# Annex. Enabling an Environment of Peace: Environment of Peace Part 4

These papers were commissioned to inform the research and analysis of the Environment of Peace initiative. They have not been through SIPRI's formal editorial process.

# Contents

# 1. BBC Media Action: *Amrai Pari* Project, Bangladesh 2014–16

Alasdair Stuart

## Project strategy

BBC Media Action's *Climate Asia 2012* study conducted 3500 interviews as well as qualitative research in Bangladesh. The survey analysis determined that Bangladeshis were aware of increasing climate variability and extreme events but did not feel prepared to cope with them:

1. Bangladeshis perceived changes in the climate (such as higher temperatures and lower rainfall), but 45 per cent felt insufficiently informed as to how they could respond.
2. A total of 82 per cent of the population felt it was their responsibility to better prepare for climate change. Yet respondents also felt they lacked the financial resources to act and that the government should support them to do so.
3. People who felt that they could work with their community were also more likely to act or be willing to take action in response to climate change.
4. People felt less able to take action if they did not know anyone else in their community who was responding.

Analysis identified two key drivers of action to address change: (*a*) how at-risk people felt about the impacts of extreme weather, and (*b*) how connected people felt to their communities.

The main barriers to action concerned perceptions of institutional support. In northwest Bangladesh, where there was little NGO support available, communities had a history of taking action on their own in the face of weather disasters. In the southwest of the country, however, an area home to many NGOs, communities were more likely to rely on the support of those NGOs before taking action themselves.

The *Amrai Pari* project sought to help people in Bangladesh to improve their resilience to natural hazards and economic stresses resulting from climate impacts. The project aimed to provide information for individuals and communities to take action without having to wait for the government or NGOs to help them (see figure 1.1).

## Project design

The project took the form of a reality television series—*Amrai Pari* ('Together We Can Do It')—which aired from 2014 to 2016. Television was chosen as the best medium to reach the largest audience, since 86 per cent of the population had access to television at the project outset and most TV outlets broadcast nationally. *Amrai Pari* travelled across the country, filming communities as they worked with local government disaster management committees. Communities were challenged to execute a resilience-related task that they had identified themselves, such as strengthening storm defences in fishing areas.

*Amrai Pari* deliberately featured a range of communities from rural areas and urban locations, as well as women and lower socio-economic groups to resonate with target audiences, showing people 'like them'. The first series concentrated primarily on increasing awareness of the risks of extreme weather. Research after the first series found audiences wanted more information about how to carry out specific resilience techniques and how they could overcome local power barriers. In response, the second and third series focused more on experts explaining practical skills and on following communities as they worked alongside local government and other stakeholders to implement actions responding to longer-term resilience challenges.

In addition to the TV series, the Bangladesh resilience project also incorporated several other media components and partnerships to reinforce content from the programme. This included

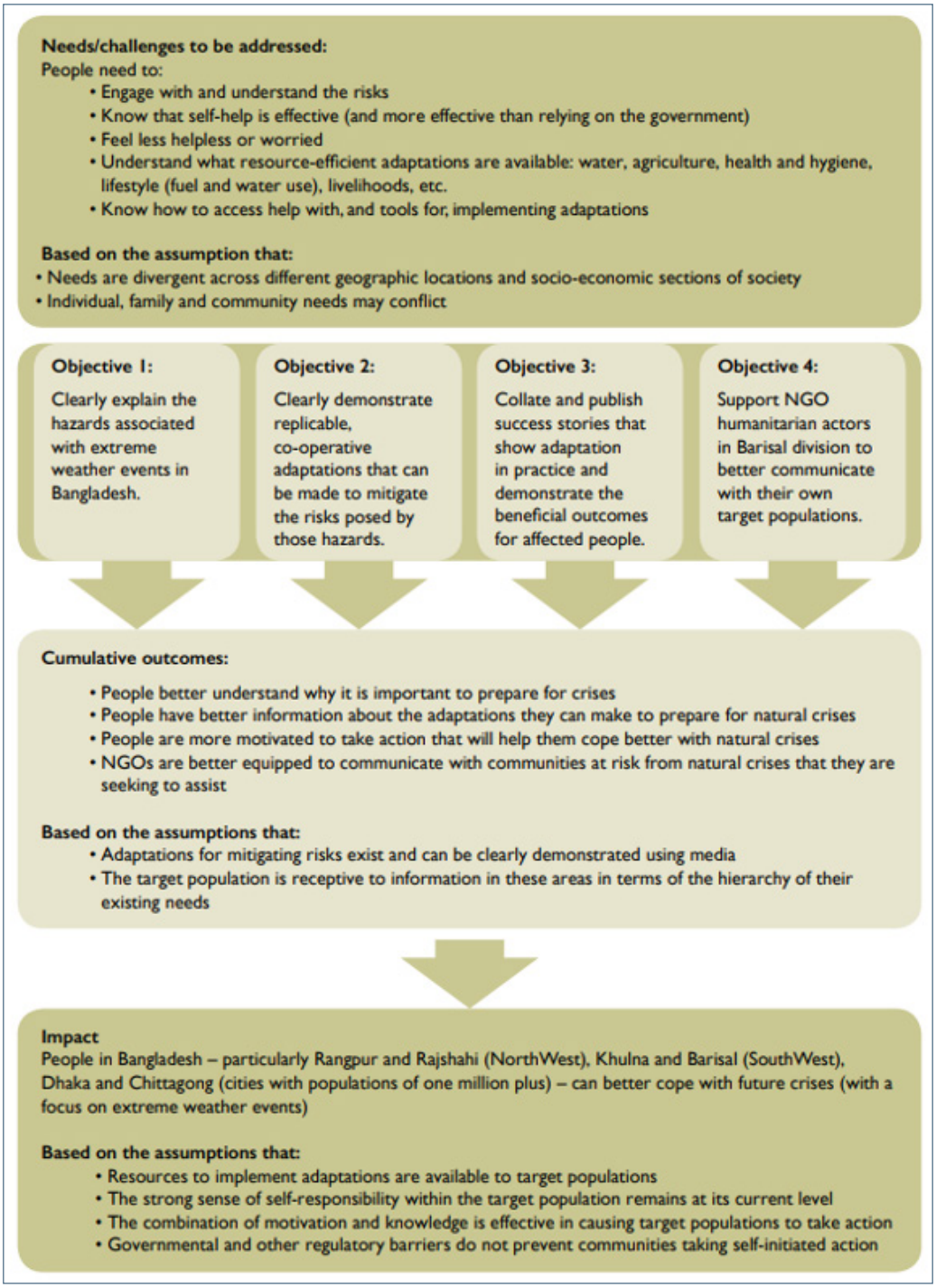


**Figure 1.1.** *Amrai Pari* project: Challenges, objectives, outcomes and impact

*Source*: BBC Media Action.

public service advertisements and announcements on TV and eight radio magazine episodes of *Amrai Pari* to increase awareness of the key issues with a mass audience.

The project communicated three key themes to its audiences: (*a*) The climate is changing, but you can do something about it; (*b*) you don't need expensive solutions and you can take action without government help; and (*c*) you'll be more effective if you do it collectively.

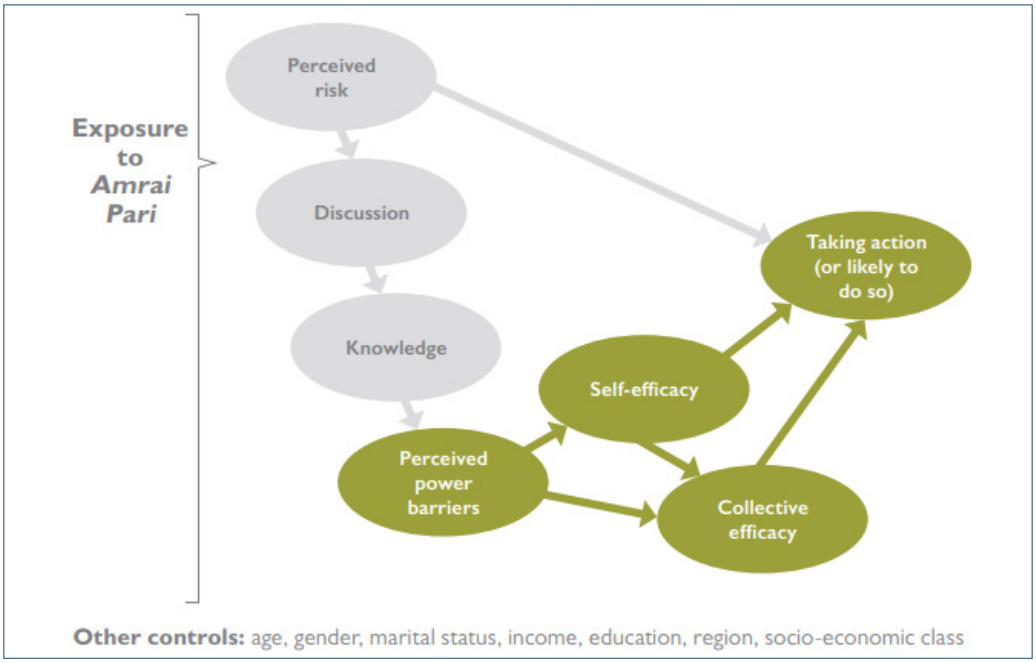


**Figure 1.2.** *Amrai Pari* project impact pathways

*Source*: BBC Media Action.

## Impacts

It is estimated that, over the course of the three-year project, BBC Media Action's resilience programming reached 22.5 million people in Bangladesh cumulatively.

Survey research showed that audience members engaged with *Amrai Pari* because it (*a*) reflected the experiences of people from across the country and dealt with issues that were relevant to their lives; (*b*) contained collective discussion of content from the show, which helped consolidate understanding, validate new techniques, and share ideas. More than a third (35 per cent) of Amrai Pari viewers said that they discussed the programme with others; and (*c*) highlighted the economic benefits of adaptation techniques. Audience members said they felt motivated to try techniques that were easy-to-implement and economically beneficial.

Among *Amrai Pari* viewers, 78 per cent said that the show improved their understanding of how to deal with shocks like cyclones and floods and longer-term stresses. A significantly higher proportion of *Amrai Pari* viewers felt well informed about things they could do to cope with resilience issues (71 per cent) compared with those who had not watched the show (58 per cent).

People who regularly watched *Amrai Pari* were significantly more likely to feel confident that they could take action in their own lives. *Amrai Pari* audiences were less likely to feel that they needed government or NGO support to take action.

People who regularly watched *Amrai Pari* were more likely to have taken action than people who didn't watch the programme. A total of 47 per cent of viewers reported that they took action.

*Amrai Pari* provided information on local governance processes for disaster preparedness and risk planning. Nevertheless, most viewers reported difficulty understanding these more formal processes and structures.

Following conclusion of the project in 2016, research was conducted to understand how *Amrai Pari* contributed to change. Analysis identified two key pathways (see figure 1.2):

1. Awareness of risk: People who regularly watched *Amrai Pari* were more likely to report a higher awareness of risk. This perceived risk was then associated with making simple changes to prepare for adverse weather.
2. Perceived need for government support: People who regularly watched *Amrai Pari* were less likely to feel they needed government support. Increases in the sense of self-efficacy and collective efficacy were in turn associated with small increases in the uptake of resilient behaviour.

# 2. Environmental Interventions in Fragile and Conflict-affected Situations: Lessons for Future Programming

## Geeta Batra, GEF IEO

Conflict and fragility affect environmental programming in diverse ways. The environment can interact with conflict across the conflict lifecycle because natural resources can act as a source of grievances, provide revenues to rebel groups during conflict, and can act as a mutual starting point during peace negotiations. Environmental interventions also interact with conflict and fragility in multiple ways. Challenges associated with security threats to project staff, hiring staff, and accessing project sites can undermine the effectiveness and efficiency of an intervention, and environmental interventions themselves can aggravate tensions or conflict. To ensure the success, sustainability and safety of interventions in these contexts, practitioners and their sponsoring institutions must understand the complex dynamics and manage the risks associated with their interventions. Employing a conflict-sensitive approach to programming can address these risks to ensure that activities, whether they be conservation or humanitarian or others, do not exacerbate or create conflicts but rather contribute to peace, while improving environmental sustainability and other outcomes.

The experiences of the Global Environment Facility (GEF) provide some valuable lessons for environment practitioners. The GEF has invested over $4 billion in areas experiencing armed conflict or fragility, and more than one-third of its global portfolio is invested in countries affected by major armed conflict. A 2020 independent evaluation of GEF-supported programming in conflict-affected and fragile situations revealed a statistically significant negative correlation between countries' fragility classifications and project outcomes, sustainability, monitoring and evaluation (M&E) design, M&E implementation, and execution quality. The absence of a systematic portfolio-wide approach and operational guidance to managing risks have impacted project quality, outcomes, and sustainability. This analysis, which was conducted by the GEF Independent Evaluation Office and the Environmental Law Institute, also demonstrated that a country's fragility classification has a significant impact on whether a project will be cancelled or dropped.[1] A review of the GEF's project documents highlighted several pathways through which conflict and fragility can impact projects (see figure 2.1). These are physical insecurity, social conflict and mistrust, economic drivers, political fragility and weak governance, and coping strategies.

The analysis shows that when practitioners acknowledge and manage the risks posed by a context's conflict dynamics, they can adjust their project's design, implementation and M&E strategies to address existing and potential dangers. Figure 2.2 illustrates the primary risk-mitigation strategies used by GEF-implementing staff: avoidance, mitigation, peacebuilding, and learning. These approaches are consistent with those of other institutions.

Practitioners should start by developing a contextual understanding of the conflict. Conflict-sensitive interventions often begin with a conflict analysis, whereby practitioners gather information on the nature, causes, actors and dynamics of local conflicts alongside other stakeholders. Working with stakeholders, they can then identify entry points for conflict risk reduction and peacebuilding, including making more informed decisions on project investments and partnerships, adapting benefit distribution mechanisms, incorporating lessons learned from similar settings or past interventions, and designing localized dispute resolution mechanisms.

Once practitioners have built fluency with local conflict dynamics, they can proceed to design their projects around this understanding. Practitioners can use a variety of strategies, including

[1] Independent Evaluation Office of the Global Environment Facility, 'Evaluation of GEF support in fragile and conflict-affected situations', GEF/E/C.59/01, Global Environment Facility, 2020.

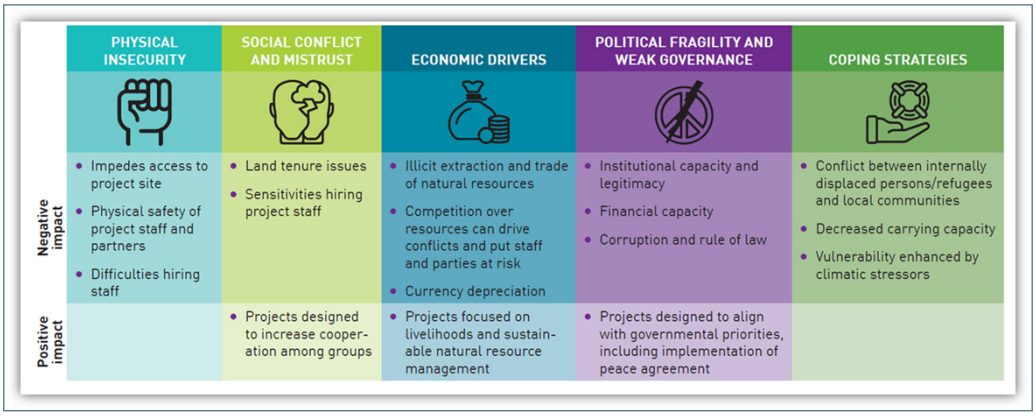


**Figure 2.1.** Key pathways through which conflict and fragility affect GEF projects

*Source*: Global Environment Facility.

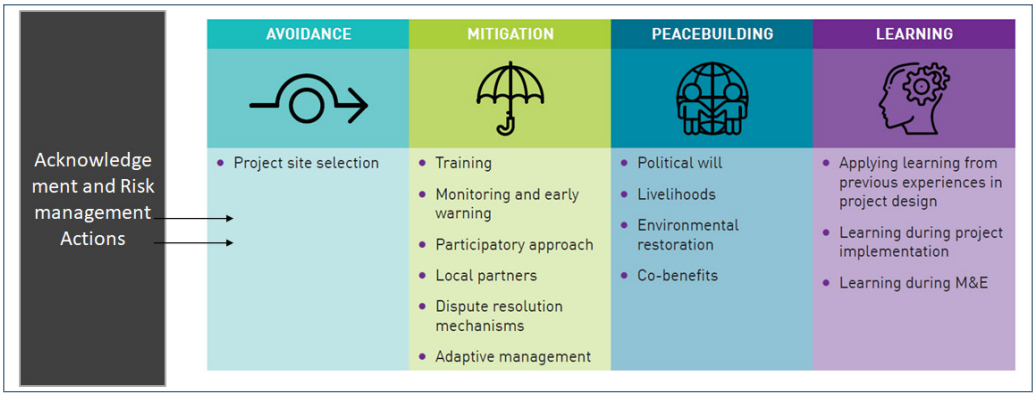


**Figure 2.2.** Risk management strategies

*Source*: Global Environment Facility.

those exhibited in figure 2.2, to mitigate risks and maximize peacebuilding outcomes. At this stage, practitioners can also benefit from building flexibility into their implementation plans, M&E strategies, and budgets. By preparing contingency scenarios and setting aside emergency funding, practitioners anticipate volatility and minimize conflict-related impacts to their work.

## Lessons

To integrate conflict-sensitive practices into an organization's culture, management needs to provide the guidance, policies, safeguards, training, resources and follow-up required to support staff in conflict-sensitive programming. For funders, standardizing conflict-sensitivity measures into funding decisions can help ensure the uptake of these strategies, beginning even at the project proposal stage. Proposals can, for example, include a conflict analysis, a discussion of risk mitigation strategies, and the incorporation of conflict sensitivity into M&E frameworks and budgets. This will help ensure that implementers are prepared for conflict dynamics and situations. Interviews conducted with GEF-implementing staff revealed that difficulties obtaining funds for conflict and fragility-related contingencies presented challenges in handling crises as they erupted. Therefore, ensuring that institutional budgeting practices allow additional funds for conflict-related challenges and emergency preparedness could improve both project flexibility (and thus success) and staff safety. Incorporating adaptive management into policies and procedures could provide a more flexible and adaptive environment, enabling projects to adapt more quickly and more efficiently to changes resulting from conflict or fragility, as well as other difficult situations.

Conflict-sensitive measures could also be included in the environmental and social standards. Many organizations, including the GEF, have environmental and social safeguards to avoid, mitigate and minimize the adverse environmental and social impacts of developmental projects. However, additional safeguards tailored to address conflict and fragile situations could help to ensure that projects both cause no harm while continuing to support local communities and meet environmental objectives in FCS contexts.[2]

[2] For further information see e.g. Independent Evaluation Office of the Global Environment Facility, *Evaluation of GEF Support in Fragile and Conflict-Affected Situations* (Global Environment Facility: Washington, DC, 2020).

# 3. How Cities Are Responding to the Climate Crisis

Blaze Horn

The pressure of urbanization combined with persistent economic instability and the growing threat of global climate change has created various new political, economic and social challenges for cities. From traffic congestion and air pollution, to population segregation, economic stagnation and crime.[1] The Covid-19 pandemic has magnified these cross-cutting injustices and opened up discussions as to the best pathways (political frameworks) for guiding and implementing the necessary changes.

Traditional urban management, with the government acting as the principle regulator, has been criticized for weakening the autonomy and ability for society to self-adjust.[2] Stability can be achieved in the short term, but the root cause(s) must be considered first, if an 'environment of peace' is to be truly achieved.[3]

'Flexible Governance' promotes constant learning—'Learning WHILE doing'—which requires creativity and speed.[4] It aims to build a governance form characterized by the participation, cooperation and joint governance of diverse subjects.

## Application of the concepts: C40

C40 is an example of such an approach.[5] Cities and local governments have become leaders in climate emergency declarations,[6] and C40—a network of mayors of 97 world-leading cities—has been at the forefront of the climate conversation for over 15 years.

As noted by Sadiq Khan, Mayor of London, 'Our cities can harness the ingenuity of the human spirit to help conquer the threat of global warming, and in doing so we will be able to fashion a new world after the pandemic that has as its guiding principle equality, fairness and justice for both the global north and the global south, a new world that is fit for our children and grandchildren, a new world that we can all be proud of'.

Using the Global Green New Deal (launched in 2019) as their 'blueprint' for halving the member cities' emissions, mayors are working alongside a broad coalition of representatives from labour, business, the youth climate movement, and civil society to deliver the urgent action required to confront the climate crisis.[7] The sharing of knowledge between not only industries but also cities and countries can help address a range of cross-cutting climate issues, from water, to energy, to transportation and food systems, much more quickly than if tackled alone.

## The DK2020 Project

The DK2020 Project, inspired by C40's Deadline 2020 project, sets a global framework for how cities and municipalities can contribute to achieving the objectives of the Paris Agreement see (figure 3.1).[8] In 2019, a total of 20 municipalities were invited to take part in the pilot project, and as of September 2021, the number of Danish municipalities that have signed up to contribute

[1] Jiang, H., Geertman, S. and Witte, P., 'Smart urban governance: An alternative to technocratic "smartness"', *GeoJournal*, vol. 87 (9 Nov. 2020).
[2] Peng, C., 'Flexible governance vital to modern urban management', Chinese Social Sciences Net, 2021.
[3] Peng (note 2).
[4] Peng (note 2).
[5] C40 Cities, 'About C40', C40 World Mayors Summit 2019, accessed 2 Nov. 2021.
[6] Rode, P., *Climate Eemergency and Cities: An Urban-led Mobilisation?* LSE Cities Discussion Papers (London School of Economics: London, 2019).
[7] C40 Cities (note 5).
[8] C4O Cities, '94 Danish municipalities will develop ambitious climate action plans', Press release, 27 Sep. 2021.

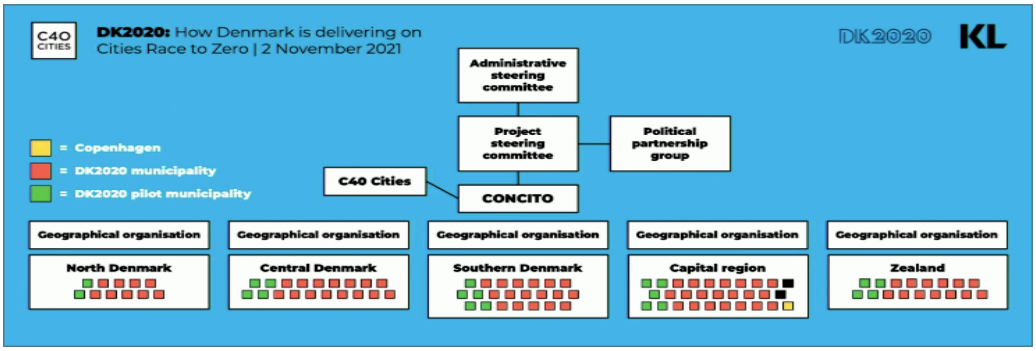


**Figure 3.1.** Structure of DK2020 Project

*Source*: C40 Cities.

was 94. Mark Watts, Executive Director of C40 Cities, said, 'These 94 Danish municipalities are once again setting the pace for towns and cities around the world, by developing highly ambitious climate action plans'.[9]

## Application of DK2020 Project to Canada[10]

During the C40 Cities event at COP26, panellists, including Antha Williams from Bloomberg Philanthropies and Eric St-Pierre from the Trottier Family Foundation, discussed how the DK2020 project model could be applied on a global level. It is a living example of the power of the tools created by C40 Cities, and the model provides a good example of how they can be applied. The city of Montreal is considering how the DK2020 model can be applied to help them meet their net-zero goals.

## 'Breathe London' to 'Breathe Global'

The Breathe London network is run by the Environmental Research Group at Imperial College London. The Breathe London network offers affordable, easy-to-install and maintain air quality sensors to Londoners, and the data is used to map and monitor air quality around London.[11] Due to the project's success, it has been expanded to 'Breathe Global' and will be supported by C40 Cities.

## Open dialogues between cities

During a bilateral EU–China meeting, held on 24 March 2021, European and Chinese city leaders explored a local approach to the renewed Sino European bilateral cooperation since the EU and China announced their latest climate targets. Discussions were held over mutual objectives and challenges for rebuilding cities and economies in a way that improves public health, creates jobs, reduces inequality and accelerates climate change action. They committed to mutual efforts to ensure a green and inclusive recovery and to deliver their 2030 and net-zero emission targets in line with the objectives of the Paris Agreement. Such dialogues, aided by the C40 Cities committee, demonstrate the importance of bilateral communication tools.[12]

[9] C40 Cities (note 8).
[10] C40 Cities, 'Our last, big chance: Why our future depends on action taken today in the world's cities', Webinar, accessed 3 Nov. 2021.
[11] Breathe London, 'About the Breathe London network', accessed 4 Nov. 2021.
[12] C40 Cities, 'Mayors from China and EU discuss new approach to EU–China cooperation on climate change', accessed 2 Nov. 2021.

# 4. The Dilemma of Green Transition and Security in the Democratic Republic of Congo: Which Way Forward?

## Robert George

The Democratic Republic of Congo (DRC), the second largest country in Africa with a size of 2345 million square kilometres, is geographically equal to the entire Western European landmass. The country is endowed with highly coveted potential for a green transition, which can ultimately contribute to transforming the negative effects of climate change and its impact on global and regional peace and security. The Congo Basin is home to the world's second largest rainforest after the Amazon. It covers 180 million hectares, two-thirds of which are in the DRC.[1] The Congo Basin plays an important role in slowing down global climate change because the forest absorbs greenhouse gases, which keeps them from being released into the atmosphere. The Congo River is the second longest river in Africa after the Nile, and with greater water flow than the Nile—a clear pointer to the country's water resource endowment. If fully developed, the Grand Inga Dam situated along the Congo River would become the largest hydropower project in the world at 40 GW and could generate twice as much as the Three Gorges Dam in China.[2] With an estimated generation cost of $0.03 per kWh, the hydroelectric dam would also be one of the most affordable sources of eco-friendly energy in Africa and could theoretically provide 40 per cent of Africa's electricity needs.[3] This means that other countries which rely heavily on non-renewable energy resources such as fossil fuels could explore alternative potentials by tapping on the DRC's great, eco-friendly energy capabilities.

Worth noting, the DRC—together with other countries in the region that are part of the Congo Basin, including Cameroon, Central African Republic, Congo, Equatorial Guinea and Gabon, in collaboration with other international actors—have undertaken conservation policy measures such as reforestation, creating reserves to protect indigenous species, fighting deforestation et cetera. However, despite efforts undertaken, these measures have sometimes been impacted negatively by the heavy reliance on extractive economies coupled with weak governance systems in these countries.

The DRC is also endowed with significant mineral reserves such as diamond, cobalt, uranium, gold, lead, tin, lithium, manganese, nickel, coltan, petroleum and copper, some of which are the largest reserves in the world, offering a huge potential for green transition.[4] In particular, the country holds more than 70 per cent of the world's cobalt production—an important metal for the manufacture of electric batteries for vehicles. Therefore, it has become the epicentre of competition as major global automakers commit to battling climate change by transitioning from gasoline-burning vehicles to electric battery-powered ones.[5] During the DRC-Africa Business Forum held from 24–25 November 2021 in Kinshasa, the Congolese Government policy statement outlined the plan to develop a global green value chain in view of its possession of all the rare earth minerals required to make electric batteries.[6] Batteries containing cobalt reduce overheating in electric cars and extend their range, but the metal has also paradoxically become known as 'the blood diamond of batteries' because of its high price and the complex insecurity conditions which characterize mining in the DRC.[7]

Despite the significant potential for a green revolution, the conditions of insecurity in the DRC pose challenges in the quest for promoting an environment of peace at global, continental and

[1] Alexandrowicz, L., 'Rainforests in the DRC: "A solution" for climate change', Euronews, accessed 11 Dec. 2021
[2] International Hydropower Association (IHA), 'Country profile: Democratic Republic of the Congo', accessed 11 Dec. 2021
[3] IHA (note 2).
[4] United States Geological Survey (USGS), *2016 Minerals Yearbook* (USGS: Reston, VA, revised Aug 2021), 'Congo (Kinshasa)'.
[5] Searcey, D., Forsythe, M. and Lipton E., 'A power struggle over cobalt rattles the clean energy revolution', *New York Times*, 20 Nov. 2021.
[6] Bukakera Tshiamala, S., 'Mines: The DRC has everything to become a champion of electric cars', Jeune Afrique, 10 Dec. 2021.
[7] Searcey, D. and Lipton, E., 'Hunt for the "blood diamond of batteries" impedes green energy push', *New York Times*, 29 Nov. 2021.

country levels. Noteworthy, the DRC is the fifth most fragile country in the world, according to the Fragile States Index 2021,[8] characterized by deep political, social, economic and environmental vulnerabilities which fuel armed conflicts. Historically, the DRC was the setting for some of the continent's deadliest civil wars, from 1996 to 1997 and from 1998 to 2002. Currently, according to the Kivu Security Tracker, there are over 100 armed militias operating in mineral resource-rich Eastern Congo.[9] The past civil wars,[10] as well as the ongoing activities carried out by armed groups largely engage on illegal exploitation of mineral resources such as gold, diamond, cobalt and coltan to sustain the economy of conflict, as the minerals find exit routes to global supply chains, including in countries which are signatories to the Paris Climate Accords. In effect, these minerals sourced from armed conflicts have reinforced weak governance systems and local grievances, resulting in cyclical violent conflicts. As a result, natural resource conflicts have posed risks on the livelihoods of the population, which include youths conscripted into armed groups; women taken as spoils of war; and the destruction of socio-cultural and economic derivatives of the ecosystem for indigenous communities such as the Pygmies. To capture this predicament, a Pygmy living in South Kivu forest reported that 'they cut down our medicinal trees and, with them, the bark and fruits used for our medical treatments. They cut down our caterpillar trees, our oil trees.'[11]

Moreover, because of the strategic reserves of natural resources, the DRC has historically become the centre of geopolitics due to competition for access and control of each of its large reserves through mining concessions. The recent surge in the power struggle between the United States and China over the control of cobalt in the Congo for the production of electric vehicles is an illustrative example of the counterproductive nature of the quest for clean energy revolution, which fuels tensions.[12]

The above paradoxical dynamics suggest that despite the huge potential of the DRC in contributing to green transition, the level of insecurity challenges impede the access and use of its natural resources in a manner that fosters a sustainable environment of peace. The ongoing armed conflicts as well as budding geopolitical tensions heighten the risks for environmental protection, with detrimental effect to human security in the DRC and the Great Lakes region. Building on existing initiatives, the following multi-pronged, policy-oriented recommendations are therefore proffered in order to ensure that the DRC plays a role in the green transition without undermining prospects for peace and security:

1. Enhance and sustain an inclusive policy and dialogue approach towards green transition in the DRC which is not only green-economy focused but also addresses the social inclusion of communities, especially those significantly affected by exploitation of minerals and land use, including women, youths and indigenous communities such as the Pygmies. This has the potential for promoting inclusive growth that fosters peace and sustainable green transition;
2. Strengthen integration of conflict resolution strategies of long-standing peace and security challenges, especially the numerous armed groups in the Eastern Congo involved in mineral conflicts, into the overall policy strategy on conflict-sensitive green transition; and
3. The DRC Government should leverage its unique position as the major global supplier in clean energy resources to influence policy commitment by other global players on green transition through fostering stringent policy regime in developing and implementing green energy value chain.[13]

[8] Fiertz, N. et al., *Fragile States Index 2021: Annual Report* (Fund for Peace: 2021).

[9] Kivu Security Tracker (KST), 'Armed groups', Congo Research Group and Human Rights Watch, accessed 11 Dec. 2021

[10] Vogel, C., 'The politics of *incontournables*: Entrenching patronage networks in eastern Congo's mineral markets', *Review of African Political Economy*, vol. 48, no. 168 (2021), pp. 1–18; Vircoulon, T., 'Behind the problem of conflict minerals in DR Congo: Governance', International Crisis Group, 19 Apr. 2021; and United Nations, Security Council, 'Plundering of DR Congo natural resources: Final report of the Panel of Experts (S/2002/1146)', UN document, Reliefweb, 16 Oct. 2002.

[11] Gauthier, M. and Pravettoni, R., 'Clashing over conservation: Saving Congo's forest and its Pygmies', *The Guardian*, 30 Aug. 2016.

[12] Searcey, Forsythe and Lipton (note 5).

[13] Examples of similar initiatives include the Kimberley Process in South Africa as well as the Dodd Frank Act in the United States.

# 5. The Frexus Project: A Response to Resource Conflict in the Sahel Region

**Alexandre Mesnil,[*] Abdou Boko Boubacar,[**] Jakob Seidler[***] and Cécilia Vey[****]**

## Improving security and climate resilience in a fragile context

The Sahel region has experienced a deterioration of its security situation over the last decade, with a steep rise in armed conflict through the presence of rebel groups and terrorist activities. At the same time, reduced access to natural resources plays a major role in tensions between communities. The Sahel has been declared by the Intergovernmental Panel on Climate Change (IPCC) as being one of the most vulnerable regions to climate change worldwide. With a rapidly growing population, currently estimated at more than 150 million inhabitants, whose revenues depend mainly on agriculture and livestock, Sahelian countries face growing pressures on water, land and energy resources, exacerbated by climate change and leading to competition and conflict between different user groups.

### *Project overview and development*

The Frexus project, currently operating in Niger, Mali and Chad aims to work towards a peaceful resolution of social tensions and conflicts in fragile areas between population groups which are caused or exacerbated by the negative effects of climate change. The project works towards a more conflict- and climate-resilient management of land, natural resources and ecosystems in the targeted communities at local, national and transboundary levels. The integrated Nexus approach adopts inter-sectoral management of water, land and energy resources to mitigate negative effects between these sectors and their respective user groups and promotes climate resilience and sustainable resource management. As such, the Frexus project aims to enable authorities and communities in fragile areas facing the consequences of climate change impacts to address these issues in a peaceful, cooperative and integrated manner. The project is co-financed by the European Union (EU) and the German Federal Ministry for Economic Cooperation and Development (BMZ) and is implemented by GIZ. The core objective sets out to develop peaceful resolution of social tensions and conflicts between population groups that are caused or exacerbated by climate change in fragile areas (i.e. the three aforementioned states within the Sahel region). The project works closely with the sector ministries of the three countries, as well as with its regional partners, the Niger Basin Authority (NBA) and the Lake Chad Basin Commission. Beginning in January 2019 (with the completion date set for June 2023), the Frexus project has been sectioned into three core phases: diagnostic, action plan development, and implementation.

In order to facilitate the implementation of the Frexus project, local climate risk assessment studies as well as systemic conflict analyses have been conducted within the intervention zones to help identify how climate change risks impact human security and natural resources and the related existing and potential conflicts.

In addition to this, analytical tools have been developed in cooperation with the Water Peace and Security Partnership (WPSP) to assess the links between natural resources, climate change impacts, and conflicts. The first being the global analytical tool, used for predicting emerging conflicts during a 12-month period. The second being the local analytical tool—still in the development stage—for assessing the links between resource scarcity, governance, climate change impacts

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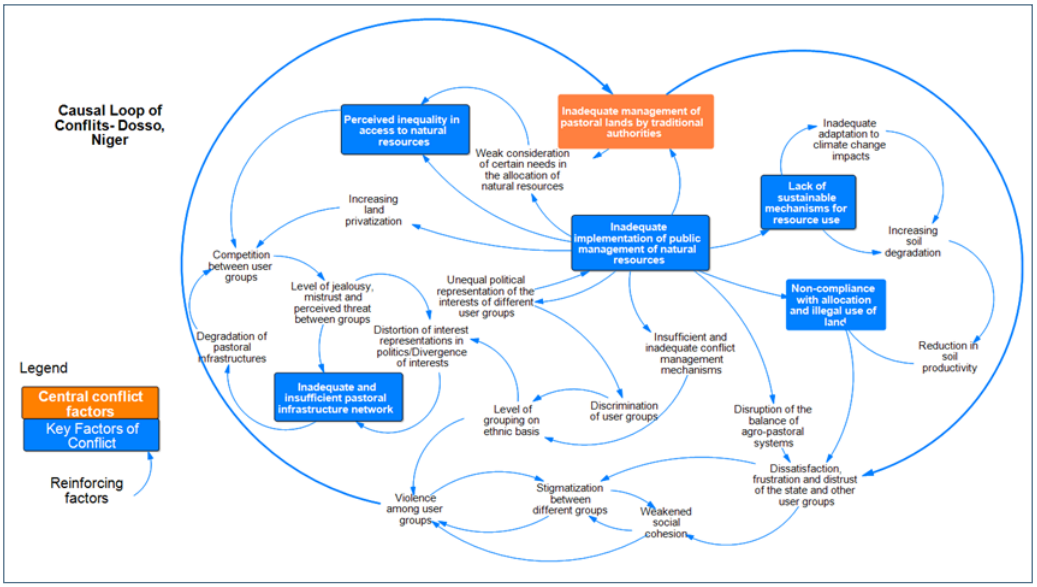


**Figure 5.1.** Regional Causal Loop: Dosso, Niger

*Source*: Frexus project.

and the onset and escalation of conflicts. It is co-developed with local stakeholders to help tailor the tool to the local situation. It will be tested locally and applied in the intervention areas. Special attention will be paid to the most vulnerable populations (women and youths). The local tool aims to integrate the climate risk assessment and conflict analysis studies to establish a local resolution of natural resources management. The following section highlights the ongoing development of the local analytical tool within a pilot area.

## Peace building in the Sahel—the case of Dosso, Niger

The Dosso region of Niger has been identified as one of three pilot project areas, as it is subject to high conflict over natural resources and access to pastoral land. The study, coordinated by Abdou Boko Boubakar (technical advisor to the Frexus project in Niger), set out to understand the key factors and dynamics of conflicts in the region and determine possible peace drivers as a form of conflict mitigation.

### *Methodological approach*

To ensure the validity of the results, the study adopted a three-step methodological approach. The first being a series of interviews and focus groups of identified key actors of the conflicts at the local, regional and national levels to exclude the possibility of 'invisible parties'. The second examines the local realities and hardships. Lastly, presenting the findings through a validation workshop will highlight any concerns, gather feedback from various stakeholders, and establish recommendations.

The national level (Niamey) saw the inclusion of Civil Society Organizations (CSOs), as well as traditional and administrative authorities. The regional level (Dosso) also saw the participation of CSOs, and traditional and administrative authorities, but with the inclusion of technical ministries (agriculture, water, environment). The local level (Farrey and Karrel) sought to include individual actors (farmers, pastors, youth and women organizations).

### *Regional and local level findings*

At the regional level, a causal loop of conflicts has identified the inadequate management of pastoral areas by traditional authorities as the Central Factor of Conflict (CFC). Multiple sub-factors have been found to exacerbate the CFC, namely a lack of sustainable mechanisms for resource use; the inadequate implementation of the public management of natural resources; a

**Table 5.1.** Peaceful resolution of conflict in the Karrel Pastoral Area

| Key actors | Key peace drivers |
|---|---|
| Rural code commission | Use the legal framework of the rural code to negotiate with stakeholders. The support of political actors could improve the understanding and outcome of the negotiation. |
| Local traditional authorities | Put in place conflict resolution mechanisms at the local level to prevent the escalation of conflicts, provide a channel to political or traditional authorities for widespread conflict resolution, and impart knowledge about access to justice. |
| Local administrative authorities, farmers, and pastors' unions | Examine if the well construction should not be limited first to Karrel, but also to the unsecured pastoral areas of the Sambéra plateau, in order to avoid a concentration of all the livestock of the region in Karrel and thus address the concerns of farmers. |

non-compliance of land allocation and use; inadequate and insufficient pastoral infrastructure network, and lastly a perceived inequality of access to natural resources, leading to competition between user groups (see figure 5.1).

At the local level, within the Farrey pastoral area, the main source of conflict emerges between farmers and breeders, seeing pastoral land being occupied by farmers as hindering breeders. The CFC has been identified as local farmers aiming to maintain their relative dominant societal position. The CFC is exacerbated by the insufficient protection of pastoral areas, a low acceptance of land legislation and regulations by traditional authorities, and the questioning of the vocations of pastoral spaces recognized by the regional legal framework (*Schéma d'Aménagement Foncier*, SAF). Within the Karrel pastoral area, the source of conflict stems from a lack of pastoral infrastructure (hydraulic infrastructure in particular) identified as the CFC. The latter is exacerbated by the pastoral infrastructure of the farms being damaged by livestock.

### *Solutions identified within the Karrel Pastoral Area*

Key peace drivers and peacebuilding actors have been identified to mitigate the negative impacts stemming from the lack of pastoral infrastructure (see table 5.1).

Upon sharing the results of the conflict analysis with the various stakeholders, a series of recommendations were voiced to strengthen the resolution process. Namely, the establishment of an ad-hoc committee, a deeper analysis of all actors and their level of implication, and finally the preservation of the inclusive and participatory nature of the dialogue between the conflict actors.

## The interconnectivity of compound climate fragility and conflict risk

As the Frexus project moves out of the diagnostic phase and into the action plan development phase (and implementation) over the next 18 months, the aforementioned solutions will guide the development of locally tailored action plans to best serve the local communities within the Farrey and Karrel pastoral areas of Niger. A series of workshops will be conducted in each intervention area to finalize the respective local tools. This is to establish mitigation strategies in a participatory manner with all concerned stakeholders in the Dosso region, improve the security, and mitigate ongoing conflicts surrounding the natural resources available.

Although it is widely accepted that climate change increases the risk of conflict, the complex and context-based nature of the problem makes it impossible to adopt a 'one-size fits all' solution. As such, the Frexus project aims to tackle the negative effects of climate change on a context-specific basis. Adapting the local analytical tool to specific cases, communities and conflicts will ensure a tailored assessment of the root cause of conflict. In the long term, such tools and approach may be transferred to other countries or regions beyond that of the pilot areas, where conflict is worsened by climate change, to provide sustainable development opportunities. Integrated and intersectoral resource planning and management can provide people, communities, regions and countries with the means to mitigate current potential negative impacts of the use of resources by one group or sector on another while facing the challenges of climate change.

# 6. The Global Resilience Partnership: 'Seeds of Resilience for Peace and Stability'

Albert Norström and Cibele Queiroz

Many of the positive examples of actions that help societies achieve global goals of sustainability and development come from local stakeholders. These 'bright spots' of innovative action can challenge dominant ways of doing things and contribute to transformative resilience in systems that are strongly locked into negative trajectories. In states or regions undergoing violent conflict, typical top-down interventions at the national scale are often ineffective or insufficient to build resilience and sustain peace. These challenges have animated a recent shift in focus by many non-state actors towards supporting local actions using innovative approaches to strengthen community resilience and bolster their transformative capacity towards peacebuilding.

The Global Resilience Partnership's (GRP)[1] 'Seeds of Resilience for Peace and Stability' project explores whether these local initiatives have the potential to contribute to transformative change and new resilient pathways towards peacebuilding. The GRP brings together some 60 NGOs and development-, humanitarian- and academic organizations to generate knowledge and share policy experience in order to identify and scale up effective on-the-ground innovations.

Through a collaborative process of knowledge co-production with several GRP participants, the Seeds project has so far identified and analysed 13 of these promising local initiatives in 8 countries. Several highlight how a strong focus on the sustainable and collaborative use of natural resources can be an effective entry point to conflict resolution and contribute to transformative change towards peacebuilding. Two such initiatives are highlighted in the following sections.

## The Program to Support Food Security and Resilience to Climate and Social Crises (PASARC) in Mopti, Mali

Mali's Mopti Region has been deeply affected by the conflicts and humanitarian crises that followed a 2012 coup d'etat and occupation by rebels and jihadists. Despite a 2015 peace agreement, insecurity and instability have persisted. Localized conflicts over natural resources have long occurred, but they have become more frequent and violent. Such conflicts often arise along socio-professional and ethnic lines, as herders, farmers and fishers share resources and navigate contending seasonal resource availability and demands. The ongoing armed conflict and instability in Mali has deepened pre-existing divisions at the regional and local levels, eroding trust among social groups and challenging traditional institutions that historically helped negotiate competition. At the same time, shifting rainfall patterns and more frequent and intense droughts have contributed to exacerbating resource scarcity and food insecurity across the region.

The PASARC program is an initiative implemented since 2012 by the Near East Foundation in the Mopti region. Using sustainable and collaborative management of natural resources as an entry point to build trust among diverse stakeholders, this initiative has provided integrated support for food production, livelihoods and conflict management to local populations in 42 communes. The project actively contributes to several key dimensions of a transformative change process, such as fostering relationships and collaboration among different actors, promoting learning and the generation of new knowledge and skills, and shifting existing power dynamics.

In the communes targeted by the PASARC program, collaborative income-generating projects and natural resources management investments serve to restore or improve shared resources. Such community initiatives include demarcating transhumance corridors to delineate between

[1] Global Resilience Partnership, <www.globalresiliencepartnership.org>.

land for crops and livestock uses; developing water points for livestock; rehabilitating wetlands that are used for fishing, fodder and food; and planting economically important trees in market gardens. These investments support livelihoods and food security, mitigate the consequences of resource scarcity and environmental degradation that can fuel or exacerbate existing conflicts, and engage diverse stakeholders in cooperation to resolve shared problems and seize common opportunities.

Participatory development of governance tools such as local resource-use conventions and land-use management plans promote the collective stewardship of shared natural resources. At the commune level, PASARC has created and trained learning and dialogue groups to facilitate inclusive decision-making and conflict resolution (approximately 60 per cent of conflicts during the project period were addressed by these organizations). These institutions and tools have in turn contributed to shifts in established power dynamics and norms.

The Near East Foundation also supports communities and local authorities in a process of intercommunal consultation, planning and integrated water resource management—leading to a decrease in conflicts around water use. Training sessions, multi-stakeholder dialogues, and radio broadcasts were also used to increase public awareness around the causes of conflict and local capacities for mitigation, and to reach a new shared understanding on potential solutions and ways forwards.

Together, these interventions have led to a measurable reduction in conflicts related to natural resources in the Mopti area, alongside an increase in food security. Importantly, the initiatives acknowledge the interdependencies between environmental degradation, social-ecological resilience and disputes around natural resources management, and are promoting positive change in the region by working at the intersection of these factors.

## The Strengthening Resilience and Inclusive Governance (STRENPO) project, Uganda

Uganda offers another example of effective innovation. In Uganda, refugee policy seeks to promote refugee integration rather than confinement. In the Arua district in the Northwest part of the country, several refugee settlements co-exist with host communities. The land is often acquired by the state from the host communities for the specific purpose of hosting refugees and integrating them with local populations. Although this is a quite progressive policy, tensions and conflicts between refugees and the host communities are common, fuelled by competition over access, compounded by the frequently unsustainable use of natural resources.

Focusing on fostering the environmental resilience of local communities, the Strengthening Resilience and Inclusive Governance (STRENPO) project implemented by CARE International has successfully contributed to conflict mitigation and resolution. Here, both host and refugee communities fell trees to produce charcoal and bricks, contributing to deforestation. This produces a detrimental circular dynamic. Host communities suffer reduced capacity to manage droughts (since soils dry faster without tree cover), and refugee shelters are more exposed to strong winds and soil erosion in the absence of trees. The increase in exposure to climate impacts, and a reduced adaptive capacity, in turn exacerbate resource competition, aggravating social tensions to fuel a momentum of conflict.

The STRENPO initiative is developing Community Adaptation Plans to support local refugee and host communities in increasing their resilience to climate change and the sustainability of their natural resources' management. STRENPO thus contributes to breaking some of the circular dynamics that both spur existing tensions and generate new sources of conflict.

To develop the plans, the program applies Climate Vulnerability and Capacity Analysis as a tool to gather and analyse information on community-level vulnerabilities to climate risks and capacities for adapting to climate change. Under this approach, facilitated focused group discussions enable participants from both host and refugee groups to consolidate their knowledge about changes in climate, critical resources, hazards experienced, power dynamics (including barriers to adaptation), available institutional resources, and potential adaptation strategies. This process itself strengthens adaptive capacity and resilience by increasing access to information and knowledge, contributing to new shared understandings, trust-building, and collective action.

In exploring such policy innovations, Seeds of Resilience for Peace and Stability has several ambitions. By examining local and regional 'seeds' that are actively contributing to peacebuilding, the project aims to identify innovative approaches that have the potential to contribute to transformative action towards sustainable peace in fragile contexts. Collecting information on these 'seeds' will provide a knowledge base to assess their key features and synthesize lessons as to where and how they can be nurtured, scaled, and contribute towards sustainable peace. Armed with this evolving catalogue of positive practice, the Seeds project will work closely with local and regional stakeholders, as well as international partners, to communicate findings and embed them in initiatives where there are direct resilience-building and peace-building investments and transformation efforts. In this way, the Seeds project seeks to become a participatory and adaptive learning platform, engaging stakeholders, decision makers and practitioners across the policy community to sketch out potential transition pathways towards sustainable peace.