoring, and the resources required to develop a monitoring mechanism within the community
- Crowdsourcing data is an option to continuously keep track of the conditions of communities and their habitats; this method relies on data gathering mobile apps and websites which the public are expected to use to upload data and observations



Additional resources

- [NbS Evidence Platform](#): Case studies and evidence showing the effectiveness of nature-based solutions
- [Evaluating the impact of nature-based solutions: a summary for policy makers](#) - this reference toolkit illustrates various nature-based solutions and their effectiveness
- [Evaluating the impact of nature-based solutions: a handbook for practitioners](#)
- [Ecosystem-Based Disaster Risk Reduction: Implementing Nature-based Solutions for Resilience](#)
- [Risk management and decision-making in relation to sustainable development](#) - Chapter 7 of IPCC report 2021
- [International Workshop on Disaster Resilient Infrastructure 2018](#)

The role of locally elected representatives is critical in supporting civil society organisations and community members to access necessary funds.





STAGE 7

Action with communities most at risk



Action with communities most at risk

Stage seven of the risk-informed development planning process recommends necessary steps to realise agreed actions - using the most viable and effective modes of action.

Overview

To achieve this stage, it is critical to anchor action, interventions and strategies in sustainability, resilience building and adaptation.

Steps should be taken to identify the most viable and effective approach for each agreed action, strategy or intervention. Cooperation, partnerships and collaboration opportunities with other stakeholders and decision makers are also necessary to begin the implementation of actions.

Sourcing human resources and funds, finding partnerships with other stakeholders and aligning with local entrepreneurs is also required.

Aims

Actions with communities most at risk aim to:

- Realise human resources and capacities required to realise action (both within and beyond the community)
- Realise funds and financing mechanisms [involving community members](#), via government schemes and other external sources
- Formalise partnerships for long and short-term action
- Formalise informal community organisations - if the community agree; this is often essential to access financial support
- Strengthen the capacities of community members most at risk, for implementation, monitoring and management
- Support local entrepreneurs to undertake selected actions or strategic interventions; this may include supporting skills development, capacity strengthening and funding procurement



Key steps in this stage

The main task in this stage is figuring out which mode of approach is best suited for each action or strategic intervention proposed, in consultation with urban, spatial or development planning experts.

1. Mode of action

Discuss and agree the right mode of carrying out, and realising, the agreed actions and strategies.

Actions and strategic interventions can be realised and implemented through various modes.

Some recommended modes include:

Pilot projects

Pilot projects can demonstrate the value of a specific action or project which can be replicated or re-adapted later based on the learning outcomes.

Tactical urbanism

[Tactical urbanism](#) is “a city and citizen-led approach to neighbourhood building using short-term, low-cost, and scalable interventions intended to create long-term change”.

Temporal interventions

These are interventions that are not permanent but dynamic in nature i.e. the intervention may be appropriate for a specific season in the year, for few days a week, or for certain hours of the day. This can be successfully applied in dynamic landscapes like floodplains of seasonal rivers, public spaces, parks, streets or agricultural lands.

Government funding

Submit proposals to local, regional or national governments where the proposal aligns with the requirements or objectives of government schemes in various sectors (e.g. relevant agencies or departments across various sectors like education, water supply, agriculture etc.)

Urban living labs

Initiate urban living labs in collaboration with technical institutions that are particularly suited for urban engagement.

Children and youth

Mobilise children and youth to carry out monitoring and documentation exercises. This could be via schools or community groups and events. Aware and motivated children can bring great ideas.

Innovation

Innovation where viable proposed strategies/ actions or interventions may be highlighted to seek from technical experts, or propose to them, innovative ideas in connection with communities most at risk.



2. Action plan

An implementation or action plan should be prepared by the risk-informed development taskforce, in order to keep track and operationalise the various actions agreed. It should document roles and responsibilities to deliver the plan, and set timelines and budgets for each action. It is recommended that you start with actions that can show immediate and evident results - this approach will help build momentum.

3. Stakeholder engagement

Bring the local perspectives of communities to higher levels of government (e.g. city, regional, state or national authorities), and other stakeholders (e.g. relevant local private companies, institutions and organisations).

While communicating with government departments, ensure that community members are represented directly. Share the community-led, risk-informed development planning process undertaken, along with the findings and action envisaged to seek cooperation, funding or feedback on existing policies. The GNDR [advocacy toolkit](#) sets out methods to achieve this.

Additional resources

- [GEF SGP Project Proposal Template and Guidelines](#) by Global Environment Facility and UNDP
- [Project management for change makers](#)
- [Urban Ecosystem Design Lab](#)
- [Tools for project planning in community development](#) by Grassroots Collective
- [ParCitypatory](#) website



BARBRA BIRABWA

Uganda

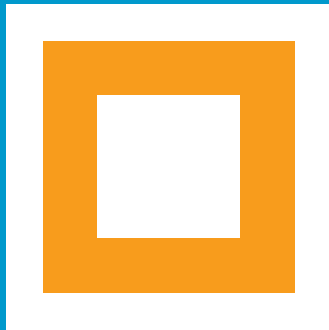
“The rainwater enters our houses and I have no solution to address the problem.

“The floodwater recently came into the house and covered my child. I almost lost him.”



Photo: Jjumba Martin/GNDR





STAGE 8

Accountability to communities most at risk and learning with them



Accountability to communities most at risk and learning with them

By enabling and building the capacity of communities in managing the outcomes and results of the actions, strategies and interventions agreed for risk-informed development, greater resilience is enabled for a more sustainable future. This is especially true because risks and development factors are dynamic and evolve continuously.

Overview

To achieve this stage, communities most at risk need to hold to account duty bearers and other stakeholders perpetrating the denial of rights.

This allows them to realise their rights and bring justice to any rights previously denied.

Holding to account other stakeholders in the planning process ensures they are supporting communities to update, adapt and implement their plans. Shared learning is also vital at this stage.

Aims

The aims of this accountability and learning stage are to:

- Ensure that the actions and interventions have resulted in the desired positive change or development gains; review their effectiveness and how they might be changed or strengthened
- Monitor risks and risk drivers by keeping track of new data and knowledge that may influence development and risks for the community and locality
- Ensure that stakeholders and decision makers are held accountable for their responsibilities and there is open dialogue around it
- Continue to learn via what is taking place in the risk-informed development planning process and via the monitoring of risks, risk drivers and development



Key steps in this stage

1. Agree responsibilities

Together with the planning leadership committee and community taskforce, discuss and agree responsibilities within the community leadership and members to collaboratively participate in accountability and learning activities as actions, strategies and interventions are realised.

2. Identify accountable stakeholders

Identify decision makers and accountable stakeholders (i.e. individuals, institutions, government agencies and departments, local government units, etc.) within and outside the community who should be involved.

3. Social audits

Strengthen the capacity of communities most at risk to conduct social audits to understand the effectiveness and success of:

Community engagement and leadership

Refer to the 11 success factors for community-based disaster risk management in the [CBDRM Cookbook](#) to examine the effectiveness of the risk-informed development planning, especially characteristics of sustainability and institutionalisation.

Coherence

Refer to the 19 key ingredients for successful coherence in the [Coherence Cookbook](#) to evaluate the risk-informed development planning process and its outcomes with respect to other sectoral or local, regional, national and global agenda on risk informed, resilient and sustainable development.

4. Review actions

Review actions being undertaken as agreed in stage seven. This includes:

- Monitor monthly and yearly targets and the schedule of activities for each of the project or strategic interventions proposed, as set by communities most at risk
- Devise a method to address roadblocks that may emerge and facilitate inclusive feedback
- Set up a community taskforce for accountability and learning who can oversee this stage - it should be gender-balanced and representative of the community most at risk
- Support capacity strengthening as needed



Additional resources

- [Social audit](#)
- [Economic Literacy and Budget Accountability Groups](#)
- [Gantt charts](#): a visual representation that provides an instant overview of the status of a project; it outlines all activities involved in a project against a timescale





STAGE 9

Repeat and strengthen



Repeat and strengthen

Stage nine involves repeating and strengthening the previous stages of the risk-informed development planning process.

Overview

It is not a one-off process. Everything within and outside the community is always evolving and dynamic, be it socio-economic, socio-cultural, environment or population changes.

It is critical that we reflect on how to revisit the risk-informed development planning stages to integrate new and dynamic challenges that emerge over time and expand the work as more people come on board and more complex risks are addressed.

How to achieve this stage

To achieve this stage, go back and revisit any of the stages to respond to unforeseen factors, risk drivers (newly realised or pre-existing) and development drivers.

The value of risk-informed development is that it allows us to add in new ideas or bring more clarity to the process in a systematic manner without losing the spirit and objective of each stage.

If necessary, return to a former stage rather than attempting to complete all stages if something has been missed, or could be added, to improve the overall process. The success of the risk-informed development relies on adaptiveness.



Key questions to ask

When all eight stages are complete, communities most at risk should have gained a good understanding of their:

- Scope to drive risk-informed development for themselves
- Power to make or influence decisions
- Capacity to actively participate in decisions about their future
- What have we achieved? What have we missed or could improve on? What have we learnt and are there new things to add?
- Where do we go next? When should we revisit (any of) the stages?
- What findings from the community-led risk-informed development process can inform policies, plans and regulations at national or regional levels?
- What value are we seeing in the risk-informed development process? How can we capitalise on this value?
- Are communities most at risk more aware of their rights? Are they more empowered? Are they aware of their role in deciding their future and risk-informed development in their community? What more can be done?

The value of risk-informed development is that it allows us to add in new ideas or bring more clarity to the process.





TOOL 1

From vision to goals template



From vision to goals template

This sample template can be used for translating your vision into goals in a participatory exercise. It can be completed individually and then as a focus group.

Results from different focus groups should be compared by the community members involved to seek agreement on joint goals and move forward to later stages of the risk-informed development planning process.

Short-term goals should cover the next few months and for the year, and include things that require immediate attention, be it aspirations, needs or concerns.

Long-term goals should cover the next 1-2 years or longer, depending on the response from the community.

An editable Microsoft Word version of this template is available for download on the GNDR website.

[→ DOWNLOAD TEMPLATE](#)

	Short-term goals	Long-term goals
What can I do to realise this vision or aspiration?	<ol style="list-style-type: none"> 1. 2. 3. 	<ol style="list-style-type: none"> 1. 2. 3.
What can we as a community do to realise this vision or aspiration?	<ol style="list-style-type: none"> 1. 2. 3. 	<ol style="list-style-type: none"> 1. 2. 3.





TOOL 2

Checklist on what data to gather and how to record it



Checklist on what data to gather and how to record it

This sample template can be used to guide your data-gathering in stage two. Capture all of the data checklist information in maps, apart from textual information.

Data sources

- SS: Secondary open source
- PS: Primary source (comprising of community observations/mapping and photo documentation)
- HI: Household interviews
- FGI: Focus group interviews

Word version

An editable Microsoft Word version of this template is available for download on the GNDR website.

→ [DOWNLOAD TEMPLATE](#)



TOOL 2

Data checklist	Data source	Who is responsible?	How is data collected?	By when?	Where is it stored?
<p>1. Geography and location</p> <p>1.1 Where is the neighbourhood/village located with respect to the surrounding area? Locate the neighbourhood or village on the map, marking out rough distances from surrounding landmarks (like a highway, major canal, or other land features), and other villages, neighbourhoods and towns. If your neighbourhood is within a large city use a map of the city to mark out your neighbourhood within it.</p> <p>1.2 What are the major land features, landmarks in and around the neighbourhood? Identify and locate the following on the map of the village: hills, valleys, mountains, beach, streams, rivers, lakes, wetlands, forests, meadows, grasslands, orchards, springs, geysers or any other such features.</p>	<p>SS + PS</p> <p>SS + PS</p>				
<p>2. People, culture and heritage</p> <p>2.1 Demographic data: total population of your village or neighbourhood and type of livelihoods of the community members.</p> <p>2.2 What and where are the historic areas of heritage and cultural value to the community, the region, or the country, in your locality?</p>	<p>SS + HI</p> <p>PS</p>				



TOOL 2

Data checklist	Data source	Who is responsible?	How is data collected?	By when?	Where is it stored?
<p>3. Economic activities and financial security</p> <p>3.1 What are the major economic activities of the community members? Which of these economic and employment generating units and companies are owned by the local community?</p> <p>3.2 Do community members have financial security during employment or loss of livelihood? Do the women, elderly or orphaned members of the community have any mechanisms for financial security and protection? If so, what?</p>	<p>HI</p> <p>HI</p>				
<p>4. Environment, ecology and natural resources</p> <p>4.1 What are the environmental issues and where are these issues observed in your community? (e.g. air pollution, water pollution, degradation of water bodies, poor waste disposal, biodiversity loss, and loss of - or disappearing - forest and green spaces.) If possible, simple water quality testing tools can also be carried during community surveys.</p> <p>4.2 What are the major natural resources in and around your community or neighbourhood (e.g. trees, forests, rivers, ponds, wetlands, fisheries, springs, fertile soils, etc.)?</p>	<p>PS + SS + FGI*</p> <p>PS + SS + FGI</p>				

* With local ecologists, environmental organisations, or technical institutes, etc.



TOOL 2

Data checklist	Data source	Who is responsible?	How is data collected?	By when?	Where is it stored?
<p>5. Soil and geology</p> <p>5.1 What are the soil types and how are these soil types distributed in your neighbourhood and village? Identify areas with fertile soils. Identify local knowledge and techniques associated with soil management practices, related to agriculture, to prevent erosion.</p> <p>5.2 Which are the geologically significant areas (e.g. areas which had landslides, areas with springs, hard rock beds, thin soil etc.)?</p>	<p>PS + SS + FGI*</p> <p>PS + SS + FGI</p>				
<p>6. Land and landscape</p> <p>6.1 What are the different land uses and land-based activities observed across the area of the neighbourhood or village? What are the different types of land cover or landscapes in your locality? Land cover or landscapes types include: barren lands, rocky outcrops, fertile floodplains, wetlands, mangroves, deserts, sandy beaches. It will be useful to identify these via secondary data as well as verify them on the ground during community observations or exercises.</p>	<p>PS + SS + FGI**</p>				

* With local farmers, environmental organisations, or technical institutes, etc.

**With local government units, municipality, development authorities, landscape experts or subject matter experts.



Data checklist	Data source	Who is responsible?	How is data collected?	By when?	Where is it stored?
<p>7. Housing and housing security</p> <p>7.1 How are the structures built, especially the houses distributed on the land? How densely occupied is each household? What is the distance between each house?</p> <p>7.2 Are there homeless people in the community? Why are they homeless and do they have any shelter facilities in the neighbourhood or village?</p> <p>7.3 How safe are the built structures? How many buildings and homes are not safe in terms of structural safety, sanitary conditions, etc.? Which structures require repair and maintenance?</p>	<p>PS + SS</p> <p>FGI* + SS</p> <p>HI**</p>				
<p>8. Accessibility and condition of infrastructure, amenities and transport facilities</p> <p>8.1 Accessibility of households to basic amenities, water sources, public transport, public toilets, electricity and power sources: locate these public amenities on the map.</p> <p>8.2 Condition of existing basic amenities, water sources, public transport, public toilets, electricity and power sources etc.</p>	<p>PS + HI</p> <p>PS + HI</p>				

* With local government units.

**Plus mapping and locating unsafe structures.



TOOL 2

Data checklist	Data source	Who is responsible?	How is data collected?	By when?	Where is it stored?
<p>9. Hazards and areas that are susceptible to hazards (include predicted or projected data, and historical data)</p> <p>9.1 Depending on the geographic location, collect information on hazards and areas susceptible to hazards within the locality and region.</p> <p>9.2 Gather spatial data and maps on areas prone to specific hazards (this information can be captured from various secondary sources).</p> <p>9.3 Gather local information and knowledge about historical events and hazards in the past and how communities adapted to those events.</p>	<p>SS</p> <p>SS + PS</p> <p>PS + FGI</p>				
<p>10. Institutions and organisations</p> <p>10.1 List all relevant local and regional institutions, organisations and agencies (e.g. public, private, government, non-governmental, formal and informal across various sectors including education, agriculture, infrastructure, environment etc.) along with basic information about their area of work. This information is useful to identify appropriate collaborators at various stages of risk-informed development planning.</p>	<p>PS + SS</p>				





TOOL 3

Contextual analysis of geophysical susceptibility to hazards



Contextual analysis of geophysical susceptibility to hazards

Use this tool to check if the communities concerned are living in contexts or conditions that are susceptible to various hazards.

Overview

Certain conditions and contexts can cause specific hazards. Look for these conditions to determine if the community concerned is prone to the hazards corresponding to these conditions.

Two tables are provided:

- Table 1 shows hazards that are either natural or triggered by climate change
- Table 2 shows hazards that are triggered by human activity

The list of hazards is illustrative and not exhaustive.

The geographic determinants of susceptibility to hazards could be mapped or located with reference the settlement.

Local indicators of susceptibility to hazards may be related to people, place, physical factors, and systems.

Word version

An editable Microsoft Word version of this template is available for download on the GNDP website.

[→ DOWNLOAD TEMPLATE](#)



Table 1: Hazards that are either natural or triggered by climate change

Hazard	Geographic determinants of susceptibility to hazards	Local indicators of susceptibility to hazards
Earthquakes and/or tremors	<ul style="list-style-type: none"> • Presence of fault lines in the locality and in the region around the community, village or town • Are there dams or mining explosion activities in areas with a history of earthquakes and seismic activities? • Presence of volcanic craters 	<ul style="list-style-type: none"> • Soil instability (frequent erosions, lands that are barren) • Buildings and constructions that are not seismic appropriate or resistant • No/poor early warning systems
Landslides	<ul style="list-style-type: none"> • Mountainous landscapes and valley regions 	<ul style="list-style-type: none"> • Barren lands, fallow agricultural landscapes, soils with high water holding capacity and shallow soils
Flooding (river flooding)	<ul style="list-style-type: none"> • Communities living in proximity to large river and river systems, especially in floodplains • Communities living in proximity to rivers with increasing trends of rainfall (rainfall duration and intensity) in its basin 	<ul style="list-style-type: none"> • Valley regions and drainage areas of the river



TOOL 3

Hazard	Geographic determinants of susceptibility to hazards	Local indicators of susceptibility to hazards
Flooding (urban flooding)	<ul style="list-style-type: none"> • Older historic areas within the city (as these typically become low lying areas as the city expands around it and also because these areas have older and degraded drainage systems) • Areas which have organically developed (i.e. unplanned) within the city • Peri-urban areas (areas that are lying towards the edges of the city administrative areas) 	<ul style="list-style-type: none"> • Areas in close proximity to canals and storm water drains or rivers and rivulets • Areas with older drainage and sewerage systems and areas which do not have drainage systems in place • Areas in proximity to polluted landscapes and drains that are clogged with solid waste
Volcanic eruptions	<ul style="list-style-type: none"> • Landscapes with previous history of volcanic eruptions and volcanic activities (refer to historic data from data library) 	<ul style="list-style-type: none"> • Areas lying in proximity to active and dormant fissures. • Valley areas in volcanic landscapes
Cyclones and tsunamis	<ul style="list-style-type: none"> • Coastal regions and island regions 	<ul style="list-style-type: none"> • Coastal belts that do not have mangroves or coral reefs • Coastal belts that have narrow deltas • No/poor early warning systems or forecast models
Wildfires	<ul style="list-style-type: none"> • Regions with deciduous forests 	<ul style="list-style-type: none"> • Deciduous landscapes with high lightning activities and thunderstorms
Heat waves	<ul style="list-style-type: none"> • Increased frequency of extreme daily maximum temperatures 	<ul style="list-style-type: none"> • Areas with urban heat island effects • Areas with sparse tree canopy or tree cover



TOOL 3

Hazard	Geographic determinants of susceptibility to hazards	Local indicators of susceptibility to hazards
Drought	<ul style="list-style-type: none"> • Deserts, regions with low rainfall and high evapotranspiration 	<ul style="list-style-type: none"> • Barren landscapes • Areas with seasonal water bodies
Cloudburst	<ul style="list-style-type: none"> • Mountainous landscapes and valley regions below 	<ul style="list-style-type: none"> • Areas lying in close proximity to rivers
Glacier outburst	<ul style="list-style-type: none"> • Mountainous landscapes and valley regions below 	<ul style="list-style-type: none"> • Observed trend of higher daily temperatures in high altitudes • Blasting and mining activities in close proximity to glaciers
Insects swarming farmlands	<ul style="list-style-type: none"> • Global and especially linked to climatic changes in regions 	<ul style="list-style-type: none"> • Large swarms of insects migrating across regions (farmlands and agricultural lands are most at risk and susceptible)



Table 2: Hazards that are human triggered

Hazard	Local indicators of susceptibility to hazards
Health crisis related to an infectious disease	<ul style="list-style-type: none"> • Poor health and starving population • Absence of robust primary health centres and network of higher-order medical facilities
Fire and explosions	<ul style="list-style-type: none"> • Unregulated and unsafe chemical industries, fire-cracker making industries • Unregulated, unsafe or poorly maintained gas pipelines or electricity grids
Industrial hazards (air poisoning/pollution)	<ul style="list-style-type: none"> • Proximity of hazardous industries or nuclear power plants to human settlements
Industrial hazards (water poisoning/pollution, radiation)	<ul style="list-style-type: none"> • Proximity of hazardous industries or unscientific landfill sites to water bodies or regions with high water table
Industrial hazards (soil/land pollution)	<ul style="list-style-type: none"> • Agricultural belts with heavy fertiliser or pesticide usage • Unscientific landfill sites and waste dumping grounds
Dam break	<ul style="list-style-type: none"> • Blasting and mining activities near dams • Dams located near fault lines and in earthquake prone regions • High erosion rates in the catchment region of the dam





TOOL 4

Relationship mapping exercise



Relationship mapping exercise

This relationship mapping exercise is designed as a collaborative exercise involving community members and aims to initiate thinking and understanding of the relationships between people, a place and systems.

Overview

This exercise has the potential to educate communities about the complexity, interdependencies and linkages between people, place/land and systems (natural and human made) - if conducted in a participatory format.

The civil society organisation may bring in experts (or professionals in the community) with experience in development planning, risks, disasters, socio-economics or environment as observers or as consultants to collaborate in this exercise.

An example of a relationship mapping exercise is described below with the objective of understanding factors linked to hazards and risk drivers, as well as their impacts.

This exercise can be run as a workshop or a small group exercise.

Preparation

Before initiating this exercise, you should:

1. Present and explain the findings of the visioning workshop
2. Present work done so far under stages two, three and four of risk-informed development planning
3. Explain the concept of relationship mapping and its purpose to the participating community members



TOOL 4

How to conduct the relationship mapping exercise

1. Randomly divide the participants into groups
2. Make a list of all hazards and risk-drivers that the community is facing (ask participants and write them on the board; the facilitator can add any other threats or hazards that are not mentioned but are relevant to the community or region)
3. Assign one or two hazards/risk drivers to each group
4. Share a set of four cue cards with each group titled: People, Place, Resource and Infrastructure/Systems for each hazard/risk driver; use a cue card set of one colour for each hazard/risk driver (i.e, each hazard or risk driver discussed will have a pre-assigned cue card colour)
5. The question for deliberation is: What are the impacts and/or consequences of hazards and risk drivers on people, place/resource, and infrastructure/systems? (This question has to be discussed for each of the hazards or risk drivers that each group is assigned)
6. Ask each group to deliberate and list answers to the question on the back of the cue card
7. On a large classroom board or on the floor, write down each of the hazards and risk drivers discussed and place all the cue cards around each of the hazards and risk-drivers that have been taken up
8. Ask all the participants to take time to go through all the cue cards around each risk driver
9. Ask a few of the participants to rearrange all the cue cards based on the titles:
 - Group the cue cards on people affected by all the listed hazards/risk drivers
 - Group cue cards on places/areas/regions and resources affected by the various hazards/risk drivers. Pin up a large base map (A1 or A0 size) of the village/neighbourhood and map/colour the impacted area on the base map of the neighbourhood/village. Use coloured pencils assigned to each hazard to draw/colour impacted areas
 - Group cue cards on infrastructure affected by hazards/risk drivers
 - Group all cue cards on systems (social/economic/cultural/democratic systems etc.) affected by hazards/risk drivers
10. Display this grouping on the floor or on the wall for everyone to see and discuss
11. Conclude and capture the proceedings of the group exercise

Additional resources

- [Relationship mapping](#) by CIToolkit





TOOL 5

Reflective questions on the resilience of people, place and systems



Reflective questions on the resilience of people, place and systems

This checklist of questions can be used during stage three of the risk-informed development planning process. It can be used together with the relationship mapping exercise.

Communities

- Can people access information about specific hazards that habitats are vulnerable to?
- Are they aware of personal safety measures to be taken for each type of hazard event?
- Are they aware about housing and necessary structural safety to the hazard?
- Do they know if their homes fall in hazard zones?

Financial security

Consider the financial security of:

- Families via employment or livelihood security
- Families via social security schemes
- Micro and small-scale industries via schemes and support mechanisms

Specific groups and individuals

- Are the special needs of vulnerable groups addressed by community organisations, local governments or other decision makers (e.g. persons with disabilities, economically marginalised, socially marginalised, elderly, women and children – especially orphans)?
- Are there special directives to improve the resilience of these special groups?
- Are formal development plans sensitive to the special needs of marginalised and vulnerable groups?

Health of natural environment

- Are natural environments in and around the community polluted, fragmented or degrading? Are they near pristine?
- Does urbanisation, agriculture and real estate cause conversion of natural landscapes?



TOOL 5

- Are communities benefiting from the natural resources in the area? Are livelihoods dependent on these natural resources secure?

Local government

- Do local government units support communities with response-rehabilitate-recover-rebuild mechanisms?

Local development plans

Do the local area development plans and local government institutions:

- Identify local vulnerable and hazard prone areas in the locality?
- Take up mitigative measures to address these physical risks?
- Invest and support in establishing mechanisms to strengthen local responses to emergencies?
- Review the vulnerability of place, people and systems and propose measures to mitigate and re-adapt to new risks?
- Have contingency plans which are reviewed and revised regularly with evolving risks?

Accountability

- Transparency and accessibility to information about government spending and use of public funds

Financial support

- Are financial or livelihood support schemes by the local government units and national governments available for the marginalised groups and communities?

Infrastructure

- Are basic infrastructure facilities available and provided by the government (e.g. coverage of water supply, sewage and drainage infrastructure - especially if in cities; access to community amenities)?





TOOL 6

Risk-informed development analysis options



Risk-informed development analysis options

This tool can be used during stage four of the risk-informed development planning process.

Development impact assessment

A development impact assessment covers environmental, social and economic impacts.

It specifically examines the impacts of development activities (e.g. mega projects and land transformation via urbanisation).

Dam construction, mining, blasting, high-ways and transport networks are examples of mega projects that can cause considerable - and many times - irreversible environmental, social and economic damage to communities and landscapes.

Undertake an environmental, social and economic impact assessment for the local area with respect to all possible development interventions including mega projects.

In cases where project-specific impact assessment studies are already available, civil society organisations can support the community members in sharing the findings from these studies with the objective of examining the relevance of those studies to the community.

Conduct an exercise to make the community members aware of the overall impact of development, risk drivers and risk factors associated with various physical and non-physical hazards.

Collaborate with local experts (e.g. EIA and SIA experts and environmental consultants) and development authorities (e.g. local government bodies).

Overlay analysis

An overlay analysis can help identify areas with multiple hazards. Spatial relationships can be mapped through the process of spatial overlay. Spatial overlay is accomplished by joining and viewing together separate spatial data sets (or maps) that share all or part of the same area.

Individual hazard maps of the neighbourhood, which are printed on transparent sheets, can be placed one over the other to delineate and identify areas with multiple hazards (i.e. overlapping hazards). The [graphic overlay method](#) is the most viable overlay analysis to work together with community members.



Land suitability analysis

This type of spatial analysis can help identify lands that are most appropriate/suitable for various types of activities.

It can be derived by deducing vulnerable lands, hazard-prone areas and environmentally important or ecologically sensitive landscapes from the larger map of the area.

Another example of suitability analysis is land suitability for agriculture, which has to be derived based on a soil fertility spatial map showing water availability for irrigation.

The key here is to identify all important physical and non-physical factors that determine the suitability of land for any particular activity.

Degradation and fragmentation of resilience infrastructure

This covers natural systems like drainage systems, wetland systems and green networks.

The primary resilience infrastructure are the natural landscape systems, as they have the intrinsic ability to adapt because they have self-regulating mechanisms embedded in their systems.

Mangroves are an important resilience infrastructure against coastal inundations and tidal forces. Natural drainage paths and networks are critical in preventing flooding and water-logging as they are a result of the terrain.

Forests and wetlands are natural sinks and all of them provide ecosystem services that are critical for resilience. For these systems to function well, structural integrity is fundamental. Fragmentation of these networks (via construction activities, road ways, etc.) harms the performance of these natural resilience systems.

The most effective method is to carry out a field exercise with community members to physically identify them using the community's local and historic knowledge of

how these landscapes and natural systems have transformed over time.

The above findings can be documented in maps. If basic maps are available, a simple overlay analysis between a map of buildings and development activities, and a historical map of natural landscape networks and natural waterways (bodies and drainage), can help identify points and areas where the natural systems have been destroyed or fragmented.

Radius of influence technique

Pollution is another major cause of infrastructure degradation and the poor resilience of infrastructure. Areas of degradation from pollution and other factors can be assessed using radius of influence method.

This can be done by locating the sources of pollution with respect to the resilience infrastructure systems/networks (natural landscapes). If pollution sources are in close proximity to these natural resilience systems, then they are prone to degradation. Both of these assessments can be conducted as a group exercise involving community members.



Carrying capacity

Carrying capacity can be calculated for a given area with respect to an available resource against the demand for it. If the availability of the natural resource within a given area is lower than the demand/requirement then it increases dependency on resources outside the area and thus beyond the natural carrying capacity of the area.

This can help make informed policy decisions on matters like resource provisioning or even utilising under-utilised local resources.

Indicators of high emissions and unsustainable practices

Dependency on private vehicles due to inaccessible public transport, poor walkability, high dependency on non-local products, cultivation of exotic species, water-intensive agriculture and disappearing local biodiversity are evident indicators of unsustainable practices.

These indicators can be used to examine sustainable and unsustainable practices at household level, community level or city level.

Making communities aware of these indicators is critical to ensure accountability to all concerned stakeholders.

It is useful for communities to brainstorm and make a list of these indicators for themselves based on their lifestyle and local conditions. This will help them shift and evolve their own innovative and sustainable practices that are most suited to them.

These indicators can be used to examine sustainable and unsustainable practices at household level, community level or city level.





TOOL 7

SWOT analysis



SWOT analysis

Strengths, weaknesses, opportunities and threats (SWOT) can be analysed to prioritise risks to be addressed in a participatory way.

How to do a SWOT analysis

To complete a SWOT analysis, groups should begin by listing internal strengths and weaknesses. These can be related to their people (social, economic and cultural factors), place (physical environment, ecosystem services factors) and systems (institutions, mechanisms, political/governance factors) context.

It should relate to those who have organised themselves to complete risk-informed development planning, and those taking part (or represented) in the SWOT exercise.

Groups should then list external threats and opportunities. This should be related to the wider environment, or stakeholders and duty bearers who are not directly involved in the emerging process.

Information from other sources, such as knowledge gathered by other tools in the risk-informed development process, can be utilised.

Answers can be presented for everyone to see in a large table such as the one shown on the next page.



TOOL 7

Strengths	Opportunities
1.	1.
2.	2.
3.	3.
Weaknesses	Threats
1.	1.
2.	2.
3.	3.

To further analyse the results and make strategic decisions on which risks to be addressed as a priority in future actions, ask the following questions:

- What strategies will use identified strengths to maximise opportunities?
- What strategies will use identified strengths to minimise threats?
- What strategies will minimise weaknesses by taking advantage of opportunities?
- What strategies will minimise weakness and avoid threat?

Answers can be presented for everyone to see in a large table such as the example on the next page.

The information provided can be referred to as the group moves to other stages of the risk-informed development process.

Word version

An editable Microsoft Word version of this table and the following one is available for download on the GNDR website.

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TOOL 7

	External stakeholder opportunities	External stakeholder threats
Internal stakeholder strengths 1. 2. 3.	1. 2. 3. Strategies that use strengths to maximise opportunities 1. 2. 3.	1. 2. 3. Strategies that use strengths to minimise threats 1. 2. 3.
Internal stakeholder weaknesses 1. 2. 3.	Strategies that minimise weaknesses to make use of opportunities 1. 2. 3.	Strategies that minimise weaknesses and avoid threats 1. 2. 3.





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