

Early Warning! Early Action! Early Finance?



Early warning only matters when it leads to early action—supported by timely finance for those most at risk. Photo: AIDMI.



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INTRODUCTION

Early Warning! Early Action! Early Finance? – Why Acting Early Matters Now More Than Ever

By *Gavin White*, Risk-informed Early Action Partnership (REAP) Secretariat, and *Mihir R. Bhatt*, All India Disaster Mitigation Institute (AIDMI), India

Early warning must lead to early action; an early action must be supported by early finance. This is AIDMI's experience on the ground in India with thousands of extreme heat-affected small businesses in small towns for years, and is supported by the practice of over 100 partner governments and organisations collaborating in the framework of the Risk-informed Early Action Partnership (REAP).

Across South Asia and beyond, climate risks are becoming increasingly predictable, yet their impacts continue to deepen. Extreme heat, floods, and other hazards are no longer isolated events—they are shaping everyday risks for health, livelihoods, and local economies. In this context, early warning systems have improved significantly, offering valuable time to prepare. Yet, this growing capacity to predict risk is not matched by an equal ability to act on it.

This gap between knowing and doing is where this special issue begins. Looking specifically at extreme heat, this issue documents the breadth of innovative approaches in India, from the Avoidable Deaths Network's campaigns to concrete examples from AIDMI's field engagement with small businesses, transport workers, and small shop owners to build heat resilience. It documents the success of the Ahmedabad Municipal Corporation (and its Ahmedabad Heat Action Plan), as well as efforts to translate India Meteorological Department's heat alerts into practical guidance for those most at risk.

“Community resilience begins with recognising local actors, especially women-led organisations, as first responders and knowledge holders. Early warning, early action, and early finance must be grounded in trust, flexible funding, and community leadership to strengthen peacebuilding, reduce vulnerability, and support dignified humanitarian responses in fragile and conflict-affected settings.”

– *Dr. Irene DAWA*, Honorary Research Fellow, Faculty of Humanities, Arts and Social Sciences, University of Exeter, UK

Subsequent articles in this issue are informed by discussions held during Humanitarian Networks and Partnerships Week (HNPW) 2026, where practitioners, researchers, and policymakers came together to reflect on the future of early warning and anticipatory action. These discussions, emerging from selected panels organised and facilitated by organisations and networks such as ALNAP, the Norwegian Refugee Council (NRC), the Avoidable Deaths Network (ADN), the ADAPT Initiative, or the Climate Charter for Humanitarian Organisations, helped shape a shared understanding among a wide range of stakeholders and partners. Together, they reinforced the importance of linking early warning with early action, strengthening resilience, and advancing the need for early finance as a critical enabler of effective disaster risk management.

The collaboration between REAP and AIDMI reflects this connection. While REAP works to align global systems, policies, and finance, AIDMI's local work demonstrates how early action unfolds on the ground—through small but meaningful decisions taken by those most at risk. As highlighted in ongoing collaboration discussions, bridging these perspectives is essential to ensure that global

ambition translates into local outcomes.

Since 2015, several institutions, such as the World Bank and the Green Climate Fund, have significantly increased their financing towards EWEA, while the creation of the Climate Risk and Early Warning Systems (CREWS) launched the first dedicated fund to address the gaps in early warning systems delivery. The creation of several coordination initiatives over the last few years - REAP in 2019, the Anticipation Hub in 2020, and the Early Warning for All initiative in 2022 - have helped to create spaces for partners to share their experiences and build bridges across efforts to reach comprehensive early warning systems and embed anticipatory action protocols ahead of forecasted disasters.

However, while the largest amounts of funding are going to unplanned crisis finance, significantly less are allocated to pre-arranged finance, and very small amounts go to early or anticipatory action. There are indications that overall amounts are growing, but nowhere near the scale required to respond to the increasing frequency and severity of climate impacts. Funding for early action remains small and fragmented and this creates unnecessary complexity. (REAP 2022)

The REAP 2030 Strategy – developed through an extensive consultative process bringing together national NGO networks, governments from vulnerable countries and regional and international organisations – acts as a frame to better address these challenges (REAP 2025a). Growing political momentum is already visible via global initiatives like the Early Warnings for All, the Global Shield Against Climate Risks, the Anticipation Hub, but also via regional and national frameworks and the work on the ground of actors such as those presented in this issue. However, the REAP Strategy also recognises that while global systems have advanced in generating information, they remain fragmented in translating that information into outcomes. Finance is often delayed, policies are not fully aligned, and local capacities are under-utilised.

The articles in this issue reflect this transition from awareness to action. They are grounded in real experiences—of workers, small businesses, and communities navigating increasing climate risks. These experiences demonstrate that early warning is not merely about disseminating information, but about enabling decisions that protect lives and livelihoods in advance of risk. What is found at global level is also found to be relevant at local level.

A strong theme emerging across contributions is that many disaster impacts are preventable. When hazards such as extreme heat are predictable, the persistence of loss signals gaps in preparedness, coordination, and timely action rather than inevitability. This shift in thinking—from response to prevention—is central to strengthening disaster risk management in a warming world.

Equally important is the recognition of locally led action. Community-



Facing extreme heat on the street—where early warning, practical action, and small financial support together protect lives and livelihoods. Photo: AIDMI.

based systems, mutual support practices, and everyday coping strategies continue to play a vital role in managing risk. These systems are often the first to respond and the most sustained over time. Strengthening them requires supportive policies, appropriate financing, and respect for local knowledge and initiative.

At the same time, the discussions reflected in this issue highlight how climate risks are reshaping vulnerability and preparedness systems. Livelihood disruption, displacement, and prolonged exposure to risks such as extreme heat are increasingly interconnected. This calls for approaches that go beyond isolated interventions and instead focus on anticipatory, integrated responses.

The question of financing runs across these experiences. In line with a growing body of research (REAP 2025b), the articles in this issue highlight that while communities are already adapting through practical and low-cost measures, financial systems are often not designed to support such early and localised action. The need for flexible, timely,

and accessible finance—aligned with risk information—remains critical if early action is to be realised at scale.

Bringing these perspectives together, this issue reflects a broader transition in thinking. Early warning, early action, and early finance are not separate ideas—they are interconnected elements of a system that must function together within disaster risk management.

This special issue is therefore not only about documenting experiences. It is about drawing lessons about recognising the importance of acting early, learning from practice, and strengthening the systems that make early action possible.

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Avoidable Heat Deaths: Turning Forecasts into Early Action

By Vishal Pathak, AIDMI, India, and Professor Nibedita S. Ray-Bennett, Avoidable Deaths Network, UK

Extreme heat is rapidly emerging as one of the most serious climate risks affecting communities across South Asia. Rising temperatures, longer heatwaves, and expanding urban heat islands are increasing the health and livelihood risks faced by millions of people. Yet extreme heat is also one of the most predictable climate hazards, and therefore the deaths associated with it should not be considered inevitable. Extreme heat deaths are largely avoidable when early warnings are linked with timely action, social protection, and practical cooling measures.

Extreme heat is often described as a slow-onset disaster. Unlike earthquakes or cyclones, heatwaves build gradually and occur seasonally, allowing time for preparation and preventive measures. Meteorological services in many countries now provide several days of advance warning for extreme heat conditions. The real challenge therefore lies not in forecasting heat, but in ensuring that these forecasts trigger early actions that protect vulnerable populations.

This shift—from reacting after a crisis to preventing harm before temperatures peak—is at the centre of the Avoidable Deaths Network’s (ADN) public engagement global campaign to reduce avoidable deaths from climate-related disasters. Networks such as the ADN promote the idea that many disaster-related deaths are avoidable through better preparedness, early warning, accountable governance, and access to medical treatment. As a member of ADN, the AIDMI contributes to

campaigns that highlight extreme heat as one of the climate risks where prevention is both possible and urgent.

Heat Risk and the World of Work

Extreme heat disproportionately affects people whose livelihoods depend on working outdoors or in poorly ventilated environments. Street businesses, transport workers, construction labourers, waste pickers, and small business operators often have no option but to continue working in high temperatures. In India, around 75 percent of the workforce depends on heat-exposed labour (World Bank, insert the year of publication). At the same time, rising temperatures are expected to lead to the loss of the equivalent of 34 million full-time jobs in India by 2030 due to heat stress (ILO, insert the year of publication).

Women workers face additional challenges. Approximately 82 percent of working women in India are employed in the informal sector, where occupational safety measures and social protection are often limited (ILO, year of publication). These workers frequently operate from small shops, home-based enterprises, or street-side workplaces that lack adequate ventilation or cooling.

For these groups, extreme heat is not simply a weather condition—it is a daily livelihood risk that affects productivity, income, and health.

Lessons from AIDMI’s Work with Small Businesses

Over the past several years, AIDMI has worked with small businesses and workers across Indian cities to

understand how extreme heat affects livelihoods and what practical solutions can reduce risk. This work has generated several lessons.

First, small businesses are often the first to experience the economic impacts of extreme heat, as customers avoid markets during peak temperatures and workers struggle to maintain productivity. Second, many small enterprises already experiment with low-cost cooling measures, such as temporary shade structures, reflective roofing materials, improved ventilation, or adjusting working hours to avoid the hottest parts of the day.

These experiences show that practical, locally grounded solutions can significantly reduce heat risks when supported by policy and community awareness. Documenting such measures also helps make visible the everyday challenges faced by workers who often remain outside formal labour protection systems.

AIDMI’s field engagement with small businesses, transport workers, and small shop owners demonstrates that protecting livelihoods is a central component of building heat resilience.

From Weather to Governance

Understanding extreme heat as an avoidable risk requires a shift in thinking. Heatwaves are often treated as natural events that communities must endure. However, when deaths occur during predictable heat events, they often reflect gaps in planning, preparedness, and governance,

including access to timely medical treatment within the golden hour of saving a life.

Many countries already possess strong meteorological forecasting capacity. Heat alerts can often be issued several days in advance, providing valuable time for preventive measures. What is often missing is the systematic translation of these warnings into early actions at local and community levels.

Examples of such early actions include adjusting working hours for outdoor labour, opening cooling spaces, ensuring access to safe drinking water, strengthening public communication on heat risks, and activating local health systems to support vulnerable populations. When such measures are implemented in a timely and coordinated way, the risks associated with extreme heat can be significantly reduced.

Local Action: The Role of Ahmedabad

The city of Ahmedabad has been recognised globally for its efforts to address extreme heat through the Ahmedabad Heat Action Plan, implemented by the Ahmedabad Municipal Corporation (AMC). The plan combines early warning systems, public awareness campaigns, and coordinated institutional response.

AIDMI appreciates the leadership shown by AMC in advancing heat preparedness and continues to support local implementation through community engagement and outreach. Most recently, engagement and outreach activities have been organised through ADN's Ahmedabad Case Station for Avoidable Deaths model. This is a place-based and issue-focused approach to health promotion, health education, and risk reduction. It engages high-risk and vulnerable

populations through outreach events held every six months, with the aim of empowering communities and building their capacity to mitigate heat-related risks.

Working with workers' groups, small businesses, and neighbourhood communities, AIDMI helps translate India Meteorological Department (IMD) heat alerts into practical guidance for those most at risk.

This includes sharing heat safety messages, promoting workplace adaptations, and encouraging early protective actions before temperatures peak. Such local-level engagement demonstrates how early warning information can be converted into life-saving early action.

Equity at the Centre of Heat Action

Extreme heat does not affect all people equally. Vulnerability is shaped by income, occupation, housing conditions, and access to services. People living in crowded neighbourhoods with limited ventilation or green spaces are particularly vulnerable. Similarly, elderly persons, migrant workers, and those with pre-existing health conditions face higher risks during heatwaves.

Effective heat action therefore requires an equity-centred approach. Protection measures must reach those who are most exposed to heat risks, especially small businesses that often remain outside formal safety systems.

Heat Action Plans adopted by several cities in India have already demonstrated the value of coordinated approaches that combine early warning, public awareness, and institutional preparedness. Strengthening and expanding such approaches can

significantly reduce the human impacts of extreme heat.

From Awareness to Early Action

In recent years, awareness about extreme heat risks has increased significantly. However, awareness alone is not sufficient. The next phase of action must focus on ensuring that heat forecasts trigger routine early actions across institutions and communities.

This includes integrating heat alerts into municipal planning, establishing automatic local response protocols, and ensuring that frontline workers—such as transport operators, street businesses, and small entrepreneurs—receive practical guidance and support.

Financing also plays an important role. Small-scale cooling solutions—such as shade structures, improved roofing materials, and community cooling spaces—can provide immediate protection for vulnerable groups when implemented at scale.

Preventing the Preventable

Extreme heat is predictable. The science is available. Early warnings exist. What remains is the consistent application of preventive measures that translate knowledge into action.

Recognising extreme heat deaths as avoidable changes the narrative. Instead of accepting heat-related fatalities as unavoidable tragedies, national and local authorities can focus on preventing them through preparedness, coordination, and inclusive planning. Furthermore, public engagement and outreach model such as the Ahmedabad Case Station for Avoidable Heat Deaths are low-cost community-led solutions that has the potential to empower communities at/high risks.

Supporting local innovations such as this, and prioritising protection for vulnerable workers and communities, it is possible to reduce heat-related deaths from rising temperatures.

In a warming world, the goal is clear: No one should die from extreme heat when the risk is known, and the solutions are within reach. ■

(The article is based on the presentation and discussion at the panel – “Campaigning to Reduce Avoidable Deaths in a Climate-Challenged World” that was organised by Avoidable Deaths Network at HNPW2026.)

ACTIONABLE PREPAREDNESS

From Early Warning to Early Action: Building Capacity Among Transportation Workers

By Mahendra Rana and Grace George, AIDMI, India

The experience from Ahmedabad and other small towns shows that early warning systems are only as effective as citizen’s ability to understand and act on them. For transportation workers – who remain among the most exposed to extreme heat – capacity building is essential to translate forecasts into practical, life-saving actions.

Through tailormade training sessions, 399 transportation workers learned to interpret India Meteorological Department (IMD)’s early warning messages and respond proactively. The approach helped people use alerts in practical ways in their daily routine, instead of seeing them only as general warnings. Transportation workers were guided to connect heat warnings with simple, actionable measures such as increasing hydration, carrying ORS, planning short rest breaks, and recognising early symptoms like fatigue, dizziness, and dehydration through self-observation and peer observations.

A key shift observed was behavioural. Transportation workers began to view early warning messages not as distant advisories, but as immediate signals for action – helping them anticipate difficult working conditions, protect their health, and “keeping cool” while on duty. This shift also extended beyond individuals to collective practices. Peer support became very important. During extreme heat, transport workers looked out for one another, checked if anyone was feeling unwell, and responded quickly when they noticed early signs of heat stress. The situation of stress became an opportunity for solidarity.

The sessions were made possible through the active support of Ahmedabad Municipal Transport Services (AMTS) and the strong participation of transportation workers, whose engagement turned the training into a shared learning process grounded in real experiences in Ahmedabad.

Aligned with the International Awareness Day for Avoidable Deaths (IAD4AD) March 12, this initiative demonstrated how awareness can be translated into practical action to reduce avoidable extreme heat risks.

Ahmedabad’s citizens and the leadership of AMC continue to remain pioneers in shaping and advancing initiatives for extreme heat planning, preparedness, and protection across transportation workers. More demands are pouring in.

There is a need for repeated, seasonal engagement and for stronger integration of early warning into daily transport operations and workplace systems, and AIDMI has developed a programme for 2026.

The lesson is clear: early warning becomes effective only when combined with sustained capacity building, practical guidance, and worker ownership – turning information into timely action and protection. ■



“Early warning messages are useful, but we need to act on them to stay safe during duty.” – Hameed Bhai, Driver, Ahmedabad, India. Photo: AIDMI.

Financing Heat Resilience: What Works, What Doesn't, and What is Missing

By Harakh Patel and Vishal Pathak, AIDMI, India

Across the world, communities are confronting a growing convergence of risks—extreme heat, climate variability, economic uncertainty, and fragile livelihood systems. These pressures are forcing humanitarian and development actors to rethink how resilience is financed at the community level. Traditional funding models, largely designed for short-term relief or large infrastructure projects, are increasingly proving insufficient to support the everyday adaptation decisions that communities must make to survive climate extremes.

Resilience finance works, when you start with knowledge

One of the clearest lessons emerging from AIDMI's field experience is that resilience finance works best when it starts with knowledge. Communities consistently show a strong demand for practical information on climate risks and how to respond to them. Orientation on extreme heat risks, interpretation of early warnings, and simple preparedness and anticipatory actions can significantly strengthen community resilience. When people understand the risks they face and the options available to them on how they can act to minimise and face the impacts, even modest financial support can translate into meaningful adaptation. Knowledge therefore multiplies the impact of small investments and helps communities turn warnings into action.

Sustainability = Local Design + Community Ownership

Another key lesson is that community ownership sustains adaptation over time. When local

"The great work that AIDMI is doing to support small businesses to adapt, anticipate, be prepared and manage losses and damages due to extreme heat risks, is a testimony and inspiration to all local, national or international organisations that community-owned and risk-informed climate adaptation actions with a little bit of flexible funding can have a BIG impact! These adaptive measures not only save lives and livelihoods but they also building more resilient communities who are able to adapt to present and future climate shocks. No action is too small; it's time to act now!"

– *Nishanie Jayamaha, Secretariat for the Climate and Environment Charter for Humanitarian Organisations*

actors—such as small business owners or workers—design their own risk-reduction measures, they are far more likely to maintain and expand them. Locally designed solutions align with daily economic realities, making them practical and affordable. In many cases, once initial measures stabilise livelihoods, community members begin reinvesting their own resources to strengthen resilience further. This cycle of ownership and reinvestment suggests that resilience is not only about financial inputs but also about enabling communities to make informed choices.

Small adaptations, BIG impact

Practical workplace adaptations illustrate how preparedness can grow from small but targeted investments. Measures such as shading workspaces, improving ventilation, adjusting working hours, and linking early warning information to business decisions can reduce exposure to extreme heat. Communities that implement such adaptations often report greater confidence in continuing their livelihoods during heatwaves and

other climate stresses. Preparedness becomes not only a safety measure but also an economic strategy that helps prevent income loss during climate extremes.

Flexible financial instruments for better durable solutions

A major insight emerging from resilience initiatives is that financing mechanisms must match the nature of the risks communities face. Slow-onset climate risks such as extreme heat do not always require large-scale infrastructure investments. Instead, they often require flexible, community-level financial instruments—such as micro-grants, seasonal support, or blended advisory and financial assistance. Rigid, short-term humanitarian funding is frequently poorly suited for these gradual yet intensifying risks. Flexible financing, designed around community priorities and timelines, tends to produce more durable results.

Inclusive and resilient financing for better uptake

Equity also plays a critical role in resilience finance. Climate risks and

financial access are unevenly distributed, particularly among women entrepreneurs, elderly workers, and persons with disabilities. Inclusive resilience financing, therefore, requires intentional outreach and design. When knowledge and financial support are accessible, vulnerable groups often demonstrate strong initiative in adopting protective measures. Inclusive consultation spaces, targeted support, and accessible training can help ensure that resilience investments reach those who are most exposed to climate risks.

The resilience of informal economies leads to a more robust national economy

The implications extend beyond individual communities. Across South Asia and many other regions, informal economies form a major pillar of local livelihoods and contribute significantly to national economies. Small businesses frequently operate on the frontline of climate risks—facing heat stress, water shortages, energy instability, and market disruptions. Strengthening their resilience, therefore, supports not only individual households but also the stability of local and national economies and supply chains.

Scale-up is possible, even in FCAS, when resilience is community-led

Community-level resilience approaches may also offer important opportunities in fragile or conflict-affected settings (FCAS). Because many of these strategies are decentralised, behaviour-focused, and relatively low-cost, they can function even where formal systems are disrupted. Supporting small enterprise adaptation can help stabilise local markets, maintain economic activity, and reduce vulnerability during periods of instability.

What needs to happen next?

Despite these promising approaches, important gaps remain. Scaling successful community resilience models requires better climate risk information, financing instruments that bridge humanitarian and development priorities, and stronger partnerships between local institutions, governments, and private actors. Perhaps most importantly, funding structures must shift from viewing communities as beneficiaries toward recognising them as partners capable of shaping and sustaining resilience.

As climate risks intensify, the question is no longer whether

communities will adapt—they already are. The challenge is whether financial systems will evolve quickly enough to support the locally led solutions that are already emerging. Financing resilience at the community level is not only about mobilising more resources; it is about designing the right kinds of support so that small adaptations today can lead to large resilience gains tomorrow. ■

(The article is based on the presentation and discussion at the panel - [Financing and Scaling Long-Term Resilience at Community Level: What Works, What Doesn't, and What's Missing](#) - organised by the Climate Charter, ECHO and UNDP jointly at HNPW2026 in March.)

AIDMIનો અતિશય ગરમી સામે ટકી રહેવાનો કાર્યક્રમ ભારતના 11 શહેરોમાં 2000થી વધુ નાના વ્યવસાયોને લઘુ ધિરાણ, ટેકનિકલ માર્ગદર્શન, અને જોખમ-આધારિત આયોજનના સંયોજન દ્વારા સહાય પૂરી પાડે છે. આ પહેલ શાકભાજી અને ફળ વિક્રેતાઓ, સ્ટ્રીટ ફૂડ વેચનારાઓ, કારીગરો, અને ઘરેલું વ્યવસાયોને ગરમીની સીઝન પહેલા ઓછી કિંમતના ઠંડક અને રક્ષણાત્મક ઉપાયો અપનાવવા માટે સક્ષમ બનાવે છે. આ કાર્યક્રમ આર્થિક સ્થિતિસ્થાપકતા મજબૂત કરવા માટે 'બ્લેન્ડેડ ફાઇનાન્સિંગ' અભિગમો પણ તપાસે છે, જેમાં સામુદાયિક યોગદાન અને ઉભરતા જોખમ ટ્રાન્સફર વિકલ્પોનો પણ સમાવેશ થાય છે. આગોતરી ચેતવણીને આગોતરા પગલાં અને સ્થાનિક અનુકૂળ સાથે જોડીને, આ મોડેલ દર્શાવે છે કે કેવી રીતે લક્ષિત રોકાણો નુકસાન ઘટાડી શકે છે અને આજીવિકા ટકાવી રાખવામાં મદદરૂપ થઈ શકે છે.

AIDMI's ongoing programme on extreme heat resilience supports over 2000 small businesses across eleven Indian cities through a combination of **small finance, technical guidance, and risk-informed planning**. The initiative enables businesses such as vegetable sellers, fruit sellers, and street food sellers, artisans, home-based businesses to adopt low-cost cooling and protective measures ahead of peak heat periods. The programme also explores **blended financing approaches**, including community contributions, early action support, and emerging risk transfer options, to strengthen financial resilience. By linking early warning with early action and local adaptation, the model demonstrates how targeted, small-scale investments can reduce losses and sustain livelihoods and build resilience among at-risk populations – small businesses.

Extreme Heat, Displacement, and Livelihoods: Rethinking Humanitarian Readiness in a Warming World

By Pallavi Rathod and Kalpesh Prajapati, AIDMI, India

The growing intersection of climate change and humanitarian crises raises an urgent question: how prepared is the humanitarian sector to respond to increasingly complex climate risks? AIDMI highlights - how extreme heat is emerging as a major but often under-recognised driver of vulnerability, particularly for small businesses, workers and small farmers.

Drawing on field experience, AIDMI's response emphasised that climate change is altering the nature of hazards faced by vulnerable communities. Extreme heat is no longer limited to occasional hot days; it is increasingly characterised by prolonged heatwaves and higher night-time temperatures that reduce recovery time for workers and families. These conditions directly affect livelihoods. For small businesses and daily wage earners, extreme heat often results in shorter working hours, declining productivity, and rising health risks.

AIDMI's field observations also highlight the growing co-location of

hazards. Communities exposed to extreme heat frequently face floods, cyclones, or water stress within the same year. For small businesses and small farmers, these overlapping risks create continuous uncertainty for income and stability. In many places, coping mechanisms are already stretched, particularly in areas affected by displacement, fragile governance, or limited access to services.

Despite these pressures, communities are not passive recipients of aid. AIDMI's work shows that local actors are already developing practical responses to climate risks. Small businesses, for example, are experimenting with shaded workspaces, improved ventilation, and adjusted work schedules to reduce exposure during peak heat hours. These locally driven measures demonstrate how adaptation often begins at the community level, even before formal policy responses emerge.

AIDMI also stresses the importance of linking early warning systems

with early action. While meteorological alerts are increasingly available, the challenge lies in translating warnings into everyday decisions that help workers and families protect their health and livelihoods. In several cities, AIDMI is exploring ways to connect heat alerts with practical guidance so that communities can adjust work practices, manage exposure, and reduce risks during extreme heat periods.

Another emerging area is the growing demand for risk financing and insurance mechanisms among small businesses facing climate-related losses. Access to such mechanisms remains limited, yet it represents an important pathway to strengthen economic resilience in climate-vulnerable communities.

A key lesson from AIDMI's experience is that resilience grows when affected communities are recognised not only as vulnerable groups but also as partners in adaptation. Small businesses, who contribute significantly to local economies, are already experimenting with solutions that can inform wider humanitarian and climate strategies.

As climate risks intensify, humanitarian preparedness must evolve to support these locally led innovations, strengthen early warning-to-action systems, and ensure that livelihood protection becomes central to climate-sensitive humanitarian action. ■

(The article is based on the presentation and discussion at the panel - "Humanitarian Crisis and Climate Challenges: Is the Humanitarian Sector Ready?" - that was organised by Norwegian Refugee Council at HNPW2026.)

अती उष्णता दक्षिण आशियात विस्थापन वाढवत आहे आणि उपजीविकांमध्ये व्यत्यय आणत आहे. हळूहळू वाढणाऱ्या जोखिमांना तोंड देण्यासाठी मानवतावादी तयारीत बदल आवश्यक आहे. पूर्वसूचना (Early Warning) यांना उपजीविका संरक्षण, स्थलांतर नियोजन आणि सामाजिक सहाय्याशी जोडणे गरजेचे आहे—जेणेकरून असुरक्षित कामगार आणि लहान व्यवसाय जुळवून घेऊ शकतील, उत्पन्न टिकवू शकतील आणि जबरदस्तीच्या स्थलांतरापासून वाचू शकतील.

Extreme heat is driving displacement and disrupting livelihoods across South Asia. Humanitarian readiness must evolve to address slow-onset risks, linking early warning with livelihood protection, mobility planning, and social support – ensuring vulnerable workers and small businesses can adapt, sustain income, and avoid forced migration.

Mutual Aid in Humanitarian Action: Recognising the Power of Community Solidarity

By Aysha Imam, AIDMI, India

Across the world, humanitarian crises are becoming more frequent, complex, and prolonged. Conflict, displacement, and climate extremes are placing unprecedented pressure on the international humanitarian system. In this context, the concept of locally led action is gaining renewed attention. At the heart of this approach lies mutual aid—the informal networks of solidarity through which communities support each other during crises.

Mutual aid is not a new idea. Long before formal humanitarian institutions emerged, communities relied on shared labour, informal credit, neighbourhood support, and collective problem-solving to survive disasters. These practices remain central to how people cope with crises today. As humanitarian needs grow and resources remain constrained, there is a notable rise in

“Listening to communities is an important first step, but genuine support must go beyond this. It requires an honest effort to unlearn many of the systems, processes, and ways of working that external actors rely on, and to create space for two-way learning and exchange with mutual aid groups.”

— Juliet Parker, ALNAP, UK

interest in these community-driven systems from parts of the international system.

The experience of working with affected communities illustrates how mutual aid functions in practice. For more than three decades, AIDMI has documented and worked with community networks responding to disasters such as earthquakes, floods, cyclones, and increasingly extreme heat. These experiences show that mutual aid is often the fastest and most trusted form of support during crises. Communities mobilise

through family networks, women’s groups, small business associations, and neighbourhood organisations—often hours, days, or even weeks before external assistance arrives, and continuing long after external support has withdrawn, demonstrating the sustainability and resilience of mutual aid systems. These networks provide immediate and practical support: sharing food and water, offering temporary shelter, extending small loans, caring for children and elderly people, and spreading information about risks. Because they are embedded in everyday social and livelihood relationships, they are able to identify who needs help most and respond quickly.

AIDMI’s work with small businesses and workers across multiple Indian cities highlights how mutual aid operates within everyday livelihood systems. During periods of extreme heat or economic disruption, shop owners and workers support one another by sharing shade, water, storage space, and temporary credit. These actions are voluntary, solidarity-based, and self-organised, emerging from trust and long-standing relationships within communities. They are largely self-



Women leading local response—organising support and sharing resources, demonstrating the strength of community solidarity in crisis. Photo AIDMI.



Cascading funding shortfalls, increasing access restrictions, and overlap of accelerating conflict and climate extreme hotspots were discussed by extreme heat-affected small businesses in Ahmedabad in a workshop on the Future of Aid, June 2025. (Photo: AIDMI).

resourced, with people contributing time, effort, and in-kind support to sustain each other. Any external assistance, when it comes, often complements these existing efforts rather than initiating them. This underscores both the strength and resilience of mutual aid systems, as well as the need to ensure that external support does not undermine their independence or create unintended dependence.

However, the growing international interest in mutual aid also raises important questions. While recognition is welcome, there is a risk that external support could unintentionally weaken the very

systems it seeks to strengthen. Mutual aid works because it is flexible, informal, and rooted in local relationships. If support becomes overly structured or short-term, it may disrupt these dynamics.

From AIDMI's perspective, the key challenge is therefore not to formalise mutual aid excessively, but to recognise, enable, and protect it – while also strengthening what it already does well. Mutual aid is effective because it is fast, trusted, flexible, and deeply rooted in local relationships, allowing communities to respond to changing needs with immediacy and care. Flexible financing, partnerships with local

organisations, and respect for community knowledge can help reinforce these strengths without undermining their independence. Another important lesson is that humanitarian actors often focus on vulnerability while overlooking local capacity. Mutual aid demonstrates that communities possess significant resources, knowledge, and organisational strength. Recognising these capacities opens new possibilities for partnership and shared ownership in humanitarian action.

Ultimately, strengthening humanitarian response in times of crisis requires listening to communities and supporting the systems they have built over generations. Mutual aid reminds the humanitarian sector that effective action begins not only with institutions, but with people helping one another and sustaining collective responses over time. ■

(The article is based on the presentation and discussion at the panel – “Mutual Aid and Locally Led Action: Rethinking International Support in Times of Crisis” that organised by ALNAP at HNPW2026.)

“The real question is no longer about the legitimacy or effectiveness of community-led approaches, but whether the international humanitarian sector is willing and able to change itself—adapting its assumptions, systems, and processes to support mutual aid meaningfully. This shift offers an opportunity to reset priorities and rethink roles, but it will not be easy.”

– *Juliet Parker and Alejandro Posada Bermudez,*
ALNAP, UK

Cooling Livelihoods: Strengthening Urban Heat Resilience for Small Businesses in India

By Vaishali Tiwari and Rohan Trivedi, AIDMI, India

The increasing frequency and intensity of extreme heat events in India have shifted from being an environmental concern to becoming a serious humanitarian and development challenge. Rising temperatures are placing growing pressure on livelihoods, particularly among small businesses that form the socio-economic backbone of many urban areas. This article explores how anticipatory action and locally driven adaptation can help reduce the impacts of extreme heat on livelihoods and strengthen resilience in cities.

Across diverse regions—from the coastal climate of Kochi to the semi-arid plains of Ahmedabad—small businesses face mounting risks from prolonged heatwaves. Many vegetable sellers, fruit sellers, and street food sellers work outdoors in temperatures that can exceed 45°C, often without adequate shade or cooling infrastructure. Under such conditions, workers experience severe heat stress, including exhaustion and dehydration, which directly affects their health and ability to work safely.

Extreme heat also has significant economic implications. Higher temperatures often force businesses to reduce operating hours, leading to lower daily earnings. Perishable goods spoil faster, particularly for vegetable and fruit sellers, resulting in further financial losses. These challenges are compounded by gaps in preparedness, including limited access to localised early

"Heating Up – Humanitarian Preparedness and Response to Heatwaves", **Paul Knox Clarke**, who chaired the panel, says, "this is exactly the type of effective, focused and low-cost solution that international financing should be supporting. AIDMI's knowledge of the urban environment has allowed them to identify groups of people who are extremely exposed to heat but often 'under the radar', and extend support that gives these people agency to address the problem in the way that works best for them".

warning information and financial safety mechanisms that could help small businesses recover from climate-related losses.

In response to these growing risks, AIDMI has been advancing a proactive approach through anticipatory action. Instead of responding only after disasters occur, anticipatory action focuses on providing support before peak heat periods begin. This shift helps move

disaster management away from a purely reactive relief approach towards preventive risk reduction.

Through its work, AIDMI has provided targeted financial and technical support to 2,003 small businesses across 11 cities in India, contributing to efforts aligned with the Sendai Framework for Disaster Risk Reduction. A strong emphasis has been placed on supporting women-led small businesses, recognising that women entrepreneurs often face additional barriers to climate adaptation. Currently, 67 percent of the supported businesses are women-led.

With modest financial support, often around ₹5,000, business owners have implemented practical heat adaptation measures. These include whitewashing roofs to reduce indoor heat, installing shade structures, improving ventilation, and adopting other simple cooling practices. Such measures help create safer working environments while also protecting goods from heat damage.



Small businesses adopting low-cost cooling solutions such as shade, ventilation, and protective coverings to reduce heat exposure and sustain daily operations during extreme heat conditions. Photo: AIDMI.

Evidence from these efforts demonstrates meaningful results. Participating businesses reported a 65 percent reduction in heat-related illnesses, a 40 percent reduction in potential income losses, and a 90 percent rate of business continuity during periods of extreme heat.

These experiences highlight how small, low-cost solutions—such as cooling umbrellas, reflective sheets, and hydration kits—can generate wider resilience when adopted across communities. Strengthening urban heat resilience will require scaling such anticipatory actions and ensuring that climate adaptation becomes a core part of urban planning, disaster risk reduction, and humanitarian strategy.

Protecting small businesses from extreme heat is not only about safeguarding livelihoods; it is also essential for maintaining the



Simple indoor cooling measures, including whitewashed roofs and improved airflow, helping small businesses maintain safer working environments and protect goods from heat damage. Photo: AIDMI.

economic and social stability of rapidly growing cities in India. ■

(The article is based on the panel presentation and discussion that taken place at

HNPW2026. The panel –“Heating Up – Humanitarian Preparedness and Response to Heatwaves”, was organised by ADAPT Initiatives.)

प्रारंभिक चेतावनी! प्रारंभिक कार्रवाई!

आज के बदलते जलवायु परिदृश्य में, आपदाओं का स्वरूप तेजी से बदल रहा है। अत्यधिक गर्मी, बाढ़, और चक्रवात जैसे जोखिम अब अधिक बार और अधिक तीव्रता के साथ सामने आ रहे हैं। ऐसे समय में केवल चेतावनी देना पर्याप्त नहीं है—महत्वपूर्ण यह है कि चेतावनी को समय पर कार्रवाई में बदला जाए।

प्रारंभिक चेतावनी प्रणाली (Early Warning System) का उद्देश्य लोगों को संभावित खतरे के बारे में पहले से जानकारी देना है। लेकिन इसकी वास्तविक सफलता तब होती है जब लोग इस जानकारी को समझें और उस पर तुरंत कदम उठाएँ। यही “प्रारंभिक चेतावनी से प्रारंभिक कार्रवाई” का सार है।

उदाहरण के लिए, अत्यधिक गर्मी की चेतावनी मिलने पर पानी की पर्याप्त व्यवस्था, कार्य समय में बदलाव, छाया में विश्राम, और स्वास्थ्य लक्षणों की पहचान जैसे सरल कदम जीवन बचा सकते हैं। यह कार्रवाई तभी संभव है जब समुदायों को प्रशिक्षित किया जाए और उन्हें स्थानीय स्तर पर सक्षम बनाया जाए।

सरकार, स्थानीय निकायों और समुदायों के बीच समन्वय इस प्रक्रिया को मजबूत बनाता है। जब चेतावनी लोगों तक सही समय पर और समझने योग्य रूप में पहुँचती है, तब वह सुरक्षा का साधन बनती है।

इसलिए, भविष्य की तैयारी के लिए हमें केवल जानकारी नहीं, बल्कि उस पर आधारित समयबद्ध कार्रवाई को प्राथमिकता देनी होगी। ■

(See more: World Meteorological Day 2026: Agenda for Cooling in India.

<https://aidmi.org/world-meteorological-day-2026-agenda-for-cooling-in-india/>

Extreme Heat, Loss and Damage, and the Urgency of Avoidable Deaths

By Prof. Anil Gupta, ICARS (Integrated Centre for Adaptation, Disaster Risk-Resilience and Sustainability) centre at IIT (Indian Institute of Technology) Roorkee, Greater Noida, India, and Vishal Pathak, AIDMI, India¹

Loss and damage from climate change are often discussed in terms of economic costs, infrastructure damage, and displacement. Yet one of the gravest and most irreversible forms of loss remains under-recognised: avoidable human deaths. During the **International Awareness Day for Avoidable Deaths (IAD4AD)**, extreme heat demands urgent attention as a slow-onset disaster that is already claiming lives – quietly and repeatedly. The global campaign reminds us “Disaster Deaths Are Avoidable.”

Globally, direct disaster deaths are declining despite an increase in climate-related hazards. However, indirect disaster deaths and the number of people affected are rising. Heat-related illnesses, livelihood losses, and stress-related health impacts often occur beyond the immediate event. Understanding the “causes and circumstances” of such indirect deaths is essential to designing interventions that can save lives.

India has made important progress in recognising extreme heat as a serious public health and livelihood risk. The growing adoption of Heat Action Plans and the expanding role of the India Meteorological Department (IMD) reflect strong

institutional leadership. Today, IMD provides up to seven days of advance heatwave forecasts – a significant scientific and governance achievement. This creates a powerful opportunity to reduce loss and damage not after impacts occur, but before harm begins.

Extreme heat deaths are rarely unpredictable. They occur when high temperatures intersect with exposure, unsafe working conditions, poverty, and lack of timely protection. Outdoor workers, informal vendors, elderly persons, and those living in poorly ventilated housing face the highest risks. When warnings do not translate into early action, heat stress escalates into illness, income loss, and, in the worst cases, death – fundamentally avoidable losses.



“The SACHET app helped me prepare for extreme heat and manage my business more safely during summer and other climate hazards”, said by Ms. Twinklben Dhaliya, who runs a small snacks business in Ahmedabad. Photo: AIDMI.

Anticipatory action is therefore central to reducing loss and damage. Early warnings, such as IMD’s 7-day forecasts, must function as decision triggers. When acted upon, they enable practical measures, such as adjusting work hours, ensuring water and shade, activating cooling spaces, strengthening outreach to high-risk groups, and preparing health services. These actions are affordable, evidence-based, and life-saving. AIDMI is working with over 3,000 small businesses across 11 cities in India to promote and strengthen the use of extreme heat early warning systems.

Initiatives such as the **Ahmedabad Case Station for Avoidable Deaths due to Extreme Heat** at AIDMI, within the Avoidable Deaths Network, show how local evidence can help convert forecasts into protection. They demonstrate that loss and damage are not unavoidable when risk is known and time exists to act.

There is much to appreciate in India’s trajectory. The science is strong. Policies are evolving. The next step is strengthening last-mile implementation – ensuring that early warnings consistently translate into early protection for those most exposed. ■

¹ Avoidable Deaths Network (ADN). (2026, February 28). *Extreme heat, loss and damage, and the urgency of avoidable deaths*. <https://www.avoidable-deaths.net/2026/02/28/extreme-heat-loss-and-damage-and-the-urgency-of-avoidable-deaths/>

From Early Warning to Early Action to Early Finance: What Must Happen Now?

By *Mihir R. Bhatt*, All India Disaster Mitigation Institute (AIDMI), India

The experiences presented in this issue point to a shared conclusion: early warning systems and anticipatory action are necessary, but they are not sufficient. Their value is realised only when they lead to timely action and are supported by systems that enable people to respond before risks escalate. The challenge ahead is not about generating more information, but about ensuring that existing knowledge consistently leads to action.

A first step in this transition is to make early action a routine part of decision-making. Early warning must move beyond alerts and advisories to become embedded in everyday systems—within cities, workplaces, and local institutions. When warnings trigger predefined actions, whether adjusting work schedules, activating public services, or supporting vulnerable groups, response becomes predictable and effective rather than reactive.

Equally critical is the need to align financing with risk. Current disaster risk financing systems are still largely designed to respond after losses occur. Shifting toward anticipatory approaches requires financing that is planned in advance, linked to forecasts, risk analysis, and delivered in time to prevent or reduce impacts. Even small, well-timed resources can enable significant protective actions when

they reach those most exposed to risk.

At the same time, policies must evolve to support this shift. Early action needs to be integrated into national and local planning frameworks, including disaster management, climate adaptation, and urban development. This integration ensures that early warning systems and anticipatory action are not standalone tools, but part of broader governance systems that prioritise prevention and preparedness.

Strengthening local capacity remains central and fundamental to this effort. The examples in this issue show that communities, workers, and small businesses are already adapting to changing risks. Supporting these efforts requires sustained engagement, practical guidance, trust and systems that recognise local actors as partners in resilience rather than recipients of support. When local knowledge and initiative are combined with institutional support, early action becomes both scalable and sustainable.

Another important step is improving coordination across sectors. Risks such as extreme heat affect health, labour, water, and urban systems simultaneously. Addressing them requires coordinated responses that bring together different departments and institutions. Without such

alignment, early warning signals may not translate into comprehensive action on the ground.

Looking ahead, there is also a need to invest in systems that connect information, action, and finance. Data and forecasts must be accessible and understandable, actions must be clearly defined, and resources must be available when needed. Building such systems requires long-term commitment and continuous learning, but it is essential for reducing risk at scale.

Ultimately, the way forward is not about isolated flagship interventions but about strengthening an interconnected system. Early warning, early action, and early finance must function together to make each other more effective, and reinforcing each other. Progress in one area without the others will remain limited in its impact and performance that matches the potential.

The knowledge exists. The practices are emerging. The need is urgent.


What is required now is consistent action—taken early and urgently, supported by finance, and sustained through systems that prioritise prevention. Time has come to think ahead how and when and who will support decentralised autonomous organisations of the affected populations use local prediction markets to signal risk, and seamlessly releases suitable and equitable funds for early action that are urgent, transparent, and effective.

In a world where risks are increasingly known in advance, acting early is no longer an option—it is a responsibility and financial prudence, may it be Europe or India.

മുന്നറിയിപ്പുകളും മുൻകൂർ നടപടികളും ഫലപ്രദമാകുന്നത് അവസരമെടുക്കാനും ഏകോപിതവുമായ പ്രവർത്തനങ്ങളായും മതിയായ ധനസഹായത്തോടെയും നടപ്പിലാക്കേണ്ടതുമാണ്. ഇത് സാധ്യമാക്കാൻ നയ ഏകീകരണം, പ്രാദേശിക ശേഷി ശക്തിപ്പെടുത്തൽ, വകുപ്പുകൾ തമ്മിലുള്ള സഹകരണം എന്നിവ നിർണായകമാണ്. ഒടുവിൽ, മുന്നറിയിപ്പ്, നടപടി, ധനം എന്നിവ ഒരുമിച്ച് പ്രവർത്തിക്കുമ്പോഴാണ് അപകടസാധ്യത ഫലപ്രദമായി കുറയ്ക്കാൻ കഴിയുക.

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2026 Humanitarian Networks and Partnerships Week Report: *Shaping the Humanitarian Reset - From Global Commitments to Local Action.*

Humanitarian workers should use this report in 2026 to strengthen locally led action, anticipatory planning, and climate resilience in everyday practice. The findings offer practical lessons on coordination, early action, innovative financing, and accountability that can help improve preparedness, reduce duplication, support affected communities, and translate global commitments into meaningful local impact. ([Read more](#))

The views expressed in this issue are those of the respective authors of each article.

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