



THE NEXT CHAPTER OF RESILIENCE:

Pairing Proven Solutions with Bold Innovation at the
Climate-Conflict Nexus

September 2025

I. GLOBAL CLIMATE FINANCE ISN'T REACHING WHERE IT'S MOST NEEDED

Across the world's most fragile contexts, **local communities and governments are innovating to adapt in the face of the converging crises of climate change and conflict**. Communities on the front lines are adapting with limited resources—repairing irrigation systems after floods, diversifying crops in droughts, and drawing on traditional knowledge to manage unpredictable weather. Local governments, and community organizations are often the first and most trusted responders, sustaining livelihoods and protecting ecosystems.

Yet despite these capacities, **climate financing and adaptation programs rarely support the systems that communities have**

already built and are eager to expand. The more fragile a country is, the less climate finance it receives. In 2022, **less than 1%** of total adaptation funding was allocated to the ten most fragile states. All 17 of the most climate-vulnerable, conflict-affected countries at the **epicenter of crisis** (see figure 1) are now ranked as **severely underfunded** in the **Global Adaptation Finance Index**, receiving **less than half** of what they would merit based on climate risk. Of the limited climate finance that reaches fragile states, **less than 10%** leaves capital cities, and almost none reaches local actors.

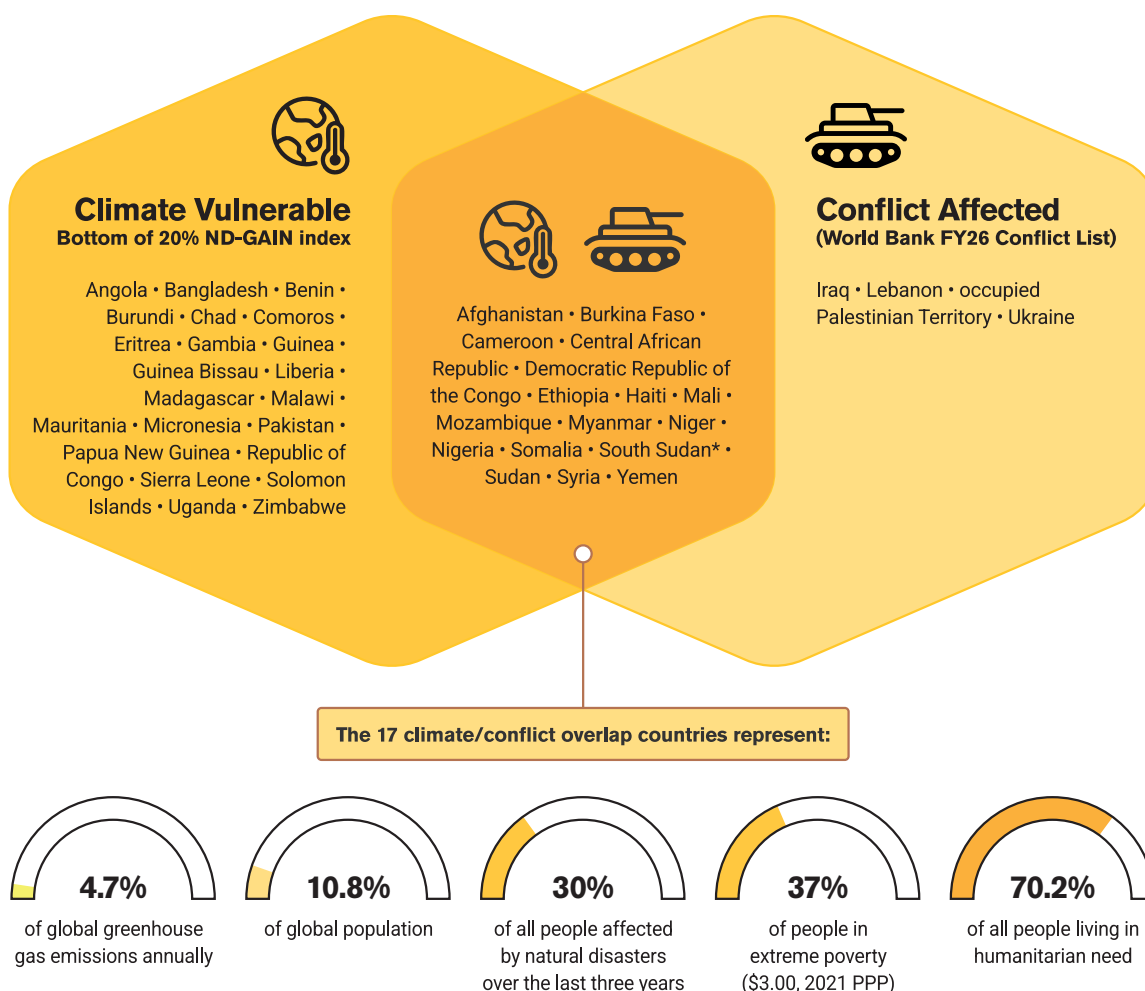


Figure 1 - *Notes countries that are extremely climate vulnerable but are not ranked on index. Source: UNEP

Additionally, climate adaptation is significantly underfunded relative to climate mitigation. While large-scale mitigation projects—such as energy infrastructure—remain essential, funding to address the immediate adaptation needs of communities already facing climate impacts is also vital. In 2021 and 2022, funding for adaptation made up only approximately 10% of all climate finance flows, leaving an annual shortfall estimated between **\$187–359 billion**. The new climate finance goal agreed upon at COP29 did not set a dedicated target for adaptation to address this imbalance. Meanwhile, progress on the COP26 commitment to double adaptation finance from 2019 levels to 40 billion dollars by 2025 is **far off track**. At the subnational level, climate adaptation programs tend to “avoid areas affected by conflict and fragility,” leaving the most vulnerable populations behind.

This is not just a funding gap — it’s a **systems failure**. Climate adaptation remains **siloed**: humanitarian donors often see it as beyond their scope, development actors are hesitant to engage in fragile states, and climate finance typically steers clear of locations seen as too ‘high risk.’ **National governments at the epicenter of crisis are both indispensable and undercut**: they often lack the financial resources, institutional capacity, political will and infrastructure to deliver comprehensive adaptation. **National Adaptation Plans (NAPs)**—central to global climate policy—are frequently derailed when state institutions are weak, fragmented, or altogether absent. Even where adaptation measures exist, they are often fragmented or undermined by a weak enabling environment, rendering them disconnected from the realities on the ground.



A female client, holding her sleeping baby, walks with IRC staff in the floods surrounding her Tukul, in Northern Bahr El Ghazal.

Rigid funding mechanisms, short-term planning, and inflexible program designs further undermine adaptability in complex and rapidly changing environments. Humanitarian funding typically operates on one- or two-year cycles, creating major barriers for effective crisis response. This inflexible and short-term approach is particularly ill-suited for the rapidly changing conditions in today’s climate reality. Funding for Anticipatory Action, for example, is often attached to a

specific geography and time horizon: when a hazard does not materialize at the right time and in the right place for the funding mechanism, **the resources must be re-programmed or returned to the donor**. Additionally, these short funding windows do little to address recurring climate shocks of increasing frequency and severity over several years. The result is a fragmented, risk-averse funding architecture that fails to sustainably reach the communities most in need.

II. PRIORITIZING THE EPICENTER OF CRISIS IN A NEW ERA OF AID

The most extreme impacts of the climate crisis are becoming increasingly concentrated in a handful of conflict-affected countries. Seventeen countries currently sit at the epicenter of this convergence of climate vulnerability and ongoing conflict; all 17 are amongst the 21 countries the IRC identified as most impacted by recent aid cuts, based on levels of humanitarian need, exposure to debt distress and least developed country status. Within these contexts, **women and girls** face especially acute risks: climate change **compounds existing inequalities**, and limits their access to resources, decision-making, and protection. The trend is only expected

to intensify: in 2025, Official Development Assistance (ODA) is expected to decline by 20%, and in 2026, the U.S. alone has proposed slashing its foreign affairs budget by 84%. CARE estimates bilateral adaptation finance will reach only 12 billion dollars by 2025, just 30% of the target, and may drop to 10 billion dollars by 2026 due to recent aid cuts. These countries at the epicenter of crisis, already constrained by limited domestic resources and mounting debt, cannot finance adaptation on their own. Without a shift in global priorities, communities will be left to bear the burden of a crisis they didn't create.

THIS IS THE NEW ERA OF AID: SHRINKING BUDGETS, GROWING NEEDS, AND A RISK-AVERSE FUNDING SYSTEM THAT TOO OFTEN AVOIDS FRAGILE AND CONFLICT-AFFECTED SETTINGS ALTOGETHER.

SOLUTIONS DESIGNED FOR AND TESTED IN FRAGILE CONTEXTS

We know climate change is the problem of our lifetime and innovators across the globe are generating solutions every day, but most are **designed for stable contexts** and **depend upon systems that are disrupted** in fragile contexts. While state and local governments, research institutions and functioning markets are key to the delivery of existing solutions, conflict causes them to break down—and where aid hasn't adapted, solutions have failed the very communities they are meant to protect.

At the epicenter of crisis, resilience-building programming delivered by international NGOs and multilateral agencies are often **out of sync with on-the-ground realities**. Too

often, these approaches are designed centrally—prioritizing standardized toolkits or donor-driven frameworks—rather than being shaped by the lived experiences and priorities of the communities they intend to serve. Rather than reinforcing and enhancing community capacity and agency, these efforts **risk deepening cycles of dependency** and sidelining local institutions and informal networks—often the actors best positioned to lead effective, context-specific adaptation and recovery. This disconnect is especially visible in the field of disaster risk reduction (DRR), where the gap between design and delivery has left many programs struggling to achieve their intended impact.

DISASTER RISK REDUCTION (DRR)

Disaster Risk Reduction (DRR) programs exemplify this disconnect between humanitarian and development actors, and contextual realities. In 2024, the Airbel Impact Lab—IRC's Research and Innovation Unit—launched a DRR exploratory research and design initiative and found that, when DRR programs are **poorly designed, implemented without meaningful local consultation, or undermined by political dynamics, they can fail to reduce risk and may even deepen vulnerability**. Our research revealed that, in conflict-affected states, physical access to rural and hard-to-reach areas—where disaster risks are often highest—is **severely limited for international aid agencies**.



A mother and daughter collect water at the river in Bamiyan province, Afghanistan.

Partnerships with local organizations can help extend coverage, but these actors also face access restrictions due to tribal or political associations and the perception that they lack neutrality. In some cases, NGO-led livelihood interventions have been **directly targeted** in the conflict, instrumentalized by political actors, or suspended entirely. Both international and local implementers often **struggle to scale** these programs in fragile environments, constrained by limited financial and organizational capacity.

These challenges are particularly acute in **Afghanistan**, where between September 2024 and April 2025, Airbel conducted human-centered design research and consultations with agro-pastoral communities, revealing how decades of conflict have eroded infrastructure, disrupted traditional coping mechanisms, and left communities highly exposed to climate- and conflict-driven disasters. Where DRR activities have been funded, **projects frequently suffer from poor oversight**, resulting in low-quality or unfinished work at the local level—**activities designed to check donor boxes rather than deliver sustainable protection**. The physical and social distance between **donors and the communities they serve** often leads to interventions that are neither effective in design nor in implementation. Political influence over funding decisions can further erode neutrality, fueling mistrust among communities. Implementing organizations find themselves **caught between government regulations and donor expectations**, leaving little room for truly community-centered, context-specific approaches. Rural communities caught in the vicious cycle of recurring floods and prolonged droughts are being pushed to the brink; **existing solutions remain fragmented and ineffective**, and the failure to make real progress is compounding pressures on livelihoods, driving catastrophic income losses and triggering mass migration.

These challenges point to a core disconnect: **the global climate adaptation agenda remains largely designed for stability**. Addressing this gap requires more than technical fixes. It requires building on proven best practices while adapting them for contexts marked by conflict, climate vulnerability and systemic breakdowns. **Evidence from the past decade shows what works**; our responsibility in the new era of aid is to rigorously operationalize these practices while pairing them with new approaches that amplify impact, scale, and reach while minimizing cost. By building upon

what works with innovative approaches—**co-designed with frontline communities, tested in partnership with local actors, and scaled to reinforce community agency**—we can deliver interventions that are both effective today and resilient tomorrow. Our experience includes small-scale pilots that offer early insights with an ambition to continue to test, refine and expand these approaches in partnership with local actors and communities, demonstrating how climate resilience can work at scale and pioneering a pathway for broader transformation.

III. OUR APPROACH: RESEARCH-DRIVEN, SYSTEMS-LED INNOVATION

In an era of shrinking resources, mounting climate risks, and systemic breakdowns, the question is no longer whether aid should evolve, but how. At the epicenter of crisis, we already know we must move beyond top-down, short-term interventions toward solutions that are **grounded in local realities, adaptable over time, and capable of scaling**. This means **ensuring locally defined priorities are driving donor and national agendas**—and not the other way around—and shifting from isolated projects to approaches that **reinforce community agency while strengthening local systems**.

Across the IRC's country offices, technical units, and local partners, we are building upon **proven practices, adapting them for fragile and conflict-affected contexts, and rooting them in local knowledge**. At the same time, we're **driving innovation** so that aid meets the scale and urgency of the challenge. This includes:



Harnessing Behavioral Science

to design programs that are more intuitive and sustainable;



Prioritizing cost-effective, high-impact interventions

that maximize resources for communities;



Centering people-first partnerships with local actors,

ensuring their expertise and decision-making shape program design and implementation;



Adapting a systems thinking approach

to design systems-level solutions;



Maintaining flexibility and adaptability,

allowing interventions to adapt to rapidly changing conditions in protracted crises.

Through this approach, the IRC advances a model of resilience that is **research-informed, systems-led, and community-rooted**. At a time of mounting pressure to be more **cost efficient** and **streamline programs**, we believe it is imperative for us to **double down on what already works** in program design—because it is the difference between high-impact and ineffective programming. By building on what already works while adapting it for the realities of fragile contexts, we ensure programs are **relevant today and sustainable tomorrow**, ultimately strengthening the capacities of communities and local systems to respond to future shocks.



REDESIGNING RESILIENCE: BEHAVIORALLY-INFORMED ADAPTATION

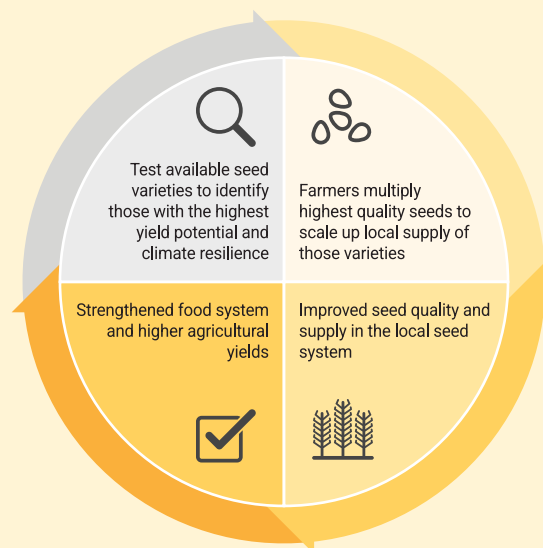
Harnessing Behavioral Science to Design More Effective Climate Programming

Business-as-usual adaptation approaches—especially in crisis settings—are often not tailored to how people actually live, think, and make decisions, so that even strong technical ideas struggle to take hold. The IRC integrates behavioral science into climate programming to close this gap. We pinpoint the **cognitive, social, and cultural enablers and barriers** that shape choices and design accordingly, which

makes programs and interventions more intuitive, timely, and feasible—and, therefore, more effective. This is especially **critical in climate work**, where success depends on **sustained behavioral change**—for example, adopting climate-smart agricultural practices, engaging with early warning systems, or shifting patterns of resource use—without relying on financial incentives.

GENDER INCLUSION THROUGH BEHAVIORALLY INFORMED DESIGN: ADVANCING WOMEN'S PARTICIPATION IN THE FARMER SEED STEWARDSHIP NETWORK (FSSN) IN NORTHEAST SYRIA

Agro-pastoral communities across **Niger, South Sudan** and **Syria** continue to grapple with the effects of **climate change**, persistent **insecurity** and **conflict**, **economic deterioration**, food and supply **shortages** and **high prices** for essential items, including food and agricultural supplies. **Robust seed systems** are essential for these communities, as they ensure timely access to high-quality, suitable seeds, which are foundational to sustaining livelihoods and food security, especially in times of crisis. IRC's Airbel Impact Lab, alongside in-country IRC teams and local partners, co-developed the **Farmer Seed Stewardship Network (FSSN)**—a **systems-based**, locally driven model designed to **strengthen the supply, availability, and accessibility of high-quality, climate-adapted seeds** in conflict-affected agro-pastoral communities.



The FSSN employs a **citizen-science approach** to **test, multiply, and distribute** locally adapted, high-yielding seeds, fortifying local seed systems for long-term sustainability. While the core tenets of the FSSN remain consistent across all project sites, the specific implementation and solution package has been customized in each target location to address the local social, political, economic and climatic conditions, ensuring the approach is both effective and contextually relevant.



After the conflict in Syria in 2012 halted her studies, a female client turned to agriculture. Through the FSSN, she accessed inputs from local markets and training in climate-adapted techniques.

In **northeast Syria**, the FSSN has been used to test behavioral strategies for addressing a key systemic barrier: **women's exclusion from agricultural value chains**, particularly cash crop production. **Entrenched gender norms** limit their access to quality inputs, financial resources, and decision-making opportunities critical for resilience and food security.

In response, the FSSN model in northeast Syria **integrated behavioral science into program design** to work towards shifting social norms and increasing women's inclusion. This included a series of **annual behavioral field studies** to test various social norm interventions and engagement strategies. Each year we reassess the key questions to be answered and adapt accordingly—making this an **iterative process** aimed at ensuring the sustained inclusion of women in livelihood activities and decision-making.



A female client, driven by her commitment to enhance opportunities for women, joins the IRC's FSSN in Tirbespiye, Syria.

In one such study, we explored the role of community networks and influential community members to drive social acceptance for women to participate in the program. In a randomized trial, we tested how to motivate community influencers—including women agricultural experts and respected local figures—to spread the word about the FSSN to others in their networks and the impact of their outreach. We found that:

- Influencers were most motivated by a **sense of altruism**.
- Women were **more effective in reaching out** to their peers than men.
- Women were **more likely to sign up** for the project when they had received a supportive message from an influential member of their community.

These results show that **tailored behavioral interventions** can measurably **increase women's sustained participation** in male-dominated agricultural spaces—trusted women influencers are motivated by altruistic messages to invite other women, and those women, in turn, are motivated to partake in the program.

Through these findings, Airbel not only derived critical insights into the motivations and socio-emotional factors influencing women's active participation in the program, but also **systematically applied these findings to enhance the FSSN's design** while aligning with prevailing social norms and the specific needs of women farmers. For instance, to empower women farmers to progress beyond basic tasks such as weeding and ploughing, and instead build expertise in the finer aspects of wheat cultivation—including independently applying fertilizers and managing

irrigation cycles—the program introduced a *mentorship model*. Under this approach, high-performing women beneficiaries were designated as mentors for newly enrolled participants, providing them with one-on-one guidance and practical support throughout the agricultural cycle. **In return, women mentors were incentivized with social rewards based on the performance and progress of their mentees.**

After a year of piloting this approach, we found that the mentorship model proved highly effective—not only enabling women mentees to achieve **significantly higher yields** compared to previous years, but also **building their confidence** in independently managing wheat cultivation.

By applying behavioral science to **challenge entrenched gender norms and create opportunities for women in wheat multiplication**, the FSSN model increases women's earning potential, strengthens their role in decision-making, and reshapes perceptions of their capabilities, contributing to more inclusive, resilient seed systems that advance food security and economic empowerment in humanitarian contexts.

WHAT'S NEXT

- Airbel also seeks to strengthen women's participation in financial decision-making. To advance this objective, in the upcoming year of pilot (beginning Fall 2025) the FSSN will pilot **Village Savings and Loan Associations (VSLAs)**, through which women farmers pool savings, can access loans, and invest their collective resources in launching small- to medium-scale enterprises related to wheat agriculture.
- In the coming year of pilot, Airbel will also be **exploring behavioral science strategies** for women farmers to foster mutual trust and engage in collective saving practices.
- By fostering deeper cooperation, mutual trust, and collective empathy, Airbel will aim to empower women farmers to support one another in their efforts, ultimately achieving a **sustainable, community-led financial resilience**.



REDESIGNING RESILIENCE: INVESTING IN WHAT WORKS

Using Cost Evidence to Drive Greater Impact

Humanitarian crises and climate shocks are growing just as resources to respond are becoming increasingly constrained. The new era of aid brings difficult decisions: with drastically reduced aid funding, **the need to maximize the impact for every dollar spent has never been more important.**

The IRC has long been at the forefront of these efforts, starting **over a decade ago** to proactively generate evidence for what it costs to deliver different programs in different contexts and prioritizing programs that achieve the greatest

outcomes most cost-effectively. In 2015, IRC launched a **"Best Use of Resources" (BUR)** team to measure cost-effectiveness and establish an evidence-based cost methodology. While accounting for just 3% of the global humanitarian budget (pre-US aid cuts), we conducted 30% of all impact evaluations in humanitarian settings and over 400 cost analyses across 37 countries to make evidence-informed decisions on where to spend more and where to save more to maximize our impact.

SCALING PROVEN SOLUTIONS: ANTICIPATORY ACTION (AA)

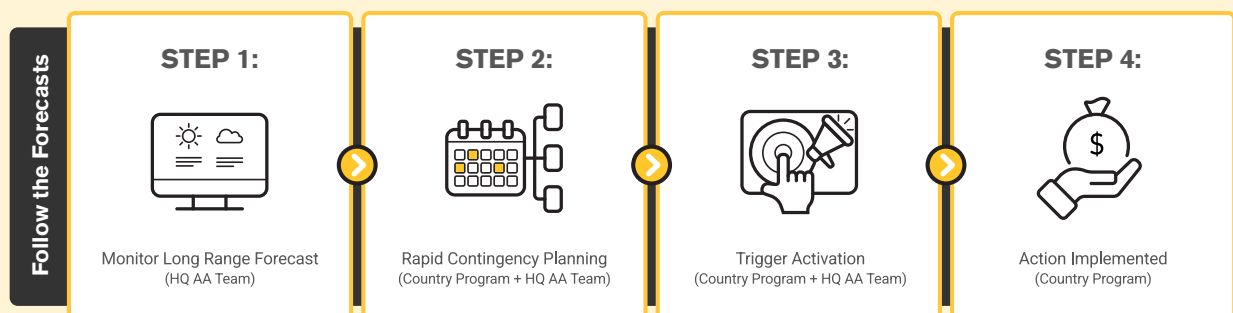
Beginning in 2021 with a pilot research program in north east **Nigeria**, IRC's findings showed that preshock cash assistance to flood vulnerable communities not only helped mitigate the impacts of shocks on livelihoods and food insecurity, but also improved communities' climate resilience in the long-run. Moreover, our **cost analysis** has shown that pre-shock cash transfers are likely to be more cost-effective than post-shock transfers and that cost-efficiency gains increase when anticipatory responses are scaled over time and across more households.

Yet even within traditional Anticipatory Action (AA) models, **structural inefficiencies undermine cost-effectiveness**. Most AA programs invest heavily in developing country-specific protocols far in advance of actual forecasts. These are constrained by fixed geographies, budgets, and project scopes, and often prove costly to maintain. Frequently, these plans are never triggered—either because the hazard does not materialize or because preset triggers do not align with real-time needs. This creates a **high-risk, high-cost scenario: investing scarce resources in plans that may never be triggered or aligned with real-time hazards**.



In Adamawa State, Nigeria, a client expanded her fish farming business through cash support, which also enabled her to pay school fees for two of her children.

In response to these inefficiencies, IRC developed the “**Follow the Forecasts**” model, which allows the IRC to **prioritize scarce humanitarian funding** to places with the highest probability of hazards occurring. Rather than building complex and inflexible protocols in advance, the IRC waits until long-range, open-source seasonal models indicate a high probability of floods or droughts—typically four months ahead—before convening rapid, contingency planning in consultation with local partners. When these rapid contingency plans are “triggered” the IRC swiftly provides cash assistance and early warning messages to vulnerable households—**prioritizing impact, minimizing delays, and reducing the risk of no trigger and unspent funds**.



IRC's first "Follow the Forecasts" AA activation was implemented in June 2024 in **Guatemala**, leveraging AI-enabled forecasting tools in its hazard monitoring frameworks and **AI-enabled mapping tools** to more efficiently target the most at-risk communities and households.

- In response to flooding, **290 households** received cash transfers and early warning messages ahead of the 2024 rainy season.
- Post-distribution monitoring showed that **90% of families used the funds** to stock food, purchase medicine, and reinforce homes—actions that helped them **protect their assets, avoid illness during floods, and maintain food and water security**.
- Across all regions, **families empowered to act early report fewer losses, reduced hunger, and greater resilience**—demonstrating that AA is not only effective but transformative.



In Badghis, Afghanistan, a client walks in search of water.

The model also strengthens the systems that serve our clients. By relying only on open-source climate data and designing cost-effective, rapidly deployable contingency plans with local partners, the Follow the Forecasts model ensures **scalability** and **replicability** across geographies, with the aim of protecting households in the present and building a more resilient aid architecture capable of delivering better outcomes for more people in the future.

WHAT'S NEXT

- In **Somalia**, the IRC scaled this model to reach **4,170 households** with cash transfers in drought-prone regions, and plans to reach an **additional 2,000 households in 2025**.
- In **Afghanistan**, IRC plans to reach **2,800** of the most asset poor drought affected households with **\$1.4 million** in multi-purpose cash from July 2025-June 2026. With IRC's modeling predicting widespread **IPC Phase-4 food consumption gaps** across the country, IRC will continue to scale and share its Follow the Forecast model with other local and international agencies over the next six months as the impact of the drought continues to develop.
- Based on current rainfall analysis, IRC plans a phased **WASH intervention in Western Afghanistan** to address critical water access for people and livestock while responding to the increasing risk of climate-change induced infectious disease (acute watery diarrhoea/cholera). More broadly, the IRC is increasingly integrating waterborne disease forecasting and response into drought AA, an approach currently being tested in **Somalia, Afghanistan, and Chad**.

In addition to informing program design and delivery, cost analysis plays a critical role in **assessing the scalability of a solution**—a process that begins from the project outset—and identifying **opportunities to improve efficiency over time**.

Using cost evidence **isn't just about saving money; it's about reaching more people**, delivering greater impact, working towards programming that is sustainable, and fulfilling the moral imperative to make every dollar count.

READY-TO-USE TOOLS FOR COST ANALYSIS

The IRC has produced **standardized publicly accessible tools** for conducting cost analysis in the humanitarian and development sector that can be easily adapted by programs aiming to include cost evidence. **Methods** and **excel-based tools** can be found on the [IRC Costing Website](#), along with a [video tutorial](#) on how to conduct these analyses.



In 2018, the IRC developed **Dioptra**, a web-based cost analysis tool that allows users to calculate the full cost of humanitarian and development programs and compare these costs against outputs, identifying opportunities to improve efficiency. Today, nine organizations—together managing a combined **\$7 billion** annual budget—use Dioptra to inform design changes that stretch donor dollars further.

By adopting standard cost-efficiency and cost-effectiveness methods and tools, peer organizations can continue to learn from each other about what drives cost, and embed this cost evidence early in program design, unlocking greater reach and impact without additional resources.



OPERATIONALIZING BEST PRACTICES: PEOPLE-FIRST PARTNERSHIPS

*Working with **subnational delivery partners** to build on local capacities*

Partnership with local actors is a cornerstone of effective aid. What sets the epicenter of crisis apart is that these partnerships are not just important, but indispensable. Where formal systems are strained or disrupted, building resilience means leaning even more on the institutions people continue to trust: local governments, civil society organizations, and community-based groups. This goes beyond surface-level partnerships: it requires **transferring power to local responders and building trust** so that they have the resources, flexibility and legitimacy to lead the way and deliver aid where it is most needed, by those who understand their communities best. It means establishing **flexible partnerships** that enable local actors to access communities who, in fragile settings, may be beyond the reach of governments or international NGOs.

At the IRC, this translates into **prioritizing partnerships with local actors** while also helping to **strengthen their ability to deliver** over time. It is **not about replacing local leadership or creating parallel structures, but about reinforcing existing systems** and ensuring they are responsive to community interests and needs. By convening government, private sector, and civil society partners, and by grounding our work in careful analysis of where systems have broken down, we focus on strengthening what already exists. Done well, this can mitigate long-term dependency on external aid and instead builds pathways for durable, community-led climate adaptation.

LEVERAGING INCLUSIVE WASH FOR EMPOWERMENT (LIFE-PAKISTAN) PROJECT

In Pakistan's climate-vulnerable Indus and Swat River catchment areas, the **Leveraging Inclusive WASH for Empowerment (LIFE) project**—supports inclusive, climate-resilient Water, Sanitation, and Hygiene (WASH) services. Operating across Buner, Swat, and Peshawar districts in Khyber Pakhtunkhwa Province, the project addresses overlapping challenges in **water security, gender equity, and climate adaptation**, particularly following the 2022 floods.

WORKING THROUGH LOCAL GOVERNMENT SYSTEMS

The LIFE project **engages directly with subnational government** institutions—including Municipal Authorities, Village Councils, and line departments such as the Tehsil Municipal Administration (TMA), the Water and Sanitation (WatSan) Cell, Environmental Protection Agency (EPA), Social Welfare Department (SWD), the Khyber Pakhtunkhwa Commission on the Status of Women (KPCSW) and the Public Health Engineering Department. These partnerships are **informed by a stakeholder analysis** of the existing governance systems' strengths and weaknesses.

BRIDGING DECISION-MAKING GAPS AND ENABLING COMMUNITIES

A key focus of the project is connecting elected officials, who often control budgets but may lack technical expertise, with government specialists and community representatives. This connection supports evidence-based planning and helps ensure that local government strategies incorporate climate change data and inclusive governance approaches.

To strengthen community agency, **LIFE works with civil society organizations and community governance structures** such as Registered Health Organizations (RHOs) and Village Councils. **Women-led Inclusive WASH Jirgas (IWJs)** provide separate spaces for women and men to identify and prioritize WASH needs. These gender-separated jirgas feed into **Village WASH Development Plans**, which then guide action by both community groups and local authorities.



In Peshawar, young students mark Global Handwashing Day 2024 by proudly showing their clean hands as part of the LIFE-II Project, promoting the importance of hygiene in schools.

■ PUTTING MARGINALIZED GROUPS AT THE CENTER

The project also supports long-term engagement and capacity building. Through **targeted life skills and vocational training**, women, girls, people with disabilities, and members of sexual and gender minority communities have actively participated in local governance processes. In many project sites, women now participate in jirgas at rates comparable to men.

In schools, LIFE has supported the transition of student WASH Clubs into **Green Clubs**, equipping students—especially girls—to lead environmental education efforts and climate action. These clubs promote solid waste management practices and climate-conscious behavior change in both schools and households. In Peshawar, students have repurposed waste materials into planters, art installations, and color-coded recycling bins for effective waste segregation.

■ DRIVING IMPACT WITH INCLUSIVE WASH

The LIFE project has reached **136,862 people** with improved WASH access, including more than **68,734 women and girls** and **1,428 people with disabilities**. **644 women IWJ members have been trained** in leadership, conflict resolution, and inclusive WASH planning. **150 persons with disabilities** and their caregivers, as well as **162 transgender persons**, received skills and psychosocial support tailored to their needs, enabling more independent coping and fuller participation in community life. In schools, **7,766 students and teachers** including 182 female teachers and 4,209 girls have been mobilized through WASH and Green Clubs, building their capacity for environmental action. The LIFE project underscores how inclusive partnerships with subnational delivery actors—when grounded in system analysis and power-sharing—can support climate resilience, equity, and basic service provision. By **centering local knowledge and capacities**, particularly those of women and marginalized groups, the project helps strengthen participatory and adaptive local governance while improving access to safe and inclusive WASH services.

■ WHAT'S NEXT

- Building on the success of the **climate-resilient WASH model villages**, IRC and partners will **continue refining and scaling locally-led solutions** that strengthen community resilience.
- In future phases, the IRC and partners **will expand access to safe and inclusive climate-resilient WASH** and solid waste management services across communities and institutions, while **piloting innovations in early warning and anticipatory action for water management**.

■ CONTINUITY OF EDUCATION DURING CLIMATE SHOCKS: EXPLORING AN INSURANCE-BACKED APPROACH

Natural hazards intensified by climate change **pose severe threats to education systems**, with tropical cyclones and earthquakes alone causing approximately **\$7 billion** in annual damage to education infrastructure in low- and middle-income countries. Despite these massive impacts, **education sector resilience has been largely understudied and underfunded** in disaster risk planning and financing—even though education serves as **a critical tool for building climate resilience** by raising awareness of climate change and reducing community vulnerability.

In response, the IRC launched the **Climate Resilience Education System Trial (CREST)**, co-designed with communities in Kenya and funded by FCDO. CREST combines **climate risk insurance** through Africa Risk Capacity Ltd. with a tailored **cash and voucher assistance (CVA)** package, while providing **remote education and child protection services**.

When triggered, this pre-arranged response helps families avoid harmful coping strategies and ensures children remain safe, supported, and able to continue learning through school disruptions. Recognizing the need to expand initiatives like CREST, IRC partnered with the World Bank's Global Shield Financing Facility **to investigate how disaster risk financing (DRF) and climate finance can strengthen education system resilience** in vulnerable regions. This report became the launching pad for an Education Resilience Finance Pact, spearheaded by the IRC and endorsed by FCDO at the Seville Financing for Development Conference.

■ PEOPLE-FIRST PARTNERSHIPS IN ACTION

At its core, CREST is built on partnerships that put people at the center of its design and delivery: communities, teachers, parents, and local authorities are not passive beneficiaries, but co-designers and co-implementers of resilience. CREST worked with communities through a participatory approach to both design and delivery, leveraging focus group discussions, school visits, and one-on-one interviews with **local education authorities, parent groups, teachers, and community leaders** to ensure that **local voices shaped project goals and tools**. This approach helped identify the community's current and historical coping mechanisms for climate change hazards, informing both project design and implementation.

Community members have also played a direct role in **raising awareness and registering school-going households**, strengthening community ownership and trust, and, ultimately, ensuring high uptake of services. This inclusive design translated into strong buy-in: during the pilot phase, **94% of parents supported continued education** and committed to child safety and disaster risk planning.

■ WHAT'S NEXT

- IRC will take out drought insurance for **140 school communities** in the coming season and continues to work hand-in-hand with local actors to refine response tools and scale its impact.
- An **impact evaluation** will assess cost-effectiveness, impact, and response, offering a valuable model for how disaster risk financing can strengthen education system resilience-when paired with meaningful community partnership.
- The findings from CREST will **inform future programming** in similar contexts and may be particularly valuable in fragile and conflict-affected settings, where the need for continued education and child safeguarding during climate shocks is especially urgent.



OPERATIONALIZING BEST PRACTICES: SYSTEMS THINKING

*Responding to **system-level breakdowns** with **systems-level solutions***

At the Airbel Impact Lab, before we jump to generating new solutions we ensure we have a detailed understanding of the root causes of the problem. Through **root cause analysis** we unpack the full web of intersecting climate and environmental, economic, political, socioecological, cultural, and historical dynamics shaping the challenges our clients face. Understanding these dynamics is a **fundamental building block for good programming**, ensuring interventions

are relevant, targeted, and grounded in reality. This analysis draws on evidence reviews, focus group discussions, key informant interviews, and workshops with sector experts and local stakeholders. Only after this thorough, participatory process do we begin **co-developing solutions with community members and local partners**—systems-level solutions that respond directly to systems-level problems.

ROOT CAUSE ANALYSIS IN ACTION: TRANSFORMING LIVELIHOODS THROUGH GLOBAL STRATEGY AND LOCAL DESIGN

In communities across the epicenter of crisis, climate-sensitive livelihoods, and in particular nomadic pastoralism and agriculture, are **rapidly disappearing or diminishing in viability**. With limited access to adaptive options and rising competition over dwindling resources, these populations are facing escalating vulnerability to poverty, conflict and food insecurity. Given the severity and growing scale of this urgent problem, IRC's access and existing relationships with remote communities facing this problem, and the dearth of existing programming to address this problem, the IRC has identified **Livelihoods Transformation** as a priority area for climate research and innovation. Solutions in this space will support IRC clients in identifying viable alternative or diversified livelihoods strategies, in accordance with their own needs and desires.



In Somalia, an 80-year-old client fears losing her family's only source of income—their animals—after three consecutive failed rainy seasons. She describes this drought as the worst she has ever experienced.

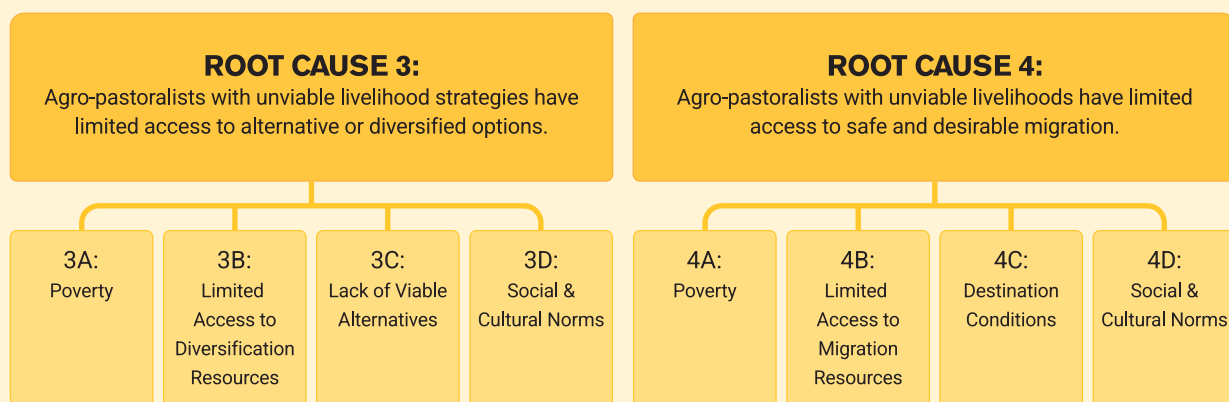
LAYING THE FOUNDATION FOR GLOBAL SCALE

To ensure that we are working toward solutions with scale potential across the 17 countries at the epicenter of crisis, we started our root cause analysis with a global lens. Through evidence reviews, key informant interviews with both local and global experts, and consultations with IRC technical and country program staff, we found common challenges to adaptation for people with climate-sensitive livelihoods across the most climate-vulnerable and conflict-affected contexts:

First, **certain livelihood strategies are becoming unviable (root cause 1)** due to the negative impacts of both sudden and slow onset disasters, a situation that is exacerbated by the mismanagement of natural resources by both governments and communities. Further, **agro-pastoralists have limited access to adaptive options to maintain their current livelihood strategy (root cause 2)** due to inadequate national financial resources (low GDP), government policies that restrict adaptive options in terms of water and land use, and conflict dynamics which destroy necessary infrastructure and limit mobility.



Additionally, agro-pastoralists with unviable livelihood strategies have **limited access to alternative or diversified livelihood options where they are (root cause 3)**, as well as **limited access to safe and desirable migration (root cause 4)**. Poverty, limited access to information, technical and input support, lack of safe non-farm livelihood alternatives, and social and cultural norms all contribute to constraining agro-pastoralist options to transform their livelihood strategy in place. Whereas poverty, limited access to information and safe migration pathways, poor conditions at the destination, and social and cultural norms all contribute to constraining agro-pastoralist options to transform their livelihood strategy through migration.



These conditions erode adaptive capacity over time—ultimately limiting agro-pastoralists’ ability to transform and diversify into alternative livelihood options and increasing their dependence on aid to meet their basic needs.

DESIGNING FROM THE GROUND UP

In Spring 2025, we began the work of examining how this complex problem manifests specifically in agro-pastoral communities in Somalia. Now in the earliest stage of innovation, we are engaging with farmers, pastoralists, and community stakeholders to localize our problem analysis, map key stakeholders in the system, and identify key leverage points for intervention. This design phase will conclude with the generation of solution ideas which will be tested with farmers and pastoralists in target communities before moving forward to prototyping.

At every step, communities will remain in the driver’s seat—**defining what a secure and dignified future looks like for them**. For some, that may mean strengthening existing practices; for others, diversifying income or pursuing safe, voluntary migration. By embedding **root-cause analysis** and **client priorities** into design, Airbel and its partners will ensure that solutions are not only technically robust but also responsive to our **client communities’ needs and aspirations** and **always grounded in their decision-making power**.

WHAT'S NEXT

- Equipped with the insights from our evidence review, Airbel will advance new delivery models in partnership with communities in:
 - **Somalia (2025):** Early-stage research is already underway, with a prototype solution slated for piloting by year's end.
 - **South Sudan (2026):** Similar research and design will follow, building on lessons from Somalia.



OPERATIONALIZING BEST PRACTICES: SOLUTIONS BUILT FOR CHANGE

*Embedding **flexibility** into program design to enhance its **adaptive capacity** in fragile contexts*

Developed specifically for **protracted crisis settings**, our models are designed to be **flexible** and **iterative**, allowing us to **respond to rapidly shifting risks, priorities, and contextual realities, without losing sight of long-term adaptation and resilience goals**. In environments where disruptions are the norm, not the exception, static or rigid solutions fail. Instead,

success hinges on the ability to adapt quickly, recalibrate priorities, and maintain continuity even when core institutions and infrastructure break down. **When solutions are designed for change, they can endure it—and even drive transformation in the most challenging environments.**

RISING TEMPERATURES, RISING FUEL PRICES: PIVOTING TO SUSTAINABLE IRRIGATION TECHNOLOGY IN NORTHEAST SYRIA

In northeast Syria, a region already grappling with the compound impacts of conflict and climate change, rising fuel prices have created a critical barrier to irrigation and food production. During the first year of pilot implementation of the Farmer Seed Stewardship Network (FSSN), feedback from participating farmers made one thing abundantly clear: **lack of access to affordable fuel was jeopardizing the viability of our seed multiplication efforts.**

During the 2023-2024 season, **hundreds of airstrikes and attacks targeted vital infrastructure**—gas, oil, water, and electricity facilities—disrupting local fuel production and increasing dependence on high-cost imported fuel. With fuel prices continuing to soar, many farmers irrigated less frequently or not at all, resulting in reduced crop yields. Others were renting fewer harvesting and mechanized tools due to rising costs, forcing them to cultivate smaller plots and compounding their financial losses.



In northeast Syria, a participating farmer in the IRC's FSSN program rides his tractor.

While the FSSN was designed under the assumption that diesel would remain a viable option for irrigation, these rapid shifts in the fuel landscape forced us to quickly rethink our approach. The ground realities no longer aligned with our program assumptions—existing solutions were no longer practical. We needed to pivot, and we needed to innovate.



The field of a female farmer participating in the IRC's FSSN program in Tirbespiye, Syria.

This was the catalyst for launching the **Wazoku | IRC northeast Syria Fossil Fuel Dependency Challenge**, a call for bold ideas to identify scalable, sustainable alternatives to diesel-powered irrigation. We screened 69 proposals from across the globe and shortlisted three promising technologies. The most viable emerged as a **Stirling engine paired with a sand battery system**—offering low operating costs, local buildability, and zero reliance on fossil fuels. The solution is uniquely suited to northeast Syria's fragile, fuel-constrained environment.

Although the solar power market in northeast Syria showed potential, it remains nascent—plagued by high costs, limited supply chains, import barriers, and lack of technical know-how. Most farmers simply could not afford solar systems under current conditions. The Stirling engine and sand battery system fills this gap with a context-appropriate solution that circumvents many of these constraints.

WHAT'S NEXT

- IRC's pilot of this innovative technology is slated to begin in **early 2026**. If successful, it will serve as a proof of concept for **affordable, sustainable, and locally appropriate alternatives to diesel irrigation**. Beyond enhancing our seed security and agricultural resilience programs in Syria, this approach could inform future initiatives in other fragile, drought-affected contexts—unlocking long-term impact for thousands of farming households on the frontlines of climate crisis and conflict.

IV. MAKING CLIMATE ACTION WORK FOR FRONTLINE COMMUNITIES

Climate leaders at COP30 should, in line with Brazil's ambition to address structural inequalities that exacerbate vulnerability, advance bold, innovative action **at the epicenter of crisis**—where needs are greatest and where the potential for transformative impact is highest. **The IRC calls on these leaders to commit to not leaving conflict-affected communities behind in climate action and financing decisions.** In order to change the business-as-usual

approach, wherein the most vulnerable populations are systematically left out of climate action, we must make a concerted, collective effort to prioritize the needs of conflict-affected frontline communities, focusing on contexts that are experiencing extreme and concurrent climate vulnerability and fragility. This requires a shift to an approach that prioritizes local knowledge, conflict-sensitive delivery methods and community engagement.

RESPONDING TO SYSTEMS BREAKDOWNS WITH LOCALLY ANCHORED, SYSTEMS-LEVEL SOLUTIONS:

The present climate funding gap and the state-centric approach to delivering climate support perpetuates a cycle of vulnerability, hindering communities' ability to build resilience and exacerbating the impacts of climate change and conflict dynamics. To break this cycle, world leaders must commit to shifting power to communities at the epicenter of the crisis. This requires that aid actors:

- **Invest in innovative and behaviorally-informed adaptation and resilience** to drive sustainable, cost-effective, high-impact change;
- **Embed cost analysis** as a core feature of adaptation programming to guide smarter decisions and scale what works;

- **Improve mapping** of root causes of systems breakdowns, including intersecting climate and conflict risks down to the local level to target action where it is most needed;
- **Drive conflict-sensitive adaptation and resilience** through localized and community-led approaches like those proposed within this report, which require meaningful sub-national partnerships;
- **Adopt a people-centric approach to delivery** that embraces a more flexible partnership model so public sector, civil society, and international organizations can work together to better meet client needs;
- **Design agile and iterative solutions for protracted crisis settings** that can quickly adapt to contextual shifts and respond to clients' evolving needs.

FUNDING CLIMATE RESILIENCE IN A NEW ERA OF AID:

To make climate finance work for conflict-affected regions, **donor strategies and funding systems need to be redesigned** to reach those most affected, enable flexible and rapid responses, and dismantle barriers that exclude frontline communities from effective adaptation and resilience building. This requires that funders:

- **Make climate finance more equitable and accessible** to adequately resource climate adaptation at the epicenter of crisis to ensure that the most impacted communities receive the resources they need;
- **Move beyond the traditional exclusive reliance on national governments** and increase investment in local NGOs that can access communities that are beyond the reach of governments in fragile settings.
- **Break down the traditional silos between humanitarian, development, and climate efforts and to mitigate donors' risk aversion**, ensuring sustained support for critical climate projects in conflict-affected states and fostering a lasting commitment to building resilience across the epicenter of crisis.
- **Provide long-term and flexible grant-based funding—**

accessible to local actors—that enables **adaptive resilience programming, supports quick pivots when conditions change, and fosters iterative learning over time.**

The financing negotiations at COP30 in Brazil present a pivotal moment to move beyond the business-as-usual approach to climate action and ensure the most affected communities have the resources and support they need to respond to this crisis. This is not an either/or question of whether to mitigate the future impacts of climate change or adapt to the current impacts of climate change, but instead a both/and opportunity to alleviate the worst effects of the crisis today while building resilience for the future.

Only through stronger funding and programs designed with and for those at the epicenter of crisis—blending proven best practices with bold innovation that enhances impact, sustainability, scale, and efficiency in a resource-constrained world—can we collectively confront the climate crisis, particularly in areas that facing the dual burdens of climate change and conflict, and foster a future of greater security, well-being, and resilience for all.