

The future of volunteering in extreme weather events: critical reflections on key challenges and opportunities for climate resilience

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Abstract

Volunteers are playing a significant role in interacting with ongoing societal shocks and stresses, such as mobilising resources and supporting responses to extreme weather events. Their actions contribute to the pursuit of local climate resilience by shaping the local level and influencing socio-ecological systems. Therefore, academics, communities, practitioners and policymakers responsible for understanding, encouraging, developing and sustaining volunteering activity can benefit from critical reflections on volunteering in extreme weather events in order to support ongoing research initiatives, future research and policy agendas, and the development of funding strategies and public programs for climate resilience.

This Policy Forum paper critically reflects on the current status of volunteering for extreme weather events and local climate resilience, using experiences from flood risk management, to identify key challenges and opportunities for the future. It builds on the ESRC CASCADE-NET project in discussing both academic puzzles and practical challenges faced in volunteering for local climate resilience in an attempt to bridge gaps and foster further debates between theory and practice. These insights are drawn from a series of dialogic exchanges that reflect the authors' diverse perspectives and lived experiences of volunteering that emerge in their research and practice in England, the Czech Republic, and The Netherlands. We identify and share ten urgent challenges, followed by discussion of four cross-cutting themes that exist: volunteers as a renewable energy source, stakeholder narratives of volunteering, learning from other contexts, and transformative resilience. In exploring the futures of volunteering, this Policy Forum challenges existing thought by proposing the need to move beyond traditional narratives of 'the volunteer' and 'volunteering' to a more inclusive and nuanced understanding. Through this, we believe that volunteering can play an essential role in pursuing a just transition, with volunteers being able to challenge the status quo to contribute to transformative climate resilience practice and policy.

Keywords: Volunteer, Disaster, Extreme Weather Events, Inequalities, Climate Resilience, Transformation

1. INTRODUCTION

“Against the backdrop of 21st Century challenges such as increasing inequalities, the climate emergency and the COVID-19 pandemic, volunteerism is often presented as a global and local asset which can help localize and achieve development goals through people-centred relationships” (United Nations Volunteers (UNV) Programme, 2021:13)

According to estimates, about one billion people volunteer every year in various parts of the world, with the economic significance of this work comparable to the GDP of the most developed countries (Salamon et al. 2011). As articulated by the UNV Programme (above), volunteering has become a worldwide phenomenon integrally connected to sustainable development and linking local actions to global imperatives.

Volunteering produces various impacts: on volunteers themselves, the direct beneficiaries of volunteering, and on society as a whole (e.g. Rochester et al., 2010; Gallarza et al., 2013; Haldane, 2014; Aoki 2016; Dostál, 2020). Recently, the relevance of volunteering has been further heightened through the COVID-19 pandemic and the war in Ukraine, with volunteers responding to these rapidly evolving societal challenges. Alongside these shorter-term societal shocks, there is longer-term uncertainty regarding the climate emergency and predicted impacts like increased extreme weather risks. These changing contexts bring opportunities and challenges in the ways in which people volunteer and to the nature of volunteering itself: as new stimuli for increasing the range of activities volunteers do, adopting new schemes in volunteer management, trialling new roles of volunteering in society, and also new types of relationships among different societal actors, including government and NGOs.

This Policy Forum focuses on volunteering in relation to extreme weather events (EWE) and local climate resilience. Climate resilience has a range of definitions and can be understood as relating to the capacity of actors (e.g. citizens, communities, businesses, and governments) or the natural environment to prevent, withstand, respond to and recover from a disruption¹. Furthermore, it includes preserving and restoring essential functioning of the system as well as including the capacity to accommodate, adapt and transform in a timely and efficient manner (UNDRR, 2017). Climate resilience can also include elements of climate mitigation², however, this Policy Forum focuses on climate resilience in the form of climate adaptation and managing future climate stresses and shocks, in particular the impact flooding as a common EWE. There has been a noticeable shift towards a ‘resilience’ perspective with international strategies and United Nations (2023) policies such as the UN Sustainable Development Goals, the Paris Climate Agreement, and the UNDRR Sendai Framework all emphasising the societal importance of building and developing resilience. This shift to a resilience perspective acknowledges that the focus needs to be broader than only on ‘prevention’ with a greater recognition that more attention is needed on reducing the consequences from EWEs. As part of this resilience shift, there is greater recognition that government actors are not always able to tackle EWE challenges solely on their own and

¹ For example, the US Climate Resilience Toolkit defines it as “The capacity of a community, business, or natural environment to prevent, withstand, respond to, and recover from a disruption.”

² For example, the IPCC Sixth Assessment report includes “cutting back greenhouse gas emissions” as part of the pursuit of climate resilient development.
<https://www.ipcc.ch/report/ar6/wg2/about/frequently-asked-questions/keyfaq6/>

has led to a broadening of the circle of stakeholders involved and greater roles for civil society and volunteers. Volunteers have played, and continue to play, an important role in influencing mitigation and preparation for EWEs through action at the local and regional levels (e.g. increasing disaster awareness, and supporting catchment-based approaches to reduce the risk of EWEs), in supporting the response to EWEs as well as providing support in the recovery process after EWEs (Harris et al., 2017; Whittaker et al., 2015; Forrest et al., 2019). In this Policy Forum, we focus on volunteering for climate resilience and cover these mitigation, preparation, response and recovery phases of EWEs.

This Policy Forum weaves together academic and practice-based discussions to reflect critically on the current and future status of volunteering and its relevance to public policy in order to draw wider insights into the challenges and opportunities for developing local climate resilience. These insights are drawn from involvement and research presentations in the CASCADE-NET project and academic research undertaken by each of the authors in their own discipline and research locations¹. A 12-month iterative construction of ideas through a series of online conversations (dialogic meetings) between the authors, and discussions with two voices from civil society in the UK, were used to identify and explore themes emerging from CASCADE-NET discussions from a cross-national perspective. This process included refinement and restructuring of ideas to try to identify ten key challenges that are increasingly relevant for volunteering in EWEs followed by a synthesis of these into four cross-cutting themes. This creative experiment in bringing different voices together led to discussions from diverse perspectives gained from their research and practice on volunteering in extreme weather management within England, The Czech Republic, and The Netherlands. In all three countries, volunteers have played a role in dealing with EWEs, and are being increasingly recognised in relevant policies. Examples are drawn from these three countries to illustrate the ten key challenges identified. This paper is addressed at both academic and practice-based readers in an attempt to support the bridging of theory and practice. Bringing these different realms together can bring mutual benefits for the future of volunteering by connecting these different perspectives together in one paper.

2. THE TEN CHALLENGES

2.1. 'To define or not to define?'

The first challenge focuses on exploring interpretations of 'volunteering' and the differing definitions of what a volunteer is and is not. Definitions of volunteering range from the simplistic 'working without pay' (e.g. Aoki, 2016) to more complex axis-based conceptualisations (e.g. Cnaan et al., 1996; Gallarza et al., 2013). Volunteering can also be defined through microeconomics by using utility theory. According to this theory, individuals maximize their utility functions through three elements: buying and consuming goods and services, enjoying their free time, and doing good, the latter sometimes described as charity (Roy and Ziemek, 2000). In this theory, there are two ways in which to 'do good, either by donating money or time. In this conceptualisation, volunteering is interpreted as donating time. Using time in your schedule, meeting with organisations you want to support, talking with them about the donation's purpose, or bringing a donation somewhere (e.g. to a remote village) might fit into the definition of volunteering since time is also donated for the benefit of others. Everyone can choose their own way to 'do good', according to their preferences, and

its subjective nature means donating money cannot be said to be better than donating time or vice versa.

There are also criteria to categorise whether an action can be classed as volunteering with three features consistently emerging: The action 1) being unpaid, 2) undertaken of free will, and 3) bringing benefits to others (outside of immediate friends and family) and to the person undertaking the activity (e.g. Dingle et al., 2014; Gallarza et al., 2013; UNV, 2022).

UNV (2022) identify five categories of volunteering: mutual aid (informal and as a response to a shared need or issue), service volunteering (respond to perceived needs of other people and communities), campaigning, participation (in governance and decision-making mechanisms), and leisure-based. There are also definitions of what is 'not' volunteering, which the UNV (2022) includes as forced work (e.g. by a court or authority), work as part of education or training programmes (e.g. a student placement), and work performed through your employer (e.g. corporate volunteering). There are nuances where these may be contested. For example, corporate volunteering is context-specific but traditionally has two models: first, the employer promotes the volunteering opportunity, encourages it and supports it materially, but the employees do the activity in their free time; second, employers support it, encourage it and enable employees to do it in their working hours, paying them the same salary as when working (Dostál et al., 2020). Corporate volunteering is defined as 'not' volunteering by the UNV (2022), but we can see subtle differences in these two models. The first model could still meet the aforementioned three criteria for volunteering despite being done through the employer, whereas the second example does not as participants were paid to 'volunteer'. Another example are student placements in care home facilities (i.e. education programme-based) that may fulfil all three criteria for volunteering and "do good" by utility theory, but be excluded based on the UNV (2022) criteria. Overall, care is needed when making value judgements on volunteering as it is context-specific and temporally sensitive (Gallarza et al., 2013).

Stakeholder perspectives are important to consider with net costs to the individual found to influence public perceptions as to whether their acts are considered to be 'volunteering' or not (Cnaan et al, 1996). Citizen perspectives may contrast with top-down perspectives and definitions from government agencies and businesses, which tend to relate to formal volunteering (e.g. with the Red Cross) rather than other models. For these agencies, defining volunteer participation is important in official reporting that connects to the desire to control and/or the need to fund (see later challenges). It is necessary to define 'volunteering' in order to be able to then quantify volunteer efforts (e.g. volunteer hours per year) to ensure that policymakers provide commensurate resources. An agreed definition can also support research (see Challenge 10) and volunteer recruitment, where success is critical and linked to sustainability and longevity of volunteering activities. Therefore, there is a need to continuously reflect on the value and appropriateness of definitions as to what is, or is not, an example of a volunteer given the dynamic nature of voluntary activities.

2.2. Interactions and relationships with other actors

The shift towards risk management and resilience has led to a recognition of the need for a wider range of actors to be involved (Challies et al., 2016) and for actions to identify the needs of society and mobilise available expertise to contribute to decision-making and

delivery of climate resilience approaches (Aldunce et al., 2016). There is a role for civil society and volunteers to play as part of this and this second challenge focuses on the nature of their relationships with other actors. Potential relational dichotomies for civil society's role in extreme weather adaptation were emphasised in the CASCADE-NET project (McEwen et al., same volume).

One key axis of dichotomy focuses on the conception and practice of relationships with implications regarding whether a relationship is considered contractual or co-operative by volunteers themselves and the statutory organisations (cf. Geaves and Penning-Rowsell, 2015). This integrates several issues: the players involved (who is in charge), the reliability and expectation of specific actions and responsibility for volunteer actions, and any harm that comes to them if something goes wrong. There can be Health and Safety issues where volunteers are putting themselves at-risk to accomplish a task, which can lead to issues of insurance and liability. Poor relationships can lead to these issues being adopted by expert practitioners, who may resist the perceived 'amateurisation' of their fields of expertise, to pose questions about quality standards for volunteers. Such quality assurance may become challenging when a second or overlaid risk needs to be dealt with (i.e. change to protocols for flood volunteers with COVID-19 restrictions in place) and place an additional burden on volunteers. On the other hand, some volunteers may not want to work with expert practitioners and be unwillingness to be trained to set standards in order to then be 'used' to implement government policy.

Another related CASCADE-NET axis contrasts flatter expectations of consultation (one-off engagements) with active and sustained participation involving social learning that positively increases capacity to deliver future volunteering. For example, interactions and relationships between volunteers and emergency professionals are not just about consultation and participation in an EWE, but also about post-event debriefing to provide space for reflection and learning. Activities such as debriefing provide space to develop relationships and build trust between volunteers and emergency professionals. However, this not always possible for spontaneous volunteers as their involvement and contact details may be unrecorded. Relationship development between volunteers and professionals requires time, and the ability, disposition and trust to learn and experiment. This will be influenced by a volunteer group's willingness and choice of contractual or co-operative relationships as being more appropriate to their setting and resources. The sustainability of such hybrid arrangements needs to be considered with contractual-cooperative agreements between state and volunteers required to stand the test of time with shifting conditions (including emerging climate risks).

There is an ongoing negotiation of the relationship between the state and its citizens with volunteerism potentially strengthening this relationship (UNV, 2022) and volunteers supplementing government services (Dingle et al., 2014). Furthermore, the political context can shape the state and has implications for the role of civil society and type of volunteering that is possible. For example, the Czechoslovakian government's relationship with NGOs during communism influenced flood risk management (FRM) and the state's response to the 1997 flood in modern-day Czech Republic (Kavan et al., 2012; Pospíšil, 2006). The government was not ready for this significant flood event and its role in the flood response was considered inefficient and rigid (Pospíšil, 2006). However, independent NGOs and the public stepped in with an unprecedented wave of donations and volunteering emerging

(Mareš et al, 2013). In this example, the formal and informal voluntary sector responded to government failure and triggered a dramatic shift of public opinion in the Czech Republic on the roles of the state and the potential of the voluntary sector (Pospíšil, 2006).

Therefore, the changing interactions between the state and volunteers, including space for discussions and development of trust, has implications on the nature of their relationship and the ability to develop deeper meaningful state-volunteer relationships. Volunteers and volunteering are involved in an ongoing negotiation with the state which is shaped by their interactions in supporting state-society relationships, supplementing government interventions, and also in highlighting government failures and reconfiguring unequal power relationships.

2.3. Predictable structures versus organic flexibility

Predictable state structures for volunteering can bring benefits of professionalism and coordinated, organised responses to EWEs. Volunteering can also be structured through formal initiatives created to organise and direct volunteers, such as the European Union's youth volunteering initiative known as the European Solidarity Corps. In addition, some countries have volunteer legislation such as the Volunteering Act in the Czech Republic. The Red Cross and other NGOs can also provide more predictable structures to coordinate and support volunteering in response to EWEs.

Volunteering can also emerge more organically and spontaneously as a nimbler and more flexible form to respond, and improvise, to shocks and stresses, as also seen during previous EWEs (e.g. the previously mentioned 1997 Czech flood and the 2021 floods in the Netherlands). Importantly, these more 'informal' volunteers can fill gaps in the government response and provide "additional surge capacity" for responding to disasters (Whittaker et al., 2015, p358). For example, Forrest et al., (2019) found that whilst there were formal flood group volunteers supporting preparation actions immediately before the 2015/2016 Upper Calder Valley floods, UK, there were also many residents who emerged to informally volunteer and support the official response and recovery efforts. These residents were not normally volunteers or part of flood volunteering activities but chose to give time to support their local community during extreme flooding. Local government-funded neighbourhood coordinators were then created post-flood to collaborative with these organic volunteer structures to create hybrid state-volunteer forms combining a more structured approach that could support volunteer activities into the future without formally constituting this spontaneous volunteerism.

Tensions have been identified in the relationships between spontaneous volunteers and formal actors in managing EWEs (e.g. Harris et al., 2017; Paciarotti et al., 2018). Two potentially different operational cultures meet when spontaneous volunteers arrive on the scene during a disaster. Formal actors have predictable structures to support their response to EWEs and spontaneous volunteers may not fit neatly into these structures as well as potentially judging the appropriateness of selected response actions (Harris et al., 2017). Volunteers may see themselves as empowered and 'good' citizens not wanting to be made to fit an alien set of objectives and procedures. Furthermore, spontaneous volunteers may not have appropriate expertise thus leading emergency responders to not always see value in their work done and instead view them as an "added danger" (Paciarotti et al., 2018,

p272). Conversely, spontaneous volunteers may have greater knowledge on local needs, priorities and resources, and be entitled to participate as the “heart of the community” (Harris et al., 2017, p366).

We see the perpetual process of finding a balance between meeting the professional standards of modern emergency management and harnessing civil society’s resources, including limitations of uncertainty in their availability and of quality control, as well as their benefits of spontaneity, flexibility, and sense of the community. Therefore, there are trade-offs between predictable structures and organic flexibility that can both constrain and provide opportunities for volunteers to take action in EWEs. Building synergies between predictable structures and organic flexibility can potentially offer the best of both worlds.

2.4. Volunteering: (quiet) agency or (vocal) activism?

Volunteers involved in campaigning can sit on several intersecting continua in terms of visibility, process/goals and emotional dimensions. Volunteering ranges from highly visible to less obvious or even covert in their operation; from a focus on advocacy to practical action; and with emotional tenor ranging from angry/impulsive to calm/measured. One dichotomy in volunteering might be argued to exist between ‘vocal activism’ (e.g. political campaigning for hazard control or over environmental concerns) and ‘quiet agency’ (e.g. in everyday acts, such as urban greening, that can be potentially transformative but a more “purposeful rather than passive expression of quietness”) (Zlobina et al., 2021; Pottinger, 2016, p217).

Volunteer voices around personal agency can be diverse: volunteering can be about trying to work with others and secure consensus (including partnership making), or it may focus on petitioning officials by capitalising on the (potential) independence of their volunteer position. Leaders of volunteers and their leadership style can have significant influence on volunteering groups and their ethos. Leaders and key members in civil society groups can positively affect volunteering by mobilising interested residents but can also negatively impact relationships with external partners and group members (identified in voluntary flood groups in the UK; Forrest et al., 2017). Leadership is often dynamic over time, for example, in the shift from independent political campaigner towards more partnership collaborator, working with ‘official’ actors to reach a consensus. The scale associated with leadership can also be important, with the National Flood Forum in England and Wales having a strong local focus but acknowledging the national. In ‘quiet agency’, leadership can also take other forms with neighbourliness and compassion potentially being key drivers (e.g. dog walking for people shielding from COVID-19).

Some forms of volunteering can be explicitly about achieving specific goals, such as securing a structural flood protection measure for at-risk properties. The nature of these goals themselves and participant perspectives of volunteering outcomes are important in determining position along the axes of dichotomy. A drawback of ‘vocal activism’ can be that community groups that advocate for specific FRM practices (like dredging) may entrench the status quo. This can lead to powerful cliques emerging and the ‘loudest being heard’, along with the marginalisation of certain perspectives, which may not lead to the best solutions or approaches (see, for example, the banner on FLAG Flooding on the Levels Action Group Facebook page: ‘It’s Simple. Dredge. Maintain.’ versus the Coadapt project’s ‘Adapting the Levels’).

Therefore, it is important to become aware of where a particular set of volunteers sits on these different axes with the implications for effective co-working. However, the danger of a perceptual dichotomy along the axes of overtness-quietness and advocacy-agency is that it may reinforce simplistic responses from practitioners and professionals.

2.5. Volunteering perceived as “unpaid labour”?

Overgaard (2019, p128) positions volunteering as “a form of unpaid labour”. Volunteering involves giving up time and ‘volunteers’ provide this time for free, which can lead to a perception that volunteers expect nothing in return (cf. Merrell, 2000) and volunteering itself has no associated cost. Organised forms of volunteering usually come with significant costs (Dostál, 2020) and lack of awareness of these costs may lead to existing volunteers deciding against further volunteering. Readily identifiable costs may be in developing and maintaining the institutional structures required to organise and coordinate volunteering activities, purchasing appropriate liability insurance, and paying for appropriate equipment for volunteering activity. These are all potential costs of volunteering that formal organisations (e.g. local government) need to account for, although in some cases the costs (time and financial) are borne by the volunteers themselves (NCVO, 2023). Volunteers may spend time organising their activities through social media and messaging apps (e.g. Facebook Groups or WhatsApp); they may also pay for their own equipment or use personal kit. Purchasing of appropriate liability insurance to cover activities that could put volunteers at risk of harm has been identified as a challenge³. For example, flood volunteer groups in the UK have found such insurance difficult to obtain as it involves discussions over who is responsible for them, especially where community flood groups undertake volunteering activities collaboratively with local authorities or on authority/private-owned land. Alongside, there are reported co-benefits for volunteers from volunteering, including personal development including skills and self-esteem, and social enjoyment (Einhof, 2018; Mateiu-Vescan, et al., 2021).

The recent narrative of empowering individuals to take a greater role in the care of their local places and a shift towards greater individual responsibility for personal flood risk is picking up pace in the UK. This empowerment of individuals extends to contributing to community actions in FRM as authorities may see volunteers as cost-free maintainers of locally implemented Sustainable Drainage Systems (SuDS) measures (e.g. rain gardens, water butts etc.). In some areas, development of volunteer flood groups and support of existing ones is linked to government expectations that volunteers will be able to take over maintenance of small-scale FRM measures from authorities. This distributed approach perceives volunteering as ‘unpaid labour’ with limited (if any) appreciation of the individual opportunity costs of volunteering.

There is also a need to resource volunteer care and appreciation and to ‘oil the wheels of volunteering’. This can support the building of personal relationships and connections that can support volunteering activities, as well as ensuring co-benefits including an enjoyable experience for volunteers. For example, the Washford Upper Catchment Multi-Benefits project, UK recognised the importance of volunteer care and appreciation by embedding a ‘thank you’ meal and the ritual hosting of flood group meetings by different members into

³ https://www.thenonprofittimes.com/npt_articles/risky-business-theres-liability-acts-volunteers/

their project schedule and funding. Other forms of care and appreciation involve providing refreshments - 'tea and biscuits' - to maintain volunteer morale, efforts and social contact. There can be hurdles in accessing formal funding for these more informal care activities, with complex systems of grants and institutional inflexibility in giving money for volunteer support. Allocated expenditure for such volunteer care and appreciation may also be unnecessarily bureaucratic, becoming a means for funders/authorities to exert control over volunteer activities by requiring approval before expenditure. In essence, this involves deciding acceptability and worth, taking away some decision-making powers and agency from volunteers. This may be perceived as being 'captured' by government agencies and loss of independence, which may be undesirable to volunteers. Therefore, there needs to be a recognition that volunteering comes with a cost to support activities, provide equipment and insurance, in order to show appreciation of volunteers and support their continued volunteering. Empowerment of volunteers requires access to these resources and support without leading to government capture that reduces the independence of volunteers whilst passing on the responsibilities for local climate resilience.

2.6. Welfare of volunteers: risk and care

There is evidence that volunteering has diverse social and health benefits, including improved physical and mental health and wellbeing (HWB), increased confidence and sense of purpose, positive emotional experiences and enjoyment, acquisition of valuable skills and provision of work experience, the nurturing of new and existing social relationships, cohesion with the population affected (expressed through thankfulness) and the supporting of a shared social identity (Gray and Stevenson, 2019; Mao et al., 2021; Fekete, 2021). However, there are also indications of potential mental health impacts on first responders, including volunteers, from experiencing traumatic EWEs such as flooding (Public Health England, 2020; Thormar et al., 2010). Volunteering in context of EWEs and in pursuing climate resilience may involve engaging in uncertain and risky situations, with implications for both HWB of volunteers and subsequent litigation (e.g. Sauer et al., 2014). Risks to the health and wellbeing of volunteers may be hidden, physical and cascading (e.g. secondary disease/illness from contaminated waters, waterborne diseases, and potential breathing problems). Mental health impacts on volunteers may be less visible and emerge in the longer term (Thormar et al., 2010). For example, volunteers may undergo mental trauma, including impacts of 'losing' people in an EWE like a flood or witnessing difficult situations (Mao et al., 2021). Dealing with floods and disasters, and supporting people traumatised by these events can also exacerbate pre-existing conditions among volunteers, as well as create new HWB problems (Thormar et al., 2010).

The professional management of volunteering includes risk mapping and analysis for various stakeholders, including volunteers (Dostál et al., 2020). It also requires organisational awareness of their duty of care (their safety, security and welfare) in managing volunteers in volunteering activities. Risk assessments need to consider how authorities can support volunteers in dealing with a sense of failure and 'not doing enough' at individual and collective levels. This includes being aware of pre-existing and underlying health conditions of volunteers and how to support their continued volunteering efforts (McEwen et al., 2018). Implications of the duty of care include supporting the longer-term impacts on volunteers from volunteering in risky situations. This needs to be linked to the professionalisation of volunteering, both for the volunteers and the 'managers' for that duty of care. This also necessitates the ability to actively identify the 'volunteers' based on their volunteering actions/contributions (e.g. during a specific EWE). If volunteering is unrecorded or informal (e.g. spontaneous volunteering), it is harder to track volunteers down subsequently, and offer them HWB support post-event. This includes those who may have been volunteering in

specific unsafe conditions (e.g. chemically-contaminated floodwaters), as well as those affected by unanticipated flood impacts.

Caring for volunteers also involves systems for individual and collective recognition and reward by a range of potential organisations including governments, NGOs and other governance systems. While some reward for aid given during severe floods (e.g. Australia's NSW State Emergency Service Young Volunteer of the Year and Bulgarian Helsinki Committee's "Human of the Year"⁴), others consider longer-term volunteering contributions. A UK example of reward for collective volunteering outside the acute phase of flooding is the Bodenham Flood Prevention group, created after the UK Summer 2007 floods, which went on to be awarded a national Queen's Award for Volunteering. Here the average volunteer age was over 70 years old in a group run by a retired army couple (Long-Dhonau, pers. comm.).

Therefore, volunteer management needs to put in place mechanisms to actively monitor risks to volunteers in order to be able to provide appropriate care both during the EWE and in the short and long-term recovery process. There may be valuable opportunities for cross-national learning about individual and group reward systems for volunteering, and how to formally recognise volunteers contributing to EWE management and local climate resilience.

2.7. 'Surviving and thriving': demographics, inequality and volunteering

The use of the 'resilience narrative' can be beneficial in positively framing citizen roles as being beyond only playing a passive role, with wide-ranging actions that can be taken to 'survive and thrive' stresses and shocks. However, this narrative has been critiqued with its emphasis on transferring responsibilities for 'surviving and thriving' in the face of uncertain stresses and shocks from the state to individuals (Forrest et al., 2020). Previous research has identified that not all citizens have the same ability to 'survive and thrive', with unequal distributions of capacities and vulnerabilities leading to some neighbourhoods having a greater ability to 'be resilient' than others (see Forrest et al., 2020 for the case of Arnhem in the Netherlands; O'Hare and White, 2018). Furthermore, resilience interpretations may be exclusionary and lead to a privileging of the status quo, rather than being inclusive and a tool to pursue sustainable and just societal transitions (e.g. Meerow et al., 2019). These critiques can also be applicable to volunteering with their presence and efforts being unequally distributed.

Place-based factors such as spatial form and social cohesion are thought to influence the presence of volunteers. A rural/urban volunteering divide has been identified in certain contexts with rural areas volunteering more in the USA, although the gap has been shrinking, which was linked to resource availability and community context (Paarlberg et al., 2022). Individuals' characteristics can be important to consider with age, existing health conditions, gender, marital/partner status, parental status (as part of life course transitions and recent parenthood), educational attainment, homeownership, social and cultural norms and experiences, religious identification, income, social network size and community cohesion, all potentially influencing participation in volunteering activities across neighbourhoods (Niebuur et al., 2018; Lam et al., 2022; Gallarza et al., 2013). Furthermore, strong local civic infrastructure and higher numbers of voluntary organisations operating locally can also lead to a greater likelihood of volunteering (Mohan and Bennett, 2019;

⁴ The Australian example is for an individual (<https://www.ses.nsw.gov.au/news/all-news/2020/february-flood-hero-awarded-young-volunteer-of-the-year/>) whereas the Bulgarian example is to a volunteer group (<https://www.liberties.eu/en/stories/human-of-the-year-2014-bulgaria/2797>)

Graham et al., 2016). There is a recognition that some communities have a greater capacity to mobilise themselves to take action on extreme weather risks than others with some leading authorities whilst others need additional government support, as found in the case of the Dutch city of Arnhem (see Forrest et al., 2021). The differences in volunteer distribution need to be considered in policy decisions, especially when public spending is allocated towards areas with high levels of existing volunteer activity as they may appear as fertile ground for ‘quick wins’ to achieve project outcomes. Targeting these areas may reinforce and privilege the status quo as the emphasis is on existing volunteers already included in the decision-making processes.

Conversely, there are lesser heard voices in communities that may be from groups that have traditionally been marginalised or excluded from local authority decisions. These groups have often been labelled as ‘hard to reach’ groups (Holmes et al., submitted same volume), but this naming is often given by authorities (many groups are unlikely to self-identify as ‘hard to reach’) and needs rebuffing to make authorities more accountable for their past interactions or inactions that may have alienated these groups. Engagement with such groups, and in areas with less volunteering activity, can need greater resources and a longer-term perspective that begins with pre-disaster interactions that then develop capacities alongside communities. Therefore, the pursuit of ‘just’ transitions for local climate resilience needs to critically reflect on potential inequalities and inadequacies in the ‘survive and thrive’ perspective. This involves challenging the status quo by recognising and addressing systemic factors that contribute to potentially unequal distributions in volunteering presence and activity (Southby et al. 2019).

2.8. Changing technology and digital spaces

New digital realms and the geographies of the digital have societal implications for the “body and the screen” (Ash et al., 2018, p33) with digital spaces spanning physical and temporal boundaries to broaden the scope of engagement that individuals can have with EWEs. Relevant activities arising from these digital spaces include awareness-raising actions providing information quicker than official sources, exchanging official and citizen knowledge on disaster situations, providing supplies and provisions for humans and animals, and enhancing the shared sense of community and social support (Tran et al., 2020; Sharp and Carter, 2020; Demiroz et al., 2022; Kaufhold and Reuter, 2022) as well as contributions to solidarity across physical locations and time with those affected that encourage volunteering beyond traditional spaces.

Digital spaces are therefore expanding the number of potential volunteers by creating new communities and pools of expertise that can be drawn on to support volunteer activities during EWEs as well as to connect offered support/volunteers to those affected (e.g. individuals posted offers of free appliances, accommodation, and skills on social media platforms to support those affected after the 2021 floods in the Netherlands). Technology also brings benefits to volunteer management with Apps used to collect evidence of volunteering hours and quantify the economic value of volunteering (e.g. Dobrometr, loosely translated as the ‘good-meter’, in the Czech Republic; see Dostál et al., 2020) as well as to assign volunteer tasks, submit danger alerts and support volunteer coordination (e.g. ‘Kordinátor’ developed by NGOs; Dostál and Koláček, 2014).

However, these technological changes raise spatial and temporal questions over what constitutes ‘volunteering within digital spaces’. Consider Wikipedia, the free worldwide online encyclopaedia available in many languages, which is provided by the Wikipedia Foundation and based on volunteer efforts (Dostál et al., 2020). When consuming knowledge on Wikipedia, it does not matter how or when the volunteer(s) contributed the information: if the volunteer did this during their normal working hours or waiting for their bus. These digital spaces expand the spatial and temporal boundaries in which volunteering can occur by allowing people to volunteer without needing to be physically present or to allocate specific time in their routine to volunteer, which reduces associated transaction costs (the cost of making it happen) and increases volunteering efficiency. This flexibility and ease of access to digital spaces can therefore potentially increase the amount of time that individuals can contribute to volunteering actions. Despite these efficiencies, new technologies and digital spaces may not always be an adequate replacement for in-person, physical activities.

Social media platforms can bring benefits for information dissemination and exchange (Mulder, 2020; Kaufhold and Reuter, 2022), but also enable the spread of misinformation and disinformation, lead to trolling, as well as causing potential information overload (Tran et al., 2020). Messages posted on social media can potentially lead to confusion and panic about ongoing management actions and the extent and intensity of ongoing EWEs (Tran et al., 2020). These can centre on issues of blame regarding the choices made to manage extreme weather risks with volunteers often having to deal with these consequences and misinformed citizens. For data freely volunteered during an EWE there are also concerns over privacy, security, ownership and potential future use of data (Sharp and Carter, 2020). Furthermore, these technological advances are not universally accessible as individuals may choose not to use social media platforms or may not have access to smartphones and the internet (Sharp and Carter, 2020), which can lead to disunity in space and time with potential data injustice existing with digital elites and digital exclusion in dealing with EWEs (e.g. Mulder, 2020). Therefore, whilst changing technologies and digital spaces expand the spatial and temporal boundaries of volunteering, they can also disrupt EWE responses and exacerbate existing digital inequalities.

2.9. Systemic embedding of volunteering into local climate resilience: bringing volunteering out from extreme “events”

Traditional volunteering for EWEs tends to be conceived as spontaneous (extraordinary) volunteering in the response and recovery phases of EWEs. Alongside this, a key challenge is how to develop persistent embedded volunteering (systemic volunteering) within communities before, during and after the EWE. Volunteering in the response and recovery phases tends to be more visible than in mitigation and preparation phases. For example, in flood preparation, this might be about connecting people to the ‘watery-ness’ of place, flood heritage, citizen science activities, and thinking about dealing with residual risk and the need for preparedness in a more transformative and systemic way. Such indirectness, or positive obliqueness, might be about volunteering in social learning and outreach activities that promote awareness of local flood risk and increased HWB through recreational engagements in urban floodplain nature reserves (e.g. Tewkesbury ‘Green Lung’ project⁵ in

⁵ <https://tewkesburynaturereserve.org.uk/green-lung-project/>

a UK 'flood town'). Nurturing a culture of volunteering in the non-emergency phases can support successful volunteer management during an emergency (Paciarotti et al., 2018).

Systemic embedding of volunteering considers the wider resilience cycle and developing baseline capacities and vulnerabilities of citizens and communities. This development can be connected to addressing the root causes, dynamic pressures and unsafe conditions (i.e. the progression of vulnerability) that contribute to disasters (e.g. as seen in the PAR model, Wisner et al., 2004). Volunteers can both engage in this for themselves as well as for other citizens through their volunteering actions relating to health, education, social welfare, ecosystems, and place-making. Whilst these actions are not explicitly connected to EWEs, they can influence society's preparation, response and recovery for the EWE. The development of volunteer capacities therefore needs to occur beyond traditional conceptual silos or boundaries about what constitutes volunteering and its associated activities in preparation for an EWE. For example, in the Dutch city of Arnhem a partnership was formed to provide neighbourhood support on housing, education and health as a way to build capacity with an implicit connection to FRM.

However, funding and governance challenges exist in breaking down silos and incorporating more holistic thinking in adopting this systemic approach of building community capacities without the explicit linkage to EWE. Therefore, there is a need to consider how to connect systemically across issues building out beyond specific EWEs to address the progression of vulnerability. This might broaden relevant volunteering activity to supporting wider social and adaptive learning for resilience in communities.

2.10. Researching volunteering

The definitional fuzziness of volunteering (Challenge 1) has implications for researching the topic and the scarcity of empirical data may be why Dingle et al. (2001, p4) suggest that "the history of volunteering is written in invisible ink". That is not to say that there has been no research into this topic, but rather that some forms are easier to explore than others. For example, more organised volunteering connected to formal structures and official agencies may be easier to research than more informal and extraordinary volunteering (e.g. 'spontaneous volunteering') that can be serendipitous and difficult to capture 'in the moment'.

Research into volunteering has implications beyond only academia with relevance in constructing a body of empirical evidence of the value of volunteering for policymakers to make informed decisions and for allocating future public resources to volunteering efforts (Salamon et al, 2011; Dingle et al., 2014). Furthermore, understanding the extent of volunteer work can help authorities and volunteer programmes to improve and provide appropriate support for volunteers to maintain the momentum and sustainability of their activities (Dingle et al., 2014). Having a shared and consistent definition of volunteering can also support cross-country comparisons (UNV, 2022).

The difficulty in researching volunteering is not limited to researchers identifying volunteering activities, it can also be challenging for volunteers to recognise their own contributions. Citizens may not necessarily perceive their activities to be 'volunteering' with the ILO (2011) manual on measuring volunteer work stating that it is suboptimal to use the term

'volunteering' when asking respondents about their volunteering experience. Instead, citizens were asked about "unpaid non-compulsory work that (they) did, that is, time (they) gave without pay to activities performed either through organizations or directly for others outside (their) own household." (International Labor Organisation, 2011, p18). This definitional approach helped to identify activities that may be understood as 'volunteering' by organisations and agencies, but not by the citizens involved.

Further challenges include the potential for participant fatigue arising when their volunteering connects to research areas of increased interest and geographical areas that have recently experienced certain phenomena/events. For example, publicised volunteer efforts in flood-affected areas can lead to sudden interest from academics and authorities with associated surveying and interviewing to collect empirical data. On the other hand, care needs to be taken to avoid assuming there is fatigue when there may not be, and researchers should recognise the potential cathartic benefits of sharing experiences in 'extraordinary' volunteering, and in volunteers feeling valued that others are interested in hearing their lived experiences. Venturing beyond only 'extractive' data collection into more dialogic research approaches that encourage the 'researched' to ask questions of the 'researcher', as well as for the sharing of previous researcher experiences, can support knowledge exchange. For example, sharing research results investigating international FRM approaches that civil society have taken can bring new perspectives and ideas for civil society roles in local FRM strategies elsewhere.

The ability to conduct research on volunteering can support academic advances and policymaking, however, it can be a challenging topic to research into due to its fuzzy nature and interactions with volunteers. Therefore, there is a need to consider different perspectives of what constitutes 'volunteering' as well as being mindful of the potential (positive and negative) effects of research on volunteers.

3. CROSS-CUTTING THEMES: FUTURE VOLUNTEERING IN EXTREME WEATHER EVENTS

In critically reflecting on the current and future status of volunteering, using experiences from FRM as context, this Policy Forum identified ten challenges that were then iteratively grouped into four cross-cutting themes below: volunteers as renewable energy, stakeholder narratives of volunteering, learning from other contexts, and transformative resilience. These themes constitute the critical reflection and synthesis of the ten challenges by the authors in a process to draw out key challenges and opportunities (see Figure 1).

Future Volunteering in Extreme Weather Events

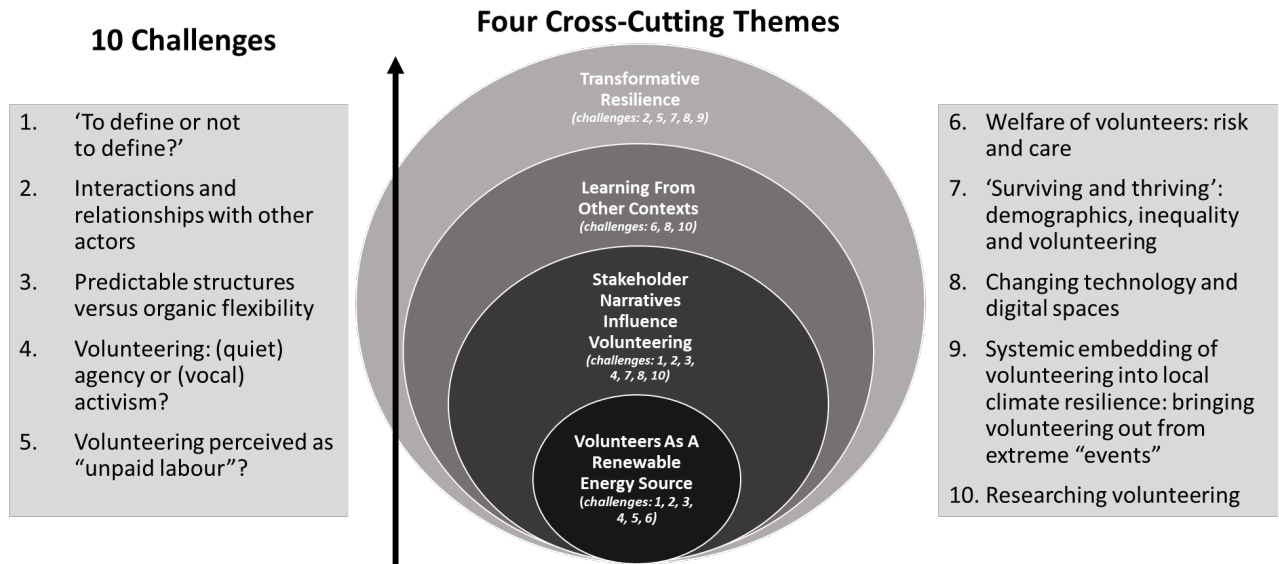


Figure 1: Challenges and Cross-Cutting Themes Identified

3.1. Volunteers as a renewable energy source

The issues of 'effective co-working' (challenge 4), 'developing deeper meaningful state-volunteer relationships' (challenge 2) and 'balancing predictable structures and organic flexibility' (challenge 3) emerged as important to consider as did the need to 'show appreciation of volunteers and support their continued volunteering' (challenge 5). State-volunteer relationships and support of volunteers are important for the present and for future volunteering. Brudney and Meijs (2009, p577) offered an interesting perspective on volunteering that connects to these issues, proposing that "volunteer energy can be usefully understood as a human-made, renewable resource that can be grown and recycled". This "renewable energy" definition emphasises the need to care for and protect volunteers from risks as well as sustain their activity into the future. There is a continual need to bring in new volunteers to replenish the volunteering pool and to access new resources. One renewable energy source needing continual refreshment and replenishment within human timescales is young people coming through into adulthood. At the other end of the age spectrum, active "silver service" volunteers also have a continual throughput, with people becoming less able to contribute/volunteer in later life stages. Creative approaches are needed to engage young people early in volunteering and embed (positive) experiences of mutual aid. Volunteer attitudes towards volunteering need consideration; sometimes this territory may be blurred, for example, with university students studying through accredited community-based learning approaches while others volunteer through their Students' Union for enjoyment, altruism, life experiences or getting skills to support their CV and future career.

Another energy source is within the private sector: their attitude towards volunteering can be more closely linked to business functioning through activities of corporate social responsibility. This type of volunteering is unlikely to be about activism, and instead more delivery of routine or longer-term tasks with the incentive of improved business reputation.

Although, like student volunteering on educational programmes, it may not always be considered to be a form of volunteering based on the three criteria (challenge 1). Spontaneous volunteering, when viewed through a positive lens, might also be considered as a renewable source of energy. It can act as an available resource that is eager and enthusiastic to support, potentially injecting new energy into a project (but also possible tensions; challenge 2). However, as Dostál (2021, p2) notes, this renewable resource “can be left idle, used sustainably, or exhausted by inappropriate use”. This renewable energy requires proper resourcing and appropriate care with ongoing negotiations on state-volunteer responsibilities and relationships (challenge 2). Even as a ‘renewable’ energy source, volunteering still needs to be supported, resourced, and carefully orchestrated to avoid tensions in duplicated efforts and show appreciation of volunteering efforts (challenge 5). The state has a role to play in ‘actively monitoring risks to volunteers’ (challenge 6) in the response and short to longer-term recovery.

3.2. Stakeholder narratives influence volunteering

The fuzzy definitions of volunteering partly caused by its ‘dynamic nature’ (challenge 1) make it a challenging topic to research (challenge 10). Furthermore, dominant narratives that circulate within stakeholders, relating to amateurisation of professional fields and the potential of volunteers being an added danger (challenges 2 and 3), shape perceptions of volunteers. Media narratives often focus on ‘victimhood’, but not so much on the ‘social strength and community’ shown in dealing with EWEs. Conversely, there are examples of policymakers overplaying the communities’ perceived resilience and their ability to do things themselves with unrealistic expectations being associated with volunteering (e.g. Paciarotti et al., 2018). This can be used to introduce narratives that the ability to deal with EWEs is due to some communities having ‘something extra’ compared to others, and can be used to stigmatise communities that fail to equally manage and ‘survive and thrive’ (challenge 7). It can also be used as a tactic to justify decisions not to provide further support or resources to EWE-affected communities. Kaika (2017) and Davoudi (2018) identified this with communities refusing to be called ‘resilient’ (‘Don’t call me resilient’), and instead signalling that they need more resources and support. Communities may believe that being labelled as resilient means that they are expected to manage EWEs on their own and not be working in partnership with formal actors. In a FRM context, it can also be seen as being told “Your community isn’t getting a flood defence, so learn to live with flood risk” (Long-Dhonau, pers. comm.). Addressing detrimental narratives and broadening the stakeholders involved can widen discussion and be more inclusive of the diverse views that exist.

Such narratives can weaken state-volunteer relationships and collaborative efforts with instances where volunteers are not being welcomed by responders (e.g. Paciarotti et al., 2018) and may ‘reinforce simplistic responses from practitioners and professionals’ (challenge 4). Volunteers may consequently expend too much energy trying to find ways into, through and around (at best) rigid structures and (at worst) a less than facilitative and sometimes hostile institution. Hence, volunteering time may not be spent on actual projects for managing EWEs but instead on dealing with the impacts of unhelpful narratives. However, at the same time, changing technologies and digital spaces are reducing transaction costs associated with volunteering and increasing volunteer efficiency (challenge 8). Although these advances are expanding the spatial and temporal boundaries of volunteering, they are also leading to the online gathering of different voices with positive

(e.g. knowledge and support exchange) and negative (e.g. disinformation and trolling) impacts, which in effect expands these definitions and narratives of volunteering.

3.3. Learning from other contexts

The challenges identified are not insurmountable and solutions can be identified from other contexts, such as the potential for 'cross-national learning about individual and group reward systems for volunteering' (challenge 6). Potential solutions and opportunities to identify learning to support volunteers and volunteering in dealing with EWEs may be found from recent societal events that have led to both spontaneous bottom-up and top-down mobilisation of volunteers in managing risks. For example, the systemic shock of the COVID-19 pandemic and its response phases is an exceptional event sustained over time and space that triggered new mutual aid practices, with so many people active in sustained ways. The important role of volunteering during COVID-19, powerfully brought to a national stage in the UK, Netherlands and Czech Republic amongst other countries, has forced a reflection on volunteering practices at this level, as opposed to more local level reviews on responses to EWEs (e.g. for severe floods). The UK government's Kruger Report (2020), for example, focused on distilling the learning about local citizen agency during COVID-19, and how to embed community volunteering into the longer-term, suggesting ideas like a Volunteering Passport. It also identified important areas such as roles of young people, and how to harness their enthusiasm to sustain volunteering efforts that arose from COVID-19 into the future. There is also recognition of the important roles of faith groups in volunteering, and several governments have focused on "learning from COVID" (e.g. the UK Government and Scottish Government in 2021). However, volunteering levels in the UK were lower in 2020/21 than in previous years with lockdown restrictions or concerns due to the pandemic acting as a barrier to participation (UK Government, 2023). Further considerations of the formalisation of volunteering to resemble paid work, unreasonable expectations of volunteers, and the issues of additional expenses from volunteering have also contributed to a recent reduction in volunteering in the UK context (NCVO, 2023) and need to be considered in volunteering for local climate resilience.

Another example is the war in Ukraine that has triggered another mobilisation of volunteering in the UK, with people reflecting on their agency and volunteering to take action - 'wanting to do something'. The war has also showcased the power of national volunteering strategies in two main ways. Local agency has been important in mobilising aid resources, and with UK families being asked by government to consider volunteering homes for refugees. We have seen volunteering for raising donations but also volunteering clothes/donations with digital spaces contributing to solidarity across physical locations (challenge 8). Here prior cultural connection can be important, with UK volunteers coming forward from communities (e.g. in Wales) with close links to or connections to Ukraine. This also links to the globalisation of volunteering, cutting across national borders, with local skills being used in a transnational context. Empathy and emotional connection drive such volunteering but also with identified issues. This may raise questions about the appropriateness of volunteering in matching to need (e.g. material versus financial donations). Weaknesses have been identified in processes of inviting refugees into private homes with issues of safeguarding the recipients of the volunteering, especially concerning the safety of women and children, as well as actively monitoring risks to volunteers (challenge 6). Therefore, there is importance in

research into volunteering that identifies challenges and opportunities (challenge 10) to support cross-country learning.

3.5. Transformative resilience

Resilience can be understood as a combination of return to normality as well as adapting and transforming in response to stresses and shocks (UNDRR, 2017). This latter element of transforming can relate to challenging the status quo and can be seen through the reconfiguring of unequal power relationships (challenge 2), the need to empower volunteers (challenge 5), and the potential for changing technologies to exacerbate existing digital inequalities (challenge 8). Through its ongoing negotiation with the state (challenge 2), volunteering itself can confront unequal power relationships (UNV, 2022), state failures (e.g. failures in the 1997 flood event in Czechoslovakia) and the status quo to support systemic changes to society's functioning as a form of transformative resilience.

Volunteering can be a response to a failure of the state to support its citizens in dealing with EWEs and can lead to citizens empowering themselves by taking action (challenges 2 and 5). However, the presence of volunteering activities and capacity to volunteer is not equally distributed (challenge 7). There needs to be planning to support volunteering in areas with fewer voluntary organisations and weaker local civic infrastructure (Mohan and Bennett, 2019; Graham et al., 2016). The act of volunteering can lead to different social and cultural beliefs and values interacting between the volunteer and those they are supporting. There is evidence of religious organisations, such as Khalsa Aid in the UK, supporting the immediate flood recovery and cooking warm meals for those affected by flooding. Actions of volunteers representing their societal and cultural beliefs and values can challenge negative stereotypes and generate positive perceptions. The authors have found this in interviews with flood victims: acts of kindness in crisis can remind people that they have more in common despite social and cultural differences.

Transformation involves paying attention to maximising the wider opportunities and co-benefits of volunteering to deal with EWEs that exist both for volunteers and their local places. Local places can benefit from volunteer activities building citizen capacities to address the progression of vulnerability that contribute to disasters and losses from EWEs (challenge 9). Benefits relate to community cohesion and social capital, renewed sense of shared social identity, and the improved physical and mental health and wellbeing of citizens to support residents in the face of other shocks (Gray and Stevenson, 2019; Mao et al., 2021; Fekete, 2021) and in pursuing local climate resilience. Volunteering for EWEs can be broadened to cover wider actions that support social and adaptive learning for resilience in affected communities (challenge 9). Volunteering efforts, that include reflection and aim for inclusive and cross-cultural approaches, can challenge the status quo by supporting the move to 'new normals' and volunteering that addresses systematic root causes as well as realising resilience co-benefits beyond 'only' safety from disaster (challenge 9). This can support transformation in volunteers' capacity to deal with EWEs as part of pursuing local climate resilience.

4. CONCLUSIONS: THE FUTURE OF VOLUNTEERING IN LOCAL CLIMATE RESILIENCE

Predictions of more frequent and intense EWEs are testing existing governance arrangements. Authorities are not always able or willing to manage these risks alone, and there is a growing role for volunteers and volunteering in these dynamic and uncertain situations. Volunteers have long played a role in societal and environmental issues and previous research has identified their role in contributing to community resilience for EWEs (e.g. Forrest et al., 2017). This Policy Forum critically explored the challenges and opportunities of volunteers and volunteering in dealing with changing extreme weather risk and how this can influence the ability to build local climate resilience. It is hoped that the ten urgent challenges and four cross-cutting themes identified can stimulate critical reflection of how academics, communities, policymakers and practitioners can collaborate with volunteers, and conduct research into volunteering, to develop effective policies and public programmes for local climate resilience. Three key recommendations for volunteering and local climate resilience emerged based on the discussions in this Policy Forum.

Firstly, a challenge for drawing together discussions and learning in this Policy Forum is in being broad enough in defining and understanding 'volunteers' and 'volunteering' so that we take account of the definitional fuzziness of the terms. Despite the attempts to define, there are volunteer actions potentially not being included as forms of volunteering despite nuances that suggest they meet the three common features associated with volunteering (e.g. by Dingle et al., 2014; Gallarza et al., 2013; UNV, 2022; discussed in 2.1.). Furthermore, different stakeholder narratives and volunteers' own perspectives of volunteering also add to the fuzziness of what to define as volunteering. Therefore, we suggest drawing together explorations of 'volunteering' stemming from 'people doing stuff' to unlock potential cross-cultural lessons and inspiration. We recommend broadening and going beyond rigid definitions, as well as understanding the different context-based influences and nuances in volunteering, to support future research and efforts to bridge the theory-practice gap in volunteering for local climate resilience.

Secondly, a hybrid of both state and volunteer collaborations is suggested to ensure a balance between structure and flexibility to respond to societal shocks (e.g. COVID-19) and future EWEs. Synergies between predictable and emergent forms have value in bringing together different knowledges and experiences and bridging between different realms where volunteers may be "wearing many hats". However, it is important for neither to lose their own identity and the independence of volunteers. Overall, developing deeper and meaningful state-volunteer relationships is important to address systemic root causes and allow more transformative approaches to local climate resilience.

Thirdly, volunteers and voluntary activity is not equally distributed or accessible across digital, social, spatial and temporal boundaries. Therefore, the third recommendation is to recognise this potential unfairness in allocating support based on visible volunteering and to focus on more inclusive and 'hidden' volunteering that includes those 'with quieter voices'. These neighbourhoods may be classed as 'hard to reach' due to (poor) historic engagement interventions in the areas that may not recognise the challenges residents face. These neighbourhoods may still have strong social connections that can be mobilised when faced with shocks and stresses; this could be recognised as 'hidden volunteering' based on strong social capital and informal networks, but unseen by authorities and academics.

In exploring the futures of volunteering, this Policy Forum challenges existing thought by proposing the need to move beyond 'the volunteer' to a more inclusive and nuanced recognition that starts with 'people doing stuff'. Examples have been drawn from flooding as a common EWE although we hope that this reflection acts as a stimulus for future researchers to explore the applicability of these challenges to different climate shocks, and whether these challenges have wider resonance in other disciplinary and cultural perspectives. Volunteering has played an important role in managing EWEs and for responding to different societal shocks and stresses to challenge the status quo. Volunteers can themselves, through their actions and challenges to the status quo, "reconfigure unequal power relationships between ordinary citizens and state authorities" (UNV, 2022, p123). Therefore, we propose that volunteers and volunteering can play a critical and wider role in pursuing a 'just' transition to achieve transformative climate resilience practice and policy.

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ⁱ The CASCADE-NET project focuses on 'civil agency, society and climate adaptation to weather extremes'. The authors presented on 'Civil Society, Sendai and wider climate resilience: an introduction' (McEwen, 2020), 'The Czech National Scheme of Volunteering during emergencies' (Dostál, 2018), and 'Flood Resilience: From 'surviving and thriving' to capacity building and addressing inequalities' (Forrest, 2020). For this paper: Steven brings a flood resilience and civil society perspective and focuses on The Netherlands and England, Jakub brings an economic perspective on volunteering and focuses on The Czech Republic, and Lindsey brings a community action and environmental management perspective and focuses on The United Kingdom.