

Integrated Risk Management **explained**



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Introduction

Climate change and ecosystem degradation place new demands on disaster risk reduction approaches. We describe Integrated Risk Management (IRM) as an enhanced, holistic approach to increase community resilience by integrating disaster risk reduction, climate change adaptation and ecosystem management and restoration. In this document, we set out CARE's approach to IRM, explain our current thinking and the key characteristics of the approach, CARE's Theory of Change, and how IRM links to international frameworks such as the Paris Agreement and the Sendai Framework.

It is now well established that the number of disasters has grown exponentially over the past decades, and that these disasters disproportionately affect the lives and livelihoods of the poorest and most vulnerable. Climate change, rapid urbanisation, growing inequality, ecosystem degradation, and population growth are among the many trends that contribute to this steep increase. As a result, more people are caught in a vicious circle of poverty, risk and vulnerability. This vicious circle drives mounting economic losses, greater costs for relief and rehabilitation, undermining development gains¹, leading to more poverty and higher vulnerability to disasters.

Integrating Disaster Risk Reduction, Climate Change Adaptation and Ecosystem Management and Restoration

CARE has worked on Disaster Risk Reduction (DRR) since the early 2000s. Based on a history of emergency relief, DRR traditionally aimed to reduce the risk of natural disasters through disaster mitigation, disaster preparedness and prevention. Over the years, the impact of climate change on frequency, unpredictability and intensity of disasters has become more evident, resulting in the inclusion of climate change adaptation measures in the practice of disaster risk reduction.

¹ [The Sustainable Development Goals Report 2016](#), and [Human Development Report 2016](#).

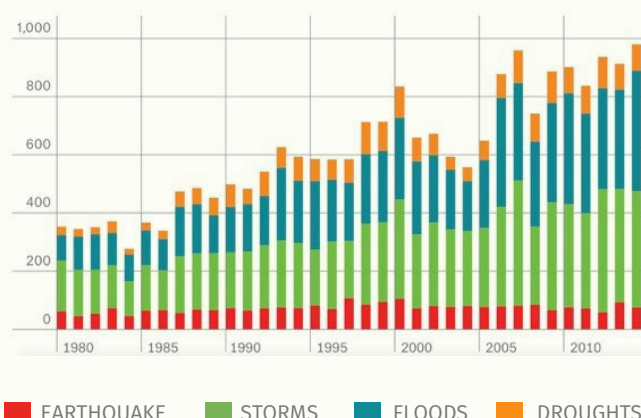


FIGURE 1 - RISING NUMBERS OF DISASTERS
(SOURCE: MUNICH RE, 2016)

In recent years, we have begun to consider natural hazards increasingly in the context of the wider environment. Ecosystems play a pivotal role in DRR as they work as natural barriers against some hazards (e.g. mangrove forests for the reduction of wave intensity, healthy rangelands for groundwater recharge), as well as a resource to help recovery in the aftermath of a disaster or to help build community disaster resilience. With the launch of the [Partners for Resilience \(PfR\)](#) programme, CARE has begun to embed ecosystem thinking structurally into DRR programmes to help increase resilience.

The term Integrated Risk Management (IRM) was first used in 2014 by PfR and refers to a holistic, multidisciplinary way of managing risk and increasing community resilience, building on the strengths of traditional DRR work and integrating key elements from Climate Change Adaptation (CCA) and Ecosystem Management and Restoration (EMR). Based on the PfR programme, and the learnings from other DRR and CCA programmes, CARE has developed a CARE-specific approach to IRM including elements of IRM pertinent to the work of the global CARE confederation. The approach builds on CARE's experience with livelihoods, gender equality and good governance and allows CARE to multiply impact, strengthen the resilience of vulnerable communities and their livelihoods, and reduce the loss of lives and livelihoods of the poorest and marginalised communities due to natural hazards.

This document focuses primarily on natural hazards, climate change and ecosystem degradation as drivers of risk, to explain the basic IRM approach. The CARE International 2020 Program Strategy focuses on increasing resilience from a wider range of shocks and stresses, as described in the [Increasing Resilience Guidance Note](#). We recognise that there is often a causal relationship between these shocks and stresses, for example, conflicts exacerbate ecosystem degradation, climate change increases conflict, disasters worsen economic development, and economic stresses can increase vulnerability to disasters. We are fully committed to building strong links with other shocks and stresses once the basic IRM approach is well established. This document can be used to develop IRM specific programmes, as well as enhancing our humanitarian response and sustainable development programmes by integrating the main characteristics of IRM.

About this document

As IRM learning, work and practice constantly innovate, this explanatory document has been developed as 'work in progress'. We intend to regularly update it based on new evidence, knowledge and interest.

This document gives an overview of CARE's understanding of IRM.

- Chapter 1 describes IRM and its key elements.
- Chapter 2 describes good programming principles to ensure IRM is more than the sum of its parts.
- Chapter 3 describes how we translate IRM thinking into a coherent approach using the Theory of Change.
- Chapter 4 describes how our IRM work links to international agreements such as the Paris Agreement, the Sendai Framework and the Sustainable Development Goals. These agreements form a strong foundation and guidance to help place IRM higher on the political agenda and to help advocate for an enabling environment for those living at risk.
- Finally, Chapter 5 is an invitation to share your experiences, ideas and feedback. In this chapter, we list some ideas for initiatives to develop tools and technical papers to support and illustrate theoretical IRM understanding on how to apply IRM in practice.



1 Characteristics and Elements of the IRM Approach

The IRM approach has evolved through step-by-step learning of Disaster Risk Reduction (DRR) linked to Climate Change Adaptation (CCA) and Ecosystem Management and Restoration (EMR). In this chapter, we explain the concepts of DRR, CCA and EMR, resulting in a description of Integrated Risk Management and its main characteristics.

1.1 Disaster Risk Reduction

What is a disaster?

A disaster is “a serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources”. (UNISDR, 2009)

What is Disaster Risk Reduction?

Disaster Risk Reduction is “the concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events”. (UNISDR, 2009)

Type of activities

Traditionally DRR has always focused on prevention, mitigation and preparedness. The introduction of measures such as first aid training, installation of early warning systems, reinforcement of embankments, often directly strengthen the ability of communities and individuals to cope with natural hazards. Measures and activities to address future shocks are designed based on experience in close cooperation with local communities using traditional knowledge. The key determinant to DRR is the following formula:

$$\text{Disaster risk} = \frac{\text{Hazard x Vulnerability}}{\text{Capacity}}$$

The disaster risk is determined by the hazard impact on a population, aggravated by the vulnerability of this population, while this can be countered by the presence of mitigating capacities.

Main characteristics of DRR

- Looks at past events to predict future events;
- Focuses on communities;
- Focuses on impacts of all natural hazards (including geophysical risks);
- Focuses on prevention, preparedness and absorption;
- Implements the formula risk= hazard*vulnerability/capacity.

Hazard

A process, phenomenon or human activity that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation.

(Source: UNISDR)

Testimony from cyclone survivors in Vanuatu

“Personally I think that if we hadn’t had the DRR trainings from CARE, we would have lost several families. Plenty of people would have stayed in houses that collapsed, plenty of trees would have fallen on houses if we hadn’t cut them, people would have been scattered and running everywhere instead of inside safe houses. But our community is safe because of this basic training.”

Read the full story [here](#)

1.2 Climate Change Adaptation

What is climate change?

Climate change is “a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods”. (UNFCCC, 1992)

What is Climate Change Adaptation?

Adaptation to climate change is “the process of adjustment to actual or expected climate and its effects. In human systems, adaptation seeks to moderate harm or exploit beneficial opportunities. In natural systems, human intervention may facilitate adjustment to expected climate and its effects”. (IPCC 5th assessment report, 2009)



Type of activities

Climate Change Adaptation (CCA) functions as a bridge between local communities and the scientific world. CCA helps communities make decisions based on current trends and expected long-term change, as projected by scientists and informed by traditional knowledge of the climate. CCA only works on climate-related disasters such as droughts and floods. Examples of CCA activities are the adaptation of water storage systems (as a precaution for extended dry spells), the introduction of alternative cropping methods and varieties, the provision of information services, and the introduction of alternative livelihood income generating activities to diversify revenue streams.

Main characteristics of CCA

- Focuses on climate-related hazards;
- Focuses on current observed change, future long-term predictions and extreme variabilities;
- Functions as a bridge between local (traditional) community ‘insiders’ and global (scientific) experts;
- Focuses on adaptation and transformation, the need to move away from ‘business as usual’.

Climate Change Adaptation work in Nicaragua

The Partners for Resilience Programme in Nicaragua has facilitated the drafting of three Climate Change Adaptation Strategies to help guide financial and technical resources to help increase resilience at community and institutional levels. All strategies have been approved through resolutions by municipal governments, the regional government and the territorial indigenous government of the Autonomous Region of the Northern Caribbean Coast (RACCN).

CARE worked at:

- Implementation of local adaptation measures through community micro projects
- Working across scales with a focus on Integral Water Basin Management
- Provide political-technical support to government to harmonise planning instruments, strategies, plans and programmes

Find the complete case study [here](#)

1.3 Ecosystem Management and Restoration

What is ecosystem degradation?

A degraded ecosystem is an ecosystem affected by “a persistent reduction in the capacity to provide ecosystem services and functions”. An ecosystem is “a dynamic complex of plant, animal, and microorganism communities and the nonliving environment interacting as a functional unit”¹ This definition highlights the fact that an ecosystem includes plants and animals, but also soil, rocks, water sources and the local atmosphere. The size of an ecosystem can vary from tiny (a backyard pond) to huge (an entire rangeland).

What is Ecosystem Management and Restoration?

Ecosystem Management and Restoration (EMR) “seeks to meet human requirements to use natural resources, whilst maintaining the biological richness and ecological processes necessary to sustain the composition, structure and function of the ecosystems concerned and assisting the recovery of ecosystems that have been degraded, damaged, or destroyed”²

Type of activities

Ecosystem management respects the natural pace of the ecosystem. Restoration efforts of degraded systems can take decades, affecting the services and functions of the ecosystem over medium to extended periods of time. Working on ecosystems often entails working on a landscape level, across administrative boundaries and involving multiple governmental departments. As a result, working with multi-stakeholder approaches is key to ecosystem management and restoration work, taking into account a wide range of expectations, claims and interest. For example, upstream and downstream communities in a watershed will have different interests; decisions taken upstream will affect outcomes downstream.



Examples of typical EMR activities are the development of watershed alliances; reforestation of hillsides; rangeland management and reforestation in (semi-) arid areas for soil and water retention; the planting of mangroves in coastal areas; the introduction of alternative livelihood activities that lead to reduced pressure on the ecosystems; awareness raising on the importance of healthy ecosystems. EMR for DRR purposes focuses on two main aspects of EMR: the restoration and management of ecosystem functions to reduce hazard risk (e.g. providing natural buffers) and the restoration and management of ecosystem services to provide natural assets for absorptive capacity (e.g. resources that ecosystems can provide for recovery purposes, shelter material, food, firewood, etc.).

Main characteristics of EMR

- Has a mid/long-term perspective;
- Focuses on restoration and management of ecosystem function and services;
- Applies the landscape approach;
- Focuses on prevention and absorptive capacity;
- Follows the multi-stakeholder approach.

¹ [UNEP Millennium Ecosystem Assessment, 2005](#)

² Adapted from SER 2004 and UN Convention on Biological diversity, 1992

1.4 Integrated Risk Management

Based on experiences with DRR, CCA and EMR approaches, Integrated Risk Management can be described as follows:

What is Integrated Risk Management?

CARE defines IRM as *the systematic process of reducing disaster risks through anticipative, absorptive, adaptive and transformative actions, taking into account the effects of climate (change) and the role of ecosystems. It addresses the drivers of risk, the capacities and assets of communities and individuals and their enabling environment.*

Figure 2 illustrates the overlap between the DRR approach, and the EMR and CCA approaches. Examples of this overlap are working on climate related disasters, developing nature-based solutions and working on communities' livelihoods within their ecosystem. The IRM approach increases these synergies by including more EMR and CCA elements, for example by developing a better understanding of the relationships with flora and fauna, by working across timescales and administrative boundaries, and including adaptation measures.

Required expertise

It is important for IRM experts to have sufficient knowledge and expertise to conduct a holistic assessment and analysis to ensure the inclusion of EMR and CCA aspects. The assessment phase is crucial to ascertain how past trends and future long-term predictions about changes in climate and ecosystems affect the programme area. Partnerships with experts in EMR and CCA should be established to provide specific knowledge and expertise for sustainable solutions and sound IRM programmes pending the needs and requirements identified in the analysis phase.

Integrating three different approaches into the IRM approach demands a wider skill set of those working on IRM. Staff is expected to have a wider lens than 'just DRR' and have a basic understanding of EMR and CCA. However, it is not expected that everybody has full knowledge of all three approaches.

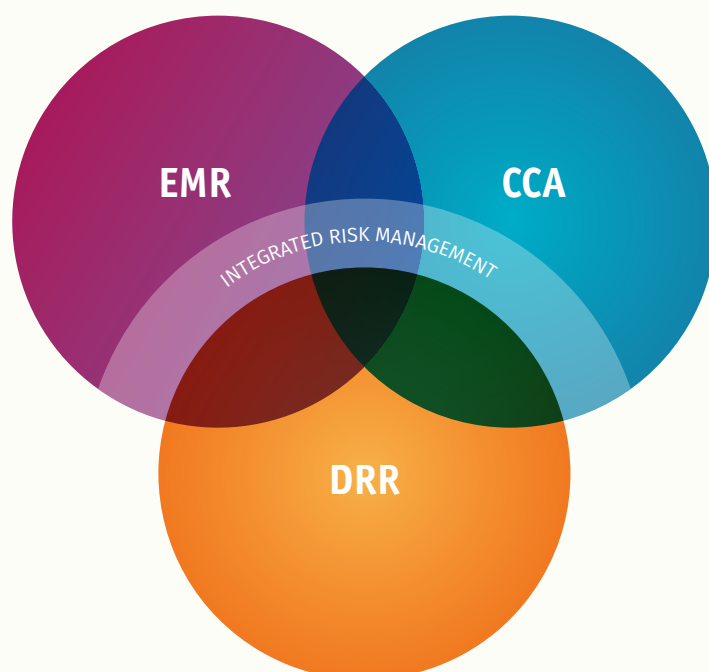


FIGURE 2 - INCLUDING ECOSYSTEM MANAGEMENT AND RESTORATION AND CLIMATE CHANGE ADAPTATION INTO INTEGRATED RISK MANAGEMENT

What disasters does IRM focus on?

CARE defines the scope of IRM as *all natural hazards, taking into account the aggravating effects of climate change and ecosystem degradation*. This scope includes geophysical, hydrological, meteorological and climatological hazards in our IRM approach.

Type of activities

IRM programming focuses on activities that address drivers of risk, build communities' capacities and assets, and create an enabling environment. The household stands central to all of CARE's approaches (in line [with the livelihoods security framework](#)), and we therefore place the capacities and assets of individuals and communities at the centre of the IRM framework. These capacities and assets help make households resilient to shocks and stresses.

IRM activities aim to strengthen a range of capacities of communities and individuals to enable them to deal with risks:

- [Anticipatory capacity](#) helps to foresee and reduce the impact of shocks and stresses that are likely to occur through prevention, preparedness and planning.
- [Absorptive capacity](#) helps facilitate a quick recovery after a disaster has struck.
- [Adaptive capacity](#) helps adapt their livelihoods and living conditions to deal with recurrent, new and changing shocks and stresses.
- [Transformative capacity](#) helps build relations with the enabling environment to influence communities and individuals in the wider environment (see chapter 1.5.2 for more details).

Restoring the coastal ecosystem in the Philippines

The small fishermen of Cagsao village have happily reported that the fish population in their part of the bay is growing, and consequently their fish catch is also increasing. They claim that these developments are due to the mangrove reforestation activities they started in 2008. The mangrove reforestation activities were part of the ACCORD project, which brought together barangay Cagsao, the municipal local government unit, CARE and the Corporate Network for Disaster Response as partners. In another part of the village, community members installed gabions made of wire mesh boxes and filled with stones. These mangrove reforestation activities were complemented by the establishment

in 2011 of a fish sanctuary in the bay, acquisition of a patrol boat, and tree planting in mountain slopes. All these activities, mangrove reforestation, tree-planting in upland areas, and construction of gabions, are designed to mitigate the adverse impacts of storm surges and tsunami on the coastal village, to lessen beach ridge erosion, to arrest the degradation of, and start the restoration for the coastal ecosystem. A healthy coastal ecosystem will also contribute to strengthening livelihoods of poor fishermen and reduce their socio-economic vulnerabilities.

Read more about this case [here](#)

It is imperative to build up the assets of communities and individuals, as capacities can only be put to practical use when the assets are in place.

Good IRM programming takes a holistic landscape approach and also includes the wider social environment. The communities and individuals we work with depend on a number of factors to help build resilience and reduce risks. These factors include an enabling environment, laws and legislations, social structures and institutions (e.g. large corporations may negatively impact the ecosystem, agricultural legislation or access to water may limit options for rural farmers). By recognising that changes in the natural and social environment are often outside the sphere of influence of the communities and individuals we work with, it is crucial for good IRM programming to build links between local practice and the wider institutional, policy and social-economic factors.³

The Landscape Approach

The risk landscape (where hazards originate and affect communities), often do not adhere to administrative boundaries. In most cases, projects address issues in certain segments of a landscape. However, it is necessary to have a good understanding of the larger landscape and the interrelationship with the project to create a sustainable impact. Taking this holistic lens into community resilience projects is called a landscape approach, which is essential for IRM.⁴

The landscape approach is an interdisciplinary, cross-sectoral and holistic approach, suitable for disaster risk reduction purposes. The approach facilitates an inclusive and participatory learning process for shared risk understanding and risk intervention scenario planning. An inclusive and participatory process allows for more innovative and integrated solutions to risk (e.g. ecosystem-based or hybrid measures and optimised initiatives on water governance as part of disaster risk management strategies and investments). Applying the landscape approach helps overcome barriers by sector and contributes to effective risk management by connecting all stakeholders involved, starting with the communities at risk in the landscape. The landscape approach is particularly suited for IRM, as it enforces the integration of work around governance, accountability and advocacy.

Main characteristics of IRM

- Assessments focus on **past disasters, trend analysis and future (climate) predictions**;
- Plans for both **short-term risks and long-term change**;
- Functions as a **bridge** between **local** experiences and solutions, and **global** development insights and solutions;
- Uses the **landscape approach**, understands functions and services of ecosystems, thinks beyond administrative boundaries;
- Addresses **all types of natural hazards**;
- Has an **anticipative, absorptive, adaptive and transformative focus**;
- Works on reducing the **drivers of risk**, builds **capacities and assets** and creates an **enabling environment**.



³ For further information on the 'enabling environment' see Twigg (2009) 'Characteristics of a Disaster Resilient Community' - Chapter 3.4 'Characteristics of an enabling environment'.

⁴ See the joint CARE/Wetlands International technical paper ['A Landscape Approach for Disaster Risk Reduction in 7 Steps'](#) for more information on Landscape Approach

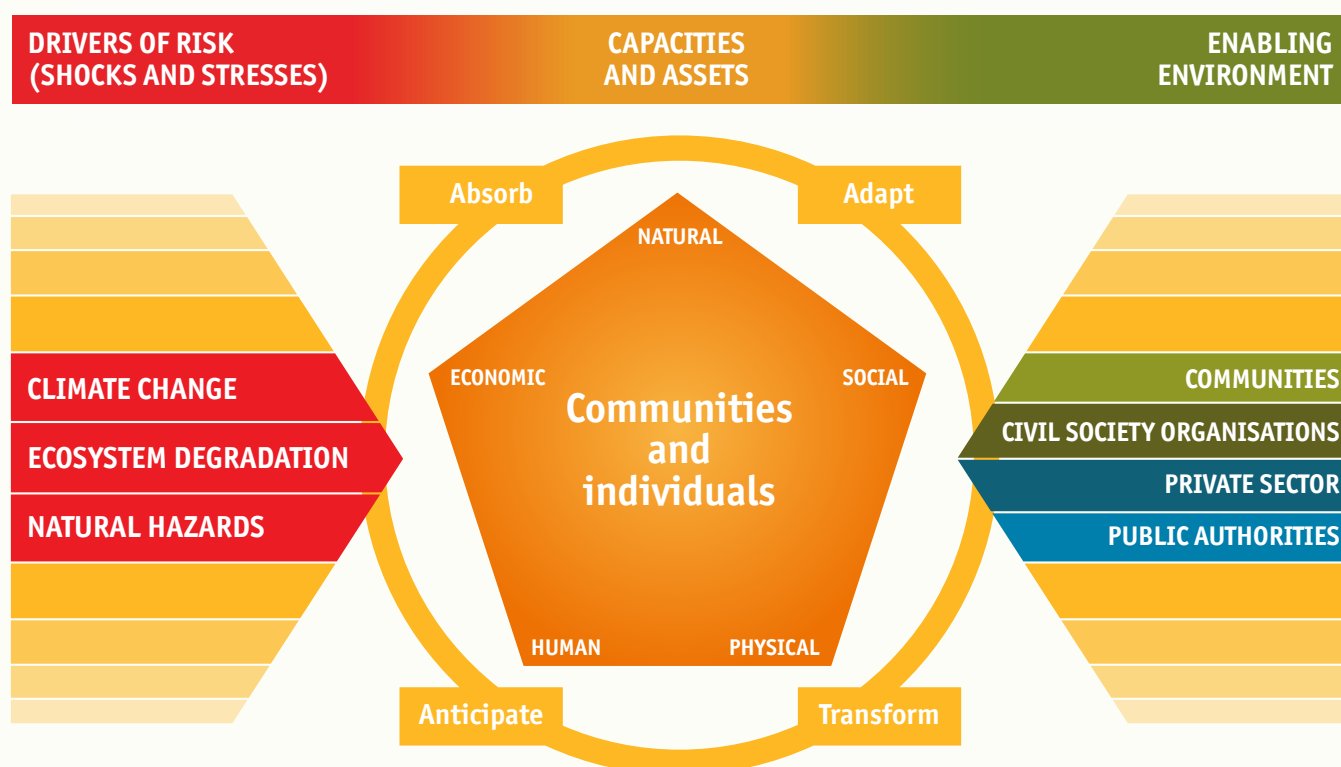


FIGURE 3 - CARE'S IRM FRAMEWORK TO INCREASE RESILIENCE

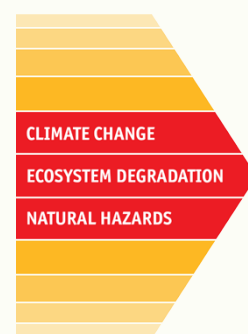
1.5 Elements of the IRM Framework

In line with the CARE International [Increasing Resilience guidance note](#), the IRM Framework (see figure 3) incorporates three main elements. Communities and individuals face natural hazards that are exacerbated by climate change and degraded ecosystems. Together these form the **drivers of risk**. CARE believes that the best way to reduce the vulnerability of communities and individuals is to increase their resilience by investing in their **capacities and assets** to deal with these shocks and stresses. As communities and individuals form part of a larger **enabling environment**, the IRM approach requires the involvement of all relevant stakeholders such as the surrounding communities, civil society organisations, the private sector and public authorities. Working concurrently on the drivers of risk, capacities and assets, and the enabling environment is central to the IRM approach.

The Drivers of Risk

The drivers of risk are placed on the left side of the IRM Framework. Although the framework acknowledges a multitude of drivers (e.g. conflict, population increase, market fluctuation), IRM focuses on natural hazards, aggravated by climate change and degraded ecosystems in particular.

A growing body of evidence shows a direct relationship between these drivers. Climate change plays a significant role in increasing the frequency, intensity and the unpredictability of natural hazards. For example, in Mindanao (southern Philippines) cyclones now affect areas in the south, which rarely experienced cyclones previously⁵. Degraded ecosystems affect the natural buffers against hazards leading to increased risk.



⁵ [Creating new paths to resilience: experiences from Indonesia and the Philippines, Red Cross/Red Crescent Climate Centre, and the International Institute of Rural Reconstruction](#)

Changing cyclone paths in the Philippines with changing climate

“Bopha, like tropical cyclone Washi almost exactly a year ago, hit a region where typhoons are not very common,” says Celso Dulce, CARE’s Philippines Representative and Disaster Risk Reduction Advisor. “The people and local authorities were therefore less prepared. The provinces that were strongest hit and experienced the most casualties are also the provinces where environmental degradation is very extensive, due to large-scale mining and logging activities.”

Read the full story [here](#)

For example, healthy mangrove and coral reefs can effectively reduce wave intensity⁶, and healthy rangelands can reduce erosion and facilitate more groundwater replenishment⁷. When ecosystems are degraded, they are less able to provide natural resources, such as shelter material, food and firewood, following a disaster or in other times of need.

Traditionally these drivers were addressed in separate approaches; within the IRM Framework, these drivers have an interdependent relationship. Natural hazards and climate change can cause ecosystem degradation, for example higher sea temperatures can result in coral bleaching; landslides can change the course of rivers affecting the watershed; ecosystem degradation and natural hazards can lead to increased climate change (e.g. peat fires, melting tundra); climate change and ecosystem degradation can lead to more frequent, intensive and unpredictable hazards.

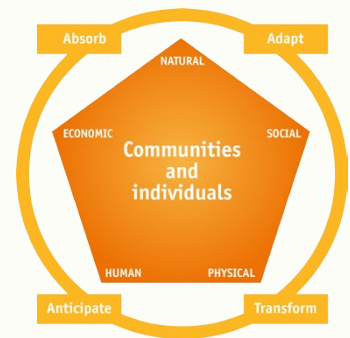
⁶ [Managing Coasts with Natural Solutions. Guidelines for Measuring and Valuing the Coastal Protection Services of Mangroves and Coral Reefs, World Bank](#)

⁷ [Improving Land and Water Management. Working Paper, Instalment 4 of Creating a Sustainable Food Future, World Resources Institute](#)

A good understanding of the causes and effects of these drivers and being able to recognise the characteristics of potential hazards (e.g. speed of onset, warning signs, magnitude and frequency, etc.) will help communities and individuals to be better prepared and prevent hazards from turning into disasters.

Capacities and Assets

Building up capacities and assets is key to building community resilience. IRM identifies four types of capacities or actions that can reduce the likelihood or impact of hazard events. Importantly, it is key to build the assets of both individuals and communities in parallel, to enable them to act on their capacities. A description and definition of the different types of capacities and assets are given below.⁸



Capacities:

- **Anticipate:** foresee and therefore reduce the impact of hazards that are likely to occur and be ready for unexpected events through prevention, preparedness and planning.
- **Absorb shocks:** accommodate the immediate impact of shocks and stresses on lives, well-being and livelihoods, by making changes in usual practices and behaviours using available skills and resources, and by managing adverse conditions.
- **Adapt to evolving conditions:** adjust habits, practices, lifestyles and livelihood strategies to respond to changed circumstances and conditions under multiple, complex and at times evolving risks.
- **Transform:** influence the enabling environment and drivers of risk to create individual and systemic changes on behaviours, local governance and decision-making structures, market economics, and policies and legislation.

⁸ Derived from the CARE [Increasing Resilience Guidance Note](#) (December 2016)

Building capacities and assets in Guatemala

Under the PfR programme in Guatemala, a range of activities was set up to help build the capacities and assets of communities. Newly formed community DRR committees developed DRR plans and evacuation routes and established communication channels with responsible authorities for immediate exchange of information on potential hazardous situations requiring possible external help. Concurrently, crop diversification was stimulated, including productive and fruit bearing trees, for additional food sources during times of crisis, when roads are cut off due to landslides.

Read the full story [here](#) (in Spanish)

Assets:

- Human potential (such as skills, knowledge, education, health, family size, individual motivation);
- Social capital (e.g. extended family, community cohesion, voice and political influence);
- Economic resources (e.g. market access, savings, insurance mechanisms, livestock, productive assets);
- Physical capital (e.g. tools, premises, infrastructure, productive land);
- Natural resources (e.g. forests, common pastures, water, soils, water, and environmental resources).



The Enabling Environment

Addressing drivers of risk and building capacities and assets are two pieces of the puzzle. The surrounding human and physical environments determine the extent to which people can progress out of risk into safety and achieve increased wellbeing.

For example, women who have greater control over their lives and assets can make more informed decisions that benefit the resilience of their families.

Experience has taught us that if communities act alone and do not receive support from other actors in their environment (neighbouring communities, civil society organisations, the private sector, government, the academic world, and other powerholders) significant lasting change cannot occur.

CARE believes that the only way to ensure lasting impact is by working in partnerships. Ensuring all relevant stakeholders are aware, involved and not harmed in the process, is an essential part of the landscape approach. Neighbouring communities should not experience adverse effects from actions or disputes (e.g. due to differing community interests upstream and downstream, or due to competition for natural resources). Involving and informing neighbouring communities is key for good neighbourliness. Sharing experiences and good practices can inspire and prevent others from making similar mistakes.

Civil Society Organisations (CSOs) often play a pivotal role in the communities we work together with and serve. In particular, in countries where governments fall short, CSOs often take over responsibilities or hold governments accountable. The partnership with CSOs and their provision



of technical and social support is incremental to the success of any programme. In any given situation, it is vital that CSOs have the legitimacy from the communities they represent/support.

The private sector, from small shopkeepers to large multinationals, often plays a crucial role in any given community to stimulate economic development and create opportunities. Industry representatives are often significant powerholders who should be considered carefully as stakeholders in programmes. Active involvement of the private sector is pertinent when the interests and activities of the private sector involve the natural environment of a community or programme/project.

Public authorities are the cornerstone of any project and ensure sustainability, follow-up and ownership. Local and international experts, including academics and international bodies, should be consulted and included in programmes and projects to ensure quality, accountability and ownership. Authorities are furthermore in charge of legislation and law enforcement which may affect disaster response structures, responsible investments and development, further risk avoidance and reduction, and the inclusion of relevant parties, including risk prone communities, in decision-making processes.

CARE has developed a Theory of Change (ToC) for IRM, emphasising the importance of the different stakeholders. Four domains of change inform this ToC, representing the various stakeholder groups (communities and individuals; civil society organisations; the private sector; public authorities and other powerholders). Chapter 3 provides more insight and rationale on these domains of change. In the next chapter, we will set out some important IRM good programming principles.

2 IRM Good Programming Principles

CARE sees IRM as a holistic, inclusive and integrated approach to increasing community resilience. A set of good programming principles guides Programme Officers and practitioners to design IRM programmes in the most integrated and inclusive way possible.

In Chapter 1, we identified a set of characteristics that provide the building blocks of any IRM programme based on DRR, CCA and EMR approaches. The principles work as a guideline to ensure successful development of high-quality IRM programmes, and ensure that IRM is not merely reduced to the sum of its parts.



IRM good programming principles:

1. **Individuals and communities** who face poverty and inequality, specifically **women and girls**, are placed **centrally** in the IRM approach.
2. The creation of **multi-stakeholder partnerships** to build the IRM approach.
3. The promotion of **gender equality** in every programme based on the IRM approach.
4. The creation of strong links and associations between individuals, groups and organisations, etc., at the local level, the national/regional level and the global level through **advocacy**.
5. The engagement of the **private sector** as a driver of change.
6. Building **flexibility** into projects and programmes to adapt to changing contexts and climate change.
7. Innovation through the promotion of **knowledge management and learning**
8. **Do no harm**; ensure IRM programmes do not negatively affect others and the environment.
9. The promotion of **accountability** and **transparency** across stakeholders.
10. **Ensure long-term sustainability** by planning transition or exit strategy in early stages.

Note: The principles form an overarching structure that sets the 'conditions' for IRM programmes; hence they are deliberately formulated in a rather broad fashion. The context of the programme/project determines how to operationalise the principles. Nonetheless, these principles form the essence of CARE's approach to good practice and provide the basis of interpretation for IRM as a new approach.

3 IRM Theory of Change

3.1 Why a Theory of Change for IRM?

A Theory of Change (ToC) is an approach to planning and implementing social change processes. Its purpose is to analyse complex systems and plan actions to bring about positive change. A ToC has the significant advantage of visualising extreme social complexity to a greater degree than log frames, leaving room for critical thinking and questioning. An explanatory narrative (versus a descriptive narrative) states what will happen if pre-conditions are met.

A ToC helps to map out stakeholders, establish their drivers and identify obstacles and opportunities for cooperation and joint action. Additionally, a ToC has

the advantage of more flexibility than log frames as it functions as a 'living document' allowing for revisions and updates as knowledge and contexts change.

IRM is a complex approach; it builds on a large variety of experiences, works with a broad range of stakeholders and must be flexible in a changing world. CARE uses the ToC to shape the processes necessary to implement a holistic IRM programme. This ToC allows us to identify the steps and milestones in the process towards impact to reach our long-term objective.

The following diagram visualises the IRM Theory of Change and its elements. We discuss these elements in further detail below.

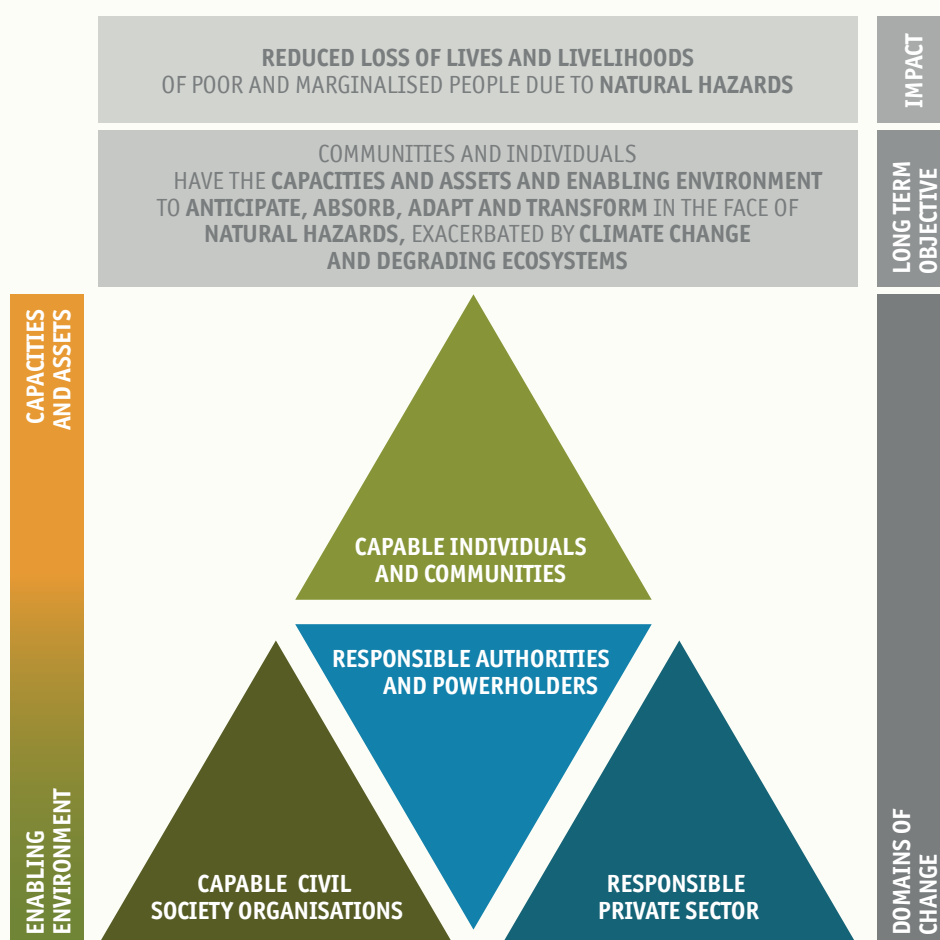


FIGURE 4 - CARE'S THEORY OF CHANGE FOR INTEGRATED RISK MANAGEMENT

CARE's IRM Impact statement:

Reduced loss of lives and livelihoods of poor and marginalised individuals and communities due to natural hazards.

CARE's long-term objective for IRM:

Communities and individuals have the capacities and assets and enabling environment to anticipate, absorb, adapt and transform in the face of natural hazards, exacerbated by climate change and degrading ecosystems.

CARE believes that reducing drivers of risk, building the capacities and assets of communities and individuals, and supporting an enabling will translate into a reduction of losses, not only of lives but also the livelihoods of the most vulnerable groups that are affected by natural hazards.

3.2 Domains of change

CARE defines four domains of change to reach this long-term objective. Each domain has key areas of focus and identifiable pathways/milestones in working towards the IRM long-term objective. Key assumptions have been formulated to show how we believe that change in the pathways will lead to change. The four arrows in the IRM framework in figure 3 correspond to the four domains:

11. Communities and individuals;
12. Civil society organisations;
13. The private sector;
14. Public authorities and other powerholders.

Below you will read more about our ToC thinking per domain; you can find further details in the CARE IRM Theory of Change⁹.

⁹ Available upon request



Capable individuals and communities

The first domain refers to communities and individuals. CARE has identified specific pathways and interventions to transform communities from being exposed and vulnerable into communities with capacities and assets to deal with natural hazards aggravated by climate



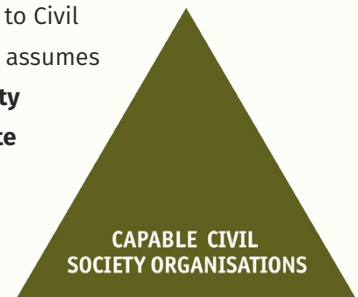
change and degraded ecosystems. These pathways and interventions are based on the assumption that communities and individuals will make risk proof decisions when they have **1) the understanding of risks and benefits; 2) the skills and assets to act on decisions, and 3) the choice and confidence to make long-term decisions.**

It is important to recognise that it is key that communities and individuals' basic needs are met. In areas where this is not the case (e.g. humanitarian response) IRM should be integrated into other actions (related to e.g. food security, shelter, water, livelihood activities).

The pathways illustrate a roadmap leading to change. The first step towards change is to increase **awareness and understanding of potential shocks and their characteristics.** Once we have a good understanding of the potential shocks communities face, an understanding of where these shocks originate, their characteristics, and an understanding of their impact, we can start to build **capacities and assets to anticipate, absorb, adapt and transform lives and livelihoods.** By building these capacities and assets, we expect communities will be better able to deal with shocks and stresses now and in the future. However, building up capacities and assets is only one aspect of the IRM Framework. Addressing the drivers of risk and creating an enabling environment are other key elements to achieve integrated risk management. Although the enabling environment and drivers of risk often tend to be outside the sphere of influence of the community and individuals, we aim to build skills and networks so that **communities, individuals and community-based organisations (CBOs) can influence and shape their environment, whether it is social, political or ecological.** Examples include the creation of access into decision-making processes, the creation of awareness around international agreements, the facilitation of women participation and leadership and the provision of technical knowledge to revise livelihood practices leading to restoration of ecosystems, etc.

Capable CSOs

The second domain refers to Civil Society Organisations and assumes that **CSOs have the capacity to implement and advocate for IRM when they have 1) understanding, capacity and technical knowledge of IRM; 2) evidence, materials and relations to advocate for the relevance of IRM and 3) the legitimacy from those they represent.**



It is of vital importance for CARE that CSOs have the **understanding, capacity (skills and resources) and technical knowledge to support communities and individuals with the implementation of IRM measures.** CSOs are often the direct line to the community and a source of (new) information and techniques that can help communities and individuals to increase their resilience. We support CSOs with access to resources and skills to fulfil this role. Furthermore, we recognise the important role CSOs play in facilitating communities and individuals to engage with their enabling environment. Furthermore, we support **CSOs with the collection of evidence, capacity and (training) materials to support advocacy and engage in the IRM dialogue with and amongst communities, authorities and power holders.**

It is vital that **CSOs have a legitimate operating space and that they enable communities to represent themselves when engaging with authorities and power holders.** These conditions help guarantee the various roles CSOs play and responsibilities they have towards the community and authorities, including community groups that are at risk, minority groups, women and the elderly, etc. By ensuring participation of community members, maintaining transparency and accountability through, for example, Community Score Card processes, this legitimacy can be tested and monitored.

Responsible Private Sector

The private and corporate sector can play a major role in reducing risks and vulnerability to natural hazards.

When engaging with the private sector, we expect that when they **feel responsible, have an understanding of the risks and place value on risk management for**

their business processes, the private sector will be willing to apply and advocate for good IRM policy, investments and practices.



CARE firmly believes that the private sector can be of great contribution to the IRM approach. However, the private sector can also negatively affect the drivers of risk for disasters, when (large scale) investments or developments, or maladaptation are involved. We, however, have the firm belief that the private sector should be seen as a catalyst for positive change and innovation, strengthening the enabling environment. For this, the private sector must have **the knowledge and understanding of the impact of disasters on their operations and markets**. This understanding and insight will highlight the current threats of disasters on operations, consumer markets and their value chain, and is the first step towards comprehending the **added (business proposition) value of investing in IRM for their businesses through their Corporate Social Responsibility (CSR) strategy**.

There is a great potential for CARE to initiate the dialogue with the private sector on IRM as many companies have already adopted or are in the process of adopting CSR strategies. In addition to investing in a more favourable enabling environment through their CSR strategy, we aim to engage with the private sector to help raise **awareness of their role and impact on the risk environment of communities and individuals so they can plan and strategise accordingly**. Ways to do this include showcasing the added value of investing in IRM and pointing out the link between environmental degradation, disasters and economic losses.

As state regulations on environment and disasters are often already in place, it is important that the **private sector upholds national and international regulations related to environment and risk**. To aid this process, CARE can train CBO/CSO/government representatives to enforce legislation and agreements and hold the private sector accountable and/or lobby and advocate for sustainable private sector practices.

Responsible Authorities and Power Holders

It is fundamental to

involve public authorities and power holders, such as traditional leaders and religious leaders, in IRM planning. CARE expects that **when public authorities and other power holders sense responsibility and are (held) accountable, they will uphold and enforce national and international agreements and engage multiple stakeholders in applying good IRM practices.**



CARE often works in fragile settings amidst shrinking political space and accountability. Although this might jeopardise the involvement of authorities and power holders in programmes, IRM can be an entry point for dialogue and engagement.

First, it is important that local and regional **authorities have the knowledge to take timely and adequate measure to reduce and mitigate shocks and stresses**, to ensure authorities and other power holders engage in IRM. Basic understanding of hazard characteristics, local level risk regulation and existing risk mitigation structures and response capacity, is a first step towards building capacity and applying good IRM practices. Simultaneously, it is important to work at the national level to ensure that national authorities are **committed to international agreements on climate change, DRR and environment, and translate these into domestic and sectoral policy and processes**. Once this commitment has been confirmed and cemented into policies and processes, **authorities will transform policies into national and local investments, and monitor implementation and enforcement by local governments and the private sector**. Local and regional level authorities are supported with investment and monitoring in place. On the local level, authorities can then help reduce hazard risk, adopt national plans and translate them into local level plans and regulation, and build response capacity.

To increase transparency and accountability between CBOs, CSOs, the private sector and the government, we promote **authorities' facilitation of negotiation space for multi-stakeholder dialogues on IRM**. In this negotiation space, authorities can take their responsibility to align efforts between stakeholders, with the ultimate aim of building the resilience of communities and individuals at risk of natural hazards, aggravated by climate change and ecosystem degradation.

4 **IRM and International Frameworks**

IRM as an approach towards increasing resilience is not only central to CARE's work; three major 2015 framework agreements that aim to provide coherence in efforts worldwide all reflect the three IRM framework components (drivers of risk, capacities and assets, the enabling environment). These three major frameworks are the Sendai Framework for Disaster Risk Reduction (SFDRR), the UNFCCC Paris Climate Agreement and the Sustainable Development Goals (SDGs).

Resilience represents a key linking pin that can serve to promote policy coherence for the efficient and coordinated implementation of the frameworks on the ground. This chapter sets out to identify the various references to resilience in these frameworks that provide a basis for the work we do with vulnerable communities. Ultimately, the goal is to facilitate local action that takes into account the effects of disasters, climate change and the role of our ecosystems in a holistic way: Integrated Risk Management.

For this approach to be effective in practice, many different institutions and sectors that traditionally operate in a non-coordinated manner must work together in a concerted manner. Collective action calls for multi-stakeholder partnerships and new approaches across government, civil society, the private sector, academia and others. Within the large network organisation of CARE International, where collaboration between different thematic areas has not always been well articulated, we need to consider how to break down barriers to promote even more effective collaboration.

Fortunately, collective action on climate change adaptation, protection and restoration of our ecosystems and the reduction of disaster risk is increasing steadily. CARE addresses all of the three frameworks with its actions. CARE's work to strengthen the livelihoods of local communities reduces their vulnerability to natural hazards; CARE does this by enhancing climate change adaptation measures at the local level to increase the resilience of vulnerable people so that communities can work towards sustainable development. CARE is committed to promoting this process by catalysing the type of concerted action and partnerships that are needed to move forward.

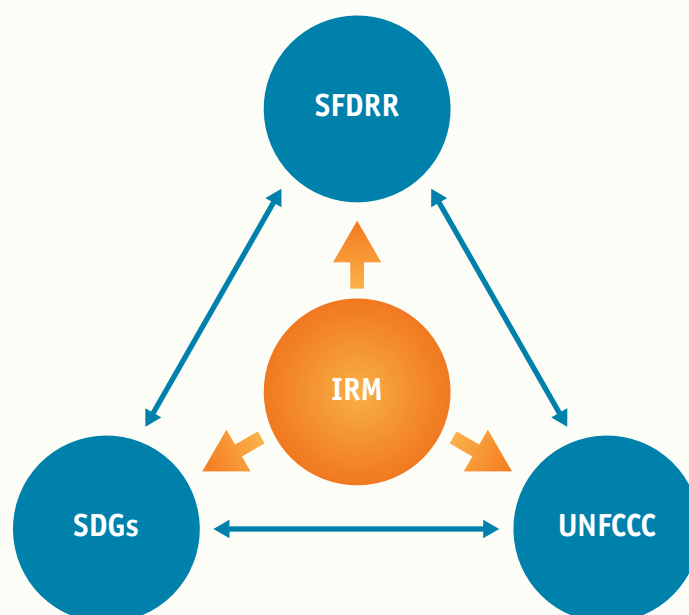


FIGURE 5 - IRM IN RELATION TO INTERNATIONAL AGREEMENTS

4.1 The Sendai Framework for Disaster Risk Reduction

The SFDRR is the successor of the Hyogo Framework for Action (2005-2015) and is the highest international framework for DRR. It sets out four priorities and seven targets to prevent new and reduce existing disaster risk. An innovative aspect of the framework is the deliberate effort to mainstream disaster risk reduction across all development sectors, programmes and policies.

The SFDRR includes many elements that are in line with CARE's IRM approach; these elements focus on resilience, the inclusion of ecosystems in risk assessment, multi-stakeholder dialogue and the adoption of a landscape approach to facilitate transboundary cooperation¹⁰.

4.2 The Paris Agreement

The Paris Agreement aims to scale up climate actions and deal more comprehensively with climate change impacts to safeguard development and eliminate poverty. This agreement recognises the role of climate change as a driving factor of disaster risk and emphasises climate resilience efforts. Countries have agreed to a Global Goal on Adaptation. By enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change, CARE's commitment and contribution can add significant value to achieving this goal.

This agreement helps build bridges with Sustainable Development Goals (SDGs) as it recognises the importance of sustainable development in reducing (the risk of) loss and damage. The agreement, therefore, calls for early warning systems, preparedness and comprehensive risk assessments. These are areas in which CARE can significantly contribute.

¹⁰ To find more information on this point please see the document developed by PEDRR: [Briefing Paper on Implementing the SFDRR and 2030 Agenda](#)

References to IRM in the Sendai Framework for DRR

- (Art. 2) Integrate both disaster risk reduction and the building of resilience into policies, plans, programmes and budgets at all levels.
- (Art. 11) Policy coherence: Ensure credible links between these processes to build resilience and eradicate poverty.
- (Art. 14) Invest in the economic, social, health, cultural and educational resilience of persons-communities-countries-environment.
- (Art. 17) Prevent and reduce hazard exposure and vulnerability to disaster, increase preparedness, and thus strengthen resilience.
- (Art. 18) Develop the resilience of critical infrastructure and basic services by 2030.
- **(Priority 3) Invest in disaster risk reduction for resilience.**

References to IRM in the UNFCCC Paris Agreement

- (Art. 2): Climate resilience in the context of adaptation and vulnerability reduction.
- Increase the ability to adapt to adverse impacts of climate change and foster climate resilience.
- Make finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.
- Global Goal on Adaptation to enhance adaptive capacity, strengthen resilience and reduce vulnerability to climate change.
- (Art.7) Adaptation: Building the resilience of socioeconomic and ecological systems.
- (Art.8) Loss and damage: resilience of communities, livelihoods and ecosystems.
- (Art. 10) Technology cooperation: technology development and transfer to improve resilience to climate change.

4.3 The Sustainable Development Goals

The SDGs set the 2030 agenda for sustainable development. The overall spirit of the goals is the enhancement of sustainable development to eradicate extreme poverty. As poverty eradication is impossible if people still live in unsafe conditions, the SDGs acknowledge the importance of reducing the risk of disasters worldwide. CARE's work is vital to increase the resilience of communities and individuals to disasters. The targets of goals 1, 2, 4, 9, 11, 13 and 15 explicitly mention DRR and resilience; goal 14 refers to strengthening resilience. The SDGs draw particular attention to the role of climate change and the necessity for ecosystem management and offer a cross-cutting issue to the Paris Agreement and the SFDRR.

References to IRM in the SDGs

- (Preamble) Shift the world onto a sustainable and resilient path.
- (Art. 7) A world where human habitats are safe, resilient and sustainable.
- (Art. 29) Strengthen the resilience of communities hosting refugees, particularly in developing countries.
- (Art. 33) Promote resilience and disaster risk reduction.
- (Goal 1.5) Build the resilience of the poor/vulnerable and reduce their exposure and vulnerability to climate-related extreme events.
- (Goal 2.4) Implement resilient agricultural practices.
- (Goal 9) Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation.
- (Goal 11) Make cities and human settlements inclusive, safe, resilient and sustainable.
- (Goal 13.1) Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.



5 Summary and the Way Forward

The aim of this document is to explain, clarify and share experiences and current understanding of the IRM approach with the CARE family. The Integrated Risk Management (IRM) approach is an enhanced, holistic approach to increasing community resilience by integrating disaster risk reduction, climate change adaptation and ecosystem management and restoration. In the light of challenges posed by the increasing number of disasters aggravated by climate change and degraded ecosystems, this approach to building resilience is increasingly informing our work.

CARE defines IRM as the systematic process of reducing disaster risks through anticipative, absorptive, adaptive and transformative actions, taking into account the effects of climate (change) and the role of ecosystems. It addresses the drivers of risk, the capacities and assets of communities and individuals and their enabling environment.

Main characteristics of IRM

- Assessments focus on **past disasters, trend analysis and future (climate) predictions**;
- Plans for both **short-term risks and long-term change**;
- Functions as a **bridge** between **local** experiences and solutions, and **global** development insights and solutions;
- Uses the **landscape approach**, understands functions and services of ecosystems, thinks beyond administrative boundaries;
- Addresses **all types of natural hazards**;
- Has an **anticipative, absorptive, adaptive and transformative focus**;
- Works on reducing the **drivers of risk**, builds **capacities and assets** and creates an **enabling environment**.

This document is the first part of an IRM information package, including a 'toolbox' offering a wide range of tools to help implement IRM programmes, and technical papers about specific topics to strengthen and illustrate this theoretical document. The toolbox and technical papers are currently under development. Most of the tools already exist and are used by CARE, Partners for Resilience and other organisations. Some of these tools have been adapted and tested to suit our IRM approach and way of thinking; others are new and provide answers to gaps identified in IRM programming.

We would like to share plans for technical papers with you and kindly invite you to share your thoughts and ideas with us. Existing technical papers:

1. [A Landscape Approach for Disaster Risk Reduction in Seven Steps](#) (CARE Nederland and Wetlands International).

Plans for future technical papers include:

1. IRM and the project cycle: a description per project cycle phase, which tools to use and questions to ask and how to embed IRM in programmes.
2. IRM and advocacy: how to link existing international agreements and standards with theoretical IRM knowledge, and guidelines on how Programme Officers can use these standards to advocate for the translation of these agreements into local/regional planning and policies.
3. IRM and the private sector: an exploration of how to approach the private sector and engage in dialogue to help adjust private sector policies and behaviours into a more IRM appropriate way of working.
4. IRM in conflict and post-conflict settings: an exploration of best practices and options to work on IRM in conflict and post-conflict settings, how to deal with power relations, how to 'do no harm' and use IRM as a medium for conflict resolution.
5. IRM and humanitarian action: an exploration of best practices and pointers to integrate IRM into humanitarian action. Humanitarian actions are often not ideal for long-term development work; however, several IRM practices can be incorporated or adapted into emergency response programming.

The way forward

Please consider this document as work in progress. Initial work on this document was prepared by two interns with CARE in the Netherlands; Joris Baars studying at the Van Hall Larenstein University of Applied Sciences, and Filippo Itolli studying at Wageningen University. We are very grateful for their efforts, as well as to all the people that have provided input during the process.

It is obvious that our work in Integrated Risk Management is only just beginning. For this reason we are constantly looking for ways to share experiences and ideas so that we can improve our work. We look forward to receiving your feedback and questions. Please send these to Wouter Bokdam (wbokdam@carenederland.org) and Bart Weijs (wijs@carenederland.org).

6 IRM in one page

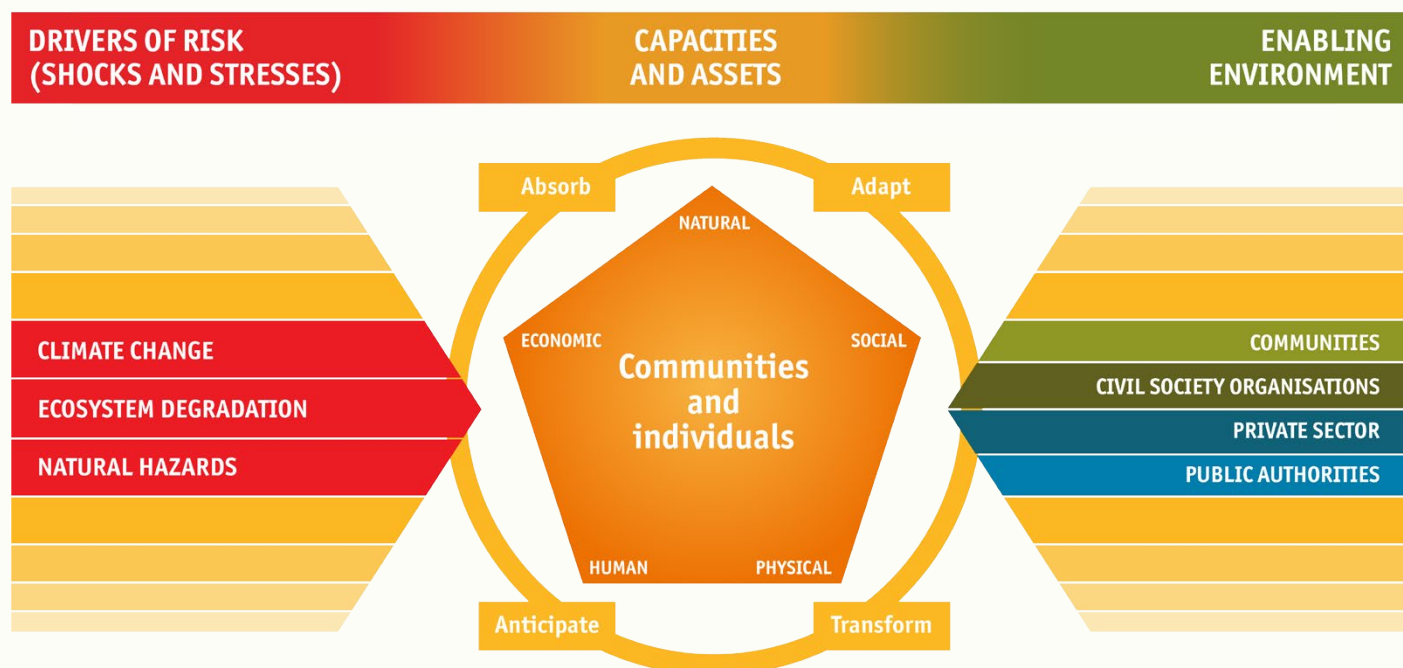
Integrated Risk Management (IRM) is an enhanced, holistic approach to increasing community resilience by integrating disaster risk reduction (DRR), climate change adaptation (CCA) and ecosystem management and restoration (EMR).

IRM is the systematic process of reducing disaster risks through anticipative, absorptive, adaptive and transformative actions, taking into account the effects of climate (change) and the role of ecosystems. It addresses the drivers of risk, the capacities and assets of communities and individuals and their enabling environment.

IRM is increasingly informing CARE's work, primarily based on the [Partners for Resilience](#) programme, and learnings from other DRR and CCA programmes.

Main characteristics of IRM:

- > Focus on **past disasters, trend analysis and future (climate) predictions**
- > Address both **short-term risks and long-term change**
- > **Bridge** between **local** experiences and solutions, and **global** development insights and solutions
- > **Landscape approach**, ecosystems, beyond administrative boundaries
- > **All types of natural hazards**
- > An **anticipative, absorptive, adaptive and transformative focus**
- > Reduces **drivers of risk**, builds **capacities and assets**, and creates an **enabling environment**



CARE'S IRM FRAMEWORK TO INCREASE COMMUNITY RESILIENCE

IRM good programming principles:

1. **Individuals and communities**, specifically women and girls, **at the centre**
2. Creation of multi-stakeholder **partnerships**
3. Promotion of **gender equality**
4. Linking people and organisations at different levels through **advocacy**
5. The **private sector** as a driver of change
6. **Flexibility** to adapt to changing contexts and climate change
7. Innovation through **knowledge management and learning**
8. **Do no harm**
9. **Accountability** and **transparency**
10. Ensure **long-term sustainability**

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