Rafaa Saleh Kassis cooks dinner for her family. She and her husband have seven children and 16 grandchildren. The family struggled as Rafaa had a low income job and her husband, a farmer, was no longer able to manage with the physical demands of his work. In early 2023, they started receiving US$150 per month as emergency cash assistance from Mercy Corps' SAFER program.

Chapter 9: Climate change and environmental considerations in CVA

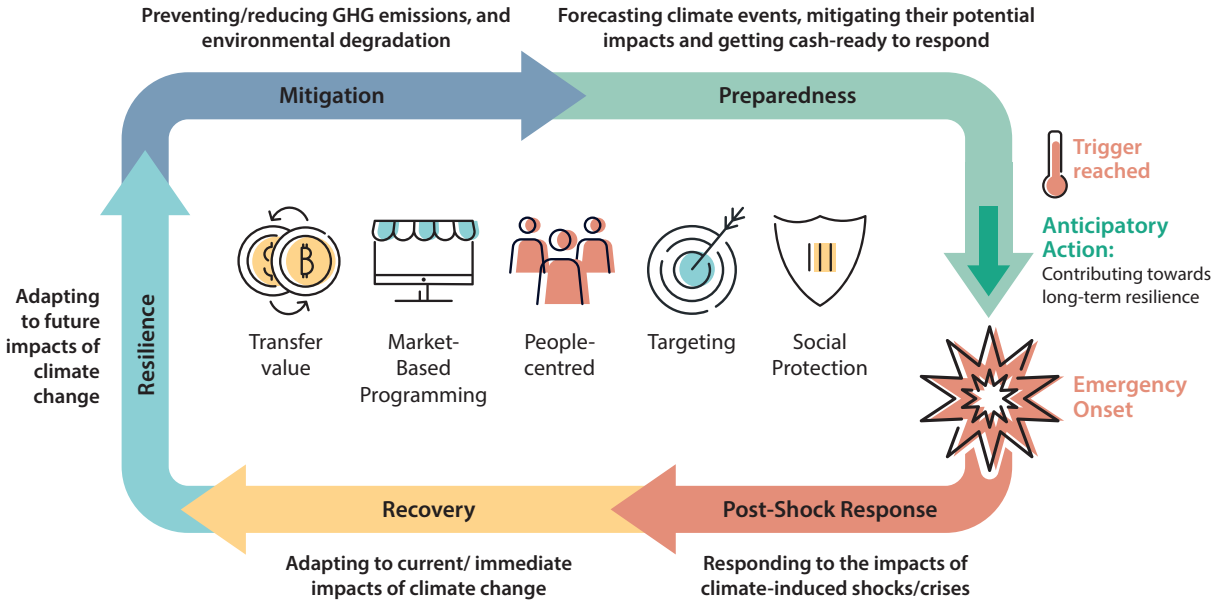
Summary: Chapter 9

Climate Change and Environmental Considerations in CVA

Key findings

- Climate change and the environment are now pressing concerns for the CVA community.
- Clarity is needed on how CVA can address needs effectively and contribute to greener programming.
- CVA is widely considered to be 'greener' than in-kind assistance. Various approaches have been identified to help mitigate the environmental impacts of CVA.
- The environmental impacts of digital payments are not generally well understood or considered in programme design.
- Social protection can provide a mechanism to address multiple vulnerabilities associated with climate change and environmental degradation.
- The use of CVA as an effective tool to support anticipatory action is receiving increasing attention. The potential to leverage social protection systems to institutionalize anticipatory action is documented but has not yet been operationalized at scale.
- There is limited evidence of environmental factors being incorporated into MEBs.
- Human mobility is increasingly recognized as an effective climate adaptation strategy. The portability and flexibility of cash makes it a suitable means of assistance along migration routes.
- Adaptation and resilience building are longer-term processes, with a critical role for cash-based social protection.

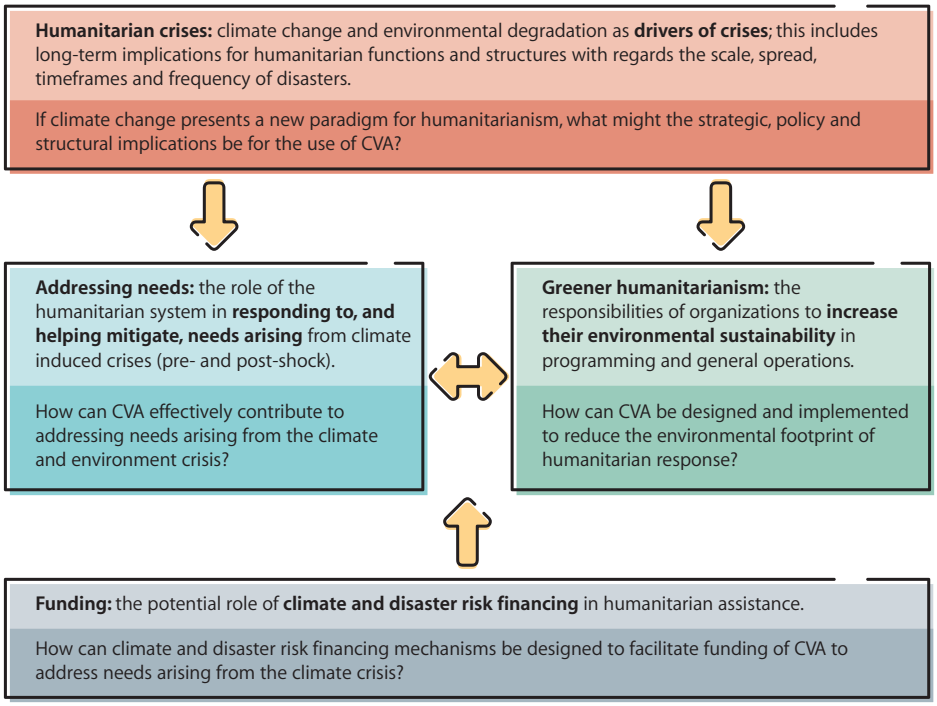
Use of CVA in the Climate and Environment Response Cycle



Summary: Chapter 9

Climate Change and Environmental Considerations in CVA (continued)

Policy, practice, and debates linking climate change, the environment and humanitarianism often relate to several broad, interlinked categories, with associated questions and possibilities for the use of CVA



Strategic debates

- In relation to the climate, what might cash at scale in anticipatory action look like?
- Can CVA be designed to support and link to longer-term, holistic approaches to addressing the climate crisis?
- How can the environmental footprint of CVA be measured and minimized?

Priority actions

- **Humanitarian actors should** identify how the humanitarian system needs to change to better face the challenges of the climate crisis, including for the most effective use of CVA.
- **All actors should** work together to identify and build the strategic and operational relationships required to link climate-sensitive humanitarian CVA across governments, civil society, disaster risk reduction, development, climate action and financing, and meteorological and forecasting agencies.
- **Donors and implementing agencies should** integrate a climate lens into the planning and implementation of CVA in all contexts as a matter of urgency.
- **Implementing agencies and researchers should** use ongoing and upcoming programming to build learning and evidence on the best use of CVA in relation to the climate crisis.

Climate change and environmental degradation are increasing the urgency of adapting humanitarian response

The **global impacts of climate change and environmental degradation are real and pose a huge immediate and long-term threat**. The effects of climate change are a primary or contributory factor in multiple ongoing and complex crises, underlining the challenges posed to the humanitarian system.

> *"Climate is not simply one more 'issue' that humanitarians must add to their ever-expanding list of cross-cutting priorities. Now, it is a constant and rapidly emerging global disaster with universal reach. Our sense of intersectionality needs to be reversed. The climate emergency will not intersect with other areas: instead, everything will intersect with climate change. This is a whole new paradigm for humanitarians, and we need to urgently reframe our vision and approach"*[1].
> (Hugo Slim, 2023)

Experience tells us that **in general the consequences of climate change most affects communities who are already poor and marginalized**, with structural inequities and characteristics such as age, gender, disability, and livelihood exacerbating individual impacts[2]. In addition to the immediate impacts of weather events, cumulative changes contribute to increased vulnerabilities. For example, food insecurity has significantly increased due to climate change, with projections from IFPRI's IMPACT model finding that 65 million more people will be undernourished by 2030 with climate change, as compared to a scenario without it[3].

Research from 2018 highlighted **longstanding barriers to the effective inclusion of environmental factors in humanitarian practice**. Barriers included prioritization, mandates, funding, and the perception of it as largely a developmental concern, noting that, *'functionally, saving lives and considering environmental impacts are many times treated as being mutually exclusive'*[4]. Environmental issues have not been given due attention in humanitarian programming, but this may have been particularly the case for CVA. This has been attributed to various factors, including challenges in monitoring the environmental impacts of CVA, other issues being prioritized within CVA, and a lack of tools and guidance for CVA incorporating environmental considerations, and vice versa[5].

However, **climate and the environment have figured increasingly in the discourse and practice of humanitarian organizations for the past decade[6], and there is evidence of growing momentum, including with regards to CVA**[7]. The push for better integration of climate issues is reflected within donor and implementing agencies' strategy documents, although the emphasis and focus is varied[8]. Multiple key informants remarked on their organization publishing new climate commitments and policies in the last few years (e.g., IRC, ACF, NRC), as well as examples of developing specialist internal capacity on this topic (e.g., Mercy Corps, Oxfam, IOM). They also highlighted climate-related programming and research e.g., IOM and climate-related migration, FAO and the adaptation of agricultural ecosystems.

In terms of collective policy commitments, at least 380 stakeholders have signed the *Climate and Environment Charter for Humanitarian Organizations*, initiated by ICRC/IFRC, including a wide array of national and international actors[9]. The Charter stresses responsibilities to work together to reduce the impact of crises, intending to galvanize and steer collective action, and encourage signatories to implement the principles through organization specific targets and plans. Other commitments include the *Humanitarian Aid Donor's Declaration on Climate and Environment* from the European Union and many European humanitarian donors[10], and those from the Humanitarian Environment Network[11].

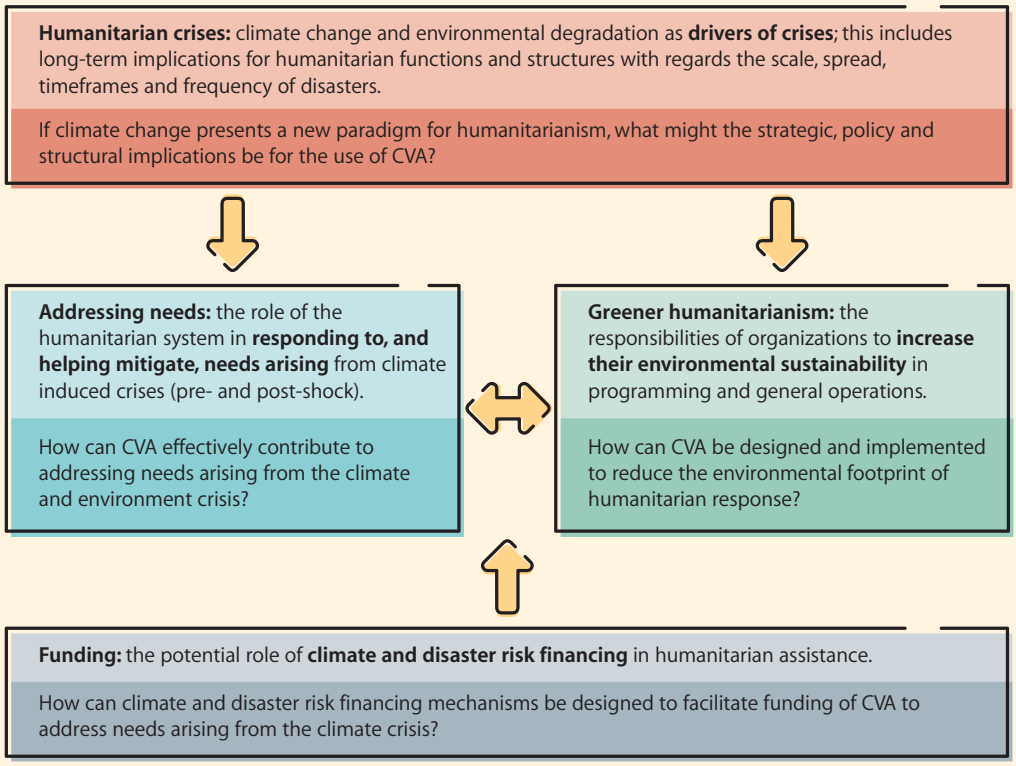
Clarity is needed on how CVA can address needs effectively and contribute to greener programming

The importance of climate change and the environment are not contested, but there are more questions than answers regarding what the effective role(s) of CVA might be. **Specific policy positions or commitments on humanitarian CVA relating to climate change and the**

environment are limited. For example, CVA is rarely mentioned directly in organizational documents as a tool to mitigate the impact of climate change, and while many organizations have policies on climate and policies on CVA, they don't necessarily intersect[12]. DG ECHO's recent cash policy[13] and its minimum environmental requirements[14] are notable exceptions that have specific considerations and recommendations for the use of CVA with regards to environmental impacts. There is also the example of the Collaborative Cash Delivery Network's (CCD) inclusion of climate and the environment as one of their core thematic areas in their refreshed strategy.

GRAPH 9.1

Policy, practice, and debates linking climate change, the environment and humanitarianism often relate to several broad, interlinked categories, with associated questions and possibilities for the use of CVA



Source: Authors, based on consolidated analysis of primary and secondary data

> *"The technical units for humanitarian and development sit in the same sub-unit, so I can reach out to my climate and environment or other technical colleagues easily. This is great as it means that even though we might just be opening a conversation, the opportunity to collaborate and the value that both parties can bring is already there, which is an amazing starting point and build technical collaboration across programmes and approaches."* (Mercy Corps)

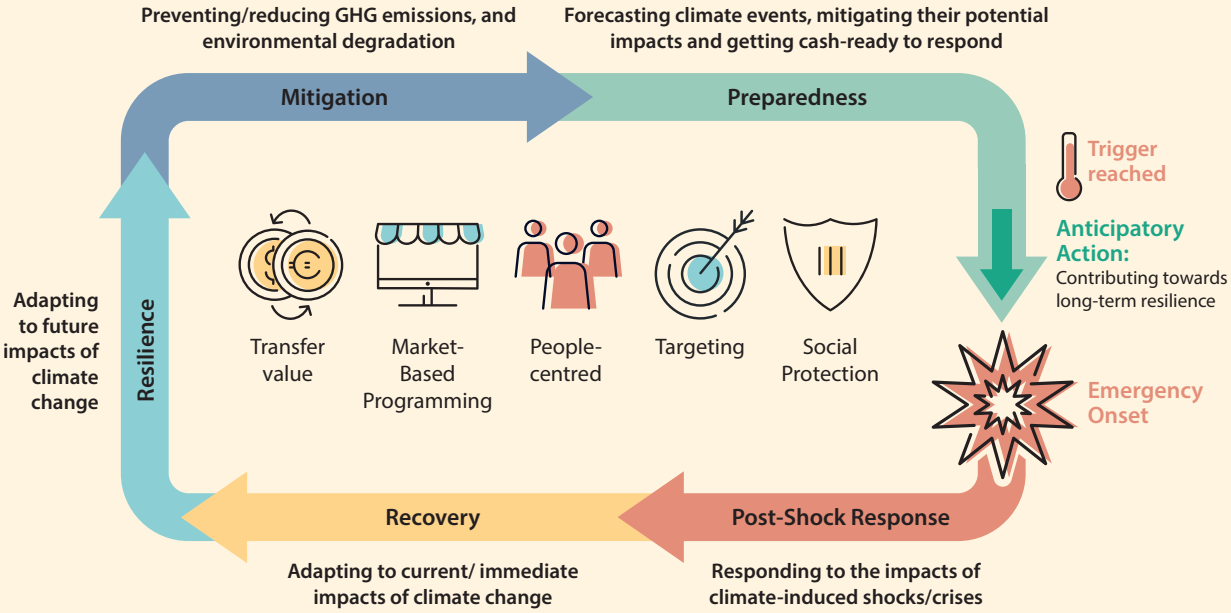
There are mixed perspectives on the relationship between CVA and environmental issues. Most organizations are in the relatively early stages of configuring linkages between CVA and climate[15]. While some see challenges in identifying meaningful intersections for CVA and climate, multiple key informants were positive about the opportunities and salience. This is reflected in conversations happening within organizations on cross-linkages, and a growing number of examples of relevant programming and research (explored later in the chapter).

Although there is a lot to learn about how and where CVA can be used most effectively, it's already **possible to identify multiple potential or existing intersections between CVA, the environment and climate change**. The nature of the climate

crisis requires broad engagement and action, within and beyond the scope of the typical humanitarian programme cycle and structures. This includes working across humanitarian, development, social protection, environmental and climate sectors.

GRAPH 9.2

Use of CVA in the Climate and Environment Response Cycle



Source: Authors

Graph 9.2 and Table 9.1 propose a framework and visualization to enable better understanding of existing and potential CVA functions and considerations in relation to climate and the environment. The analysis that follows is largely structured around this, recognizing that while there are multiple overlaps between different elements, a framework for thinking is a useful tool given the complexities and myriad considerations.

The Indonesian Red Cross (Palang Merah) and IFRC provided cash assistance to people affected by the earthquake that hit West Java, Indonesia in the Cianjur province in 2022.
© The Indonesian Red Cross. May 2023

TABLE 9.1

Framework situating CVA within the climate and environment response cycle

Mitigation (preventing/reducing greenhouse gas (GHG) emissions, and environmental degradation)	**Preparedness and anticipatory action** (CVA climate preparedness; mitigating potential impacts of climate events; contributing to resilience)	**Response (post-shock)** (CVA to address immediate needs arising from **loss and damage** due to climate-induced shocks/crises; climate sensitive programming)	**Adaptation, recovery, and resilience** (using CVA to help adapt to current and future impacts of climate change and environmental degradation)
• Greening humanitarian CVA (reducing environmental impacts, risk analysis, market analysis, market-based programming; dedicated/ mainstreamed tools, guidance, etc.) • Environmental footprint of CVA – aspects and comparative measurements viz other modalities, factoring greenhouse gas (GHG) emissions, biodiversity, and ecosystems services degradation	• Climate inclusive CVA preparedness (e.g., targeting, delivery mechanisms, capacity building of responders, hazard risk and environmental analyses, forecasting, early warning, market analysis) • Shock responsive and adaptive social protection (e.g., coordination of planning, targeting, design) • Anticipatory action and CVA (e.g., targeting, delivery mechanisms, forecasting, triggers, timing, transfer values, funding, complementary actions)	• Mainstreaming green response (see Mitigation) • Targeting (inclusivity, gender, climate-related vulnerabilities) • Minimum Expenditure Basket (MEB) e.g., energy, climate adaptation • Transfer values (immediate needs; factoring sustainable recovery and resilience building) • Market-based programming (e.g., post-shock recovery, managing climate impacts) • Complementary activities (e.g., services, in-kind, infrastructure) • Social protection (linkages and coordination) • Funding (e.g., access climate finance and disaster risk financing) • Monitoring and evaluation (environmental indicators and outcomes)	• Human mobility (as a form of adaptation) • Cash for Work/Public Works/Conditional Social Assistance for risk reduction and adaptation activities – e.g., carbon sequestration, reforestation, watershed rehabilitation, environmental resilience • Short- and long-term resilience building through cash assistance • Environmental analyses

Topics with cross-cutting relevance and overlaps in understanding CVA and climate/environment:

social protection linkages (e.g., shock responsive, adaptive), nexus (humanitarian-development-climate), locally-led response, disaster risk management, financing (including climate, disaster risk), gender

Mitigation

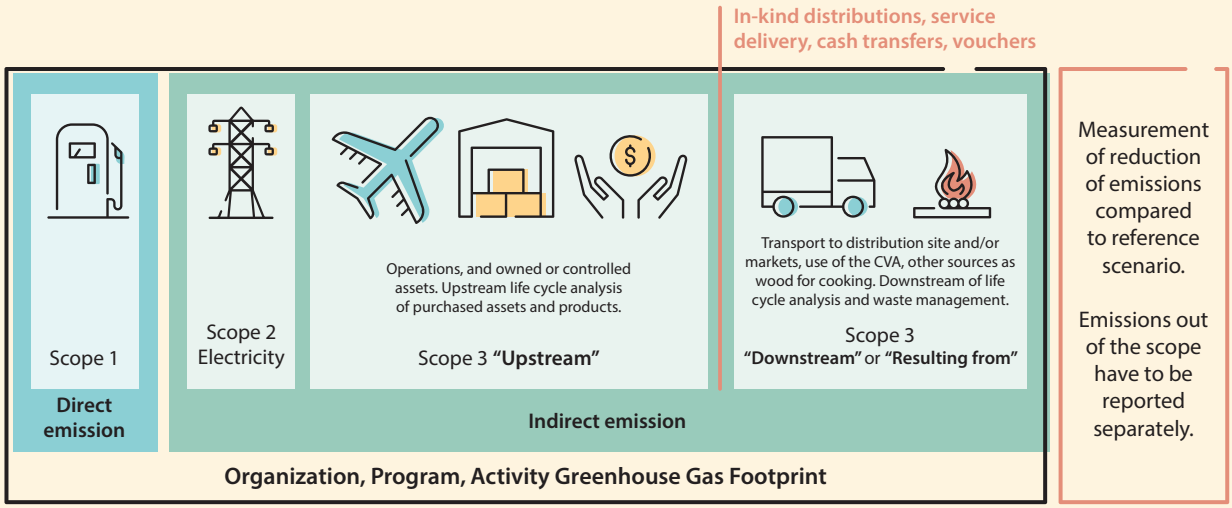
Mitigation of climate change is generally understood as the prevention or reduction of greenhouse gas (GHG) emissions, either by reducing GHG sources, or enhancing 'carbon sinks' that can remove and store these gases (e.g., through reforestation). Mitigating GHG emissions is a key component of the drive for 'greener' humanitarian responses. However, maximizing the environmental sustainability of humanitarian programming and reducing the associated 'environmental footprint' encompasses both GHG emissions and environmental degradation. For humanitarian organizations, in line with the principle of 'do no harm', this means working to avoid, minimize and manage the damage they cause to the environment and the climate, while maintaining the ability to provide timely and principled humanitarian assistance.

Metrics to calculate the environmental footprint of humanitarian programming are being developed but face significant complexities. Stakeholders generally base their **GHG emission calculations** on existing global standards[17]. Analysis of the GHG impact of humanitarian programming is largely focused on indirect emissions, including those from people who receive assistance (see Graph 9.3[18]), which is at the core of debates in the context of CVA. Beyond GHG metrics, the ability to **measure the broader environmental footprint of the**

humanitarian sector would also need to take account of multiple other factors including water resources, biodiversity, land use, health etc. Existing **tools and guidance** can help with the process of identifying relevant criteria for developing an environmental footprint calculation for example, the NEAT+ tool[19], UNHCR's Environmental Checklist[20], and ECHO's minimum environmental requirements.

GRAPH 9.3

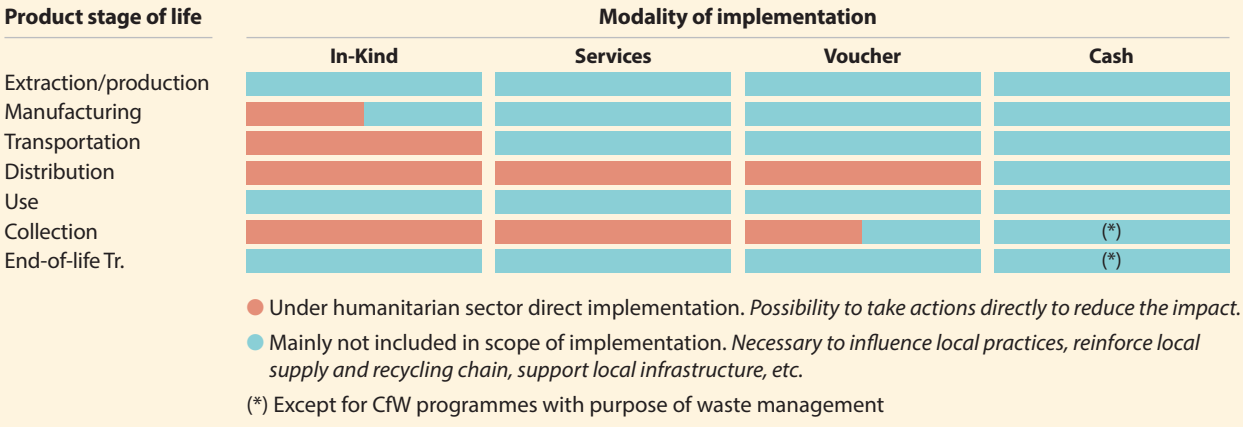
Emission calculations



Most recent humanitarian studies on environmental impact are based on the **Lifecycle Approach** which considers all stages of a product or service from acquisition of raw materials, through to final disposal[21]. Modality choice has implications for the opportunities available to humanitarian actors to directly manage environmental impacts at different stages in a product lifecycle (see Graph 9.4). The fungibility of cash and the transfer of agency to the people receiving it means more limited scope for direct action to reduce environmental impacts. However, studies have shown that the highest emissions for most products relate to the production stages, with organizational scope to directly influence these processes also relatively limited for other assistance modalities such as in-kind.

GRAPH 9.4

Areas for which levers to reduce environmental impact are identified



Source: Action Against Hunger, 2021

Interest in how to calculate GHG emissions for the humanitarian sector has increased in recent years. For example, through the development of the Humanitarian Carbon Calculator, which is linked to the Climate and Environment Charter[22]. This includes a suggested metric for calculating emissions for cash assistance based on the respective country's average emissions per capita and GDP. A recent ACF study further contributes to efforts to measure the footprint of CVA, through analysis of how to calculate the GHG emissions of various minimum expenditure baskets (MEB)[23] (see Box 9.1).

CVA is widely considered to be 'greener' than in-kind assistance, with the potential to reduce the environmental footprint of humanitarian interventions[24]. This is based on factors such as reducing organizations' logistical loads, and the potential to boost local production and economies (e.g., reducing the transport related footprint of goods in local markets). Also, as people choose what they buy, CVA can avoid transporting and distributing 'unnecessary' goods that don't align with recipients' needs and may be traded or disposed of. However, **calculating and evaluating the environmental footprints of different modalities is complex**, including varying thresholds for attributable emissions across different organizations[25]. As a result, it has been difficult to prove assumptions about the environmental footprint of CVA in practice[26]. Attribution is further complicated for cash assistance where spending choices belong to the recipients and may be informed by multiple issues – e.g., markets, household economies, behavioural and cultural factors – which are beyond the influence of the implementing organization.

BOX 9.1

Action Contre la Faim (ACF) and CITEPA – Calculation of MEB GHG footprint

- ACF collaborated with the Technical Reference Center for Air Pollution and Climate Change (CITEPA) to calculate the GHG emissions (weight) for a range of MEBs.
- As the necessary data on the carbon emissions per country is not available, French reference data was used.
- Due to the large variations in MEB content from one country to another (e.g., some include health, water, energy, transport, etc., others do not), the calculations focus on the food component for comparison between countries. Food is a primary area of expenditure across contexts, and consistently included in MEBs, although the types and range of food vary.
- The household size on which MEBs are calculated also varies, affecting GHG emission calculations, so the comparison was built on the USD equivalent.
- The study proves that it's not possible to calculate an average carbon intensity (carbon emission weight per USD) for MEBs across countries as the range is too great – from less than 0.5kgCO_2/USD to 10kgCO_2/USD.

> *"How we measure carbon footprint (for CVA) is potentially a big rabbit hole. No definition exists for this … If, for example, expenditure includes school fees, how do you measure the carbon footprint for that?"*
> (Red Cross Red Crescent Movement)

Several key informants from this and another study[27] expressed **scepticism regarding the feasibility of a standardized, shared methodology to assess the environmental impacts of CVA**, despite efforts being made. For example, the challenge of determining parameters for inclusion and exclusion, the diversity of expenditures, and questioning the technical feasibility of calculating the emissions for some types of expenditure.

Some stakeholders expressed concerns that people may use cash assistance to purchase low quality items, with the potential for a larger environmental footprint if items need to be replaced more often and generate more waste[28]. These concerns have led some stakeholders to recommend more conditional or restricted assistance to facilitate environmentally friendly purchases, assuming relevant items are locally

available[29]. However, several key informants emphasized **the need to avoid restricting people's spending based on a perceived tension between the flexibility of cash and potential environmental impacts**. They acknowledge a trade-off between people's choices and the quality of what they might purchase but highlight that **a combination of limited household purchasing power, spending priorities, and market availability inform these choices**. The inherent value in the fact that whatever is purchased likely reflects people's priorities was noted, with the associated concern that attempting to constrain purchasing contradicts the central concepts of dignity and choice in cash assistance. One key informant also questioned the ethics of scrutinizing the consumer choices of some of the world's poorest people in the context of a climate crisis primarily driven by rich people and countries, arguing that there are more effective ways for humanitarians to use their time and resources. Finally, cumulative evidence on the extent to which recipients may sell on in-kind assistance to address other priorities[30] indicates that providing in-kind as an alternative to cash does not necessarily resolve the issue of accessing and using more sustainable products.

> *"The vision needs to be for market-based approaches (rather than CVA per se) – actions that are greener that focus on mitigation. I think that using this lens is an enabler."* (FGD, Americas)

> *"We want to avoid negative environmental impacts through all actions including cash. Market analysis will need to consider the environmental impact of goods in the market, but technical capacity to do this analysis is a key barrier. We are hiring expertise and looking at building capacities."* (Donor)

Objectives, context, and environmental assessments are critical in informing intervention design[31]. There are circumstances where restricted modalities will be appropriate with regards to environmental footprint – e.g., guarding against deforestation in relevant shelter interventions. Equally, **CVA provides enough flexibility to ensure that restrictions and conditionalities are not the only solution**[32]. Evidence and guidance indicate various and complementary approaches to integrate mitigation of environmental impacts into CVA (and other) programming, with an understanding of **market systems**, supply chains and **local production processes** being critical (see Box 9.2). One key informant highlighted that effectively implementing these approaches demands **additional skill sets** that are currently either not available or limited within the humanitarian sector.

BOX 9.2

Emerging options to integrate the mitigation of environmental impacts into CVA[33]

- **Ensure environmental factors are incorporated into programmatic tools including assessments, analyses (e.g., needs, market, risk, response analysis)**, monitoring, and evaluation. Specific environmental assessments and analyses can also be utilized e.g., using tools such as NEAT+, particularly for sector-specific interventions.
- **Integrate an environmental lens as a core element of market assessments and analysis, engaging with environmental actors and authorities as necessary**. This can enable analysis of both the potential environmental benefits and negative impacts of cash assistance with regards to locally available products, services, and practices, employing a lifecycle perspective as appropriate, and considering the whole value chain. This helps inform the selection of the most effective mix of modalities and complementary interventions.
- **Work with local markets, trade unions, and market and environmental policy makers to facilitate access to environmentally preferable products. Market support interventions** can consider how to improve the environmental sustainability of available items and strengthen local market systems, which will usually require longer term engagement and investment. This includes **working with local producers and suppliers on decarbonization of relevant products and services which have higher emissions and environmental impacts**. ACF's MEB study[34]

recommended this to achieve greater long-term impact, rather than focusing on attempts to restrict choice and what people can purchase.

- **Consider awareness raising activities on environmentally conscious practices and purchasing as a complement to cash assistance**. This type of intervention should ensure though that transfer values are sufficient to enable these choices, and that relevant items are available locally.
- **Use an environmental lens in the MEB composition**, including household energy requirements. This could include prioritizing environmentally sustainable options, where prices are relatively comparable, factoring these issues into gap analysis and transfer value calculations, and considering whether there are environmentally damaging items in the MEB that could be better addressed through non-cash modalities.
- **Consider the potential environmental impacts relating to digital payments and how these might be reduced**. For example, ensure the selection of digital devices considers durability and coordinate with others to avoid unnecessary duplications (see section below for more on digital payments).
- **Include environmental criteria in the selection of private sector partners**, such as financial service providers (FSPs e.g., investment portfolios, including fossil fuels), traders (for interventions using vouchers), and other relevant suppliers of services, for example relating to energy consumption (see below on digital payments).

> *"To identify the meaningful changes that could be made, we need to understand which are the areas contributing most to higher emissions or ecosystem destruction in humanitarian programming. For example, is it deforestation resulting from the establishment of camps, or the flights of aid workers, or the logistics of food?"*
> Climate Change and Social Protection Research Initiative (CCASP)

With evidence still relatively limited, some key informants noted the potential benefits of continuing efforts to identify **a common and workable methodology to calculate the environmental impact of humanitarian operations, across sectors and modalities**. The challenges are recognized, but there is value in better understanding impacts to inform the programme design. Further analysis could also produce more evidence of the impact of the recipients' use of CVA, which has the potential to inform understanding and provide data across multiple sectors.

The **environmental impacts of digital payments** are not generally well understood or considered in programme design. This covers several aspects, including energy consumption for storing and transferring data and powering devices, and the impacts of producing and disposing of digital hardware. In terms of energy requirements, perhaps the most energy intensive payment mechanisms to date have been certain forms of **cryptocurrency** that use a 'proof of work' standard (e.g., Bitcoin). However, the use of cryptocurrencies in humanitarian response has, to date, been very limited, while the 'proof of stake'[35] approach is increasingly standard for most cryptocurrencies (e.g., used by Ethereum since 2022) and is much less energy intensive than 'proof of work'[36]. See Chapter 7 for more on digital payments and the use of blockchains and cryptocurrencies.

Preparedness

The core building blocks, principles and best practices of CVA preparedness usually apply for any type of CVA intervention, including responding to climate-based shocks (see also the section on anticipatory action, below). As CVA preparedness is covered in depth in Chapter 5, this section only highlights **some emerging recommendations and practices on better incorporating climate and environment into humanitarian responses using CVA**.

The perspectives of local people should be incorporated into climate and environmental hazard risk analysis and related aid planning. Research in disaster prone regions of Bangladesh noted the potential for mismatches between the focus of aid programming and how local people perceive their own needs and feel the impacts of different hazards. For example, respondents in one area were much more likely to cite heatwaves than floods as the most significant hazard, while most past preparedness and aid had been geared towards flooding. This highlights the importance of regular engagement with communities, recognizing that climate change impacts may change over time. The same study also outlined communities' demands for longer term structural support as an essential element of adaptation and resilience, while in practice they were only receiving short-term aid. This **underlines the limits of humanitarian action in addressing the climate crisis**, and the importance of a more holistic approach addressing both long-term and short-term requirements[37] – for example, connecting CVA with other forms of assistance.

Humanitarian preparedness for climate-based crises should be a coordinated and collaborative process with disaster risk agencies, meteorological services and social protection systems and ministries. In Madagascar, for example, planning for humanitarian cash responses to drought or flooding were linked to both social protection and early warning systems, to ensure collaboration. This requires **relationship building**, with and between agencies, ministries, and services, incorporating advocacy and mutual capacity strengthening. Working with regional platforms like the Coordination Centre for the Prevention of Natural Disasters in Central America (CEPREDENAC) has the potential to generate buy-in where there are challenges with country-level engagement. Involving donors might help to **leverage interest and investment in climate preparedness linking humanitarian response and longer term development**[38].

Social protection can provide a mechanism to address multiple vulnerabilities associated with climate change and environmental degradation. For example, **adaptive social protection (ASP)** aims to build the capacity of poor households to prepare for, cope with, and adapt to shocks, avoiding falling further into poverty. Originally conceived as bringing together social protection, disaster risk reduction (DRR) and climate change, ASP has evolved to adapt to multiple shocks a community might face[39], with partner coordination across government and the humanitarian sector key to facilitating it effectively[40]. See Chapter 6 for more on working with social protection in CVA.

Using data from early warning systems, forecasting and climate modelling can help facilitate the integration of climate and environmental factors into preparedness activities. Key CVA preparedness activities include:

- **Building relationships with meteorological and forecasting entities** where relevant, though forecasting systems in many parts of the world are not yet ready to provide the data needed to enable effective trigger-based responses and require further investment.

- **Registering potential recipients in hazard prone areas, with climate risk as a key vulnerability criterion**. Where applicable, support the strengthening of linkages between climate hazard vulnerability and social protection data systems to identify the extent of overlaps between poverty (the basis for eligibility for many social protection programmes) and climate vulnerability. For example, in Indonesia, partners are supporting the government to develop a national database on disaster vulnerability with the disaster management agency, allowing spatial analysis of social registry data with household hazard vulnerability data. Research has shown that **using existing social registry data in a response (anticipatory or post-shock) without taking steps to layer in climate vulnerability could aggravate exclusion errors**[41]. A similar finding demonstrated that to be effective, ASP needs to modify targeting to integrate vulnerability to shocks, with a focus on high-risk households and areas subject to recurrent shocks, using complementary interventions as relevant[42].

- **Defining and agreeing early warning thresholds**, which incorporate community perspectives wherever possible, linked to funding mechanisms and action plans and protocols to facilitate a timely response.
- **Adapting payment mechanisms**, including ensuring people in climate vulnerable locations have access to payment mechanisms. This entails working with FSPs to support pre-shock account registrations for people in locations vulnerable to climate hazards who don't have access to these services. This could include partnering with FSPs to encourage customers to open accounts, providing financial literacy training and advocating for the development/expansion of the infrastructure and services[43].
- **Incorporating market-based programming to facilitate post-shock recovery**. Using data from past events and climate modelling could help inform the likely impacts of different hazards on market systems, including access and availability of essential items and services. This could then inform planning in terms of appropriate phasing of assistance, and the potential for market-based programming, working with traders and suppliers on contingency plans and preparations to enable a faster recovery.

Anticipatory Action

While anticipatory action (AA) can encompass a range of formal and informal arrangements using various forecast or predictive analyses as a basis for action, the term is primarily used to refer to formalized arrangements with pre-agreed triggers, plans and financing[44]. This is reflected in three core elements of AA: (a) risk information, forecasting and early warning systems; (b) planning, operations and delivery; and (c) pre-arranged financing (e.g., climate/disaster risk financing instruments, DRM budgets)[45].

> ***"Anticipatory action*** *(also known as early action or forecast-based action) means taking steps to protect people before an impending crisis through a combination of risk analysis, early warning and/or forecasts (with pre-agreed triggers), and pre-agreed financing. It must involve meaningful engagement with at-risk communities. CVA can be used in anticipatory action to help reduce the impacts of a predicted event on homes, livelihoods, and health. To be effective, this requires preregistration of recipients, functioning markets and having a transfer mechanism and FSP in place who can potentially register new clients within 2–3 days. Anticipatory action differs from early response which refers to actions undertaken immediately after a disaster occurs."* (CALP Glossary – definition adapted from Early warning, early action | IFRC and Cash-hub.org)

Interest in this approach has been growing over the last decade and accelerated more recently, cross-cutting the humanitarian, development, disaster risk management and climate sectors[46]. Within the humanitarian sector this is reflected in practices such as the hiring of anticipatory action specialists[47], and UN OCHA's pilots linking AA to Central Emergency Response Funds (CERF)[48]. There are also many **locally-led AA initiatives, often based on local forecasts, knowledge, action, and approaches** but data on these is currently patchy as they are often informal, being implemented outside of formal project structures[49].

The use of cash assistance as an effective tool to help achieve the objectives of AA is the subject of increasing attention and activity. A growing number of examples of the use of cash transfers in AA, covering both rapid (e.g., typhoons, floods) and slow onset (e.g., drought) events, evidence this. **Examples of anticipatory cash, led by humanitarian organizations, is summarized in Table 9.2**. The Anticipation Hub also includes a database of anticipatory actions, some of which include CVA.

TABLE 9.2

Organization	Country	Summary Description
ASIA		
WFP and Bangladesh Red Crescent Society	Bangladesh	• 23,434 households (HHs) forecast to experience severe flooding[50] were sent BDT 4,500 (approximately US$53, equivalent to two weeks of HH food expenditure) via mobile transfers. Implemented in collaboration with the Government of Bangladesh.
CARE Bangladesh, Concern Worldwide, Islamic Relief & RIMES[51]	Bangladesh	• SUFAL (Supporting flood Forecast-based Action and Learning) included the design of early action plans and triggers with government and the local community. A programme evaluation, assessed the impact of different combinations of early actions, including early warning messaging, evacuation, shelter, WASH, and cash transfers.
WFP	Nepal	• With CERF funding, HHs received NRs.15,000 prior to the onset of flooding in October 2022, other HHs received post-shock cash assistance[52]. Cash was also distributed as part of pre-flood action in Nepal in June 2022.
FAO	Mongolia	• Provision of cash, together with livestock fodder and health kits ahead of a severe winter season to help protect livelihoods[53].
Red Cross Red Crescent	Mongolia	• Distribution of unconditional cash grants to herder households to help meet needs, such as hay, fodder, warm clothes and medicines, during the dzud.
Oxfam and consortium partners	Philippines	• B-READY (Building Resilient, Adaptive and Disaster-Ready Communities) is a community designed AA approach. Pre-disaster cash grants are a core part of the methodology. In the first two years, 9,300 individuals were reached[54]. B-READY has also been rolled out in Indonesia and Sudan.
FAO	Vietnam	• Ahead of Typhoon Noru in September 2022, FAO disseminated early warning messages, distributed cash and provided waterproof drums.
AFRICA		
IRC	Nigeria	• Early warning messaging and transfer of lumpsum of anticipatory cash to 725 HHs when triggered by climate data risk thresholds – part of a climate resilience project in a flood prone area. The same number of HHs received cash post-shock for comparison.
WFP	Ethiopia	• Anticipatory cash (based on forecasts of low rainfall) of US$168 per HH over four months in Somali region, reaching 14,625 people, plus early warning information to approximately 10,790 HHs. Complements long-term capacity building and early (post-shock) response[55].
WFP	Niger	• Cash provided to 6,000 HHs in August 2022 as part of a broader CERF funded AA framework (implemented by seven UN agencies, the government and over 15 partner organizations) covering food security, health, nutrition, protection, and WASH[56].
WFP	Somalia	• Following forecasts of low rainfall, 206,874 people reached with anticipatory cash transfers, using Somalia's safety-net programme. Early warning messages broadcast on public radio.
GiveDirectly	Mozambique	• Mobile payments of US$225 per HH provided to approximately 7,380 HHs in Sofala, in partnership with the government. Satellite data and flood mapping were used to identify where the worst flooding was expected, with payments made in the days before the cyclone[57].
Cash Working Group and Bureau National de Gestion de Risques et des Catastrophes and Ministère de la Population, de la Protection Sociale et Promotion de la Femme	Madagascar	• In 2021, forecast-based action tackling drought was used for the first time by WeltHungerHilfe which made cash transfers to 7,500 people for six months to prevent food insecurity. • FAO and partners provided cash transfers as part of a wider set of interventions (including small livestock and drought-tolerant seed provision), based on forecast drought. • WFP provided cash to support agricultural production and for water mobilization reaching 62,210 people.
CENTRAL AMERICA		
Red Cross	Guatemala and Honduras	• 600 families in Honduras and 700 in Guatemala received cash assistance ahead of a tropical storm. It was funded through the IFRC's Disaster Response Emergency Fund (DREF)[58].

With the increasing number of examples of the use of cash in AA, learning is being generated albeit based on a limited number of interventions. **Key findings** from the available literature are summarized as follows.

- **Anticipatory cash can have positive impacts in both the immediate and longer term, contributing to resilience**. For example, an IRC study in Nigeria found positive impacts in terms of adaptation (more likely to take pre-emptive actions) and resilience (more likely to invest in productive assets, and less likely to resort to negative coping strategies) amongst households who received cash pre-shock[59]. An evaluation of the welfare impacts of cash provided before the onset of flooding in Bangladesh found **significant benefits along multiple dimensions, including food consumption, well-being, asset loss and damage, employment, and evacuations**. Households who received anticipatory cash reported significantly improved child and adult food consumption, even when measured three months after the intervention, and were 36% less likely to go a day without eating compared to households that did not receive the transfer. Well-being was assessed as 12.5% higher for households that received cash, with significantly decreased asset loss and damage, decreased borrowing, a higher likelihood of being in work, and higher earnings potential. Households receiving cash were also more likely to evacuate people and livestock prior to flooding[60].

- **Timing matters – even small differences can have an impact**. For example, analysis from Bangladesh found that receiving anticipatory cash a day earlier resulted in a small increase in food consumption months later[61].

- In the case of rapid onset events (e.g., typhoons, floods) that can at least temporarily disrupt markets (availability and access) and increase prices, **cash is most useful before and after, rather than during, a shock**. This points to the value of receiving cash and, for example, being able to stock up pre-crisis (when availability and prices are likely to be more favourable).

- **The evidence indicates a preference for anticipatory cash as means to address needs and protect assets**. For example, in the Philippines, 81% of respondents to a pre-crisis survey reported that they would immediately use cash assistance prior to typhoon landfall. In Nepal, cash was the preferred modality overall (60%) in the case of pre-flood assistance, albeit with variation by need (highest for livelihood support and shelter, lowest for clean water access, split almost 50–50 between cash and in-kind for food).

> *"CVA presents opportunities and can have spill over effects on resilience. Choice of modality is very much based on the context, the type of crisis, the timing of the intervention. You need to have the system in place in advance to distribute CVA on time."* (Start Network)

- Preferences for cash as a post-shock means of recovery are known, underlining the **value of coordination and continuity in planning from anticipatory action through to early recovery**. This corresponds with the recommendation that anticipatory action, including the use of CVA, should be part of a holistic contingency planning process, linking to early and ongoing response to a shock. This is as opposed to seeing AA as an alternative to post-shock assistance[62].

- **Delivering cash assistance with complementary activities can help to mitigate hazard impacts**. These might, for example, include goods or services that can't be sourced locally, or activities to mitigate impacts on assets and infrastructure. Designing for complementarity should consider the range of AA support (all modalities) planned across humanitarian agencies and government, as well as linking to post-shock response plans[63].

> *"Anticipatory action, yes, it's new and sexy, but the core of what makes it function is basic cash preparedness and common vulnerability analysis that we've been preaching in our contingency plans for all sorts of other responses."* (FGD Asia)

- **Combining cash assistance with early warning information and guidance can increase effectiveness**. WFP found significant positive impacts across multiple metrics when combining AA cash assistance with early warning information to drought vulnerable people in Ethiopia. For example, in the endline analysis, food consumption scores for 91% of households receiving both cash and information were at an acceptable level, compared to 70% of those receiving cash

only. Similarly, 23% of households receiving both cash and information confirmed having sufficient food stocks, compared to only 5% of the 'cash only' control group[64].

- **Unconditional cash** allows people to **determine their immediate priorities and increase their resilience**, including potentially deciding to move (see the Adaptation, Recovery and Resilience section for more on migration).

Focus group participants for this report highlighted that **facilitating the effective use of CVA for AA reflects effective CVA preparedness in general in many respects**. At the organizational level, it means having the building blocks for CVA in place, and sufficient agility to act quickly when required. Developing country and hazard specific action plans with clear triggers and activities (e.g., National Societies' Early Action Protocols, plus FAO example in Table 9.2), and identifying pre-arranged financing, are also critical preparedness components for AA. In terms of intervention design with considerations relevant to anticipatory action, key elements include:

- **Market assessment and analysis**. These are critical in planning cash and other modalities as part of AA, to understand availability of items that would mitigate impacts at the household level, and price trends. Market analysis may also identify where market support interventions are required, to help mitigate impacts on traders and supply chains, and facilitate faster post-shock recovery.

> *"Our work related to cash in the Climate Centre is under two main themes – anticipatory action, and social protection. We are advocating for targeting based on real-time hazard forecasts, ideally using an existing social protection system database in which all households are pre-registered."* (Red Cross Climate Centre)

- **Targeting.** For many types of climate-based shock, particularly rapid onset events such as storms and flooding, identifying which locations will be most affected may only be possible a few days in advance of the event. Several key informants and FGD participants noted that **this unpredictability calls for comprehensive, up to date identification and registration processes in advance** – something more within the scope of national social registries and social protection than humanitarian agencies. For example, in Nepal the government's dashboard of flood-vulnerable households was overlain with social protection recipient lists to highlight priority locations. Using pre-existing data and delivery systems enabled rapid action.

Other recommendations include having common targeting criteria across implementing agencies; pre-identify recipients with the relevant authorities to limit perceived in/exclusion errors; and account for likely impacts on different livelihood, wealth and demographic categories given that AA targets 'at-risk' households[65].

- **Pre-register people to the identified payment mechanisms**. Assessments to identify suitable payment mechanisms need to consider timing and capacity to provide cash to the target group within the required pre-shock window, and accessibility (including safety in collecting payments, and ability to use the mechanism). It has been argued that in rapid onset contexts with short lead times of only a few days, digital solutions may be the only viable option to deliver anticipatory cash, particularly at scale[66]. Possibilities being explored by some agencies relating to the use of aggregators (see Chapter 7 on Data and digitalization) may provide greater flexibility in future.

- **Transfer values**. AA intends to help people to prevent or mitigate the impacts of a shock, so estimates of the costs of recommended measures to achieve this should be considered when setting the transfer value. In practice – in common with CVA in regular humanitarian response – various factors inform transfer values, including MEBs, social assistance transfer values, income deficit calculations, or the needs of specific target groups.

Defining readiness (pre-activation) and activation triggers based on forecast data, mapping, and analyses is one cornerstone to AA that is not part of regular CVA preparedness. It should integrate community feedback wherever possible. Improvements in the accuracy of meteorological forecasting and impact mapping have

helped in the push towards more AA, although the **accuracy and timeliness of forecasting data can vary significantly** depending on the data source and nature of the shock, and so constrain the launching of anticipatory action CVA. For example, longer rivers with strong systems for river basin measurements and more developed modelling can generate accurate flooding forecasts seven to ten days in advance. In comparison, more complex river systems require investment in modelling across multiple tributaries, and for flash flooding events, are more challenging, and typically provide forecasting data two to three days in advance. Defining the triggers and thresholds for activation can also still be challenging and a contested process. It may be the case, for example, that a readiness trigger is activated, but the threshold for activation and disbursing assistance is not[67] (though significant change in forecasting is possible in the coming years, as the use of artificial intelligence increases[68 69]). Until more certain, one key informant highlighted how essential it is to manage expectations within communities that are pre-registered for AA, with clear communication regarding the thresholds for assistance to be released.

Despite the growing evidence of AA benefits, several key informants remarked on the fact that **funding remains a significant challenge** due to reticence to provide advance funds given uncertainties about precisely when and where action will be required, and at what scale. Governments' reluctance to act on early warning data has been cited as a barrier, with concerns to avoid generating unnecessary panic (in the case the hazard doesn't materialize as forecast), or 'waste' resources. This constrains the use of social protection systems for AA, and for other partners' CVA provision where authorization is required to trigger a response. This also relates to issues of identifying and agreeing effective triggers, and a lack of flexibility to adjust – for example if the anticipated shock does not materialize, but another does. A key informant gave a recent example from Pakistan, where a plan and funding were in place for anticipated drought, but when flooding struck there was no mechanism to transfer the funds and adjust plans.

BOX 9.3

FAO's experience working to institutionalize AA

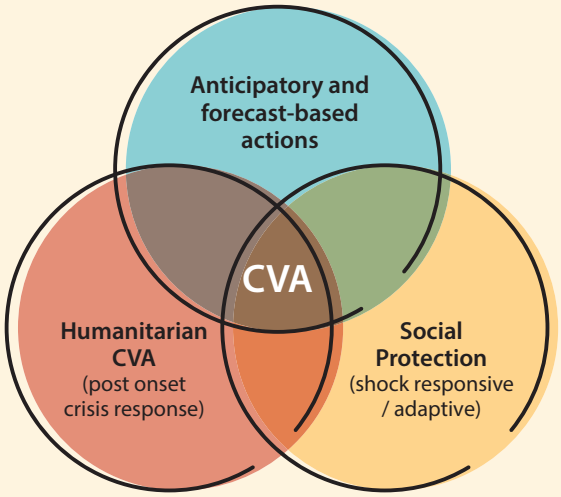
FAO began engaging in AA in 2016. Today, AA has become an integral part of the organization's strategic framework to deliver on their mandate and mitigate the impact of hazards on agricultural livelihoods. In 2023, FAO set a target of reaching 60 million people affected by emergencies, including through AA. It is emerging as a priority in country strategic plans, with investment in country-specific AA protocols, and triggers specific to each hazard. FAO plays a key role in global, regional and national partnerships and coordination platforms on AA. For instance, FAO chairs the Anticipatory Action Task Force, co-chairs the Technical Working Group on AA of the global Food Security Cluster, as well as regional Technical Working Groups on Anticipatory Action in Asia Pacific and Southern Africa.

Interest among donors is growing, FAO's investments in AA have increased significantly since 2016, and the organization has set a target to invest 20% of its emergency portfolio on AA. CVA is a major part of this strategic approach. To ensure pre-positioned financing, they are developing a portfolio of funding sources including the internal SFERA fund, with a dedicated component for AA (funding from Germany, Belgium, Sweden, Canada and Norway); the CERF; and DG ECHO, among others. Multi-year programmes with the German Federal Foreign Office, DG ECHO and USAID-BHA are allowing FAO to build the necessary capacities to implement timely and effective AA at scale.

To date, **funding for AA has come primarily from humanitarian and donor agencies, rather than government budgets**, with challenges in establishing disaster risk financing strategies that enable access to suitable funds. As the timely release of funds in line with triggers is critical to the effectiveness of AA, **more attention is needed on the topic of how funds can be pre-arranged**[70]. Potential approaches include investing and building confidence in forecasting and early warning systems, developing accountability frameworks, continuing work to define reliable triggers, and building evidence of the benefits of acting earlier. The ASEAN Framework for Anticipatory Action is an example of work to act on these issues[71].

GRAPH 9.5

The overlap between cash-based anticipatory action, humanitarian CVA, and social protection



The potential for leveraging social protection systems to institutionalize anticipatory action is well documented, although so far has not been operationalized at scale[72]. With the established and growing linkages between humanitarian CVA and social protection (see Chapter 6 on Linkages with social protection), **the overlap between cash-based anticipatory action, humanitarian CVA, and social protection can be visualized** (see Graph 9.5). The interplay between these systems and processes appears to be central to future planning and actions, pointing towards the need for a holistic approach to CVA. Evidence indicates that one-off anticipatory transfers cannot fully facilitate a quick recovery, with further transfers required, while linking humanitarian cash and social protection may enable longer term objectives of resilience building (see section below for more on this)[73].

Post-Shock Response

To a greater or lesser extent, a significant proportion of humanitarian crises are attributable to the impacts of climate change and environmental degradation; hence, the role of CVA in helping address needs arising post-shock is already in evidence in many countries. The preceding sections on **mitigation** and **preparedness** cover many core elements of planning for and implementing a greener CVA response, while this section summarizes a few aspects that have not been effectively included elsewhere.

Targeting must be more inclusive. The **climate crisis is and will disproportionally affect women, children, older people, minorities, and persons with disabilities**. As these groups are, on average, typically poorer and subject to greater vulnerabilities already, failing to systematically include them in climate-related response **risks exacerbating existing inequalities**. Calls have been made to **put gender and inclusion at the centre of the response to the climate crisis**, partnering with gender and inclusion specialists to better achieve this[74].

There is limited evidence of the incorporation of environmental factors into MEBs. **Energy, for example, is not consistently included in MEBs** and this is largely attributed to energy not being a sector. There are examples of its inclusion – e.g., Gaza, Uganda – and it has been the focus of some discussion, but it remains something of a gap. At the same time, household access to and use of clean energy can be complex, particularly when linked to habitual practices, associated costs, and priorities (e.g., reluctance to pay for cleaner fuels if dirtier alternatives such as firewood can be accessed without charge). Interventions that have used restricted assistance such as vouchers for clean(er) energy items such as solar lights/panels and improved stoves, and attempts to influence purchasing behaviour, have shown mixed impacts. **One key informant suggested that climate change adaptation should be included as a line in MEBs, reflecting the ongoing impacts and need to adapt**, although as the cleaner energy example illustrates, calculating this and making it effective would be complicated.

Climate finance is considered a potential future source of funding for humanitarian response. As the CALP Glossary definition indicates, the bulk of existing climate finance mechanisms and commitments have been geared towards mitigation and adaptation. The agreement to establish a **Loss and Damage** Fund at COP27

> *"**Climate finance** refers to financing – drawn from public, private and alternative sources –that seeks to support mitigation and adaptation actions that will address climate change. Climate finance is needed for **mitigation** to reduce emissions, and for **adaptation** to the adverse effects, including reducing the impacts of a changing climate. Cash assistance can potentially support climate adaptations in multiple ways, including meeting existing needs, managing risk, investments in asset bases, and facilitating mobility and livelihoods transitions."* CALP Glossary Adapted from unfccc.int and Godfrey Wood (2011)

in 2022 followed decades of pressure from activists for the countries which caused most climate change to better address the impacts and aid recovery. At the time of writing, discussions to establish the fund were facing problems, with lower-income countries demanding the money comes in grant form or highly concessional loans – as would be the case with most humanitarian funding. Donor countries concerned about the potential scale on top of already stretched overseas aid budgets have, however, been reticent about making commitments[77]. Notwithstanding the challenges, the future potential to access these finance mechanisms to expand humanitarian response funding, and for climate associated social assistance, has been noted[78]. This would need to entail structural changes to financing models and how they interact. For example, analysis of the 2022 Pakistan flood response noted that, so far, *'no climate financing mechanisms have been developed that could meaningfully augment traditional sources of humanitarian financing'*[79].

BOX 9.4

Start Network's innovative disaster risk and response funding mechanisms

Since 2016 the Start Fund includes the option for members to raise an anticipation alert and apply for funding in advance of a crisis. FOREWARN (Forecast-based Warning, Analysis, and Response Network) was created alongside it to connect humanitarian practitioners with hazard experts to support access to Risk Information. Alerts raised cover climate-related shocks. CVA is often a significant component of the member designed responses.

Start Ready, a pooled disaster risk financing mechanism which pre-positions funding for predictable, recurrent crises like floods, droughts, and heatwaves, went live in 2022. It utilizes insurance principles and a capital model to stretch funding and protect more people than if funds were held in separate restricted pots[75]. Funding is released when pre-agreed risk thresholds are met. For example, in February 2023, GBP 700,000 was released in advance of Cyclone Freddy in Madagascar to prepare communities through anticipatory actions and early response activities. This included the distribution of cash, as well as in-kind support[76].

There have also been calls for **innovative funding mechanisms**, including imposing windfall taxes on fossil fuel companies to fund loss and damage[80]. The IFRC commented they are looking at innovative financing options for their DREF – for example through collaboration with insurance companies – using donor funds to pay the premiums, and thereafter significantly increase funds available for emergency response when insurance payments are triggered.

Adaptation, Recovery and Resilience

Climate change and environmental degradation requires strategies that not only aim to reduce the frequency and severity of associated shocks (mitigation), and relieve humanitarian needs, but critically also **enable people and communities to better adapt to, manage and recover from the impact of events when they occur**.

The UN has advocated for more than 50% of total climate finance to be spent on resilience and adaptation, in line with government commitments stretching back to COP15 in 2009. However, analysis shows **there is no**

chance of achieving 50/50 balanced funding for mitigation and adaptation soon, while contributions remain well below longstanding pledges[81].

Human mobility is increasingly recognized as an effective adaptation strategy where, for example, climate change impacts have significantly undermined livelihoods, and local opportunities to diversify or develop more resilient livelihoods are being exhausted[82]. Key informants and recent research have highlighted that the **portability (including cross-border) and flexibility of cash makes it a suitable means of assistance along migration routes**. This includes before departure, on the move, and at the destination, although evidence and learning on this is not currently substantial[83]. It has been suggested that having access to cash gives people more flexibility to make the difficult decision to move if this presents itself as the most effective adaptation strategy available. Providing CVA before people move could also help them to avoid becoming stranded along their route. With climate-driven mobility set to increase, the humanitarian sector needs to think about the structures and programmes required at the various stages in this process. IOM, for example, report that they are currently researching this topic to develop more effective strategies, including the use of CVA for people on the move.

Adaptation and resilience building are inevitably longer term processes, with a critical role for cash-based social protection. There is **growing evidence of the potential of anticipatory cash to support household's pre-shock adaptations and post-shock resilience**. However, **evidence of the impacts of short-term cash assistance on resilience is limited**, with some recipients indicating that such interventions cannot effectively prepare them for complex climate crises[84]. However, there is **evidence that providing cash transfers to poor households over the longer term (usually years) increases coping capacity against climate extremes**, whether designed for or not, although there is also the risk of increasing vulnerabilities if climate change isn't explicitly considered in the design and targeting of social assistance[85]. Affected communities have highlighted the value of longer term adaptation interventions, although they also note these can have limited coverage and need to be scaled up[86]. **Social protection, including cash assistance, is a key tool that needs to be considered more strategically**[87].

> *"CVA enhancing resilience to climate change is difficult to evidence. It can be illustrated anecdotally. There are some examples of cash for work schemes having such effect (e.g., by working on land to develop a community asset that can increase resilience)."* (Start Network)

Cash for Work (CFW), or public works can play a role in supporting risk reduction and adaptation to build environmental resilience. Several key informants noted this, which can potentially include a wide range of interventions, including carbon sequestration activities, reforestation, improved land management, building and maintaining flood defences, and supporting adaptive agriculture. These activities typically fall more within the scope of development and social protection programming, but **CFW is well established in humanitarian response and has the potential to bridge to longer term initiatives**. Realizing this potential would require proactive work to establish partnerships between humanitarian actors and various government, development and climate actors to ensure sustainability and longer term objectives. FAO shared an example from Paraguay where they build on an existing national government social protection system with another conditional cash transfer to incentivize reforestation and adaptive agriculture, noting that while this was a development context, it illustrated the potential of CVA if provided for sufficient duration. Research has also shown that public works (social protection) interventions combining cash transfers with measures to reduce environmental degradation can help build ecological resilience to slow onset climate events[88].

Facilitating livelihoods recovery is frequently a key part of humanitarian and early recovery programming following climatic shocks, with many examples of the incorporation of adaptation strategies with the objective of building more resilient livelihoods. These types of interventions tend to blur the lines on the continuum from humanitarian to development programming, particularly in contexts prone to recurrent climate hazards and environmental degradation. Cash assistance can play an important role in supporting income generating activities and livelihoods diversification. The evidence indicates that these interventions are much more likely to succeed where substantial capacity building and skills development is provided – particularly where participants are branching into new and adapted forms of livelihood. Cash assistance also

needs to be substantial enough to facilitate livelihoods development[89], while effective strategies to support climate resilient livelihoods generally require complementary interventions, for example addressing water access. Similarly, research suggests that *'while social protection can improve livelihood opportunities it is unlikely to lead to climate change adaptation without complementary programming and sufficiently generous benefits'*.

Implications for the future: Areas for strategic debate and priority actions

Areas for strategic debate

Our analysis highlighted the following considerations to inform further thinking and progress in this area.

- **What might cash at scale in anticipatory action look like?** The recent focus on AA, including the use of CVA and its potential to address the impacts of climate-induced crises, indicates that this is a type of programming that is likely to increase. This raises many questions, regarding the scale and coverage (countries, regions), and **what would need to happen to facilitate significant growth** in the use of CVA in AA. Developing **suitable funding mechanisms**, and **investing in strengthening forecasting systems and capacities**, are central elements for AA in general. The respective **functions and relationships** between humanitarian organizations, governments (e.g., social protection and disaster risk management) and others (e.g., meteorologists and climate data specialists) are also critical.

  If the use of CVA in AA does increase significantly, possibly becoming a default humanitarian approach in relevant contexts, it will be important to consider **how pre-and post-shock assistance is coordinated** and targeted, including what types of **complementary interventions** can increase effectiveness. Given ongoing resource constraints, it's unclear whether increasing pre-shock assistance will result in relatively less being delivered post-shock – and the **structural and funding implications** of this for humanitarian assistance. For CVA specifically, which seems well suited to the objectives and timeframes of AA, **it remains to be seen what a major increase in AA might mean in terms of the growth of CVA as a share of humanitarian aid**.

- **Can CVA be designed to support and link to longer term, holistic approaches to addressing the climate crisis?** There are limits to the scope of humanitarian action, but CVA could potentially contribute towards addressing the climate crisis in multiple ways. To do so coherently and effectively requires a **joined-up approach working beyond the usual boundaries and partnerships of humanitarian response**. This includes recognizing the **central role of governments**. An important relationship here in many contexts is that between **CVA and pro-climate social protection**. This isn't a lens that is systematically applied to how these programmes are designed on either side, but it could bring notable benefits. On the other hand, **in fragile contexts** where social protection systems are limited, humanitarian actors may need to play a more substantial role in supporting the management of climate risks.

- **How can the environmental footprint of CVA be measured and minimized?** There are doubts about the feasibility of identifying a standardized set of measures for the environmental footprint of CVA, although this doesn't imply there isn't value in better understanding and seeking to mitigate impacts relating to CVA. Issues include the extent to which humanitarian actors are accountable for or should seek to influence the purchasing decisions of CVA recipients. Which strategies, including market-based approaches, could be effective in striking a balance between approaches that can appropriately and positively influence the environmental footprint of the goods and services people access, and avoid paternalistic approaches that undermine the objective of increasing choice and dignity through cash assistance? There might be doubts about the desirability, value and feasibility of systematically quantifying the footprint associated with CVA, but understanding how people use assistance to survive, adapt to and recover from shocks in climate-vulnerable contexts could provide useful learning on how to better support them.

Priority actions

- **Humanitarian actors** should identify where the humanitarian system needs to change to better face the challenges of the climate crisis. This includes determining how, where and when CVA can be used most effectively, both pre- and post-shock.

- **All actors** should work together to identify and build the range of strategic and operational relationships required to effectively link climate-sensitive humanitarian CVA across governments, civil society, DRR, development, climate action and financing, meteorological and forecasting agencies.

- **Donors and humanitarian actors should** integrate a climate lens into the planning and implementation of CVA in all contexts experiencing and vulnerable to climate-induced shocks as a matter of urgency, ensuring the systematic inclusion of the perspectives and priorities of communities.

- **Humanitarian agencies and researchers should** use ongoing and upcoming programming to build learning and evidence on the best use of CVA in relation to the climate crisis. For example by: (a) reducing the environmental footprint; (b) using CVA to support adaptation and recovery, including enabling people to implement local/personal resilience strategies; (c) anticipatory action to reduce impacts; (d) identifying effective combinations of pre- and post-shock CVA, and complementary activities; (e) linking to and complementing social protection; and (f) identifying the limits of CVA, and advocating for longer term and structural interventions as relevant.

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