

# THE CONTRIBUTION OF VOLUNTEERING TO CLIMATE ACTION AND COMMUNITY RESILIENCE



Published in March 2024

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Platz der Vereinten Nationen 1, 53113 Bonn, Germany

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Editing and layout design: Phoenix Design Aid, Copenhagen, Denmark

### Acknowledgements

We would like to thank the following people who participated in interviews, contributed valuable information on the projects featured in this report and/or reviewed the draft text: Prof. Matt Baillie-Smith, Northumbria University; Hannah Reid, independent expert on climate change and development; Javier Brolo, United Nations Development Programme; Juan Pablo Rustrián, fomer UN Youth Volunteer; Jaqueline Hernández, former UN Community Volunteer; Pablo Dourojeanni, Norwegian Agency for Exchange Cooperation; Lawrence Mashungu, United Nations Framework Convention on Climate Change.

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## **ACRONYMS**

CBA community-based adaptation

CCA Common Country Analysis

CCCF County Climate Change Fund

CPP Cyclone Preparedness Programme

COP Conference of the Parties

IFRC International Federation of Red Cross and Red Crescent Societies

IPCC Intergovernmental Panel on Climate Change

LDC least developed countries

LLA locally led adaptation

NAP National Adaptation Plan

NDC Nationally Determined Contribution

NGO non-governmental organization

NSA National Situation Analysis

SDG Sustainable Development Goal

UNDP United Nations Development Programme

UNEP United Nations Environment Programme

UNSDCF United Nations Sustainable Development Cooperation Framework

UNFCCC United Nations Framework Convention on Climate Change

UNGA United Nations General Assembly

UNV United Nations Volunteers programme

VNR Voluntary National Review

WCCPC Ward County Climate Planning Committees

### **EXECUTIVE SUMMARY**

Across the world, climate change is impacting people's lives and transforming ecosystems. The climate crisis is a humanitarian crisis. In the last five years, 1.59 billion people have been affected by climate and weather-related disasters; as a result, around 130 million people have been internally displaced.¹ Aside from the immediate impacts, climate change also brings slow-onset impacts, affecting food security, livelihoods and economies.

There is a need for urgent climate action across three dimensions: mitigation to cut carbon emissions; adaptation to reduce climate risks; and loss and damage to address unavoidable climate risks and limits to adaptation. Volunteer interventions at local and global levels continue to drive environmental outcomes and climate action, whether through spontaneous community-based actions or highly specialized support at the global level.

This report provides evidence of how volunteers across the world are engaging in actions that help their communities adapt to – and build resilience against – the impacts of climate change. It looks at the different forms and scales of volunteering, with a focus on local volunteering.

Volunteerism comes in many forms and contributes in multiple ways to respond to climate change and build community resilience. This study presents four key contributions of volunteers to climate action and community resilience: knowledge and capacity-building; disaster preparedness and response; implementation of mitigation and adaptation measures; and climate governance. Gender and youth appear as cross-cutting themes, recognizing the critical role of young people and women in climate action and the need for gender- and age-inclusive volunteerism to achieve climate justice.

This study intends to provide a guide for local volunteering efforts on climate action and support policymakers in United Nations Member States, governments, international organizations and non-governmental organizations (NGOs) to identify strengths and areas for improvement when assessing their own work on volunteer and climate action.

### 1. INTRODUCTION

### 1.1 Climate crisis and the need for action

Across the world, climate change is impacting people's lives and transforming ecosystems. Rising global temperatures and changing rainfall patterns caused by human activity make extreme weather events more likely and more severe, as evidenced by recent heatwaves across Europe, China and North America, flooding in Pakistan, and drought in the Horn of Africa.<sup>2</sup>

The climate crisis is a humanitarian crisis. In the last five years, 1.59 billion people have been affected by climate and weather-related disasters; as a result, around 130 million people have been internally displaced.<sup>3</sup> Aside from the immediate impacts, climate change also brings slow-onset impacts, affecting food security, livelihoods and economies.

The effects of climate change are not felt equally. Close to half of the world's human population lives in regions highly vulnerable to climate change impacts.<sup>4</sup> Vulnerable communities who have contributed the least to global carbon emissions are disproportionately affected by its impacts. The richest 1 per cent of the world's population is responsible for as much carbon emissions as the poorest 66 per cent of humanity – five billion people.<sup>5</sup>

There is a need for urgent climate action across three dimensions: mitigation to cut carbon emissions; adaptation to reduce climate risks; and loss and damage to address unavoidable climate risks and limits to adaptation (see annex 1 for definitions of key terms). Even with efforts to curb carbon emissions, the world will need to adapt and build resilience to cope with the impacts that cannot be prevented.

All sectors and all stakeholders need to respond to the climate crisis with collective action and systemic change. Since climate change is inextricably linked with so many dimensions of life, climate action and implementation of the Paris Agreement<sup>i</sup> will drive forward all Sustainable Development Goals (SDGs).<sup>6</sup>

### 1.2 Volunteering for climate action and community resilience

"In every community on the planet, volunteers are taking action to support the most vulnerable people, including in the midst of conflict and other humanitarian emergencies. Young volunteers are joining the fight for climate action, pressing Governments, businesses and policymakers to take the decisions needed to end this planetary emergency."

United Nations Secretary-General António Guterres' message for International Volunteer Day for Economic and Social Development 2023.

i The Paris Agreement is a legally binding international treaty on climate change. It was adopted by 196 Parties at the United Nations Climate Change Conference (COP21) in Paris, France, on 12 December 2015. Its overarching goal is to hold "the increase in the global average temperature to well below 2°C above pre-industrial levels" and pursue efforts "to limit the temperature increase to 1.5°C above pre-industrial levels." United Nations Framework Convention on Climate Change (UNFCCC) (2014). The Paris Agreement. http://unfccc.int/paris\_agreement/items/9485.php

Volunteers play a critical role in driving climate action and building the resilience of communities. This might be through spontaneous, community-based actions at local levels or by providing scientific or technical support at the global level. These voluntary actions contribute to climate change mitigation (e.g. through campaigning for reduced emissions or promoting more sustainable lifestyles), adaptation (e.g. building flood defences or educating communities on how to adapt to climate change impacts) and climate-related disaster response and risk reduction (e.g. monitoring environmental conditions and helping people affected by extreme weather events).

Communities are at the front lines of climate change impacts. Evidence shows that climate-resilient development processes are more effective and sustainable when they are tailored to the local context and combine scientific, Indigenous, local, practitioner and other forms of knowledge.<sup>7</sup> Community-based adaptation (CBA) has been highlighted as an effective adaptation option – "a community-led process, based on communities' priorities, needs, knowledge, and capacities, which should empower people to plan for and cope with the impacts of climate change." The economic benefits of CBA measures can outweigh the costs. They also contribute co-benefits in terms of livelihood opportunities, improved food security, health and education.<sup>9</sup>

Recognizing that projects should not only be based in communities but actively led by local actors and institutions, the term "locally led adaptation" (LLA) is increasingly used to emphasize the agency of local actors where local knowledge, resources and realities are central.<sup>10</sup> The Principles for Locally Led Adaptation, which guide efforts to promote LLA, have been endorsed by over a hundred organizations.<sup>11,11</sup> Studies of existing adaptation projects have argued that few are truly locally led.<sup>12</sup> In LLA, local actors are not mere recipients or participants, but active project leaders and decision makers, and external actors – such as donors and implementers – become facilitators or co-designers in the process.<sup>13</sup> For adaptation to be locally or community-led requires defining what "local" or "community" means, which may be based on geographic, administrative, age, gender, religion or other characteristics, depending on the context.<sup>14</sup>

Volunteerism provides a mechanism for "channelling individual actions into collective strategies for coping with risk". In the context of climate risks, volunteers are often the first responders in extreme weather events. Volunteers help to map and monitor changes in their environments, provide vital local knowledge and take practical steps to build the resilience of their communities against future risks. Resilience is not just about "bouncing back" or returning to how things were before, but about building the capacity for adaptation and transformation. <sup>16</sup>

Local volunteers have the capacity to be flexible, self-organize and respond quickly. They can act as a bridge between community-based groups and external actors, relaying important information and voicing local concerns.<sup>17</sup> However, local volunteerism also comes with challenges. Rooted in community power dynamics and politics, it may not always lead to equitable outcomes. Forming partnerships among local volunteers and neighbouring communities, subnational or national authorities, international organizations and other actors helps to balance risks more equitably, maximizing the potential of volunteering to positively impact those often left furthest behind.<sup>18</sup>

### 1.3 Purpose of this report

When prioritized in planning, volunteer mechanisms can be a powerful and effective means of implementation. Yet there is limited knowledge and evidence of how volunteering can be embedded into strategies, policies and plans to mitigate the vulnerabilities caused by climate change, including disaster risk reduction. A paper published by the International Forum for Volunteering in Development<sup>19</sup> highlights a "dearth" of studies on volunteering and climate change, particularly studies that directly link the two, despite the urgency of the issue.

This report aims to address this gap by providing evidence of how volunteers across the world are engaging in actions that help their communities adapt to, and build resilience against, the impacts of climate change. It looks at the different forms and scales of volunteering, with a focus on local volunteering. The outcomes of this study are intended to provide a guide for local volunteering efforts on climate action. It also aims to support policymakers in United Nations Member States, governments, international organizations and NGOs to identify strengths and areas for improvement when assessing their own work on volunteer and climate action.

### Methodology

This report draws primarily on secondary data that is complemented by primary data collected through interviews with stakeholders. A desk review was carried out of academic and grey literature, policy documents and video recordings of seminars and webinars on the topics of volunteering, climate action and community-based or locally led adaptation. With limited available research examining the links between volunteering and climate action, additional primary data was collected through six online interviews and informal discussions with stakeholders.<sup>iii</sup>

United Nations Member States' national plans and programme documents were analysed to seek synergies between, and practical examples of, volunteering and climate action. These include: Nationally Determined Contributions (NDCs) and National Adaptation Plans (NAPs) under the Paris Agreement; Voluntary National Reviews (VNRs); United Nations Sustainable Development Cooperation Frameworks (UNSDCFs) and Common Country Analyses under the UNSDCFs; country programme documents from the United Nations Development Programme (UNDP), United Nations Population Fund (UNFPA), and United Nations Children's Fund (UNICEF); as well as national situation analyses (NSAs) on volunteerism carried out by the United Nations Volunteers (UNV) programme. This analysis involved keyword searches to identify specific references to volunteerism and climate change in the documents and reviewing the context for each reference (see section 2.3). Due to time limitations, a comprehensive analysis of the documents beyond explicit references identified through the keyword search was beyond the scope of this study.

Climate adaptation projects that involve volunteers were identified through the literature review and filtered to select the case studies that appear in the report. Explicit mentions of volunteers tend to appear in projects with formal or organizational forms of volunteering, as opposed to informal or direct volunteering, which may be implicit but not mentioned in project documents. A deeper examination of the multiple forms of volunteering across scales that contribute to climate action was beyond the scope of this report but represents an opportunity for future empirical research.

### **Structure**

The report is divided into four parts. Following this introduction, section two defines volunteering, provides an overview of the contributions of volunteerism to sustainable development and explores the synergies between volunteering and climate agendas. Section three describes the specific contributions of volunteers to climate action and community resilience, with case studies from India, Guatemala and Kenya. Section four concludes with key messages and recommendations to support ongoing efforts at different levels to integrate volunteers and volunteerism into the climate change plans of United Nations Member States and throughout the United Nations system.

iii The literature review and interviews were carried out primarily in English, except for two interviews and selected documents in Spanish. iv NDCs, NAPs and NSAs in English, French and Spanish were analysed for references to volunteering and climate change using a word search and coded. Documents in other languages were machine translated to English using Google Translate.

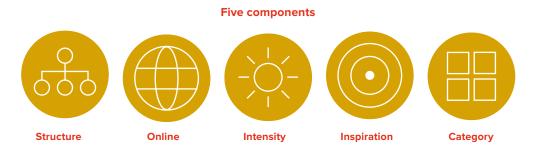
### 2. VOLUNTEERING FOR PEOPLE AND PLANET

### 2.1 Defining volunteering

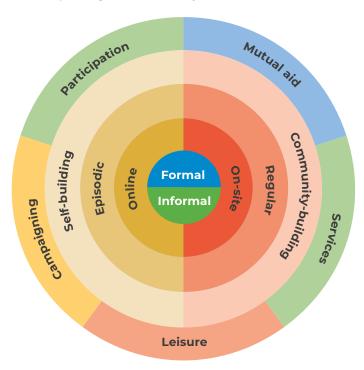
Volunteering means different things to different people. UNV, drawing on the 2002 United Nations General Assembly (UNGA) resolution 56/38 on *Recommendations on support for volunteering*, defines volunteering as "a wide range of activities, including traditional forms of mutual aid and self-help, formal service delivery and other forms of civic participation, undertaken of free will, for the general public good and where monetary reward is not the principal motivating factor."<sup>20</sup>

Under the Plan of Action to Integrate Volunteering into the 2030 Agenda, a model of volunteering was presented comprising five components (structure, online, intensity, inspiration and category) and five categories (mutual aid, services, campaigning, participation and leisure) (see figure 1).

FIGURE 1: A model for volunteering practices in the twenty-first century



These components manifest in different configurations and intensity depending on how and why volunteer work is done



Source: (UNV, 2021).

This model classifies volunteering into two structures:

- formal, through organizations, community groups or other platforms, also called "organization-based volunteering"
- informal, as part of everyday activities to help other people, also termed "direct volunteering"

Scholars have highlighted that the formal/informal distinction risks delegitimizing established social institutions that may not necessarily be recognized as "formal" institutions within the development sphere.<sup>22</sup> Consequently, it is important to remember that these components exist along a spectrum rather than representing binaries. Volunteering is complex, with different dimensions and categories that can overlap and coexist, defying neat classification.

The meanings, motivations and practices of volunteering are influenced by social, economic and cultural contexts. Many cultures have rich traditions of mutual aid, solidarity, cooperation and care, which may or may not fit with western models of "volunteering". In some cases, the term "volunteer" can even carry a negative connotation, such as when people are stigmatized for engaging in voluntary activities instead of making money for their family.<sup>23</sup> Recognizing and incorporating the diverse volunteering cultures, histories and realities across the world, which are constantly evolving, will support progress towards climate action and the SDGs.

### 2.2 Volunteering and sustainable development

The 2018 General Assembly resolution 73/140 on *Volunteering for the 2030 Agenda for Sustainable Development* recognized volunteering as a "powerful and cross-cutting means of implementation of the 2030 Agenda for Sustainable Development". It encourages governments to integrate volunteerism into national development strategies, plans and policies and to invest in measuring the scale and contribution of people's voluntary efforts towards the 2030 Agenda. The 2021 Report of the Secretary-General on *Volunteering for the 2030 Agenda for Sustainable Development* further calls on Member States to broaden support for volunteering by including "grassroots and informally organized volunteer groups who are often at the front line of community responses". There is an opportunity for governments to nurture the power of groups working in their communities to build resilience against climate risks and provide the support they need.

UNV, drawing on research conducted by Voluntary Service Overseas and the Institute of Development Studies, presented six key contributions of volunteering to the SDGs: solidarity; ownership; participation; innovation; inspiration; and inclusion (see figure 2).<sup>26</sup>

The 2018 State of the World's Volunteerism Report identified two overarching, distinctive contributions of local volunteering to community resilience. First, that the human connections generated through volunteering strengthen solidarity, trust and relational bonds. Second, that volunteers' capacity to self-organize in response to shocks and stresses is fundamental to community resilience.<sup>27</sup>

### FIGURE 2: Key contributions of volunteering

### Solidarity

Volunteering allows people from different backgrounds, groups or even nationalities to work collectively for a common cause.

### **Ownership**

Volunteering can provide opportunities for people and groups to set the vision and priorities in their communities and societies, and to hold development actors to account.

### **Participation**

Volunteering enables people to contribute and collaborate on development problems, through self-organized activities engagement with existing structures.

### Innovation

By looking beyond usual professional, geographic, and financing boundaries for problem-solving, volunteerism can foster new forms of collaboration.

### Inspiration

Volunteers can raise awareness and generate optimism about the possibility of finding solutions, model new norms or behaviours, and inspire others to take action.

Since all types of people volunteer, volunteering has the potential to strengthen linkages between the most marginalized groups and formal social and economic structures.

Source: (UNV, 2020a).

### 2.3 Aligning volunteering and climate change agendas

Recognizing the powerful role of volunteering in delivering the 2030 Agenda, substantial progress has been made to integrate volunteerism into the SDGs.<sup>28</sup> When it comes to SDG 13: Climate action, what are the synergies between volunteering and climate change agendas at national and international levels? To answer this, this study examined the extent to which volunteerism appears in national climate action plans (NDCs and NAPs), and also the extent to which climate change is referenced in VNRs, UNSDCFs, UNDP country programme documents and NSAs on volunteerism carried out by UNV. It also examined the latest climate change reports from the Intergovernmental Panel on Climate Change (IPCC) and reports and strategies from UNV and international volunteering organizations, to identify existing and potential synergies. The following sections present the findings from this analysis.

### 2.3.1 Volunteering in national climate action plans

Under the Paris Agreement, nations are required to communicate their national climate action plans, known as NDCs, every five years. Together, these climate actions determine whether the world will achieve the goals of the Paris Agreement and curb global greenhouse gas emissions. The NAP process was established under the 2010 Cancun Adaptation Framework under the United Nations Framework Convention on Climate Change (UNFCCC) to enable developing countries and, in particular, least developed countries (LDCs) to formulate and implement NAPs. NAPs enable countries to identify their medium- and long-term adaptation needs and develop and implement strategies and programmes to address those needs. While NDCs articulate a nation's high-level political commitments, the NAPs are intended as more detailed plans at a national level.

Volunteerism will be a crucial part of countries' efforts to meet global climate targets. But to what extent are volunteers and their efforts officially recognized in Parties' climate action plans? This section presents the results of an analysis of NDCs and NAPs, with examples of how countries are positioning volunteers' contributions to climate mitigation, adaptation and disaster risk reduction.

### **Nationally Determined Contributions**

An analysis of all 168 NDCs<sup>v</sup>, representing 195 Parties, found that 14 refer to volunteers, volunteering or volunteer-involving organizations in their climate action commitments: Albania, Bahamas, Bangladesh, Cabo Verde, Cambodia, China, Dominica, Dominican Republic, Liberia, Myanmar, Pakistan, Saint Lucia, Türkiye and Venezuela (see figure 3). Notably, five of these countries are Small Island Developing States, which are extremely vulnerable to climate change impacts, and three (Bangladesh, China and Myanmar) appear on the list of top 10 countries with the highest disaster risk worldwide, according to the *World Risk Report 2023*<sup>29</sup>. Absent from this group are higher-income countries, despite the prominence of volunteering in North America, Europe and Central Asia.<sup>30</sup> Although not explicitly mentioned in the NDCs, many climate-related volunteering initiatives are under way across these regions. For example, the European Climate Pact Ambassadors are volunteers based in European Union Member States whose role is to inform, inspire and support climate action in their communities and networks.<sup>31</sup>

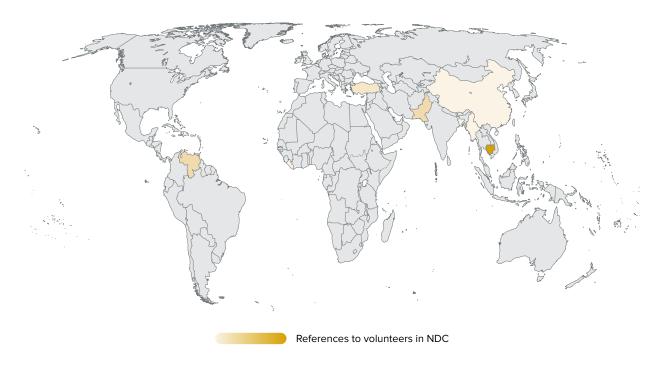
### **National Adaptation Plans**

An analysis of 53 NAPs<sup>vi</sup> found that 15 refer to volunteers, volunteering or volunteer-involving organizations in their climate change adaptation plans: Bangladesh, Brazil, Cabo Verde, Cameroon, Chad, Costa Rica, Fiji, Grenada, Kiribati, Niger, Pakistan, Sierra Leone, State of Palestine, Sudan and Suriname (see figure 4). These countries represent a mix of regions – Africa, Asia and the Pacific, Latin America and the Caribbean, with three appearing in of the results of both the NDC and NAP analyses (Bangladesh, Cabo Verde and Pakistan).

v NDCs were downloaded from the NDC Registry <a href="https://unfccc.int/NDCREG">https://unfccc.int/NDCREG</a> on 7 December 2023. Of the 195 that appear in the full list, 27 were duplicates of the NDC for European Union Member States, leaving 168 unique NDCs. The search focused on mentions of "voluntary" or "volunteer" in the context of volunteer activities or participation, excluding mentions of voluntary pledges, instruments or migration. Five documents were not text-searchable and were therefore not included in the results.

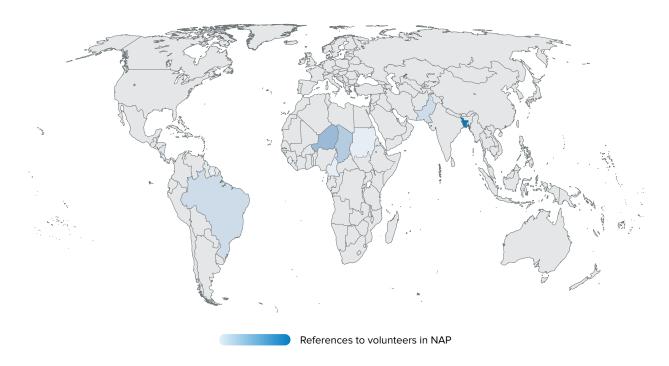
vi All submitted NAPs (53) were downloaded from https://napcentral.org/submitted-naps in January 2024. The search focused on mentions of "voluntary" or "volunteer" in the context of volunteer activities or participation, excluding mentions of voluntary pledges, instruments or migration.

FIGURE 3: Map of countries with NDCs that mention volunteers, volunteering, or volunteer-involving organizations



Source: The maps were created by the author. Powered by Bing © Australian Bureau of Statistics, GeoNames, Microsoft, Navinfo, Open Places, OpenStreetMap, TomTom, Zenrin

FIGURE 4: Map of countries with NAPs that mention volunteers, volunteering or volunteer-involving organizations



Source: The maps were created by the author. Powered by Bing © Australian Bureau of Statistics, GeoNames, Microsoft, Navinfo, Open Places, OpenStreetMap, TomTom, Zenrin

The references to volunteering across the NDCs and NAPs can be categorized into four overarching and two cross-cutting themes. Volunteers are positioned as trainers, educators and knowledge-sharers; as critical to disaster risk reduction and response; as implementers of national climate plans; and as active participants in climate policy. Gender and youth appear as cross-cutting themes, recognizing the critical role of women and young people in climate action and the need for gender- and age-inclusive volunteerism to achieve climate justice. These themes are discussed in section 3.

In some cases, a reliance on volunteers amid a lack of public services is highlighted as a risk. For example, in its 2016 NAP, the State of Palestine notes that efforts to promote recycling and reuse of solid waste are largely limited to initiatives by individuals and the voluntary sector, highlighting waste management as a highly vulnerable issue in the West Bank.<sup>32</sup> Cameroon's NAP reports that due to the fragmentation of resources, field interventions during disasters initiated by volunteers, NGOs and even by firefighters and law enforcement forces have been late and disorderly.<sup>33</sup> Cameroon's NAP, therefore, outlines an objective to strengthen planning for emergency preparedness and disaster risk reduction.

These results show that 8 per cent of all NDCs and 28 per cent of NAPs explicitly mention volunteers, volunteering or volunteer-involving organizations. Because NAPs contain more detailed information about countries' adaptation plans, that is where the role of volunteerism becomes more evident as a mechanism to achieve climate commitments. Other studies have examined references to citizens in NDCs. For example, Indigenous Peoples and local communities are increasingly recognized in NDCs, although a lot more needs to be done to ensure their full participation in implementation.<sup>34</sup> A study published by the South African Institute of International Affairs showed a need to recognize young people as active agents of change in NDCs, as opposed to viewing them either as beneficiaries or a "vulnerable" group.<sup>35</sup> The brief analysis presented here highlights examples of how countries are engaging volunteers on the ground and in policy to deliver national climate action and provides an opportunity for others to consider the role of volunteers in climate plans and programmes.

### 2.3.2 Climate action and volunteering in national strategies, policies and plans

### **Voluntary National Reviews**

As part of its follow-up and review mechanisms, the 2030 Agenda for Sustainable Development encourages countries to carry out regular reviews of progress at national and subnational levels. These VNRs aim to facilitate the sharing of experiences, including successes, challenges and lessons learned, towards achieving the 2030 Agenda. In a 2023 review of their progress towards meeting the SDGs, 32 out of 39 countries and groups mentioned volunteering in their VNRs.<sup>36</sup> An analysis of 2023 VNRs carried out by UNV shows that 11 countries mention volunteering in relation to SDG 13, which involves climate action (see table 1).

**TABLE 1:** Volunteering in relation to SDG 13 in 2023 Voluntary National Reviews

VNR 2023 REPORTING COUNTRY	EXAMPLES OF INITIATIVES INVOLVING VOLUNTEERS IN RELATION TO SDG 13
<u>Barbados</u>	<ul> <li>Clean Up Barbados project</li> <li>Conservation and Restoration of Coral Reef Ecosystems in Barbados, by NGO CORALL</li> </ul>
Bosnia & Herzegovina	<ul> <li>"Let's Do It – Clean the Country in One Day" and "Let's Do It – One Million Seedlings in 1 Day" projects, part of the "Let's Do It World" global movement</li> </ul>
Brunei Darussalam	<ul> <li>Reef Check Surveys by volunteer diverse to monitor the status of Brunei Darussalam's reefs, by NGO Reef Check Brunei</li> <li>Project AWARE Dive Against Debris ® Survey</li> <li>River Clean-Up Operation (RECOVER)</li> </ul>
Burkina Faso	<ul> <li>100 scouts, students and parents were trained in reforestation techniques and the manufacture of plant protection grids</li> <li>Distribution of 2,461 shelters and 3,848 exclusive breastfeeding kits to internally displaced households and flood victims in the Centre-North, Sahel, Centre-West, East, Boucle du Mouhoun and waterfalls</li> </ul>
<u>Croatia</u>	Boranka (Scouts) afforestation actions, educational activities in kindergartens and schools on forest protection, fire prevention and climate change consequences
Democratic Republic of the Congo	<ul> <li>Red Cross volunteers work on recovery actions, climate change mitigation, and prevention, mitigation and preparation for disasters and conflicts.</li> <li>National youth volunteering programme in development</li> </ul>
<u>Guyana</u>	Volunteer Corps trained in search and rescue, disaster risk management, community mobilization, first aid, damage assessment and conflict resolution, among others

## **VNR 2023 EXAMPLES OF INITIATIVES INVOLVING VOLUNTEERS REPORTING IN RELATION TO SDG 13 COUNTRY** Ireland Clean Coasts programme Green-Schools programme Mongolia • Mongolia's network of volunteer organizations is actively engaged in achieving the SDGs. Volunteers carried out specific activities within the framework of SDGs 1, 3, 4, 5, 8, 10, 11, 13, 16, and 17. • Activities include training, advocacy, providing support, information and consultation services, conducting research, participating in organized work to raise awareness of the importance of the SDGs, fundraising, and campaigning independently and with support. **Portugal** National Strategy for Environmental Education 2017-2020 includes initiatives such as the certification of participation in environmental volunteering activities and the implementation of awareness-raising and information campaigns to promote public participation. Saudi Arabia Ongoing initiatives and campaigns include the GO GREEN initiative, Zero Waste Campaign, Earth Day, United Nations SDGs and Climate Week, youth sustainability, Leadership Certification Volunteering at Center for Sustainability and Climate (CSC).

United Nations Sustainable Development Cooperation Frameworks, United Nations entities' country programme documents and Member States' national plans

Further links between volunteering, climate action and resilience can be found in UNSDCFs, and in the country programme documents (CPDs) of UNDP, UNFPA and UNICEF as well as in the Member States' national plans analysed in UNV-led national situation analyses (NSAs) on volunteerism.

Citizens are acting on climate change through individual actions and by putting pressure on authorities to deliver on their promises. This is recognized in the 2022 Pakistan Common Country Analysis (CCA) wherein, under the Clean Green Pakistan programme launched by Pakistan's Ministry of Climate Change, over 120,000 Clean Green Champions voluntarily registered to help implement the programme; they are playing a vital role in raising awareness, monitoring the role of municipalities and enhancing city management practices through environmental protection activities.<sup>37</sup>

Sri Lanka has seen a rise in volunteerism in recent decades in the wake of different social and environmental challenges, including conflict in the Northeast, the Indian Ocean Tsunami in 2004, the COVID-19 pandemic, and extreme weather events such as floods and droughts. Climate change is ratcheting up the challenges that places affected by conflict are already facing.<sup>38</sup> Volunteerism can play a critical role in these areas by promoting greater social cohesion, mitigating conflict, rebuilding trust and promoting peacebuilding in the aftermath of disasters and violent conflict. The Sri Lanka CCA recognizes that mobilization of community volunteers to co-design and implement sustainable projects can build local support for greater ambition in national climate commitments and make local governments more accountable.39

Volunteer activities included into the UNSDCFs in addressing climate action and disaster risk reduction strategies for SDG13 focus on different actions in different countries: mobilizing volunteers for enhancing community participation for climate action among youth (Cambodia UNSDCF<sup>40</sup>); protecting biodiversity and natural habitats with involvement of Indigenous communities (Pakistan UNSDCF41); and building resilience to future shocks (Egypt UNSDCF<sup>42</sup>).

Volunteers are recognized as first responders to disasters and as part of community-based adaptation and disaster risk reduction strategies (Nepal UNSDCF<sup>43</sup>) and for their contribution to shift disaster preparedness from policy to implementation (Tajikistan UNSDCF<sup>44</sup>). While volunteers help in participation of excluded groups to strengthen disaster risk governance (Madagascar UNSDCF), a few UNSDCFs have included interventions to build capacity of community volunteers for climate resilience (Egypt UNSDCF45), and disaster risk preparedness (Iraq UNSDCF<sup>46</sup>).

Very few United Nations entity CPDs recognize interventions to utilize volunteers to address climate action. Among the CPDs from United Nations entities, the UNDP country programmes are the ones most likely to highlight volunteers, with a focus on building partnerships with volunteer networks for climate action (UNDP Costa Rica<sup>47</sup>, UNDP Ecuador<sup>48</sup>, UNDP Togo<sup>49</sup>), strengthening of initiatives that promote community resilience through volunteering (UNDP Guinea<sup>50</sup>), and environmental awareness (UNDP Bangladesh<sup>51</sup>). UNFPA and UNICEF CPDs that highlight volunteers focus on strengthening their internal capacity to deliver on climate action through volunteers (UNFPA Bolivia<sup>52</sup>, UNFPA Burundi<sup>53</sup>) and for adolescent and youth development in climate change and disaster risk reduction (UNICEF Montenegro<sup>54</sup>).

National plans provide important information on the barriers facing volunteers in different contexts around the world. These include, for example, a lack of a comprehensive legal framework for volunteering in some countries, bureaucracy, financial and time constraints, and a poor understanding of volunteering. Addressing these barriers will be vital so that volunteers can realize their potential and scale up climate action.

### BOX 1: Cambodia: Aligning volunteering, climate action and youth development

Cambodia is highly vulnerable to the impacts of climate change, particularly floods, droughts, windstorms and sea level rise. With an agrarian-based economy and limited resources, infrastructure and access to technology, Cambodia faces many challenges in adapting to the impacts of climate change. Cambodia is a least developed country responsible for just 0.01 per cent of global cumulative CO<sub>2</sub> emissions. <sup>55</sup> Yet, it has ambitious targets for climate action, recognizing how crucial such steps are to all dimensions of the country's sustainable development. Volunteering is deeply ingrained in Cambodian culture, and volunteers across the country are mobilizing to tackle environmental challenges.

Cambodia has been a party to the to the UNFCCC since 1996. Cambodia's updated NDC includes multiple mentions of volunteers, especially youth volunteers, in its planned mitigation and adaptation activities, from urban gardening to village development and community-based disaster and climate risk programmes. Cambodia intends to undertake actions to ensure a "whole-of-society approach, harnessing private sector partnerships and community participation (especially leveraging youth as volunteers) for environmental governance, biodiversity and climate action", according to the *United Nations Sustainable Development Cooperation Framework for Cambodia 2024-2028*. A survey of 17 volunteer-involving organizations carried out as part of the 2023 National Situation Analysis prepared by UNV found that 47 per cent contribute to SDG 13: Climate action.

Young people between 16 and 29 years of age are the most actively engaged in volunteering among all cohorts in Cambodian society. One of the initiatives young people from Cambodia are participating in is #Movers4Climate, a regional movement of volunteers across the Asia/Pacific Region. The "Movers" develop climate awareness, entrepreneurial mindsets and twenty-first-century skills by conducting localized training at a grass roots level. The Movers Programme is founded by Youth Co:Lab, an initiative co-led by UNDP and Citi Foundation. Cambodia's NSA notes a shifting pattern in volunteering, where youth are leading rather than simply playing supporting roles. Volunteering opportunities are providing more space for youth to take the lead, express their creativity, and receive the support that they need, especially in terms of capacity-building and sometimes partial financial support.

### 2.3.3 Climate science and volunteering practice

### Volunteerism and the Intergovernmental Panel on Climate Change

The IPCC recognizes the critical role of community-based action and the need for climate resilient development with cooperation between governments and local communities, youth, women, Indigenous Peoples and other stakeholders. Voluntary work will be a fundamental component of these efforts.

The IPCC report *Climate Change 2022: Impacts, Adaptation and Vulnerability*<sup>56</sup> includes few explicit references to volunteers. These include references to voluntary, networked climate action led by cities and the scientific community, volunteers engaged in citizen science and online mapping for community-based disaster risk reduction and environmental observation, and volunteer social and health workers who attend to and strengthen the resilience of communities impacted by climate change. The report also cites the risk of relying on an overstretched volunteer base for recovery and adaptation, which can exacerbate vulnerability to climate change. The IPCC synthesis report does not mention "volunteers" or voluntary work,

vii There are 11 mentions of "volunteers" or "voluntary" work in its 3,000+ pages. The search focused on mentions of "voluntary" or "volunteer" in the context of volunteer activities or participation, excluding mentions of voluntary pledges, instruments or migration.

aside from the important voluntary contributions of experts and scientists that go into producing the IPCC report itself.

However, volunteer engagement is often implicit in reference to the engagement and participation of civil society actors, youth, Indigenous Peoples and local communities. For instance, "community-based adaptation" is mentioned 112 times in the Climate Change 2022: Impacts, Adaptation and Vulnerability report and five times in the Sixth Assessment Report<sup>57</sup>. Yet less than 17 per cent of total adaptation finance is directed at local, community-based projects.<sup>58</sup> Likewise, National Red Cross and Red Crescent Societies across the world have reported receiving limited access to climate finance; about 10 per cent received national funding and 28 per cent received international funding for climate change adaptation between 2019 and 2021.<sup>59</sup> This gap between the huge demands for adaptation that is locally led and the limited funding available underscores two points. The first is the need for adaptation finance to be directed towards local levels. The second is recognition of a demand for volunteers to fill this gap and support adaptation in their communities while also acknowledging the need to develop the right support and structures so volunteers can avoid becoming overstretched and exploited, which can lead to maladaptation (see annex 1).

### Climate strategies and research among volunteering and humanitarian organizations

By 2030, around 150 million people every year could need international humanitarian aid as a result of climate-related disasters and the socioeconomic impacts of climate change. 60 Volunteering and humanitarian organizations are increasingly integrating climate change into their strategies at the international and national levels. Hundreds of organizations have signed the Climate and Environmental Charter for Humanitarian Organizations,viii which intends to guide humanitarian action in amid the climate and environmental crises.

"Climate and environmental crises" is one of five strategic priorities for the International Federation of Red Cross and Red Crescent Societies (IFRC), the world's largest volunteer-based humanitarian network, recognizing that the climate crisis is also a humanitarian crisis. The IFRC works across four pillars of action to address the climate crisis:61

- 1. Scale up climate-smart disaster risk reduction, early action and preparedness
- 2. Reduce health impacts of climate change
- 3. Address climate displacement
- 4. Enable climate-resilient livelihoods and services, and sustainable water resource management

A survey among 58 National Red Cross and Red Crescent Societies demonstrated how National Societies across the world are implementing, or planning to implement, climate action<sup>62</sup>. In particular, it identified scaling up climate-smart disaster risk reduction, early action and preparedness as the highest priority areas. Increasing public awareness and mobilization on climate change, as well as strengthening internal expertise and the volunteer base are high priorities for National Societies, according to the survey results. The results underscore the need for active involvement of volunteers to complement internal capacities in supporting the implementation of climate and environmental campaigns. More than half of National Societies feel that their staff and volunteers have somewhat strong general knowledge of climate change basics. However, most National Societies (90 per cent) indicate a need to better train staff and volunteers, especially at local levels, on climate change adaptation, advocacy and environmental sustainability more broadly.63

The International Forum for Volunteering in Development (Forum) has published a number of papers on volunteering in climate action and dedicated its 2020 Conference to the topic. Allum and others<sup>64</sup> identify four main areas where volunteering and climate change intersect:

- 1. Advocacy and awareness, which includes the awareness of volunteers as well as partner organizations and communities, as a way to address local and global engagement;
- 2. Adaptation and resilience as a conscious and direct response to climate change issues at partner and community level, offering models of volunteer activity;
- Capacity-building, such as volunteer for development models where international and national volunteers
  can be used as agents of change, capacity-builders or providers of expertise to specific communities or
  organizations; and
- 4. **Influencing policies and systems**, where international volunteer cooperation organizations and volunteer-involving organizations can affect governmental policies and systems.

A study published by Forum with a focus on Pacific Island countries found that volunteers in the region contribute to a wide range of climate adaptation and mitigation efforts (e.g. renewable energy, policy strengthening, environmental education, disaster preparation and recovery, and health issues related to climate change). However, the study found that in most volunteer organizations examined, the contributions of volunteering are not specifically measured, climate change is not mainstreamed within the organization, and none have specific volunteer programmes focused on climate action.<sup>65</sup>

Section three of this report will build on the framework presented by Allum and co-authors, identifying the key contributions of volunteerism to climate action and community resilience, with an emphasis on local volunteerism.

### 2.4 Global extent of volunteering for climate action

More than one billion people globally serve as volunteers. The actual number could be higher, since many countries only report data on formal volunteering, given the challenges of capturing information on informal/direct volunteering. Huch of the reported data comes from higher-income countries, leaving a patchy global picture of volunteer activity, but one that is gradually improving with increasing efforts to systematically measure volunteerism. It is not clear what proportion of these one billion volunteers are engaged in climate action generally, or specifically in community-based adaptation. The *Adaptation Gap Report 2023* by the United Nations Environment Programme (UNEP) cites a lack of data on local or community-based adaptation and the limited and often inconsistent reporting of adaptation actions across countries. While data is lacking on informal volunteerism in the context of climate action, figures collated by international volunteering organizations provide insight into formal volunteering related to climate and environmental issues.

In 2023, 605 UN Volunteers (78 per cent national and 22 per cent international; 57 per cent women and 43 per cent men) participated in initiatives that contribute to SDG13: Climate Action. The IFRC network's 191 National Red Cross and Red Crescent Societies and 16.5 million community-based volunteers reach approximately 55 million people affected by climate and environmental crises. A total of 276 projects and initiatives (21 per cent) in the Red Cross *Volunteers in Action* database address "climate change and the environment" and 199 projects (16 per cent) address "crisis and disasters". IFRC volunteers have spent much more time responding to crisis and disasters (227,000+ total volunteer service hours) compared to working on climate change and environment projects (3,000+ hours), although these categories are interconnected,

ix Figures accessed on 5 February 2024 (Volunteers Dashboard, UNV)

x Figures as of December 2023, IFRC Volunteers in Action: <a href="https://volunteeringredcross.org/en/voluntarios-en-accion/">https://volunteeringredcross.org/en/voluntarios-en-accion/</a>

since disasters are increasingly climate-related. These figures show how formal volunteering is largely focused on response - as opposed to mitigation and adaptation projects. To address this imbalance, the IFRC aims to generate one billion Swiss francs to finance locally led climate action and adaptation efforts through the Global Climate Resilience Platform.xi

In the case of local and community-based adaptation, it can be particularly difficult to identify specific volunteering interventions, since engaging in activities for community benefit is often not considered either volunteering or labour. A survey by the International Institute for Environment and Development found that smallholder farming households across 12 countries spend an average of 107 days per year of unpaid labour implementing climate adaptation measures. 69 Adaptation measures carried out on one's own farm might not constitute volunteering per se,xii yet these interventions can bring benefits to neighbouring farms, communities and urban infrastructure in the wider watershed, ultimately contributing to national and international climate targets and the public good. Defining what is and what is not volunteering when it comes to climate adaptation is a complex task. Yet defining and measuring this work is important so that individuals, organizations and policymakers can understand and recognize the impact and better manage resources and investments for climate action.

### Care work for people and planet

Care work underpins a sustainable economy but is often invisible and undervalued. Women spend at least 2.5 times as much time on unpaid care and domestic work than men.<sup>70</sup> The climate and ecological crisis intensifies the burdens on women and girls, who are most affected by water scarcity, food insecurity and increased care loads.<sup>71</sup> Similarly, environmental care work, such as conserving and restoring ecosystems, has been unrecognized and undervalued in the global economy. Care and repair work is fundamental to climate adaptation and mitigation. This includes responding and rebuilding following climate change-induced extreme weather events, restoring ecosystems to reverse degradation and caring for vulnerable people.72

Women are at the centre of environmental justice movements that seek to protect nature for the health and well-being of their families, communities and territories. Examples include organizing and participating in conservation projects, political activism and bringing legal challenges against fossil fuel development projects.73 Renowned environmentalist Vandana Shiva has spoken about how her early experiences volunteering with the Chipko forest conservation movement in India taught her about self-organizing, solidarity, ecology and humility.<sup>74</sup> Indigenous Peoples protect 80 per cent of the Earth's biodiversity while occupying only 20 per cent of its land. But they face backlash as a consequence. According to Front Line Defenders,<sup>75</sup> of the human rights defenders that reported threats and violations in 2022, 11 per cent were defending environmental, land and Indigenous Peoples' rights (the most targeted sector), and 7 per cent were defending women's rights.

Much of this environmental care work is carried out on a voluntary basis for the benefit of the wider community. Climate change mitigation and adaptation strategies tend to focus on ecological and technical fixes while overlooking unpaid care work.<sup>76</sup> To achieve climate justice, it is essential to put in place structures to care for the carers, ensuring that volunteers who care for people and the planet are safeguarded.

With a significant financing gap to achieve adaptation,77 this will place additional demands on volunteers to implement adaptation measures. Their efforts must be recognized and made visible. To achieve climate justice, measures are needed to protect and support volunteers, avoid exploitation and negative social or ecological outcomes. The next section explores the different contributions of volunteers to climate action, with a focus on local and community-based adaptation.

xi https://www.ifrc.org/document/global-plan-2023

xii According to the International Conference of Labour Statisticians, people in volunteer work are defined as all people of working age who, during a short reference period, performed any unpaid, non-compulsory activity to produce goods or provide services for others, where, production "for others" means work performed outside of the household or family of the volunteer.

# 3. CONTRIBUTION OF VOLUNTEERISM TO CLIMATE ACTION AND COMMUNITY RESILIENCE

Volunteerism comes in many forms and offers myriad pathways for responding to climate change and building community resilience. After examining links between volunteering and climate action, six overarching themes emerge from the data. They can be categorized as contributions to:

- Knowledge and capacity-building: Volunteers and volunteer organizations are trainers, trainees, educators and knowledge-sharers.
- Disaster preparedness and response: Volunteers are first responders in disasters and extreme weather
  events.
- Mitigation and adaptation implementation: Volunteers are implementers of national climate plans through mitigation and adaptation measures.
- Climate governance: Volunteers are active participants in climate policy.
- Gender equity and youth-led climate action: Volunteers and volunteering promotes climate justice through gender equity and youth leadership.

The following sections in this chapter discuss each of these themes, drawing on information and examples from national climate action plans, strategies and programme documents and other sources. This chapter also features three case studies, one each from Guatemala, India and Kenya that demonstrate how volunteering is supporting community-based adaptation in different contexts.

### 3.1 Knowledge and capacity-building

Volunteers play a vital role in building the knowledge and capacity needed to respond to climate change – as trainers, trainees, educators and knowledge-sharers.

Volunteers contribute to educating and training individuals, community groups, organizations and public sector stakeholders to adapt to climate change and build resilience. Several NDCs and NAPs identify volunteers and volunteer organizations as key actors to engage in climate-related education, training and outreach activities. For example, Saint Lucia's NDC<sup>78</sup> cites a programme through which volunteer farmers support schools in developing gardens, building resilience to climate risks and enhancing food security. Studies by the World Agroforestry Centre and the International Livestock Research Institute in East Africa have shown how farmer trainers can be effective agents of change, sharing information on improved agricultural practices within their respective communities.<sup>79</sup> The volunteer farmers have an in-depth knowledge of local conditions, culture and practices, which helps to build trust with fellow farmers. But to keep them motivated and promote effective outcomes, the farmer trainers need support from experts and investment in human, social and financial capital.

In many countries, skilled local, national and international volunteers help to build institutional capacity to address climate risks. For example, Australian Volunteers International is listed as a partner to help build public sector capacity for the implementation of Myanmar's NDC.<sup>80</sup> The private sector also plays a role in sharing knowledge. In China, environmental volunteers and business representatives share their experiences in implementing green and low-carbon initiatives.<sup>81</sup>

Volunteers are also trainees, tapping into education and training programmes that equip volunteers with the skills and support to become leaders in their schools, communities or workplaces. Y-Adaptxiii is an interactive, games-based curriculum that educates, engages and inspires youth to help their communities adapt to climate change.

A combination of local knowledge and climate science is essential for local-level and community-based adaptation.82 Indigenous and local knowledge informs mitigation and adaptation options through sharing land management practices, predictions of natural disasters, observations of longer-term changes in the environment, as well as offering possible solutions.83 Through citizen science, citizens can become actively involved in different stages of a climate adaptation initiative – from identifying climate risks and proposing solutions, to data collection, analysis, monitoring and evaluation.84

As part of the CoAdaptaxiv project in Brazil, for example, school students and community groups from Sao Paolo and Rio de Janeiro states were involved in participatory vulnerability assessments to identify the climate risks and impacts affecting their community. After participating in training to become community researchers, they identified specific risks, such as flooding and droughts, occurring in their localities and the wider watershed. This information was used to generate risk maps based on the experience and perceptions of communities. 85 Another way citizens contribute knowledge is by voluntarily monitoring and sharing climate and weather information from their locality. In some countries, such as the Dominican Republic<sup>86</sup> and Chad<sup>87</sup>, meteorological agencies and climate change observatories offer training and volunteering opportunities to citizens to promote the dissemination of climate change-related information.

Citizen scientists are volunteers – they are motivated by a range of factors, such as environmental concern, scientific curiosity or a personal sense of fulfilment.88 Effective citizen science projects involve two-way information flow throughout the project.89 Citizen science has the potential to democratize data collection and environmental governance processes. But since it can document potentially controversial environmental issues, safety and security considerations must be taken into account.90 Citizen science tends to be rooted in Western empirical scientific methods and, therefore, it is essential to find ways to effectively incorporate it with local, traditional and Indigenous knowledge.91 There are practical examples of integrating these different knowledge systems in sustainability initiatives. Through the Meskwaki Food Sovereignty Initiativex in Iowa, members of the Meskwaki Nation and non-Meskwaki gardeners work together and employ techniques and principles of "Western" science. Volunteers, professional gardeners and community members all share knowledge in the rearing of the garden. Indigenous scientists make use of both Indigenous and "Western" methods as vehicles to fulfil their responsibility as stewards of the earth and to uphold their relationship to community.92

xiv https://www.coadaptalitoral.net/

xv https://www.meskwaki.org/mfsi/

### BOX 2: UNDP Guatemala Accelerator Lab: Collective intelligence for climate action

### Context and climate risks

Santa María de Jesús is a small town located on the slopes of the Volcán de Agua volcano, about 50 km from Guatemala City. Historically, the town has been known for producing snow peas. But today, small farmers face a serious scarcity of water. Higher temperatures and more variable rainfall increase the risk of food and water insecurity among the most vulnerable populations in Guatemala.

### **Policy framework**

Under the UNFCCC, Guatemala drafted a National Climate Change Policy and one of the first climate change laws in the world: The Framework Law on Climate Change. Guatemala submitted its updated Nationally Determined Contribution in April 2022.

### The Accelerator Lab

The UNDP Guatemala Accelerator Lab<sup>xvi</sup> partnered with UNV and the Guatemalan Volunteer Centre, involving national UN Youth Volunteers and UN Community Volunteers. Together, they performed a collective intelligence exercise where the local volunteer organizations provided first-hand community information. They asked: What are people's needs? How are communities tackling development obstacles? What solutions have been implemented so far?

The Accelerator Lab worked with the farming communities of Santa María de Jesús to identify solutions for water management and conservation. In collaborative workshops, community members identified water quality and water pollution as key challenges and mapped out potential solutions. Out of a map of solutions such as rain gauges and tools to measure humidity, soil moisture and water quality, community members voted on their preferred solutions which were then prototyped<sup>xviii</sup> with farmers during field visits.

Juan Pablo Rustrián, former national UN Youth Volunteer, explained how the farmers were implementing these solutions to gather data. "The idea is that this will eventually build a support network between farmers and that in a platform they add their data and can extract timelines of how much it rained this month, for example."xviii With this information, farmers are able to make better decisions to manage their crops, prevent disease and over time, diversity their crops to adapt to a changing climate.

The collective intelligence approach is a citizen science initiative that helps to fill data gaps by mobilizing citizens to generate real-time localized climate and environmental data. Digital tools facilitate knowledge-sharing among communities of practice, like smallholder farmers in different locations, and allow more people to get involved in climate action and problem-solving. By fostering a two-way exchange of information between scientists and local communities, collective intelligence initiatives can help close the gap between scientific knowledge, lived experience and public understanding. For example, community members shared their experiences of what works, what doesn't, and what they have tried; volunteers such as Rustrián provided technical training to the farmers on how to use the sensors and upload the data.

"It is the people closest to the problems that have the solutions and the understanding of what needs to be done. So, we need to build on that. Not replace it or impose something different or marginalize it," Javier Brolo, Head of Experimentation at UNDP Guatemala Accelerator Lab, said in an interview. "What we need to focus on is: 'What are the ways to integrate and leverage that effort so that the individual activity becomes more than the sum of its parts?' "xix

### **BOX 2:** Continued

Jaqueline Hernández is a former UN Community Volunteer who lives in Guatemala City. She joined the project with the Accelerator Lab, working closely with the communities of Santa María de Jesús to implement rainwater harvesting solutions.

"It is a beautiful experience to be serving the community, giving them support and that they learn from me as much as I learn from them. So, it is a nice experience, that exchange of knowledge and to be collaborating with them so that they make better use of the resources, said Hernández.xx

The volunteers gained practical experience, and in turn, provided support and motivation to the farmers, including in the use of technology. A challenge faced in this project was ensuring continuity and the ongoing participation of local farmers in the project. Since volunteer assignments are often temporary, this can disrupt ongoing support to communities.

Collective intelligence projects are time-consuming and require collaboration and trial and error to succeed. But as a result, they are more likely to produce solutions that are durable in the long-term. The Accelerator Lab also partnered with the Guatemalan Volunteer Centre, a platform that articulates and promotes volunteering, bringing together volunteer-involving organizations across Guatemala. Through the Guatemalan Volunteer Centre and their network of volunteers, the Accelerator Lab tested out different collective intelligence methodologies. Having "eyes and hands in closer proximity to people in need" helps to identify local needs and existing or potential solutions while also determining what works and what doesn't, explained Brolo. For example, one exercise invited people to suggest solutions that can increase people's income while also protecting nature, drawing from their knowledge of initiatives in their respective communities. Over 300 ideas were shared on social media, and the Accelerator Lab used web scraping technology to analyse the data. In another exercise, people were invited to submit ways that progress on environmental goals can be monitored. The outcomes of these collective intelligence exercises informed national dialogues in the development of Guatemala's NDC.

The UNDP Guatemala Accelerator Lab was launched in January 2021 with the objective to build resilience to climate change by improving collaboration among institutions and civil society organizations. It is part of a global network of 91 labs supporting 115 countries, the UNDP Accelerator Lab Network. The Accelerator Labs were created out of the recognition that development needs to be done differently to address the structural, unpredictable and complex global challenges. They introduce new methods such as experimentation, solution mapping and collective intelligence, drawing on new and unusual data sources.

### Key lessons learned

- · Collective intelligence initiatives can help close the gap between scientific knowledge, lived experience and public understanding of climate change by fostering a two-way exchange of information between scientists and local communities.
- · Climate action projects can benefit by engaging with different types of volunteers for specific tasks once they are well organized and provide tangible benefits to volunteers to match their level of effort and length of engagement.
- Prototyping ideas helps to explore the viability of policies and interventions by testing them on the ground and then taking the learning to scale.

### 3.2 Disaster preparedness and response

Volunteers are often the first to respond in the wake of disasters. Climate change will continue to increase the risk of extreme weather events and natural disasters, increasing pressure on local communities and volunteer networks. Research has shown that volunteers can enhance the ability of communities to cope with shocks and stresses by increasing human capital, strengthening social capital, enhancing natural capital and developing financial capital.<sup>93</sup> While spontaneous self-organized volunteer groups have the capacity to respond quickly,<sup>94</sup> volunteers also need support from wider, more formalized structures to ensure that community resilience is enhanced rather than inhibited.

Across the national climate and sustainable development plans and strategies examined in this study, volunteers are frequently mentioned in relation to disaster risk reduction and emergency response. Under their NDCs, Albania and Türkiye plan to establish and train networks of volunteers to prevent and combat forest fires.<sup>95</sup> In Bangladesh, over 76,000 volunteers are involved in the Cyclone Preparedness Programme (CPP)<sup>xxi</sup> to mitigate the challenges of catastrophic cyclones that frequently affect coastal areas. CPP volunteers take on varied roles such as being involved in rescue operations, delivering first aid, and building shelters for people displaced by cyclones and floods. According to their NAPs, Bangladesh<sup>96</sup> plans to engage 46,000 urban volunteers in urban safety and resilience efforts, and Pakistan<sup>97</sup> aims to mobilize local authorities and community volunteers to improve climate resilience and disaster risk reduction in urban areas.

Volunteers contribute to early warning and early action efforts. In Hunza Valley, Pakistan, rising temperatures cause glaciers to melt, putting nearby villages at risk of floods from glacier lake outbursts. A community-based monitoring and early warning system was set up to monitor the glaciers, building on the existing Indigenous knowledge of the communities, to improve community preparedness and disaster response. Volunteers in each village formed community watch groups. They received training in data collection and photographic documentation and were equipped with basic rescue tools and cameras to monitor the glaciers and respond to future hazards.

Given the dangerous nature of disaster response, there are equity considerations about who this work falls to, whether voluntary or paid. In the United States, journalists have documented a disaster-work industry largely made up of migrants and undocumented workers who follow climate-related disasters such as hurricanes and wildfires.<sup>99</sup>

Women and children are more at risk when disaster strikes. For example, 70 per cent of the people killed in the 2004 Indian Ocean Tsunami were women.<sup>100</sup> But women are also active community leaders, innovators and entrepreneurs, possessing essential knowledge and skills to build community resilience amid climate-related disasters.<sup>101</sup>

According to the 2020 *Global Synthesis Report: Plan of Action to Integrate Volunteering into the 2030 Agenda* published by UNV, the integration of volunteering tends to be higher in the implementation of disaster risk reduction policies and plans when compared with other sector policies.<sup>102</sup> However, it also found that local and community-level volunteering, including spontaneous volunteering in the context of disaster response, lacks support and integration into the 2030 Agenda.<sup>103</sup>

3.3 Mitigation and adaptation implementation

Volunteers play a critical role in the practical implementation of climate mitigation and adaptation projects. Across the world, there are many examples of how volunteers are taking part in measures to mitigate and adapt to climate change, such as ecosystem conservation and restoration, agroforestry efforts, tree planting, renewable energy initiatives and promoting more sustainable lifestyles.

In Venezuela, 13,000 children and young people are involved in ecological brigades, and there are plans to reach all education institutions across the country. Through the brigades, students learn about environmental issues and take part in tree planting campaigns.<sup>104</sup> Also in Venezuela, agromining schools in various mining areas of the Bolívar state train volunteer groups from mining communities to mitigate and restore areas affected by extractive activities.<sup>105</sup> Events such as tree planting campaigns and clean-up activities are commonly cited by Member States as examples of environmental volunteering initiatives. Coastal clean-up activities have been found to have a positive impact on local behaviours and awareness of environmental issues; as well, these activities also yield positive environmental impacts – at least in the short-term.<sup>106</sup> Tree planting, in particular, must be well-planned to ensure trees are suited to the native ecosystem and do not conflict with other land uses by local people. To succeed, these efforts require long-term monitoring and maintenance.<sup>107</sup>

Conservation and adaptation projects that are led by communities can offer more benefits in the long-term over discrete events. While funded community-based adaptation projects might have paid roles available for local community members, projects often instead rely heavily on the voluntary participation of the community, sometimes in exchange for training or other non-monetary rewards. In Cambodia, NGOs and community-based organizations have engaged local community members in community-based adaptation<sup>xxii</sup> with funding from UNDP and the Global Environment Facility. Through this programme, local volunteers form a community management committee that has the authority to recruit additional community members. These volunteers patrol forestry, fishery and protected natural areas, participate in tree planting activities and forest rituals, and promote awareness of the protection and sustainable use of natural resources.

Adaptation measures might be initiated by the local community or by the national government or international organizations that engage with local volunteer groups. In the town of Kisakasaka in eastern Tanzania, incoming seawater was affecting the drinking water and destroying crops. The villagers got together to reforest and restore hundreds of hectares of mangroves, which act as a natural barrier against floods and storm surges. Volunteers from the community helped to restore the mangroves; within two years, the community saw improvements in the quality of their water and the survival of their crops.<sup>108</sup>

As highlighted by the IPCC, adaptation can have unintended consequences, making people more vulnerable to climate change, known as maladaptation. An over-reliance or exploitation of volunteers risks maladaptive outcomes. On the other hand, tools such as participatory climate vulnerability assessments and locally led adaptation approaches can mitigate this risk by gathering information on the specific vulnerabilities faced by different groups of people and inform decisions about adaptation options that are best suited to the local context.

### Context and climate risks

The Indian Sundarbans is part of the world's largest contiguous mangrove forest in the world and the largest delta, the Ganges-Brahmaputra-Meghna Delta, which features a diverse array of flora and fauna and is home to around 4.4 million people. Residents largely rely on nature-based livelihoods in a context increasingly shaped by an often-unpredictable climate. The low-lying islands are protected mostly by mud embankments which often breach during extreme events like cyclones and storm surges, causing saline water intrusion and large-scale disruption to lives and livelihoods. Between 2019 and 2021, the region witnessed three major tropical cyclones with subsequent floods. Apart from a changing climate, the remoteness of the islands in the Sundarbans poses significant challenges for communication, secure employment options and access to quality health care, which impacts the lives of millions.

### **Policy framework**

In 2008, India published its NAP, containing eight submissions aimed at climate change mitigation, adaptation and sustainable development. In 2022, India submitted its updated NDC under the Paris Agreement to reach its goal of net zero emissions by 2070.

There are a number of significant national volunteering platforms in India, and civil society organizations have increasingly used the language of volunteering to mobilize individuals and groups. In 2007, a National Policy on the Voluntary Sector was introduced, although this is broader and differs from volunteering per se. In India the term "volunteering" does not necessarily have wide currency – it is often associated in popular discourse with professional skills-based volunteering opportunities – and research that formally focuses on volunteering in India is relatively limited. However, this reflects the association of the term volunteering with only particular kinds of labour; ideas and practices of "service" without reward are ubiquitous in India.

### How volunteers are responding to climate change in the Indian Sundarbans

As part of the Voluntary Labour for Climate Adaptation and Disasters (VOCAD)<sup>xxiii</sup> initiative, research has been developed by Jadavpur (India) and Northumbria (United Kingdom) Universities on the diverse kinds of voluntary work taking place in, or in relation to, the Indian Sundarbans. Rather than analyse particular projects, the research has sought to identify the different kinds of volunteering and how they relate to the changing delta environment of the Indian Sundarbans. This research has been focused on voluntary work in a context severely impacted by climate change rather than solely on volunteering in response to climate change.

VOCAD data reveals the diverse roles volunteering plays in community responses to climate change in the Indian Sundarbans. For example, community kitchens run by volunteers play a key role after cyclones, bringing people together to provide meals. Self-help groups are also a significant community structure, supporting training, savings and livelihoods but also mobilizing voluntary labour to work on community-based projects such as the planting and grafting of plants. Data show that women play critical roles in initiatives, such as the self-help groups and community kitchens, but may undertake their volunteering alongside maintaining other tasks, creating significant pressures on them.

### **BOX 3:** Continued

Volunteers are also involved in supporting the embankments that protect against saline water intrusion and sea level rise and planting mangrove seedlings to prevent soil erosion and replenish lost mangroves which are critical to the local ecosystem. But there is also volunteering work that both reflects and responds to the changing climate. As stresses are placed on societies by the climate emergency, livelihood challenges become more acute, meaning stipends from volunteering may become more significant.

VOCAD data show how volunteering is providing opportunities for women to challenge existing gender roles, including around skills development in order to access jobs they have been excluded from. For example, women volunteered in one location to learn specific techniques with straw, to make cyclone-resistant roofing. Voluntary work from outside the Sundarbans is also important; city inhabitants of nearby Kolkata may volunteer to support Sundarbans communities, particularly during and in the aftermath of cyclones.

### Key lessons learned

Diverse forms of voluntary work play important roles in the lives of individuals and communities in the Indian Sundarbans, helping to build more resilient ecosystems and communities amid increasing climate change impacts.

Women play critical roles in community-based responses and adaptation to climate change, but this adds significant pressures on top of their other responsibilities. Voluntary work has a more complex relationship to climate change than acting in relation to changes in the physical environment, playing a role in strategies to confront the socioeconomic impacts of climate change including in relation to livelihoods and inequalities.

### 3.4 Climate governance

Volunteers contribute to climate governance by participating in policy and planning processes. The first of the Principles for Locally Led Adaptation that were developed by the Global Commission on Adaptation is "devolving decision making to the lowest appropriate level: Giving local institutions and communities more direct access to finance and decision-making power over how adaptation actions are defined, prioritized, designed, implemented; how progress is monitored; and how success is evaluated". Ocitizens who participate in decision-making forums about adaptation – and community matters more broadly – often do so on a voluntary basis. Volunteers can also support citizens by training them in the skills needed to effectively participate in these spaces.

According to Cabo Verde's NAP,<sup>110</sup> the Civil Society Forum aims to strengthen civic action on climate and promote citizen involvement in changing social values. Participation in the Forum is voluntary and open to all to share knowledge and information about climate policies and analytical tools for the development of mitigation, adaptation and resilience policies. Kiribati's NAP<sup>111</sup> outlines a plan to develop a community ownership and accountability system for climate change and disaster risks related projects. This would allow communities to voluntarily provide feedback on projects to ensure their effectiveness and sustainability.

Citizen climate assemblies bring together a diverse group of people selected at random to learn, deliberate and make recommendations on aspects of the climate crisis. While citizen assemblies are generally initiated by national or local governments in the Global North, the world's first global citizens' assembly<sup>xxiv</sup> was codesigned with institutions, scientists, citizens and social movements from around the world in 2021 and presented a Declaration at COP26. Challenges include the large, unpaid time commitment required from participating citizens and the fact that governments may choose not to follow the recommendations. The case study presented in box 4 highlights an example from Kenya of community-elected committees to support locally led adaptation.

Over recent decades, climate activism has increased at local, national and international levels, as governments and industry fail to act quickly enough to cut carbon emissions. The 2015 *State of the World's Volunteerism Report: Transforming governance* describes the convergence between volunteerism and social activism. "While it is recognized that not all activists are volunteers, many activists are volunteers and many volunteers are activists." Climate activism comes in many forms – from school strikes through the Fridays for Futurexxx movement, to scientistsxxxi turning to direct action, or to land and environmental defendersxxxii resisting the harmful impacts of extractive industries in their territories. The Climate Action Network is a global network of more than 1,900 civil society organizations in over 130 countries driving collective and sustainable action to fight the climate crisis and to achieve social justice. Local climate action groups are largely volunteer led; without volunteers, many would not exist. Volunteers take on various roles among activist groups, contributing their time and skills, whether through online awareness or advocacy campaigns or joining protests and resistance against projects in their localities. The actions of volunteer activists can shape discourse and public opinion on climate change.<sup>113</sup>

However, in many countries, environmental activists and human rights defenders face increasing threats of violence and criminalization.<sup>114</sup> As highlighted on the UNV Knowledge Portal on Volunteerism, "Volunteering for climate action is not risk-free. With a global and local surge in climate action, many volunteers are being persecuted as civic space shrinks and environmental defenders are being killed in record numbers.".<sup>115</sup> These threats represent a barrier to volunteering because they can deter people from engaging in climate action. It is critical that United Nations Member States and Parties to the UNFCCC recognize the role of environmental volunteers, including land and environmental defenders, Indigenous people and local communities, in advancing climate action and put protections in place to ensure their meaningful participation in climate policy.

### BOX 4: Locally led adaptation in Isiolo, Kenya

### Context and climate risks

In Kenya's Isiolo County, a largely arid area, droughts and floods have become more frequent in recent decades. Extreme weather events displace communities and damage infrastructure, crops and livestock. In Isiolo, communities wanted more control over local development planning to make sure that investments were suitable to their local context and to better deal with extreme weather events.

### **Policy framework**

To build resilience against climate hazards, Kenya aims to mainstream climate change across all sectors and at national and county government levels, under the 2016 Climate Change Act and NAP.

The County Climate Change Fund (CCCF) is a mechanism that enables counties to create, access and use climate finance to build resilience and reduce vulnerabilities to climate change in a more coordinated way. The fund is managed by committees operating at the county and ward levels with input from local communities in the design and use of the funds. The CCCF was piloted in Isiolo County from 2011 to 2013.

Kenya's National Volunteerism Policy provides guidelines for the efficient and effective coordination management of volunteerism in Kenya.

### Volunteer committees manage climate finance

Ward County Climate Planning Committees (WCCPC) are central to the climate change fund. They support communities to identify and prioritize their own adaptation needs, and then they identify the investments that best meet those needs.

Each ward committee has 11 voluntary members elected by the community. Among the 11 there must be two youth and three women representatives, one elected member from each area of the local customary institution for range management, and one representative from a community-based organization. Integrity, leadership and local knowledge are prioritized over academic qualifications in the selection of representatives, since the committees are able to access external technical assistance. To reduce the risk of vested interests, committee members are volunteers and are not paid for their work. The voluntary nature of the committees is outlined in guidelines for establishing a CCCF:

"Committee members (both voting and ex-officio) agree to work on a voluntary basis and are not paid for positions. It is important to stress the voluntary nature of the work to manage any expectations and avoid rumours that committee members personally benefit from their positions. All costs associated with the work of the committees are, however, paid from the committee's operational fund."116

These committees are an example of institutional based volunteers undertaking volunteerism through advocacy and civic engagement, as described in Kenya's 2015 National Volunteerism Policy.

### **BOX 4:** Continued

Crick and others<sup>17</sup> cite a representative of Isiolo County Climate Change Planning Committee who says, "Working strategically with local-level committees who are part and parcel of communities makes it easier for the WCCPC to make critical resilience building investments at the local level. The Isiolo CCCF structure saves us time and saves communities from the effects of climate hazards."

Within different wards in Isiolo, various adaptation measures selected by the community have been implemented, such as installing sand dams and boreholes to improve access to water and strengthening community resilience. Following the pilot programme in Isiolo, the CCCF was scaled to other counties across Kenya, channelling climate finance to local levels.\*\*

### Key lessons learned

- Volunteers play an important role in the planning and financing of climate change adaptation.
- · Community-elected committees can help to ensure adaptation is driven from the community level.
- Local knowledge, integrity and leadership qualities, along with diverse representation, are more important than academic qualifications when selecting volunteer committee members.

### 3.5 Gender equity and youth-led climate action

Gender and youth emerged from the data as cross-cutting themes in volunteering for climate action. To achieve achieving meaningful progress in climate action requires an inclusive approach that embraces all genders and age groups.

Initiatives for young people to engage in climate action include: a Youth-Led Adaptation Plan and an Accelerated Youth Innovation Programme to help surface youth-led solutions for climate change in Bangladesh;<sup>118</sup> the Red Cross Red Crescent Strategy on Youth-led Climate Action;<sup>xxix</sup> a Climate Ambassador Programme<sup>xxx</sup> for COP27 in the United Arab Emirates; and many more. One of the realizations that emerged from the fifteenth International Conference on Community-based Adaptation to Climate Change was that young people do not want to simply be called "volunteers" in climate change forums or invited as a form of tokenism but rather to meaningfully participate at higher decision-making levels.<sup>119</sup>

Niger has produced an action plan for women's adaptation to climate change and the country's NAP highlights engagement with women's associations to develop adaptation solutions based on women's traditional knowledge. Bangladesh includes plans to introduce gender-inclusive search and rescue programmes during disasters with the help of local authorities, CPP volunteers and community members. Gender parity is a key principle for the CPP, which has over 76,000 volunteers, 50 per cent of whom are women. In recognition of the increased risk of violence to women and girls in the wake of disasters, Suriname plans to include gender awareness training for volunteers working in disaster areas including crisis management and sexual and gender-based violence.

### 4. CONCLUSIONS AND RECOMMENDATIONS

Volunteering strengthens the capacities of individuals, organizations and communities and builds resilience to shocks.<sup>123</sup> This study aimed to provide evidence on the specific ways volunteering is contributing to mitigate climate risks and build resilience. It did this by exploring the scale and scope of volunteering in this context, with a focus on local volunteerism through local or community-based adaptation, and it examined how to embed volunteering into climate policies and plans.

While substantial progress has been made to integrate volunteerism into the SDGs, there is a need for greater integration into specific climate policies. The findings presented in this study show some recognition among countries of volunteerism as a mechanism to achieve climate action. Eight per cent of NDCs and 28 per cent of NAPs submitted to the UNFCCC explicitly refer to volunteers, volunteering or volunteer-involving organizations. Examining national climate action plans and development strategies, plans and policies, and strategies from volunteer organizations, several key contributions of volunteering to climate action and community resilience emerge:

- Knowledge and capacity-building: Volunteers and volunteer organizations are trainers, trainees, educators and knowledge-sharers.
- Disaster preparedness and response: Volunteers are first responders during disasters and extreme weather events.
- Mitigation and adaptation implementation: Volunteers are implementers of national climate plans through mitigation and adaptation measures.
- Climate governance: Volunteers are active participants in climate policy.
- **Gender equity and youth-led climate action:** Volunteering promotes climate justice through gender equity and youth leadership.

There are some key challenges and limitations when trying to understand the contributions of volunteering. First, the concept of volunteering is understood and works very differently in different contexts. Volunteers are embedded in specific community power structures, gender dynamics and histories. Initiatives that work with volunteers must be mindful of these dynamics. Secondly, people volunteer in multiple ways; it is not always clear which activities can be considered strictly climate-related and which are best classified as targeting such issues as development or plastics pollution. Third, there is a lack of clear data on the engagement of local volunteers in community-based adaptation measures.

The three case studies presented here – from India, Guatemala and Kenya – offer insight into the different roles of volunteers in local, community-led adaptation. The other examples cited in this report cover a range of different mitigation, adaptation and disaster risk reduction approaches. A deeper examination of the multiple forms of volunteering across scales that contribute to climate action was beyond the scope of this report but represents an opportunity for future empirical research. Following the Principles for Locally Led Adaptation, this report proposes some key considerations for volunteerism to enhance adaptation outcomes (see table 2) and recommendations.

# PRINCIPLES FOR LOCALLY LED ADAPTATION

# CONSIDERATIONS FOR VOLUNTEERISM

### **PRINCIPLE 1:**

# Devolving decision making to the lowest appropriate level:

Giving local institutions and communities more direct access to finance and decision-making power over how adaptation actions are defined, prioritized, designed and implemented; how progress is monitored; and how success is evaluated.

- Voluntary citizen participation in decision-making spaces
- Volunteers can train citizens in the skills needed for effective participation in decision-making.

### **PRINCIPLE 2:**

Addressing structural inequalities faced by women, youth, children, disabled or displaced persons, Indigenous Peoples and marginalized ethnic groups:

Integrating gender-based, economic and political inequalities that are root causes of vulnerability into the core of adaptation action and encouraging vulnerable and marginalized individuals to meaningfully participate in and lead adaptation decisions.

- Make visible the voluntary contributions of individuals and groups towards climate action and community resilience.
- Acknowledge and address the unequal distribution of voluntary labour by women and other groups.

### **PRINCIPLE 3:**

# Providing patient and predictable funding that can be accessed more easily:

Supporting long-term development of local governance processes, capacities, and institutions through simpler access modalities and longer term and more predictable funding horizons to ensure that communities can effectively implement adaptation actions.

 Volunteers with financial and administrative knowledge can provide support to local institutions to manage climate adaptation finance.

### **PRINCIPLE 4:**

# Investing in local capabilities to leave an institutional legacy:

Improving the capabilities of local institutions to ensure they can understand climate risks and uncertainties, generate solutions, and facilitate and manage adaptation initiatives over the long-term without being dependent on project-based donor funding.

- By participating on a voluntary basis in vulnerability and risk assessments, citizens support knowledge generation on climate risks and potential adaptation solutions.
- Local, national and international volunteers can support communities conducting vulnerability and climate risk assessments.

### **TABLE 2:** Continued

### PRINCIPLES FOR LOCALLY **LED ADAPTATION**

### **CONSIDERATIONS FOR VOLUNTEERISM**

### **PRINCIPLE 5:**

### Building a robust understanding of climate risk and uncertainty:

Informing adaptation decisions through a combination of local, traditional, Indigenous, generational and scientific knowledge that can enable resilience under a range of future climate scenarios.

## Through citizen science and participatory knowledge-sharing spaces, community members contribute local and Indigenous knowledge vital to understanding climate risk and uncertainty.

### PRINCIPLE 6:

### Flexible programming and learning:

Enabling adaptive management to address the inherent uncertainty in adaptation, especially through robust monitoring and learning systems, flexible finance, and flexible programming.

Volunteering programmes and initiatives that support climate adaptation need to be flexible to allow for adaptive management and learning.

### **PRINCIPLE 7:**

### Ensuring transparency and accountability:

Making processes of financing, designing, and delivering programmes more transparent and accountable downward to local stakeholders.

Local, national and international volunteers and voluntary groups represent important advocates for transparency, holding institutions accountable.

## **PRINCIPLE 8:**

### Collaborative action and investment:

Collaboration across sectors, initiatives and levels to ensure that different initiatives and different sources of funding (humanitarian assistance, development, disaster risk reduction, green recovery funds, etc.) support each other, and their activities avoid duplication, to enhance efficiencies and good practice.

Ensure all types of volunteers and forms of volunteering (local, national, international, formal and informal, etc.) are included and supported in the climate adaptation processes.

### **Recommendations**

- Increase the visibility of all forms of volunteering that contribute to climate action and community resilience. Diverse forms of voluntary work help to build more resilient ecosystems and communities. Volunteer responses to climate-related disasters and community-based adaptation are often informal and spontaneous, the demand for which will expand with the increasing impacts of climate change. It is important to continue to measure and report on all volunteer contributions to climate action and community resilience to inform planning at national and global levels.
- 2. Care for the carers: Support the volunteers who deliver vital contributions to people and the planet. Across the world, volunteers are found on the front lines of climate-related crises, dedicating their time and energy to care for people and the planet. It is critical to care for the carers, providing volunteers with training and support to avoid negative outcomes and potential maladaptive outcomes arising from overstretched volunteers. Forming partnerships between local volunteers and neighbouring communities, subnational or national authorities, international organizations and other actors helps to balance risks more equitably, to achieve climate justice. It is critical to acknowledge and address the disproportionate climate risks and burdens experienced by women, Indigenous Peoples and other groups.
- 3. Channel climate finance and decision-making to local levels. Despite evidence of the effectiveness of locally led adaptation, in practice few projects are truly locally led, and the amount of finance that arrives at community levels is vastly inadequate. The case study from Isiolo, Kenya, showed how devolved financial mechanisms and community-elected volunteer committees can help to ensure better outcomes. This links to the previous recommendation to ensure that volunteers are not over-burdened in the absence of sufficient funding.
- 4. Continue to integrate volunteerism into national and international climate and development policies, plans and programmes (including NDCs, NAPs and UNSDCFs). Volunteers are already responding to climate change in their communities, regions and online. Yet much of this work is not visible in climate and development strategies and plans. Citizens, volunteers and community groups should be involved in the co-design of climate plans and their implementation.
- 5. Scale up approaches that integrate Indigenous and local knowledge. Examples discussed in this report show how integrating Indigenous and local knowledge through collective intelligence approaches and citizen science can support anticipatory and early action and identify key vulnerabilities and potential solutions to environmental challenges. To be effective, these projects take time and require a two-way flow of information.
- 6. Support and protect volunteers who contribute to climate governance. Volunteers contribute to shaping and implementing climate policies in many ways through civil society platforms, citizen assemblies, advocacy and activism. Local, national and international volunteers and voluntary groups represent important advocates for transparency, holding institutions accountable. However, many volunteers are being persecuted as civic space shrinks and environmental defenders are being killed in record numbers. It is critical that United Nations Member States and Parties to the UNFCCC recognize the role of environmental volunteers, including land and environmental defenders, Indigenous Peoples and local communities, in advancing climate action and put protections in place to ensure their meaningful participation in climate policy.

# **ANNEX 1: KEY TERMS**

### Climate change

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

### Climate change adaptation

In human systems, the process of adjustment to actual or expected climate and its effects, in order to moderate harm or exploit beneficial opportunities. In natural systems, the process of adjustment to actual climate and its effects; human intervention may facilitate adjustment to expected climate and its effects (IPCC, 2022b, p. 2898).

### Climate change mitigation

A human intervention to reduce emissions or enhance the sinks of greenhouse gases (IPCC, 2022b, p. 2915).

### Community

A group of people who may or may not live within the same area, village or neighbourhood, who may or may not share similar culture, habits and resources and who are exposed to the same threats and risks, such as disease, political and economic issues and natural disasters (IFRC, 2014, p. 10).

## **Community-based adaptation**

Local, community-driven adaptation. Community-based adaptation focuses attention on empowering and promoting the adaptive capacity of communities. It is an approach that takes context, culture, knowledge, agency, and preferences of communities as strengths (IPCC, 2022b, p. 2898).

### Loss and damage

The negative effects of climate change that occur despite mitigation and adaptation efforts. While mitigation addresses the causes of climate change and adaptation addresses its impacts, loss and damage is concerned with the unavoidable and irreversible impacts of the climate crisis. Economic loss and damage refers to negative impacts where the costs are quantifiable, such as damage to infrastructure or reduced crop yields. Non-economic loss and damage refers to negative impacts that are not easily traded in markets, and typically harder to measure in monetary terms, such as loss of culture, displacement and way of life. These tends to be more irreparable and irreversible (UNEP, 2023).

### Maladaptation (maladaptive actions)

Actions that may lead to increased risk of adverse climate-related outcomes, increased vulnerability to climate change, or diminished welfare, now or in the future (IPCC, 2022b, p. 2915).

### Resilience

The capacity of interconnected social, economic and ecological systems to cope with a hazardous event, trend or disturbance, responding or reorganizing in ways that maintain their essential function, identity and structure (IPCC, 2022b, p. 2921).

### Volunteerism, volunteering and voluntary activities

A wide range of activities undertaken of free will, for the general public good, for which monetary reward is not the principal motivating factor (United Nations General Assembly, 2002).

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# **ENDNOTES**

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- 41 UN Pakistan and Government of Pakistan (2022)
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- 43 UN Nepal and Government of Nepal (nd)
- 44 UN Tajikistan and Government of Tajikistan (2022)
- 45 UN Egypt and Government of Egypt (nd)
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