



Photo: UNOPS/Claude-André Nadon

## UNOPS RESILIENCE PATHWAYS MODEL

Resilience is the ability to withstand, recover and adapt to and from shocks and stresses. To meet current and future climate challenges, governments will need to make the most efficient use of existing infrastructure and make the most effective use of scarce financial resources for these investment needs.

UNOPS Disaster Risk Reduction for Resilience team launched its ISO 31000 based Resilience Pathways Model (RPM) in 2015. The Model is a tool designed to help countries integrate resilience planning across multiple sectors of their hard and soft infrastructure. While the issue of resilience is not new, the RPM represents a unique approach to addressing resilience within the context of all major global frameworks<sup>1</sup> and the Sendai Framework for Disaster Risk Reduction in particular.

The RPM framework and processes provides opportunity to engage at a strategic level with Government to influence resilience agendas broadly and create new opportunities. Key to this is assisting member states to better understand the concept of resilience and to determine who within the government systems owns the resilience agenda. This understanding involves a shift in thinking from focussing on the disasters (being reactive), to recognising that many risks are created by new development and are inherent in the existing built environment.

The model described below provides a framework to advise and provide strategic guidance on delivering against the key global policy frameworks in an integrated and cohesive way.

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<sup>1</sup>Key global frameworks include the Sustainable Development Goals, the Climate agenda, Sendai Framework for Disaster Risk Reduction, Habitat III, Global Financing and the World Humanitarian Summit.

# Resilience Pathways Model

The foundation of RPM is based on five principles.

## Five principles

1. Resilience is an outcome. The basic premise is that for resilience to be achieved then all elements of development must be resilient.
  2. Resilience is a “state of being” – Resilience is not an end goal in itself but a continuously changing state.
  3. Development should learn from adversity. Understanding the reasons for failure as a result of the impact from specific shocks and stresses provides opportunity to extend the development trajectory to higher levels and avoid repeating the same mistakes.
  4. Development and humanitarian actions are inseparable. Risks are inherent in existing development and new development often creates new risks. Well planned development can therefore minimize the extent of humanitarian response,
- whereas poor development decisions can result in increased humanitarian needs in the event of shock and stresses occurring.
5. Promoting programmatic synergies. This is the key to achieving resilience objectives within and across the global development agenda’s.

The Model is consistent with global resilience objectives and priorities. It fast-tracks applied thinking around current resilience discussions through articulating a unique set of actions that can be applied to a variety of development scenarios. Importantly, the Model links both development and humanitarian contexts in a cohesive manner through adopting a three pathways approach for achieving resilience.

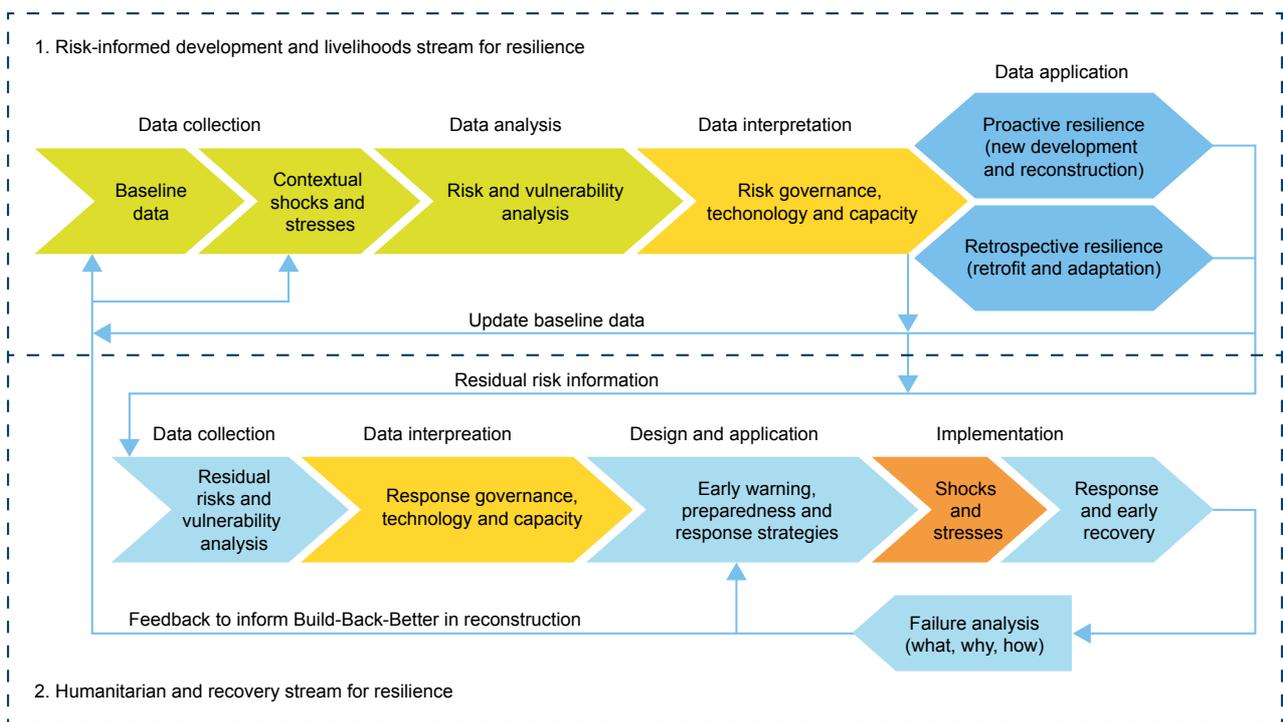


Figure 1: Resilience Pathways Model

### Three pathways approach

1. Proactively for new development through ensuring that planning and design are risk-informed;
2. Retrospectively for existing development by ensuring that levels of risk exposure and vulnerability are analysed and mitigation measures are identified and implemented;
3. Reactively through understanding residual risk to develop appropriate preparedness and response strategies. Also ensuring failure analysis is built into recovery processes to inform build-back-better strategies and therefore strengthen resilience opportunities proactively (during reconstruction) and retrospectively.

The Model is designed for implementation within the country context and is applicable to development planning at the national and local government levels. The processes can also be adapted and applied to assess resilience at the community level.

#### Development stream

The key message in this stream is that risks are inherent in existing development and new development often creates new risks.

The steps within the development stream are designed to minimise or remove risk, thereby protecting development investments. The focus here is on strengthening resilience 1) proactively for new initiatives and 2) retrospectively for existing assets and systems.

In order to bring about a reduction in risk, member states should ensure that all relevant ministries and stakeholders:

1. Have access to up to date information on what currently exists in the built environment.
2. Have up to date information on contextual shocks and stresses that the country may be confronted with which could impact on the development agenda.
3. Have access to risk and vulnerability information that not only informs any new development but also highlights risk inherent in the existing built environment.
4. Have the policy, compliance standards, institutions, technical capacity and technology to effectively drive development and humanitarian resilience agendas.
5. Apply the risk-informed planning and decision making to the design of new development and adaptation and to identifying retrospective resilience solutions.

The outcome of effective coordination across all ministries and ensuring implementation of risk-based approaches on a whole-of-Government basis will be the application of appropriate mitigation measures to reduce risk inherent in the existing built environment and reduction of risks created through new development.

#### Humanitarian stream

The key objective of linking the humanitarian stream and the development stream is to recognise that quantification of residual risk inherent in the built environment (both existing and created by new development) will enable emergency responders to better prepare and respond and help communities to better understand risks and prepare in the event of a significant shock or stress.

The steps within the humanitarian stream are designed to remove people from the risk and thereby saving lives and protecting livelihoods.

For UNOPS, the key function associated with this stream is failure analyses which “closes the loop” by ensuring that causes and reasons for failure during the impact of specific shocks and stresses are clearly identified and understood and that this information is used to update and inform the development stream through a build-back-better approach.

#### Failure Analysis

In damage assessment, UNOPS must lead the transition away from counting physical losses to understanding the reasons for failure. The UNOPS failure analysis methodology (sometimes referred “forensic analysis”) to inform and strengthen damage assessment processes is a critical step in supporting member states and other UN Agencies in strengthening build-back-better actions.

Failure analysis involves conducting investigations to ascertain why systems or the built environment (infrastructure and otherwise) fail during specific shocks and stresses. The primary aim of failure analysis is to distinguish between the “root causes and the consequences” of failure so that base-line data and risk contexts can be reviewed and thus better inform proactive and retrospective resilience strategies in the future.

## Applying the Resilience Pathways Model

The RPM identifies nine steps that collectively contribute to the design of resilience outcomes within the development and humanitarian contexts. The model is thus an implementation tool that provides a framework to organise an approach to building resilience in a comprehensive manner.

To assist in RPM's application, a set of guidelines has been developed. The guidelines provide a range of questions that be applied to each step in the RPM process.

### The first range of questions that require answers are:

1. What is it that we want to achieve (purpose)?
2. What results are we looking for (impact)?
3. What is the behavioural shift that we are looking for and where (objective)?
4. What is the scope of the project, particularly when considering a multi-phased approach?

The RPM process can apply to a variety of design issues, including infrastructure systems and technical assistance projects, or they can target a specific issue such as determining resilience around gender. There are multiple applications, and changes to the baseline data that will determine the course that is needed.

## Linking to Global Frameworks

The RPM processes provide a logical and structured pathway for identifying and strengthening programmatic linkages across most of the global frameworks. The key is to identify the systemic relationships and key outputs from each framework as suggested below.

To achieve resilience, every aspect of the system must be resilient. It is therefore critical that when considering resilience we do so from a systems perspective. This means that the causal relationships and programmatic linkages of every aspect of the work being undertaken must be evaluated separately and then collectively to determine the level of resilience. If we apply this to the interactive nature of the global frameworks, it becomes evident that weaknesses in one area can have a major impact and possibly result in the cascading failure of the whole process or system. The global frameworks cannot operate in isolation to each other, as to do so would compromise the primary rationale for their existence.

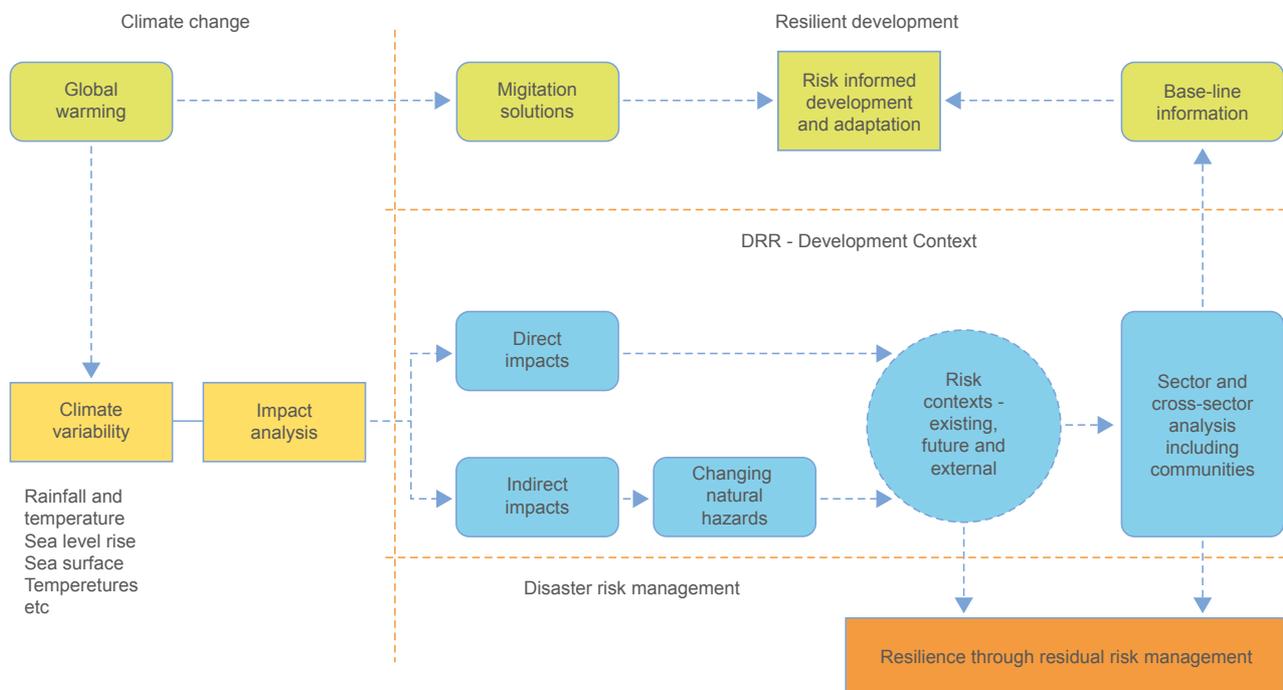


Figure 2: Pathways for risk informed development