



# TOOLBOX

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## ADDRESSING CLIMATE-FRAGILITY RISKS

LINKING PEACEBUILDING, CLIMATE CHANGE ADAPTATION,  
AND SUSTAINABLE LIVELIHOODS

*This toolbox provides you with a number of tools and exercises, and offers further reading on selected topics. It thereby supports the implementation of the Guidance Note 'Addressing Climate-Fragility Risks' which facilitates the development of strategies, policies, and projects that seek to increase resilience by linking climate change adaptation, peacebuilding, and sustainable livelihoods. Each tool and exercise is explained in detail. More complex tools are broken down into individual steps.*

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# 1 Tools and exercises

## 1.1 Conflict sensitivity checklist

### Quick checklist to review for the conflict sensitivity of your process:

These questions are intended to guide your thinking and help you consider context-specific responses. There is no right or wrong answer to these questions. These questions are relevant to the whole programme cycle.

- Has a conflict analysis been conducted (at the local and/or national level)? Does it include an assessment of underlying conflict factors and power dynamics as well as a stakeholder analysis? How has the design of the project been informed by this analysis?
- Have you considered whether and, if so, how project activities could make conflict worse or spark conflict within or between communities? If so, how will these risks be managed and monitored?
- Have you considered how your project would respond if there was an increase in conflict within or close to the project sites?
- Have you identified specific challenges faced by men and women, young people, boys and girls?
- Have you identified any underlying values and attitudes relating to gender that may be responsible for driving gender inequalities? How might these affect your project, and how might your project affect these values and attitudes?
- How have the project beneficiaries and partners been selected? Has this been informed by the conflict analysis (e.g., accounting for any divisions along ethnic, political or social lines)? Were clear criteria for participant selection developed with the local communities (including both direct beneficiaries and surrounding communities)?
- Are communities involved in decision-making and planning around the programme design, implementation and monitoring? What feedback and accountability mechanisms have been built into the programme implementation plans?
- Does your M&E framework reflect the ways in which the project interacts with conflict dynamics? Does it capture the effects that the project will have on conflict and the impacts that the conflict dynamics could have on the intervention?
- Do budgets include provisions for updating the conflict analysis and building the capacity of staff, partners or community members in conflict and gender sensitivity?

## 1.2 Inclusive planning: guiding questions

### Key questions for understanding and promoting inclusion in analysis and planning<sup>1</sup>:

- What forms of identity are critical organizing principles for this community/region (e.g. gender, race, ethnicity, religion, citizenship, age, caste, ability)? Who are the most marginalised women, girls, men and boys in the community and why?
- What social and economic programmes are available to different groups in the community?
- Who does and does not have access to or control over productive resources and why?
- Which groups have the lowest and the highest levels of public representation and why?
- What laws, policies and organizational practices limit the opportunities of different groups?
- What opportunities facilitate the advancement of different groups?
- What initiatives would address the needs of the most marginalised groups in society and those who face the most discrimination?

### Examples of ways to promote inclusive programming:

- Consider women's rights as non-negotiable in programming, whilst also recognising that converging identities impact opportunities and access to rights, as well as considering the ways in which policies, services and laws that impact one aspect of our lives are inextricably linked to others. As such, gender should be considered in relation to other identities such as class, religion and race to understand how resilience and vulnerability are affected by cultural practices and social norms.
- Support a 'bottom-up' approach to analysis and planning. Programming should begin by asking about how people live. This then helps identify the influences that shape women's lives.
- Recognise and build on the existing strengths and capacities of marginalised groups. For example, invest in women's institutions, and work with them to build strengths and capacities because they have knowledge and skills that need to be recognised to enable them to participate fully in resilience-building.
- Strengthen access to resources for marginalised and excluded groups. For example, this can be done through livelihood programmes. This in turn will bolster these groups' influence and position in the community and support their ability to influence broader community decision-making, such as in risk reduction committees, to ensure that planning reflects their priorities.
- Build alliances between organizations/networks of marginalised groups, supporting them to lobby policymakers, and setting up space for dialogue with

<sup>1</sup> This box is adapted from Actionaid 2016.

decision-makers to build confidence. For example, work in broad alliances to build national movements for women's land rights, protection of natural resources, etc.

### 1.3 Mapping approaches

Climate-fragility mapping can be a powerful tool for identifying climate-fragility risks and potential entry points. One way of improving our understanding of climate-fragility risks in a specific geographic area is to develop a map. Mapping approaches have long been used in conflict analysis, particularly to illustrate the role that environmental risks and natural resources play (for examples, see [ENVSEC](#) or [GRIDA](#)<sup>2</sup>). For the mapping of natural resources availability, the online platform [MapX](#) provides a variety of tools and spatial data.

Climate-fragility risk maps depict the main climate and conflict risks in a given geographic area graphically. For example, these maps can show certain geographic areas' climate hotspots, resource availability, and areas where conflicts are or were prevalent. Any other relevant information and data can also be included graphically as an additional layer (for example, migration movements or areas hosting communities of internally displaced persons). In addition, mapping provides an opportunity to include local communities in assessment and planning processes. For example, through [participatory 3D mapping](#)<sup>3</sup>, communities can inform spatial planning processes, ensuring that these processes take local knowledge into account. In particular, mapping exercises can be used to analyse differences in climate-fragility risks between geographic areas and what the reasons for these differences might be (different climatic conditions, different availability of or access to resources, governance mechanisms established, relations between groups, (non-)existence of conflict resolution mechanisms, etc.). However, maps always depict reality in a simplified way and cannot contain every detail. In conflict-affected and fragile contexts, it is thus important to make sure that maps are developed in a conflict-sensitive way by including all stakeholders, in particular those that are marginalised. It is important to accompany a map with additional background information to avoid misinterpretations.

These kind of maps make it easy for the users or target audiences to grasp potential climate-fragility hotspots, which regions and population groups are affected, what sectors need to be targeted and where to carry out measures. As such they are a good tool to discuss different perceptions and raise awareness. Mapping exercises provide an opportunity to initiate dialogue processes, either among the affected population and conflicting groups when collecting data and developing the map in a participatory process at the local level or among policymakers and stakeholders when presenting the results of the mapping at the national level<sup>4</sup>. When you present the results of the mapping to representatives of different sectors, departments or ministries, this might be an opportunity for them to recognize linkages between issues in different regions

<sup>2</sup> See for example

[http://www.envsec.org/index.php?option=com\\_content&view=article&id=27&lang=en&region=All&type=publications](http://www.envsec.org/index.php?option=com_content&view=article&id=27&lang=en&region=All&type=publications) or <http://www.grida.no/resources/7391>

<sup>3</sup> See for example: Participatory 3D mapping in North Darfur <https://www.youtube.com/watch?v=QLU3kQn-nEY>

<sup>4</sup> USAID 2013

and sectors, which they may not have recognised before, and which may flag the need for cross-sectoral cooperation.

#### Lessons learned when using maps:

- Maps provide an objective overview of conflict dynamics. This can help affected populations to approach conflicts that affect them with a more nuanced and systemic understanding.
- Mapping exercises provide an opportunity for conflicting parties to meet, get to know each other and exchange their individual perspective on the conflict situation. This helps to create awareness of the other party's situation and to overcome potential misunderstandings. The presence of an independent third party can be useful to encourage a discussion between conflicting parties.
- When you are conducting the mapping as part of a project to address the climate-fragility risks in the region, such mapping can be a useful tool to fully understand the underlying challenges faced by the population and to better understand the dynamics behind climate-fragility risks.

### 1.3.1 Climate-fragility map

**Below are 5 steps to help you construct a climate-fragility map:**

1. Define the scope and geographic area: Choose the participants for the exercise on the basis of the geographic areas assessed. It is important to have all population groups, ethnicities and religions that are living in a geographic area, as well as other important stakeholders, represented.
2. Make sure the purpose of the mapping exercise is clear to all participants.
3. Ask participants to draw a map of the area, including the resources, places and characteristics that are important to them and their livelihoods. These can include food or firewood, water wells or holes, arable and grazing land, and religious or cultural places. In addition, ask participants to mark areas with specific climatic conditions or climate risks – for example, where rainfall is high, where it is variable, or where extreme weather events such as floods have occurred. The particular items which participants will be asked to include depend on the specific purpose and objective of the climate-fragility mapping.
4. Once the participants feel the map contains all information important to them, ask them where resources or other items are affected by conflict or where conflict is occurring. For example, where does competition for grazing land, water resources or firewood exist and where are armed groups active? Highlight these places or items on the map. If displaced people or migration movements play an important role, also include those.
5. In a further step, encourage participants to review and discuss the highlighted areas of conflict and climate risks. Focus the discussion on the interaction between conflict and climate risks. It might also be helpful to rank the importance

of different climate-fragility risks. One method to identify climate-fragility risks at the local level is through a transect walk.

Before areas with potential climate-fragility risks are fixed on a map, you can experience the geographic details of this area through a walk together with the participants in the mapping exercise. For example, in areas where land ownership is contested you can ask the local participants to show you the boundaries of the village or of the land which is contested. These boundaries can be drawn into the map. This visualization of land and resources can have significant impacts on the local population's perception and may encourage dialogue processes and motivate participants to find solutions<sup>5</sup>.

There are a number of different platforms that provide free access to data and maps that can be helpful for your mapping exercise. For natural resources mapping and monitoring, [MapX](#) platform offers useful services for your mapping process. It provides access to spatial data and tools and helps manage information. Another source for mapping data and exemplary maps and graphics is the [World Resources Institute's maps and data library](#).

### **Climate-fragility mapping at the national level**

For national-level mapping, the mapping exercises at the local level present the first step. The results of local-level mappings will then be transferred into a national map. The regions which will be included in the national map depend on the context and objective of the mapping exercise. In addition, you may want to include further climate or conflict characteristics of the country that are relevant and have not been addressed in the local mapping exercises. For example, overall changes in climatic conditions, natural disasters, migration routes, availability of resources, etc. can be included in the map as additional layers. For an example of such a map, please see below. You can either present a draft map to your target audience as a basis for discussion and develop the map further according to the suggestions made during the presentation, or you can bring a basic map to the meeting and conduct the mapping exercise together with the national representatives. Please be aware that such a mapping exercise might be a lengthy process and could produce controversial opinions. This can be a positive effect of the exercise if you wish to encourage the stakeholders to discuss the topic and become engaged with it, but in this case you need to ensure that sufficient time is available.

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<sup>5</sup> See for example: USAID 2015





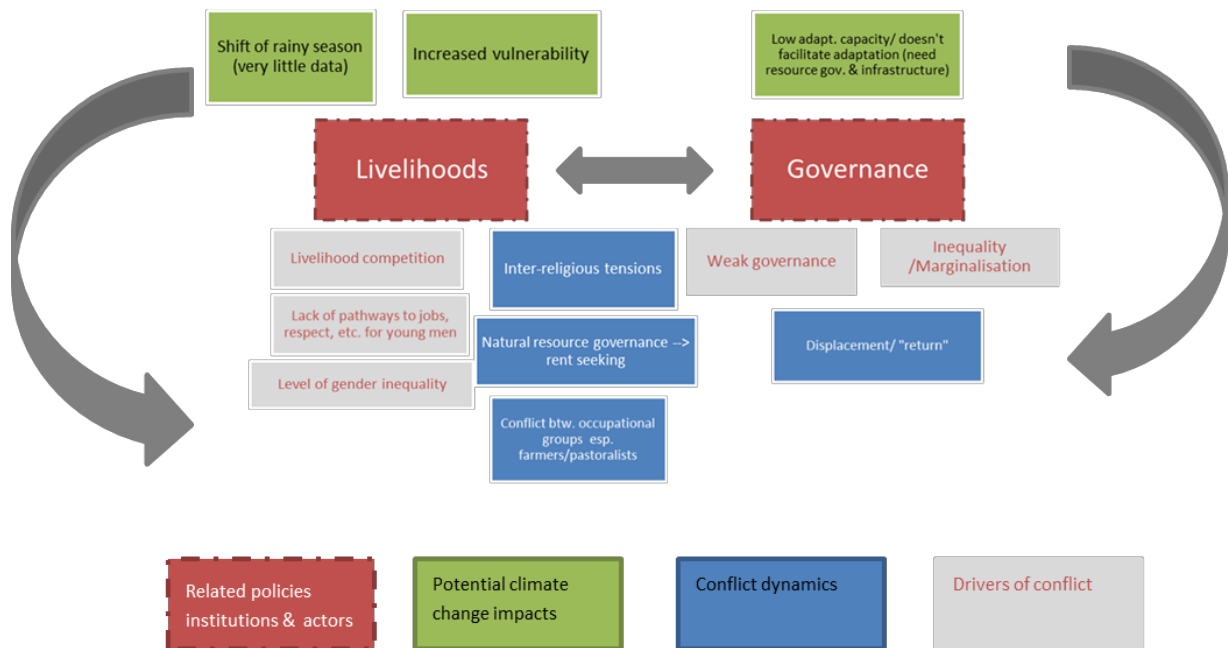
Source: Novikov and Rekacewicz 2005

### 1.3.2 Pressure and shocks map / driver map

Pressure and shocks/ driver maps help you to visualize and thereby understand and identify the different pressures and shocks that are driving the climate-fragility risks you are focusing on. These maps provide the advantage that you can:

- Mark how different actors are affected.

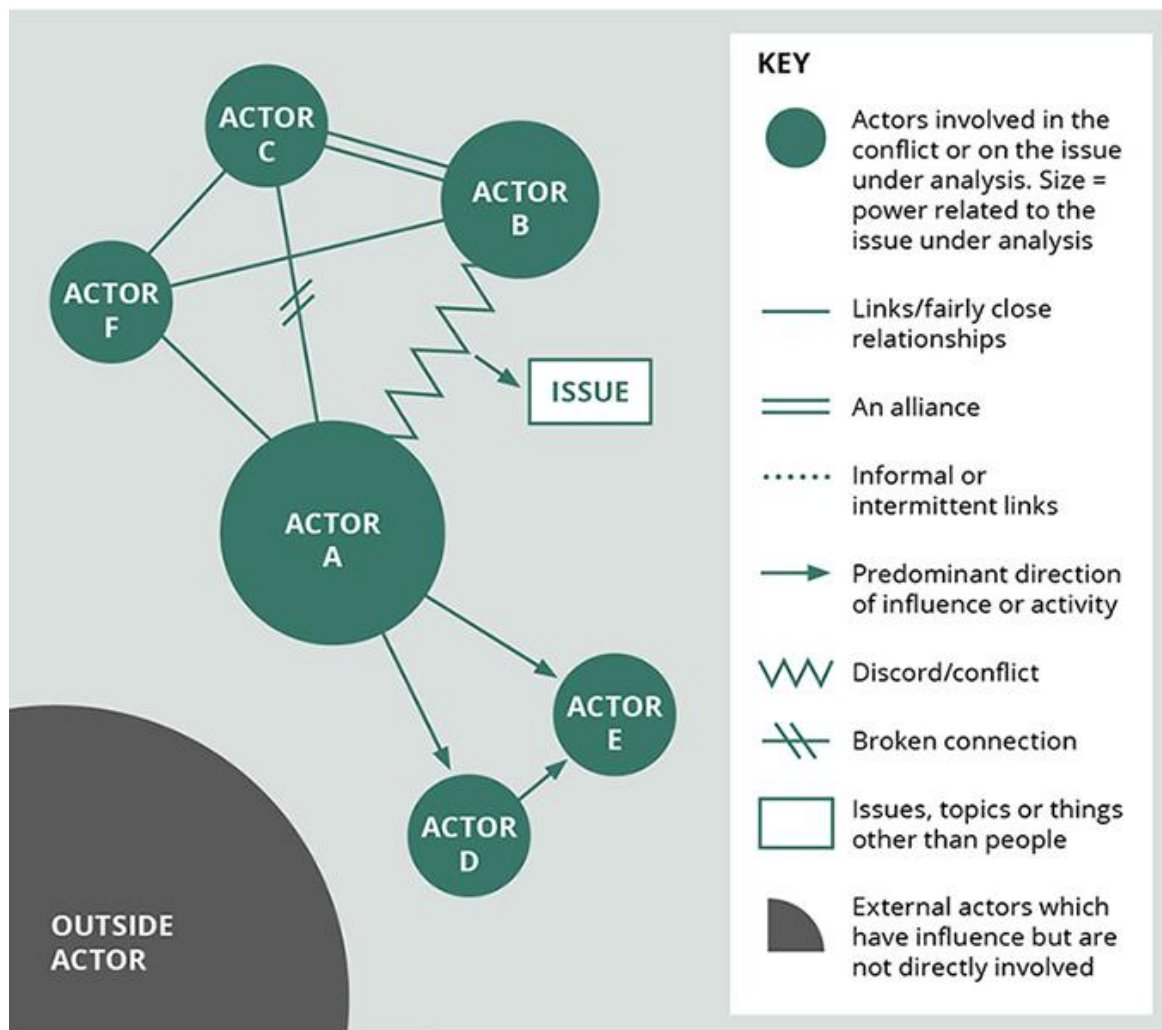
- Highlight important structural factors and forces and how they interact with different pressures and shocks.
- Start by identifying already **existing or potential future conflict dynamics** and the **drivers of these conflict dynamics**. In addition, visualize potential **climate change impacts** on related policies, livelihoods, institutions or actors. If there are several different **areas to which these drivers of conflict are related**, it may be useful to group them accordingly.
- A driver map may be useful to increase awareness of the factors which actually drive conflict and the links between climatic conditions and conflict dynamics. A visualization of the conflict dynamics and its drivers also helps to understand where connections and overlaps exist between single actors, institutions, policies and livelihoods.
- The graphic below shows an example of a driver map. The actors, climate impacts, drivers and dynamics included in the map depend on the specific purpose of the driver map.



Source: adelphi, author's own graphic

### 1.3.3 Actor mapping

**Actor or stakeholder mapping** can be a useful tool for getting a graphic snapshot of actors' relative power in the conflict, their relationships, and the conflict issues between them. It is a good tool to start analysing a conflict. Power asymmetry can be represented by the relative size of the actors' circles. Animosity and alliances are symbolized with lines. Different mappings representing different perspectives can be useful to understand different perspectives (see figure below).

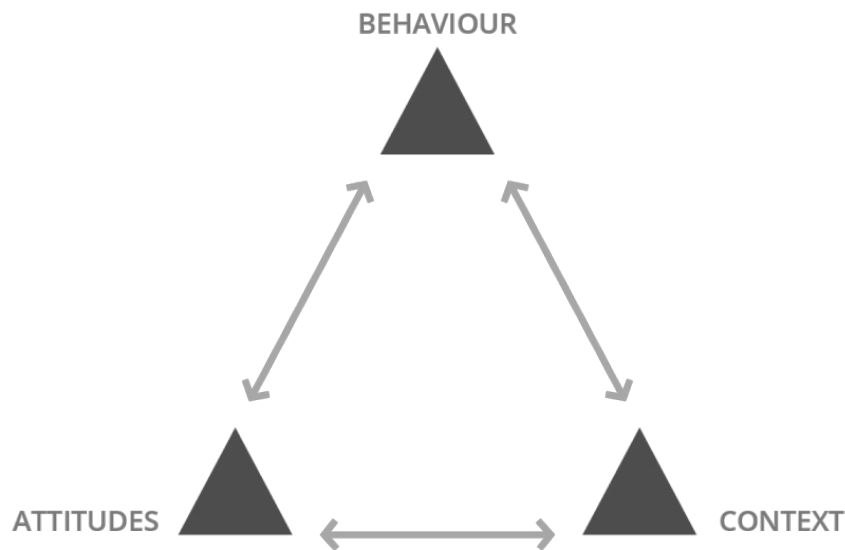


Source: Adapted from Fisher et al. 2000 in Herbert 2017

### Step-by-step instructions for actor mapping:

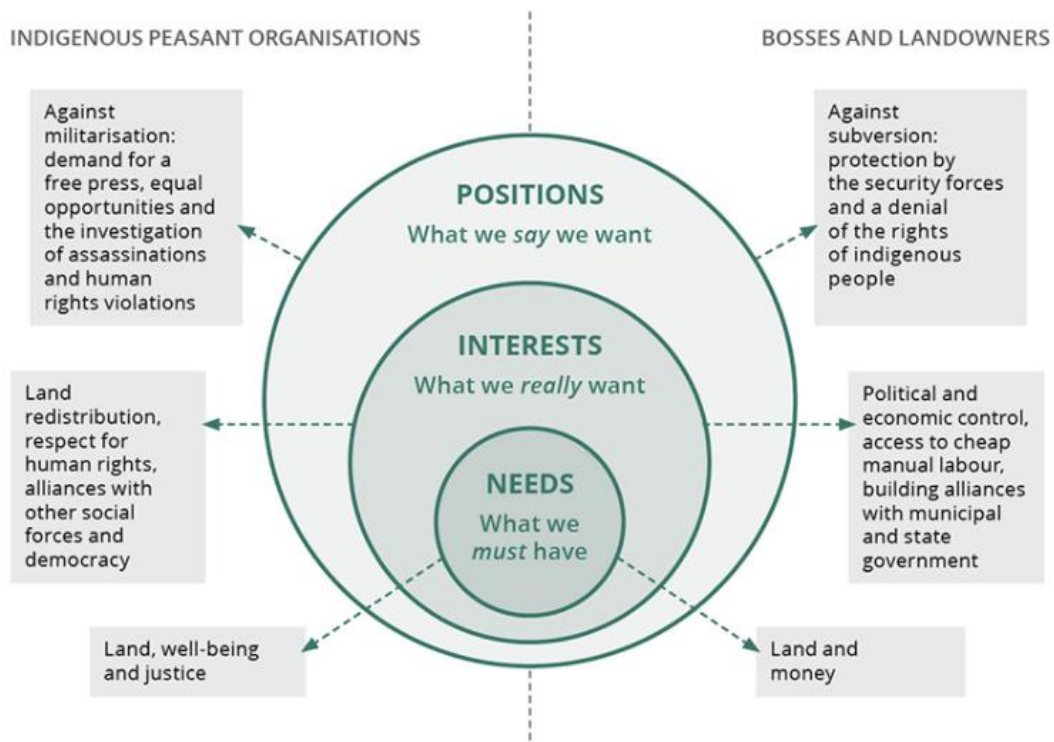
1. Decide on the conflict you want to analyse. Set the conflict system boundaries.
2. Form groups of two or more people. One can make a conflict map by oneself, but doing it in a group is better. If there are people in the group who know nothing of the conflict, they can help by asking clarifying questions and by being a person the involved actors can talk to and test ideas on.
3. Take a large sheet of paper and draw the actors as circles on the paper, or on cards that can be pinned on a paper, with the size of the circle representing an actor's "power". Do not forget to put yourself as an actor on the page as well if you or your organization are involved. List third parties as semi-circles.
4. Draw lines (see symbols below) between the circles representing the relationship between the actors.
5. List the main themes in square boxes or at the top of the map.
6. Don't forget to add a title and date to the conflict map, and if it is not confidential, also include the name or organization of the person mapping.

- The **ABC triangle** graphic tool is used to examine actors' attitudes, behaviours and context (depicted graphically in a triangle) and compare the different perspectives. This tool can be applied to consider and understand the positions and actions of different parties.



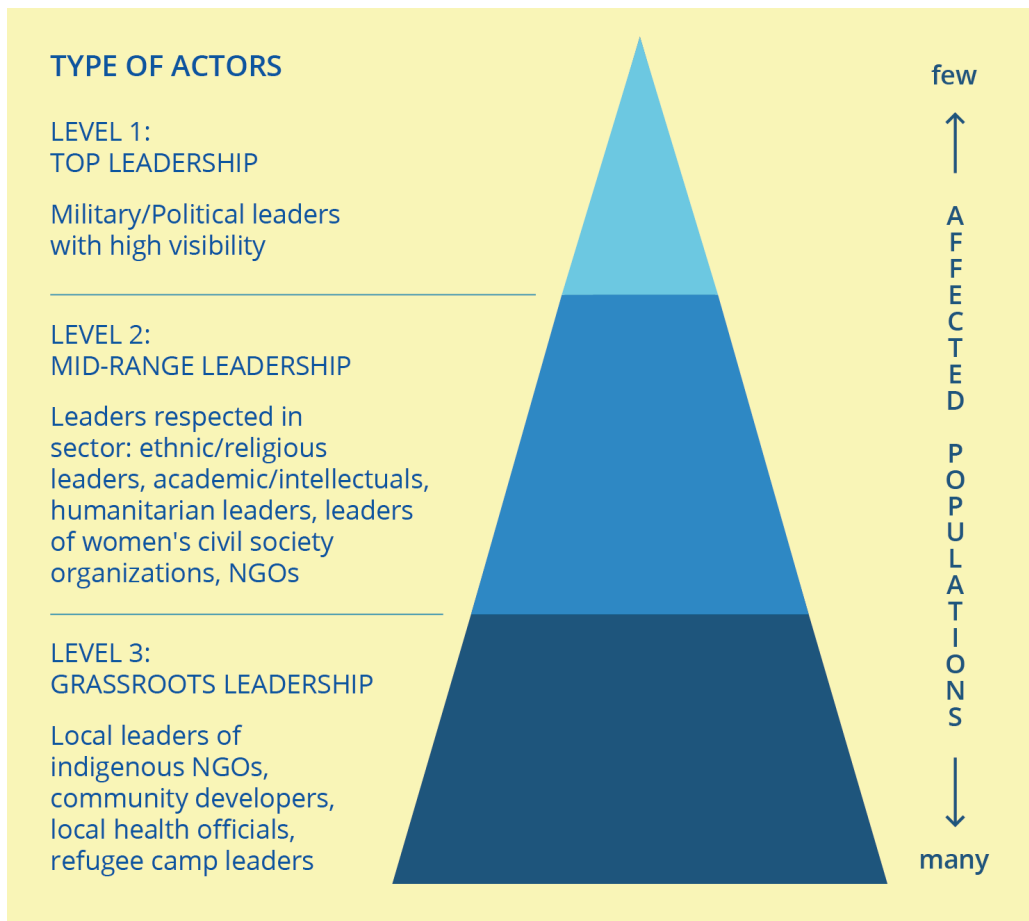
Source: Adapted from Fisher et al. 2000 in Oliva and Charbonnier 2016

- The **onion** graphic tool is used to examine actors' public positions (the outer layer), interests (the middle layer) and needs (inner layer). It can be used to examine actors' competing interests and to identify possible trade-offs.



Source: Adapted from Fisher et al. 2000 in Herbert 2017

- The **pyramid** graphic tool is used to examine the different levels of stakeholders in a conflict – starting with key conflict actors at the top level. The tool suggests focusing more on mid-level actors in conflict resolution activities, as these actors are connected to both the grassroots and the top levels.



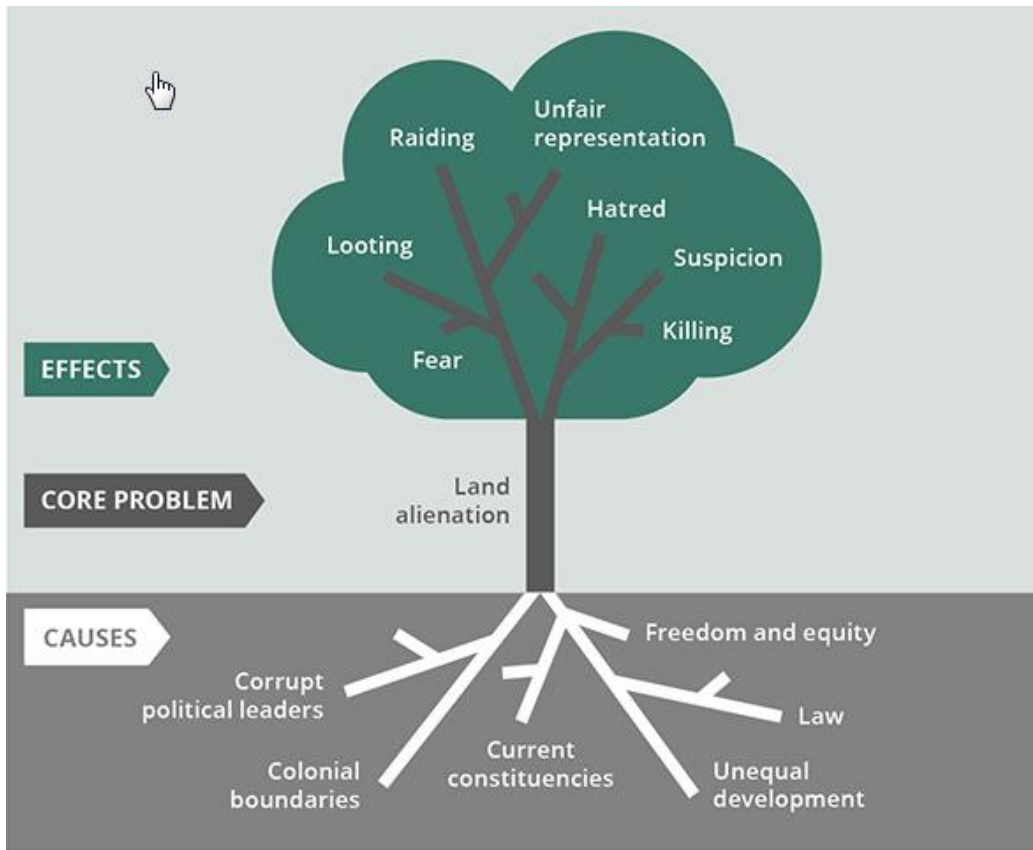
Source: Adapted from Lederach 1998 in Oliva and Charbonnier 2016

## 1.4 Conflict analysis tools

Conflict analysis tools provide a systematic way to identify the underlying causes and consequences of conflicts. The tools below provide a good starting point for finding entry points to address climate-fragility risks. The tools are all well suited to being applied and developed during participatory vulnerability assessments.

### 1.4.1 Conflict tree

The **conflict tree** graphic tool is used to examine core problem(s) (the tree trunk), causes (the roots) and effects (the branches and leaves). It visualizes how structural and dynamic factors interact and lead to conflict (see figure below).



Source: Fisher et al. 2000 in Herbert 2017

### 1.4.2 Force field analysis

The **force field analysis** graphic tool is used to examine the different forces influencing a conflict (connectors and dividers).<sup>6</sup> These positive and negative forces are presented in a table to visualize interactions between them. The size of the arrows indicates the significance of the individual force and its potential to contribute to a change in the conflict.



<sup>6</sup> Oliva and Charbonnier 2016

Source: Adapted from Fisher et al. 2000 in Oliva and Charbonnier 2016

## Pillars

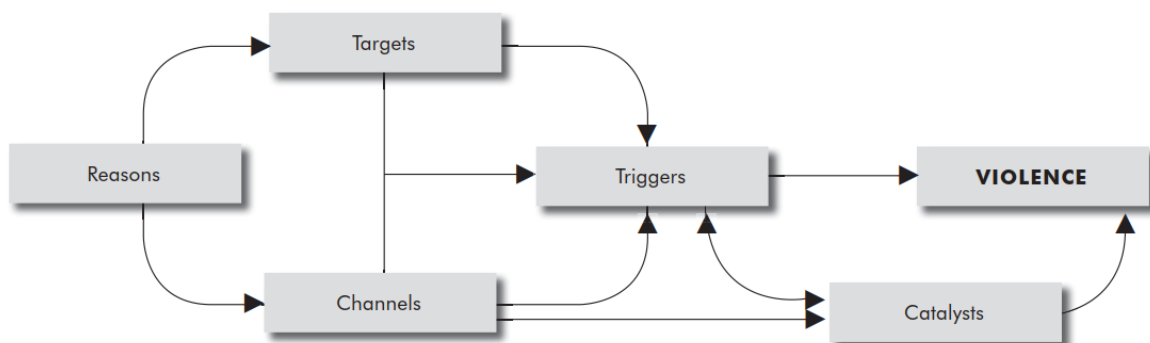
The **pillars** graphic tool is used to examine the factors or forces that contribute to creating conflict.<sup>7</sup> The pillars tool can help to reveal structural causes of conflict and to identify entry points.



Source: Adapted from Fisher et al. 2000 in Oliva and Charbonnier 2016

### 1.4.3 Multi-causal role model

This model focuses on causation and on the different quality of reasons, triggers, channels, catalysts, and targets. Content and actors, dynamics and structures are also considered'.<sup>8</sup> For more examples, please see [the ECC Factbook](#), which provides a multi-causal model for more than 120 case studies.



Source: Masan and Rychard 2005

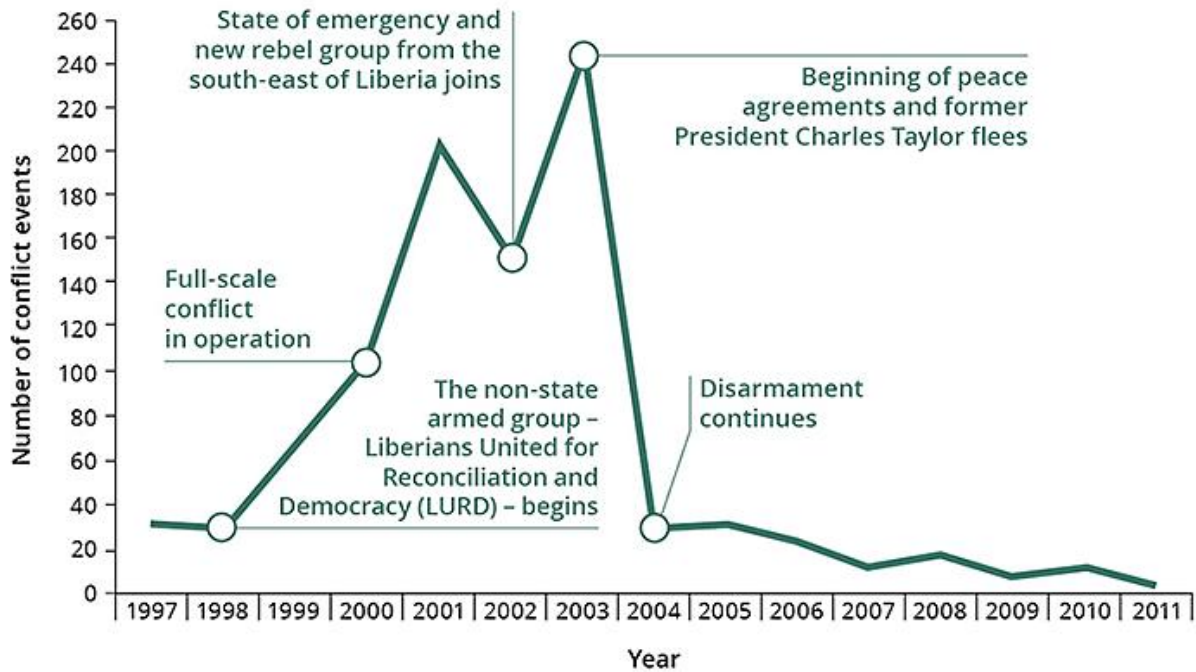
## Profile and dynamics

<sup>7</sup> Based on Goss-Mayr in Fisher et al. 2000

<sup>8</sup> Masan and Rychard 2005

Presenting events linked to a conflict graphically can help to better identify conflict dynamics and the relations between conflict and other events.

- Plotting a **graph of events** gives a sense of time, frequency, trends and stages of the conflict. Conflict events can be disaggregated, e.g. by type of conflict act, perpetrator/conflict actor, conflict cause, etc.



Source: Adapted from Dowd and Raleigh (2012:14) in Herbert 2017

- Drawing a **map** or maps across time periods to visualize trends, e.g. with conflict events or territorial control of different actors.
- Drawing a **timeline** of historical conflict events, phases and triggers to help identify trends, temporal patterns and potential triggers. This can then be analysed against upcoming future events (e.g. elections, reform processes, youth bulges).

#### 1.4.4 Connectors and dividers

**Connectors and dividers** are at the centre of every conflict situation. While connectors have a positive effect on actors across different groups, dividers contribute to tensions in society. Actors that are connectors in one situation/context can be dividers in another situation and vice versa. Conducting an analysis of connectors and dividers is essential for “do no harm” approaches. Analyses are often undertaken through brainstorming and discussions, and it can be useful to note down the results in a table.





There can be various reasons to conduct a vulnerability assessment. Some of the **benefits** a vulnerability assessment can provide are:

- Identifying climate change/ vulnerability hotspots
- Identifying entry points for intervention
- Keeping track of changes in vulnerability; monitoring and evaluation of adaptation
- Raising awareness of climate change among decision-makers and communities; providing advice for responses to climate change impacts
- While there are various ways of designing a vulnerability assessment, it is advisable to define the following points ahead of conducting a vulnerability assessment:
  - Topic/ climate change impacts/ sectors to be covered by the assessment
  - Geographical scope of assessment (e.g. national, regional, local level)
  - Time scale (current/future vulnerability; short-/long-term, etc.)
  - Methodologies to be used: quantitative methods (e.g. measuring, statistical surveys, etc.), qualitative methods (e.g. interviews, etc.) or mixed methods?

### **Integrating conflict analysis into Participatory Vulnerability Assessments**

Participatory Vulnerability Assessments (PVA) engage communities and other stakeholders in an inclusive process to collect and analyse information about their vulnerability, risks and capacities in a structured way. This information can later be used as a basis for developing programming solutions. A PVA's main purposes are to:

- identify the key vulnerabilities of a particular community
- understand how community members perceive risks and threats to their lives and livelihoods
- analyse the resources and strategies available to them to address or reduce these risks
- help the community develop an action plan to address identified vulnerability and risk.

It is one of the core tools used by development and disaster risk reduction organizations and is effective in promoting inclusive, bottom-up approaches. However, the majority of PVA tools do not explicitly address conflict risks and thus do not help understand and address linked climate-fragility risks, and can lead to conflict-blind programming.

For organizations that already use PVAs, we recommend integrating conflict sensitivity into existing PVA processes. Through slightly adapting the questions being asked, a PVA can help to identify existing or potential conflicts that could impact a community's resilience-building efforts. This means that we need to integrate questions on conflict into some of the tools we have been using for the assessment. It is important to discuss the 'what if' question with communities, exploring how different risks interact dynamically.

Process of integrating conflict sensitivity: The process of integrating conflict sensitivity into PVA involves reviewing the existing tools and processes for their

inclusion of conflict analysis – for example, consideration of conflict history, actors, dynamics and drivers. The gaps can be addressed through questions, guidelines and processes as set out in Annex X/Box X. Adjustments and additions should then be made in areas where conflict sensitivity was seen to be relevant and add value.

Conflict analysis questions can add nuance to an understanding of how group membership and identity affect vulnerability (exploitation, discrimination, violence). One lesson learnt from the process is that adjusting a core institutional tool requires strong buy-in, not only from senior management but also across the organization. Making changes to existing practices takes time and needs to be accompanied by an understanding of why those changes are being made. At the same time, the process of integrating conflict sensitivity into the PVA tool showed that this type of initiative also provided a good opportunity to raise internal awareness of the relevance of conflict analysis and conflict sensitivity.

For further guidance and practical examples of vulnerability assessments, please see the following references:

- [The Vulnerability Sourcebook](#): provides a standardised approach to vulnerability assessments covering a broad range of sectors, topics and levels. Annex includes many tools and templates.
- [USAID Climate Vulnerability Assessment](#): offers a step-by-step guideline on climate vulnerability assessments.
- [UN Environment Guidance on Integrating Ecosystem Considerations into Climate Change Vulnerability and Impact Assessment to Inform Ecosystem-based Adaptation](#): gives step-by-step guidance on how to implement a vulnerability assessment, with a particular focus on ecosystems and their services.
- [GIZ Framework for Climate Change Vulnerability Assessments](#): provides an overview of data sources and participatory as well as top-down, sector-specific and generic methods for assessments.

## 1.6 Scenario planning

### 1.6.1 What is scenario building?

Scenario building involves describing a range of plausible futures. The goal is not to *predict* the future. Scenarios describe different plausible future states and the developments which would lead to them. All scenarios developed are treated equally and no probability is assigned. On the basis of the different scenarios, strategies and interventions can be developed and tested. More preferable scenarios – “best-case scenarios” – can also be identified, and concrete actions can be formulated to develop a pathway to an improved situation.

The challenge is to create robust descriptions based on both scientific understanding and widely held attitudes and perceptions. Scenario development helps us deal with the uncertainty of long-term forecasts and overcome our perceptive limitations when looking into the future. Scenarios channel uncertainty to allow us to consider the factors we take for granted and how those unexamined assumptions can leave us vulnerable.

One key aspect of any successful scenario development exercise is to foster interaction between experts from different fields and backgrounds. It can also help to create a common vision and understanding of the future and, as such, support the building of networks and teams. Thus, a scenario development exercise can be an important part of your process of developing a new strategy, programme or project.

### **1.6.2 Brief guide to developing climate-fragility scenarios:**

**The following offers a basic four-step process for developing scenarios:**

#### **Step 1: Define the question**

- Ensure that the group of participants includes a cross-section of disciplines, e.g. physical and social scientists, whose expertise can highlight the complexity of the issues under discussion. It can also be helpful to include key stakeholders, e.g. from civil society, that are important for your overall goal. For example, if you are trying to identify climate-proof water policies, you might want to consider including water user groups.
- Identify the purpose and audience for the scenarios, e.g. to inform planning and policies.
- What is the timeframe being explored? What is the geographic scope? And what are the starting conditions?
- Does the scenario include climate change or environmental change?

#### **Step 2: Identify drivers**

- Identify a broad range of drivers (both climate-related and non-climate-related), and consider which will be most important in the future, as well as those which are most important now. You can use your climate-fragility assessment, particularly if you have done a driver map as a starting point, and add or cut drivers. One tool you can use in this process is a STEEP matrix (STEER stands for Social, Technological, Economic, Environmental, Political). This matrix helps to separate and structure the drivers into different categories:
  - Social
  - Technological
  - Economic
  - Environmental
  - Political
- Systematically map the full range of known variation in the drivers and identify key uncertainties. Include conditions at the extremes and 'wild cards'. When working with climate projections, consider how representative they are of the uncertainty range (including significant tipping points). Including climate science expertise, as well as social science expertise, is important at this stage.

#### **Step 3: Project the scenarios and map boundaries**

- Consider how the important drivers might interact in the future, including the dynamic interplay between drivers over time (e.g. how climate vulnerability and fragility might impact adaptive capacities and future fragility risks).

- Map the boundaries of the scenario by identifying the nature of the uncertainty and the range of possible outcomes.

**Step 4: Develop the scenarios into consistent narratives**

- Generate plausible narratives that describe particular futures, drawing on the material from steps two and three.
- These can describe 'end states' – what the context looks like at a specific point in the future – or 'timelines' – a description of how that future has evolved.

**Step 5: Test strategies and interventions**

As a last step, these scenarios can be used to test your identified strategic entry points or interventions. To assess the robustness of a strategic entry point or intervention, imagine how this strategy or intervention would perform in the different scenarios you have developed. Those strategies or policies that work in most or all future scenarios are the most robust.

## 2 Further reading

### 2.1 Glossary of key terms<sup>10</sup>

**Fragility:** The OECD defines fragility “as the combination of exposure to risk and insufficient coping capacity of the state, system and/or communities to manage, absorb or mitigate those risks. Fragility can lead to negative outcomes including violence, the breakdown of institutions, displacement, humanitarian crises or other emergencies”<sup>11</sup>.

**Climate change** is defined by the Intergovernmental Panel on Climate Change (IPCC) as “a change in the state of the climate that can be identified (e.g. by using statistical tests) by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer”<sup>12</sup>. According to the IPCC, it is highly likely that anthropogenic greenhouse gas emissions such as carbon dioxide, methane and nitrous oxide, in combination with further anthropogenic factors, are the prevailing cause for the warming of the climate. Due to industrialisation and population growth, these emissions have reached unprecedented levels. Projections of future greenhouse gas emissions vary widely but the warming of the climate and related, long-lasting impacts on the population and ecosystems are expected to continue. Only a major reduction in greenhouse gas emissions could, in combination with adaptation measures, contain climate change and its impacts. But even if anthropogenic greenhouse gas emissions were stopped, many climate change-related effects would still be felt for centuries<sup>13</sup>.

**Climate change adaptation** is defined by the IPCC as “adjustment to actual or expected climate and its effects”<sup>14</sup> in human and natural systems, while adaptive capacity is understood as “the potential, capability, or ability of a system to adapt to climate change stimuli or their effects or impacts”<sup>15</sup>. This requires different human, institutional, socio-economic or technical capacities<sup>16</sup>. At an intervention level, adaptation entails activities with the objective of reducing vulnerability to climate change at the sectoral, national or local level<sup>17</sup>.

**Conflict** occurs when two or more parties find their interests incompatible and express hostile attitudes or take actions that damage the other party’s ability to pursue their interests. According to this definition, almost all contexts are affected by conflict in one way or another. Indeed, conflict is in itself not a bad thing. Almost any process of social change is likely to be contested by one or more groups within that society, which is a form of conflict. However, when conflicts spill over into violence, or threaten to do so, then the impacts on local people can be devastating.

<sup>10</sup> This Glossary is adapted from Start Network n.d., see: <https://www.christianaid.org.uk/sites/default/files/2017-03/Conflict%20Prevention%20Report%20.pdf>

<sup>11</sup> OECD 2016

<sup>12</sup> IPCC, 2014

<sup>13</sup> IPCC, 2014

<sup>14</sup> IPCC, 2014

<sup>15</sup> Smit et al. 1999

<sup>16</sup> Fritzsche et al. 2014

<sup>17</sup> ibid

**'Drivers of conflict'** refers to the underlying issues that can drive or contribute to conflict. These do not only include visible signs of conflict, but also 'proximate causes' (shorter-term factors that can contribute to conflict, such as availability of firearms, high unemployment, etc.) and 'structural causes' (the underlying structural and cultural drivers of violence, such as narratives of clan superiority or competition for scarce resources, that are woven into the fabric of society).

**Do no harm** is an approach that is used to identify conflict-exacerbating impacts of assistance. In particular, it seeks to identify how decisions and actions that organizations undertake can affect inter-group relations. This approach requires analysis of dividing and connecting issues and actors, and should be done with local partners and assessed throughout the project. By way of example, when an international organization built a well close to remote villages in Kenya with the aim of reducing the distances that women had to travel when collecting water, one unanticipated result was an increase in family and inter-village conflicts. It emerged that women had used the trip to the wells to discuss, negotiate and resolve many community problems. Without a conflict analysis or an analysis of the local capacities of peace prior to the project, the prospect of this outcome had not been identified.<sup>18</sup>

**Peacebuilding** is a process which transforms violent conflict into sustainable peace and seeks to prevent relapses into violence. Peacebuilding activities address different levels such as structural or potential causes of conflict, consequences of conflict, reconciliation measures, and capacity building among the population and within institutions.<sup>19</sup>

**Conflict sensitivity** is the ability of an organization or project to:

- > understand the conflict context (history, social and demographic composition, political system, economy and security)
- > understand the potential interaction between any planned action/intervention and the context – how will interventions affect the context; how will the context affect interventions?
- > act upon this understanding in order to minimise negative impacts on conflict and peace and maximise positive impacts.

**Resilience** is the ability of individuals, communities, and states to absorb and recover from shocks (to cope), whilst positively adapting to longer-term change and transforming their core structures and institutions if necessary<sup>20</sup>. Building more resilient states and societies does not mean ensuring the status quo and continuing practices that maintain conditions favouring the powerful. However, changing underlying structures and institutions is also a very long-term process that needs considerable resources and commitment by all actors.

**Vulnerability** is defined by the IPCC as "the degree to which a system is susceptible to, and unable to cope with, adverse effects of climate change, including climate variability and extremes. Vulnerability is a function of the character, magnitude, and

<sup>18</sup> Haider 2014

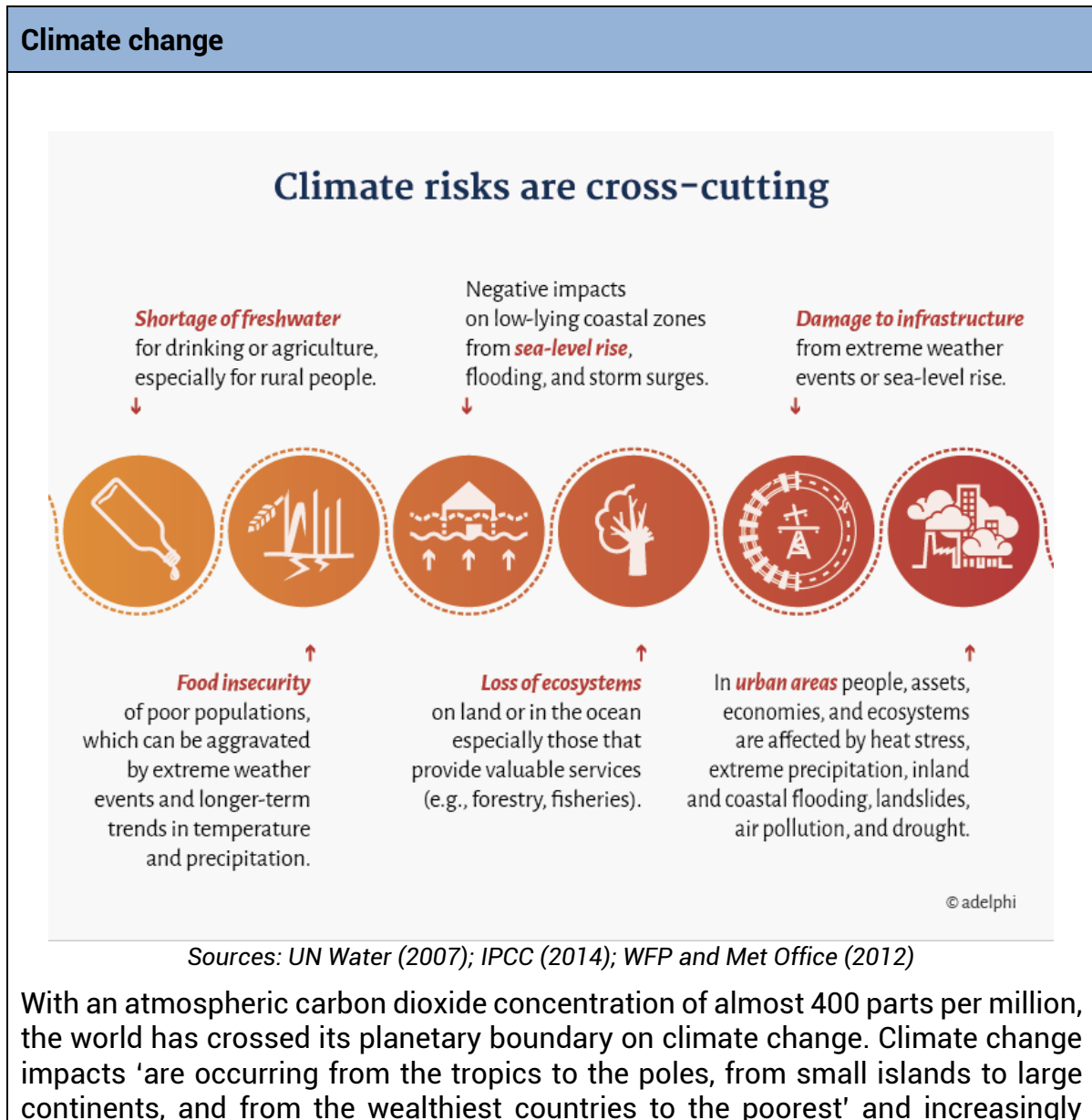
<sup>19</sup> Alliance for Peacebuilding 2013

<sup>20</sup> OECD 2018

rate of climate change and variation to which a system is exposed, its sensitivity, and its adaptive capacity"<sup>21</sup>.

## 2.2 What are climate-fragility risks?

Fragility<sup>22</sup> and conflict are always the result of complex interactions between different social, political, economic, cultural and environmental drivers. Climate change is to be recognised as a variable (not the sole variable, or the key variable, but a variable) that aggravates pre-existing environmental, social, economic and political pressures and stressors. As such, it can drive a diverse set of knock-on risks such as violent conflict, political instability, displacement, poverty and hunger.



<sup>21</sup> IPCC, 2007:104 pp

<sup>22</sup> For further reading on the fragility concept used in this guidance note, see 8.2.1



affecting agriculture, human health, ecosystems on land and oceans, water supplies, and livelihoods. (IPCC 2014).

An understanding of the relationship between climate change, fragility and conflict is only possible through a rigorous exploration of the complex interactions between different risk factors, in which climate change is understood as a variable that affects pre-existing economic, environmental, political and social pressures and stressors.

Taking stock of the state of the art of research on the security implications of climate change, the report "A New Climate for Peace", commissioned by the G7 foreign ministries, identified seven climate-fragility risks that emerge when climate change interacts with other political, social, economic, and environmental pressures such as rapid urbanization, inequality, economic shocks, and environmental degradation. These seven climate-fragility risks are:

### **1. Local resource competition**

Restricted availability of and access to natural resources, such as water and arable land, in combination with a rise in demand, can lead to increasing competition over resources and result in instability and conflict if dispute resolution is lacking.

### **2. Livelihood insecurity and migration**

The livelihoods of people who depend on natural resources will be threatened by climate change if environmental changes emerge in combination with other issues, forcing people to migrate or to turn to illegal sources of income.

### **Climate change, migration and displacement**

Population growth, urbanisation, economic opportunities and conflict are important drivers of migration. But with the human impact on the environment and the climate growing exponentially over the past few decades, environmental factors are increasingly playing an important role in shaping human mobility. The impact of environmental and climatic changes on migration is best understood within the context of existing migration patterns. Existing patterns will most likely be exacerbated by climate change.<sup>23</sup> Most migration takes place within countries and not across borders. According to recent projections, climate-induced internal migration will further increase and could rise sharply from 2050 onwards due to more severe climatic impacts and increasing population growth.<sup>24</sup>

Extreme weather events are already displacing more people every year than all conflicts combined.<sup>25</sup> Increasing urbanisation further raises the risk of displacement in the event of extreme weather events, especially in vulnerable areas such as coastal regions. Urban areas in fragile or conflict-affected countries are also particularly prone to experiencing the impacts of climate change and extreme weather events, as capacities and means for adaptation are often lacking.<sup>26</sup>

<sup>23</sup> Asian Development Bank 2012

<sup>24</sup> Rigaud et al. 2018

<sup>25</sup> Ibid.

<sup>26</sup> Schreiber et al. 2016

### Climate change, migration and displacement (Cont.)

The negative impacts of climate change on livelihoods such as agriculture or fishing are particularly important as a push factor for migration. In rural areas where the effects of climate change threaten water supply, subsistence agriculture and other sources of income, these impacts can act as a driver of rural-urban migration.

People in high-risk areas can be forced by conflicts to flee to less dangerous places within their own country or across borders. In cases where environmental risks and violent conflicts occur at the same time, this pressure can even be intensified. But environmentally and climate-induced migration can also increase the likelihood of political tensions or outbreaks of violence in receiving areas, for example in cases in which an influx of migrants increases pressure on local resources or public services.

However, migration can also be an effective adaptation strategy. Migration can improve living conditions and provide economic prospects. Temporary or seasonal migration from severely affected regions to less affected regions, for example during seasonal rainfalls or heat waves, can help people to cope with crisis.

### 3. Extreme weather events and disasters

Extreme weather events and disasters will endanger the livelihoods of people, especially when communities' resilience is already strained by the impacts of conflict.

### 4. Volatile food prices and provision

Climate change in combination with increasing global pressures is expected to result in greater food insecurity, making societies more vulnerable to civil conflicts.

### 5. Transboundary water management

With rising demand for water and pressure from climate impacts, transboundary waters have the potential to lead to tensions among riparian countries, especially in already conflict-affected regions.

### 6. Sea-level rise and coastal degradation

Rising sea levels are expected to have severe negative impacts on economies. In addition, it is likely that the incidence of natural disasters in coastal areas will increase. Both of these effects are leading to the displacement of populations and forcing them to migrate, which eventually might contribute to conflict.

### 7. Unintended effects of climate policies

Climate adaptation and mitigation projects bear the risk of leading to unintended negative effects for the economy and political stability, particularly in fragile and conflict-affected contexts.

**Climate change, terrorism and organized crime<sup>27</sup>**

Today, we can observe an increasingly complex landscape of violent actors, from rebel groups and insurgents to youth and street gangs and organized crime to highly professionalized terrorist groups such as Al Qaeda, ISIS, and Al Shabaab. The boundaries between these actors are often fluid, as are their organizational structures and agendas. Climate change facilitates the rise and growth of these kinds of non-state armed groups. It can create an environment in which these groups can thrive more easily:

1. Climate change increasingly contributes to fragility. Non-state armed groups can more easily operate in those fragile and conflict-affected environments where the state has little to no authority and is lacking legitimacy.
2. The progressively negative impact of climate change on livelihoods in many countries and regions makes affected groups more vulnerable to recruitment by non-state armed groups. These groups can offer livelihoods and economic incentives and/or respond to political and socio-economic grievances.

On top of this, non-state armed groups leverage the fragile environments arising from compound climate-fragility risks. They are increasingly using natural resources as a weapon of war by, for example, inhibiting access to water. This in turn further compounds and exacerbates resource scarcity and amplifies the power of those who control resources.

For more information, see: [Insurgency, Terrorism and Organised Crime in a Warming Climate – Analysing the Links Between Climate Change and Non-State Armed Groups](#)

<sup>27</sup> Based on: Nett and Rüttinger 2016

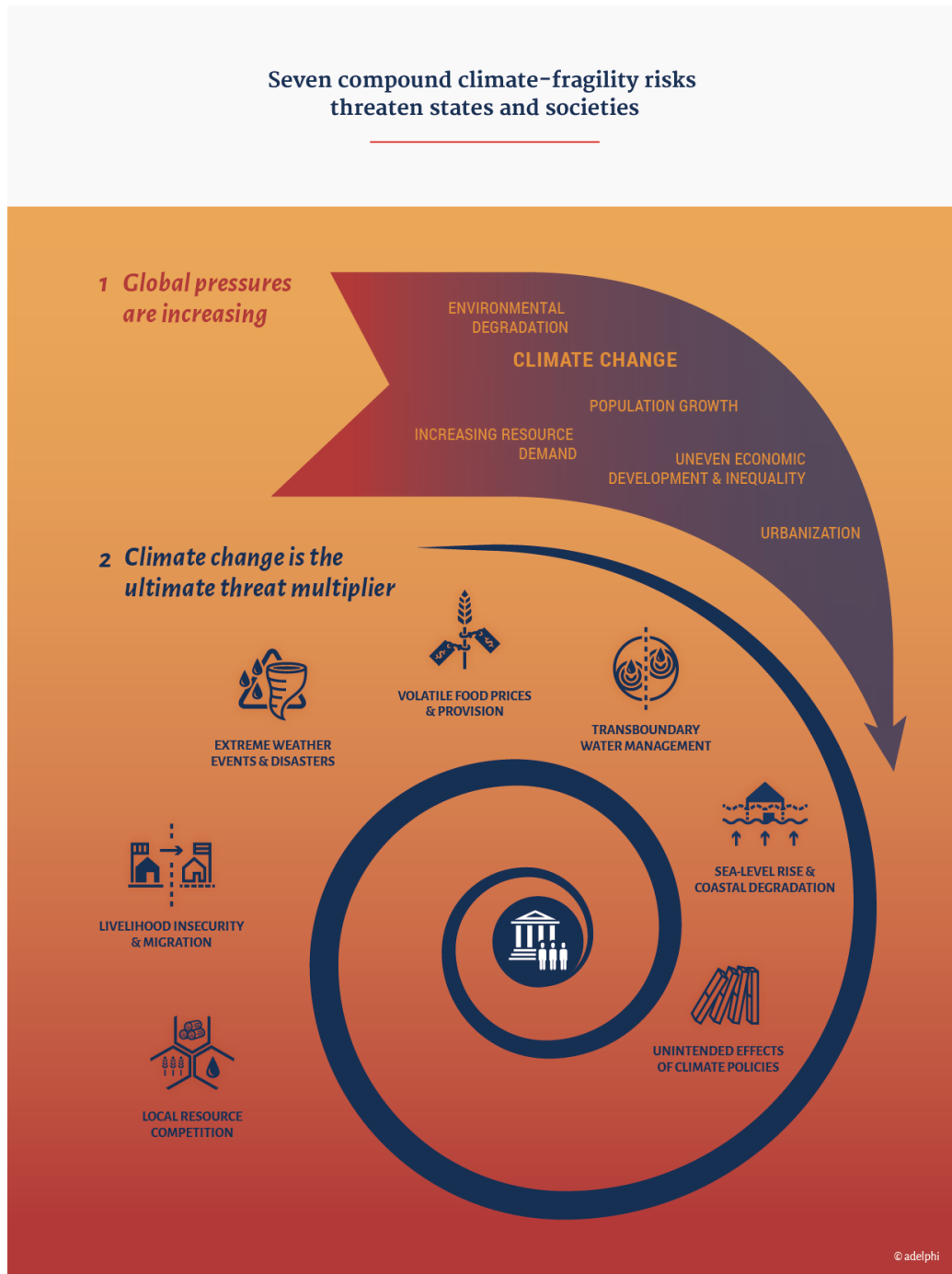


Figure 1: Seven compound climate-fragility risks

The drivers and pressures propelling these seven compound risks are largely the same. A majority of the risks are closely linked to food, water, and energy security and the natural resources and ecosystems on which they rely. Accordingly, they are not isolated from each other and are affected by the same drivers and pressures: climate change, increasing population and demand, mismanagement, and environmental pollution and degradation. The compound risks mainly differ in how these pressures interact, and how directly climate change influences them.

Further reading: for more information on climate-fragility risks, see [www.newclimateforepeace.org](http://www.newclimateforepeace.org)

## 2.3 What is fragility?

Fragility is the inability (whether whole or partial) of a state to fulfil its responsibilities as a sovereign entity, including a lack of legitimacy, authority, and capacity to provide basic services and protect its citizens.<sup>28</sup> Thus, in a situation of fragility, the state lacks basic governance functions and the ability to develop mutually constructive relations with society.<sup>29</sup>

The ability of states and societies to withstand pressures and shocks, manage change, and transform themselves occurs along a spectrum of fragility that runs from most fragile to most resilient.<sup>30</sup> At the positive end of the spectrum, resilient states are characterized by a stable social contract; functional, accountable, and inclusive institutions; and the provision of basic services. More importantly, resilient states and societies can absorb shocks and handle challenges peacefully while maintaining political stability and preventing violence.<sup>31</sup>

Fragility increases as we move towards the negative end of the spectrum.<sup>32</sup> Though the term 'fragility' has limitations, it offers a useful rubric for considering a range of related governance problems.

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<sup>28</sup> Carment, Samy and Prest 2007; Teskey, Schnell and Poole 2012; and Stepputat and Engberg-Pedersen 2008

<sup>29</sup> OECD 2013

<sup>30</sup> cf. Ruettinger et al. 2015: 12

<sup>31</sup> OECD 2013

<sup>32</sup> OECD 2008

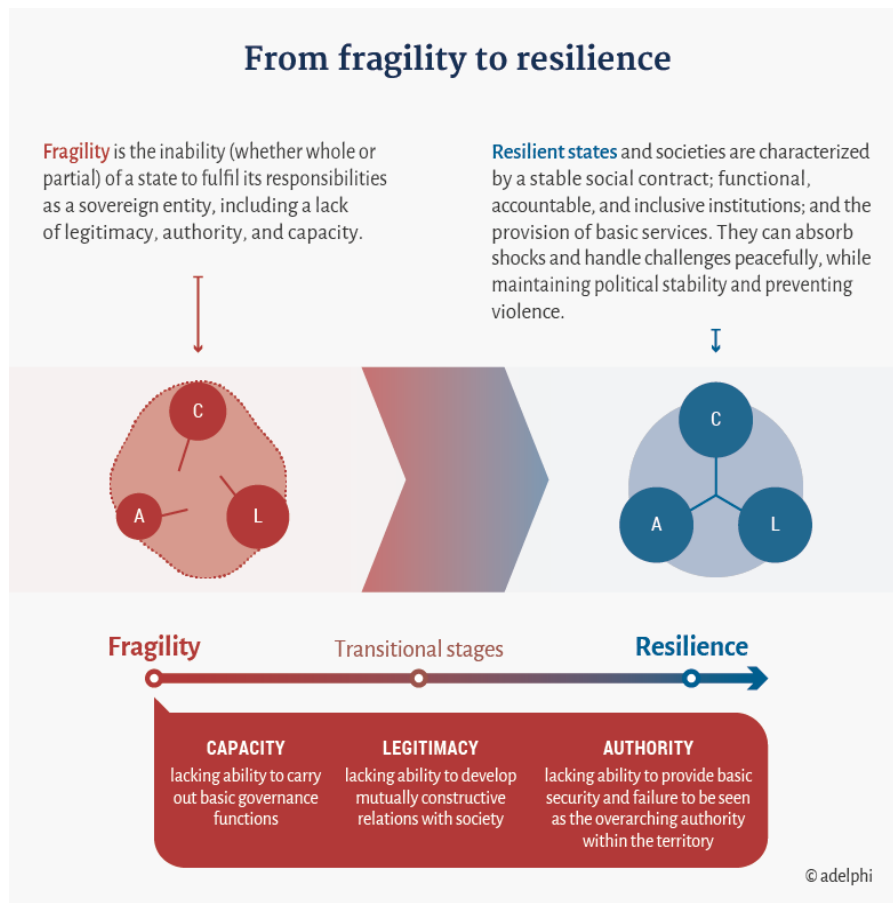


Figure 2: From fragility to resilience

A government's legitimacy decreases if it does not meet the expectations of its population, such as when it is unable to manage basic needs and expectations through political processes, or when its institutions are not inclusive and accountable and certain groups are marginalized.<sup>33</sup> These failures can fuel frustration with a society's ruling authorities. The risk of civil unrest and conflict increases as the state's legitimacy decreases.<sup>34</sup>

Fragility manifests itself in various forms and to varying degrees. Countries experience different situations of fragility such as violent conflict, political instability, civil unrest or regime change. These situations of fragility can emerge on the local, national, regional, and global levels.<sup>35</sup>

Conflict can be a major shock that affects states and communities and undermines resilience. Conflict, particularly violent conflict, can directly undermine people's well-being through its impacts on physical and psychological health, basic service provision and livelihood security. Conflict can also be experienced as a significant stress factor that can undermine resilience. Low levels of security or the fear of insecurity or violence can undermine community capacities to coordinate efforts to strengthen resilience and adapt to changes, making communities more vulnerable to other hazards or shocks. Conflict can also be seen as symptom of weak resilience.

<sup>33</sup> OECD 2008; and Bellina et al. 2009

<sup>34</sup> Kaplan 2009

<sup>35</sup> Rocha Menocal, Othieno and Evans 2008; and Asian Development Bank 2012a

The strategies that vulnerable populations employ to manage or adapt to other shocks and stresses can increase the likelihood or intensity of violent conflict. Communities that cannot manage shocks or stresses without recourse to violence can therefore be described as being insufficiently resilient to cope with conflict-causing stresses.

Conflict can thus be seen as a shock and a stress factor, as well as a symptom of a lack of resilience. In conflict-affected contexts, therefore, it is imperative for peacebuilding to form a core component of resilience-strengthening methodologies. Failure to do so not only misses an important opportunity for interventions to reduce communities' vulnerabilities, but risks exacerbating these vulnerabilities and undermining the very resilience that they seek to build.

In order to build resilience against climate-fragility risks, it is crucial that actions in key sectors – climate change adaptation, development and peacebuilding – be integrated with each other. It is important to underline that building more resilient states and communities does not mean ensuring the status quo and continuing practices that maintain conditions favouring those in powerful positions.

Some interventions can unwittingly exacerbate some of these conflict issues. For example, if efforts to help communities prepare for or adapt to hazards are carried out without an understanding of the underlying factors that can contribute to conflict, they can contribute to local tensions. Tensions can increase the risk of violence and ultimately undermine the resilience of local people. Conversely, interventions that are informed by an understanding of local conflict dynamics, for example through a conflict analysis, may be able to identify creative ways of bringing people together across potential conflict lines and addressing the tensions that can contribute to conflict, thereby making them more resilient to conflict.

## 2.4 Engaging with the security sector

### **Inclusion of the security sector in climate fragility assessments<sup>36</sup>**

The approach of climate-fragility risk guidance involves engaging with stakeholders, including formal and informal security actors. This is important because the security sector can play a significant role in both creating and addressing climate-fragility risks.

Consider, for example, a scenario in which drought has caused a shortage of food and has disrupted previous resource distribution arrangements. In this event, formal security actors could support the provision of equitable distribution of available resources or, alternatively, they could ensure that only privileged groups have access to food. In an extreme situation, other informal security forces could challenge or prevent formal security actors from accessing resources. Integrating the security sector into our Climate-Fragility Risk Assessment can ensure that you identify the appropriate risks, find the correct entry points, and engage the requisite actors.

While relationships between NGOs, local partners and community members and government stakeholders in conflict-affected areas can often be highly strained,

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<sup>36</sup> Start Network n.d.

relationships with formal security providers can be even more challenging. Top-down security providers can be more focused on protecting state interests than common interests for all groups, and so community members and NGOs can often be reluctant to engage directly with them, instead often seeing them as potential security threats in themselves. On top of this, in areas where there is opposition to the government and especially where there are armed groups, citizens can be viewed as untrustworthy by government stakeholders, particularly by security providers.

Informal security actors which operate outside formal government structures can have a significant influence on local conflict dynamics through, for example, the use of violence and access to resources. Therefore, they are important actors with the potential to positively or negatively affect climate-fragility risks. The more involvement that these informal actors have in a conflict, particularly if they use, accept or encourage violence, the more difficult it can be to engage with them.

### **2.4.1 Benefits of constructive engagement with security actors**

Security providers are often keen to maintain good relations with local communities as this can help them to be more effective and can also reduce the risk of them becoming the target of an attack in violent contexts. For communities, good relations with security providers can lead to improved local security and justice. For example, security providers can provide safety and security to vulnerable groups by ensuring that women or children do not become the victims of violence or harassment.

Constructive engagement with security providers can be a useful starting point in dealing with difficult challenges that hinder resilience such as ensuring the protection of human rights, non-discrimination and participation. Along with this, security providers may have access to knowledge, skills, equipment and manpower that can assist in the implementation of resilience-strengthening activities. On the other hand, ignoring or failing to constructively engage with security providers can lead to hostile relationships that could impede the success of projects aiming to mitigate climate fragility.

### **2.4.2 Challenges when engaging with security providers**

Engaging with security providers, particularly informal actors, can be challenging for several reasons:

- Ethical issues arise if they are (or are perceived to be) conflict actors, or if they are accused of violating rights or using excessive force.
- Implementing organizations can be open to criticism if there is a perceived or real alignment that can call their impartiality into question.
- Projects can empower conflict actors by giving them legitimacy and credibility, providing them with information or supplying them with equipment or skills.
- Community members or staff could be put at risk if they criticise security actors.
- Some implementing organizations may not allow engagement with formal or informal security providers.



### 2.4.3 Best practice for engaging with the security sector

- Security actors can serve as important allies in resilience strengthening by reducing threats and vulnerabilities related to conflict or insecurity. There is no single best way for building relationships with the security sector. Instead, whether and how to engage with them has to be decided on a case-by-case basis. It is important that, once you have decided to build a relationship with security actors, specific time and effort is allocated. Best practices and lessons learned include the following:
- Security actors should be involved from the beginning of the assessment. From a climate-fragility perspective, both formal and informal security actors should be included in the stakeholder engagement phases if possible. It is even more important, however, that the climate-fragility assessment and proposed entry points maintain their impartiality.
- A consultative and constructive approach is required, as opposed to a confrontational one.
- Include the various security actors in the conflict analysis. It is important to understand their positions and interests, how climate fragility is affecting them and how they are affecting climate fragility. Where do they stand in the local context? What are their relationships with community stakeholders? What are their security and justice priorities? Are they already working in the area of disaster risk reduction or similar efforts?
- Understand the weaknesses and challenges that they are facing: Are they engaged on issues of climate fragility? Do they have the equipment and budget that they need for their work? Can that equipment and funding be used for climate resilience actions? Do they have the key skills (including gender, conflict sensitivity and climate-fragility training) to reach out to community members effectively? How diverse is their staff (including women, ethnic or religious minorities, etc.)?

## 2.5 How can a project contribute to conflict prevention and peacebuilding?

Conflict prevention and peacebuilding go beyond conflict sensitivity and try to actively reduce the risk of lapsing or relapsing into conflict, strengthen conflict management, and lay the foundations for sustainable peace and development. Peacebuilding is informed by the understanding that conflict is a process and a normal part of society which can have an important transformative function. It is a long-term process that involves actions on many different levels. In order to address the complex interactions between different drivers of conflict and fragility, it is often necessary to intervene in multiple sectors and on various levels. As an approach, peacebuilding is thus often integrated into sectoral projects and programmes. Any intervention in a context affected by fragility or conflict should at least be informed by the lessons learned from peacebuilding.

Peacebuilding principles:

- Local ownership

- Building trust
- Inclusive approaches, involving all groups
- Long-term commitment

Simple processes and activities that change how people interact with each other can contribute to conflict prevention and peacebuilding. For example:

- Ensure meaningful rather than just nominal participation of groups that are usually marginalised and excluded from decision-making processes; this can be a powerful tool for building social cohesion. This might require building participants' capacity to constructively negotiate positions and articulate their views. Training in negotiation skills could be an action plan point in itself.
- Enable people from conflicting groups to work together by addressing common concerns, grievances or priorities. For example, in projects in water-scarce contexts, setting up water user committees with representatives from across conflict divides might encourage people from conflicting groups to work together.
- Enable conflicting groups to share their local expertise and risk-mitigation mechanisms.
- Design activities in which governance providers such as government officials coordinate and cooperate with communities to build trust and improve relationships: for example, through participation in meetings, having them as advisors, consulting them on the prioritisation of issues, getting their buy-in for action plans, and giving them a role in the implementation of action plans, as well as holding them accountable for the successful implementation of action plans and celebrating successes together.
- Design participatory, consensus-oriented processes.

## 2.6 Approach adaptation holistically

Climate change funding should not be limited to "narrow and technical interpretations of adaptation". Sometimes a non-climate-specific solution will be the most effective intervention to enhance adaptive capacity (e.g., education, conflict resolution). It is important to understand the many dimensions of adaptive capacity. These can vary from system to system, but normally include:

- **Knowledge:** general levels of education and awareness about climate change and its impact
- **Technology:** availability of and access to technological options for adaptation as well as the technological stage of the development of the system
- **Institutions:** covering a multitude of governance, institutional and legal issues. It includes the capacities and efficiency of key institutions, the enforcement of environmental laws, and the transparency of procedures and decision-making. Going further, it can also include accountability and participation practices in ensuring the sustainable management of natural, financial and human resources.

- **Economy:** this incorporates the structure of the national and local economy. It includes the unemployment rate, the sectoral breakdown of economic activity (e.g. agriculture, manufacturing, etc.) and the country's dependence on imported food and energy. At a micro level, it can include household income, food expenditure, housing and dependency rates.

Given that adaptation measures are designed in anticipation of future climate change impacts, they must cope with a high level of uncertainty. A method for overcoming this challenge is the use of 'no regret' measures. These are measures which create beneficial or desirable outcomes both immediately and in the long term even if the projected climate changes do not occur.<sup>37</sup> The insulation of buildings and the repair of leaking pipes are good examples of 'no-regret' measures. Both of these measures provide important cost-benefits even in the absence of climate change. Whether or not a measure can be regarded as 'no-regret' depends on the specific circumstances. For instance, whereas additional reservoir capacity might seem a clearly appropriate response in many regions facing strong (and likely increasing) variability in precipitation, the case for expending high capital costs on such infrastructure might be considerably weaker in hot and arid regions where additional storage threatens to significantly increase losses from evaporation.

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<sup>37</sup> Fritzsche et al. 2014

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## ABOUT THE PROJECT

UN Environment and the European Union (EU) are joining forces to assist crisis-affected countries tackle the destabilizing effects of climate change. The project is designed as a response to the recommendations of the 'A New Climate For Peace: Taking Action on Climate Fragility Risks' report (2015) commissioned by members of the Group of 7. It is one of the first initiatives to take concrete action on climate-security risks at country and community levels.

The four-year project (2017–2021) is financed by the EU's Instrument contributing to Stability and Peace (IcSP). The project is developing a suite of tools for the global, national and local level, as well as piloting practical measures building resilience to climate-fragility risks. The project is partnering with adelphi, one of the leading think tanks on climate security.

This project is made possible by the generous support of the European Union.

**For more information see: [unep.org/climatesecurity](https://unep.org/climatesecurity)**

**Share your experience using the toolbox note at:**

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