

Digital Cash Series: Mercy Corps Cryptocurrencies & Cash Assistance

In a rapidly changing global environment marked by climate shocks, conflict, displacement, and economic volatility, Mercy Corps continues to position itself at the cutting edge of humanitarian and development innovation. One of the most transformative areas of progress in recent years has been the organization's work at the intersection of cash assistance and financial and digital technology.

This brief, is the second in our series, focused on digital cash technology pilots in humanitarian cash transfer programs. This brief explores cryptocurrencies and blockchain enabled platforms in Myanmar, Afghanistan, Kenya, and Syria. You can find our first brief, focused on partnering with financial technology providers as a tool for addressing the cash liquidity crisis in Sudan [here](#).

Why Innovation in Cash Assistance Matters

Cash and voucher assistance (CVA) has become a cornerstone of humanitarian response, accounting for approximately 21% of total international humanitarian assistance in 2022 — a rise from just 10% in 2016 (CALP Network, 2023). It offers affected populations autonomy, dignity, and the flexibility to prioritize their own needs. Yet, as CVA scales up, the limitations of traditional cash delivery models are becoming more pronounced — particularly in fragile, politically constrained, or financially isolated environments.

Globally, 1.4 billion adults remain unbanked (World Bank, 2021), many of whom live in conflict or disaster-affected areas where humanitarian aid is needed most. In these settings, standard banking and mobile money services may not be available, reliable, or trusted. Humanitarian agencies often face weeks-long delays in payments, compliance bottlenecks, and transaction costs as high as 15% due to reliance on layered intermediaries like banks, remittance agents, and money handlers.

In places where formal financial systems collapse or are subject to international sanctions, aid agencies are left scrambling to deliver assistance through insecure, informal channels — increasing the risk of fraud, exploitation, and operational delays. Moreover, currency depreciation and liquidity crises in fragile states (like Sudan, Lebanon, Myanmar, or Venezuela) often erode the real value of cash transfers, rendering them less impactful for recipients by the time they are redeemed. This is compounded by the fact that humanitarian crises are lasting longer: the average humanitarian crisis now lasts more than nine years and in 2023 it was recorded that the global humanitarian needs hit a record \$55.2 billion, while funding covered just 41% of that need (OCHA, 2023). This gap demands innovation and cost-effectiveness in delivery.

Innovation in cash assistance is about future-proofing humanitarian aid: building systems that are faster, cheaper, safer, and more equitable, capable of meeting both today's and tomorrow's complex emergencies through inclusion, agility and dignity. Pilots led by Mercy Corps and other leading actors are using stablecoin-backed cash transfers¹, blockchain-secured aid tracking, and decentralized digital wallets to bypass broken financial systems and deliver cash directly, instantly, and securely. In a recent

¹ Stablecoin-backed cash transfers use cryptocurrencies pegged to stable assets (like the U.S. dollar) to deliver aid digitally, maintaining value stability while enabling fast, low-cost transactions.

pilot, Mercy Corps and partners used stablecoin transfers to deliver cash in under 10 minutes, with fees under 1% — compared to the 5–15% typical of legacy systems².

By leveraging emerging technologies — such as AI³ for participant targeting, Web3⁴ platforms for real-time monitoring, and digital ID systems for secure authentication — CVA actors can dramatically reduce delivery costs, increase transparency, and improve accountability to affected populations.

But innovation is not only about technology. It is about creating inclusive, adaptive, and locally led solutions that can function in high-risk, high-need contexts. It is about expanding the reach of cash to marginalized populations — such as refugees, people with disabilities, or women in remote regions — who often fall through the cracks of standard systems. It is about pushing for the development of digital platforms and financial technologies that can be utilized by highly vulnerable communities often at the forefront of crisis but at bottom of the digital divide.

The Crypto Frontier: Going Beyond Traditional Aid

As the humanitarian sector grapples with increasingly complex crises—conflict, climate disasters, hyperinflation, and restricted financial access—conventional cash assistance methods often fall short. Mercy Corps is helping chart a new frontier with blockchain-powered, crypto-based solutions that extend the reach and impact of humanitarian aid, especially in hard-to-access or politically sensitive environments.

Web3 and stablecoins are at the heart of this shift. Mercy Corps has been piloting the use of stablecoins like USDC—cryptocurrencies pegged to reserve currencies—to deliver aid faster, more securely and transparently, and with lower transaction costs. In crisis-affected countries where financial infrastructure is either degraded or under surveillance, stablecoins offer an anonymous, traceable, and efficient way to transfer value directly to affected populations and local partners.

A standout initiative is Project Lydian, which utilized Web3Auth technology to create self-custodial wallets via a Telegram chatbot. Through this system, humanitarian organizations disburse funds directly to local actors who can withdraw smaller, flexible amounts in secure environments. This not only preserves anonymity but also significantly reduces the logistical risks tied to traditional financial services. In an environment where local currency devaluation and bank shutdowns were rampant, Lydian proved to be a lifeline.

² Mercy Corps Ventures (2024). 2024 Impact Report. Mercy Corps Ventures, Portland, OR. Available at: <https://www.mercycorps.org/what-we-do/ventures>.

³ Artificial Intelligence (AI) refers to computer systems capable of performing tasks that typically require human intelligence—such as data analysis, prediction, and decision-making—used here to improve targeting, delivery efficiency, and monitoring of cash assistance.

⁴ Web3 refers to the next generation of internet applications built on decentralized blockchain technology, enabling secure, transparent, and user-controlled digital transactions and identities.

From the Lydian pilot implementation, digital currency transfers achieved an average cost saving of 10.87% compared to traditional financial service providers - reducing transfer costs from \$93.36 to \$82.31 per household. With the same \$100,000 budget, the pilot could reach 131 additional households at the \$82.31⁵ per-transfer cost. Across Mercy Corps' broader crypto innovation portfolio, the results have been compelling. In a blockchain-powered anticipatory cash transfer pilot in Kenya, Mercy Corps disbursed 11,271 USDT to 262 pastoralists through smart contracts that automatically released funds based on real-time climate data. This pilot yielded:

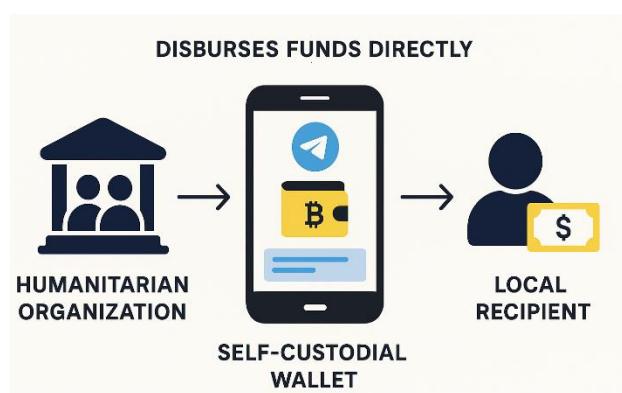
- 75% reduction in transaction costs (from 10% to 2.5%)
- 90% faster payment settlement time (from 14.5 hours to nearly immediate)
- 77% of participants reported lower financial stress⁶.

These results are not outliers. Across all pilots in 2024, Mercy Corps Ventures impacted 43,000 people, launched 7 new pilots, and reviewed 450 concepts—solidifying its position as a leading innovator in humanitarian crypto applications.

But Mercy Corps isn't just solving for speed or cost. The crypto approach enables:

- Financial inclusion for unbanked populations (1.5+ billion globally lack access to banks).
- Improved transparency and fraud mitigation through immutable blockchain records.
- Resilience and adaptability in high-risk contexts, where physical cash or mobile money systems are compromised.
- Decentralized delivery that empowers local tech partners and civil society organizations to drive innovation and accountability.
- Ability to deliver in financial restricted markets and environments.
- Opportunity to address the digital divide through digital inclusion and the use of e-wallets.

The organizational infrastructure to support this innovation is evolving. Mercy Corps created a Humanitarian Venture Lab to bridge the gap between local tech developers and humanitarian needs. This lab ensures that crypto tools are not only cutting-edge but also context-specific, user-friendly, and aligned with global humanitarian principles.



⁵ Mercy Corps Ventures (2024). Project Lydian Evaluation – Final Report. October 2024. Prepared by DWMC and Mercy Corps Ventures, Limited Circulation.

⁶ Mercy Corps Ventures. (2024, August 13). Pilot Insights – Blockchain-Powered Anticipatory Cash Transfers for Pastoralists in Kenya. Medium. Retrieved from <https://medium.com/mercy-corps-social-venture-fund/pilot-insights-anticipatory-action-leveraging-blockchain-for-drought-impact-pastoralists-in-the-eastern-Horn-of-Africa-e2d60d0f0f3d>

With crypto, Mercy Corps is not merely digitizing old systems—it is reimagining the architecture of aid. This leap has the potential to transcend legacy barriers and bring humanitarian response into a decentralized, agile, and more dignified future for those who need it most.

Crypto in Action: Use Cases and Learning

While crypto solutions in humanitarian settings may once have seemed theoretical, Mercy Corps has deployed multiple real-world use cases that prove the practicality, efficiency, and transformative potential of blockchain-based systems, moving them from pilots to practice.

Critical Findings and Impacts from Pilots:

1. **Hyperinflation Resilience:** In contexts suffering from hyperinflation and financial system collapse, stablecoin-based aid delivery has provided a financial safety net that local currencies could no longer offer. Through digital wallets, recipients receive USDC or USDT, stable cryptocurrencies pegged to the U.S. dollar, helping them preserve purchasing power in places where national currencies are losing value daily. This was particularly impactful in fragile states where banks had collapsed or imposed severe withdrawal limits, allowing Mercy Corps to sidestep failing infrastructure and deliver uninterrupted aid.
2. **Empowering Local Humanitarian Actors:** One of the most meaningful applications of crypto came through empowering local NGOs and frontline workers. In a country under severe sanctions, Mercy Corps supported local humanitarian organizations access funding by using self-custody wallets and peer-to-peer transfers, bypassing the need for centralized banks. The use of Web3Auth and Telegram bots enabled organizations and even individuals in isolated areas to participate in humanitarian operations without risking surveillance or seizure of funds. This also facilitated more direct partnerships with local groups, aligning with the sector's localization agenda.
3. **Operational Continuity in Crisis:** In volatile contexts, aid workers have often been cut off from financial resources due to security disruptions or institutional delays. Crypto has enabled operational agility—even when banking networks go down, staff can still be paid or receive emergency stipends via stablecoin transfers that can be redeemed for local currency or goods via trusted vendors. This agility has kept field operations moving even in times of curfews, border closures, or communications blackouts.
4. **Vendor and participant Empowerment:** Vendors in hard-to-reach areas were onboarded to accept crypto payments directly or through QR-based redemption systems. Mercy Corps found that these vendors appreciated:
 - Reduced delays in payments (no bank clearance times),
 - Clear transaction histories for reconciliation, and
 - Greater flexibility in restocking using peer-to-peer crypto liquidity networks.

Likewise, participants reported greater autonomy and discretion in how and when they accessed their assistance, contributing to their sense of dignity.

5. **Monitoring, Transparency, and Learning:** One of crypto's biggest strengths is the ability to track transfers in real-time. On-chain analytics allowed Mercy Corps to:
 - Monitor transaction patterns,
 - Identify delays or bottlenecks instantly,
 - Flag anomalies for fraud prevention.
6. **Cost Management:** Lower transaction and foreign exchange fees improved overall value for money, enabling more participants to be reached with the same budget.
7. **Risk Management:** Immutable blockchain records and decentralized systems reduced exposure to fraud, diversion, and banking surveillance risks.
8. **Reduced Compliance Burden and Operational Ease:** Automated transaction records and transparent ledgers simplified audit trails, eased reporting requirements, and reduced the administrative workload on field teams. This drastically improved accountability to donors and communities, while also making internal learning more robust. Unlike opaque banking systems, every transaction in a blockchain-based aid program becomes auditable.

What Do Agencies Need to Be Aware of When Considering Cryptocurrencies for CVA?

As humanitarian actors explore the use of cryptocurrencies and blockchain-enabled systems for cash and voucher assistance (CVA), several practical and contextual considerations must guide decision-making. Technology offers speed, transparency, and cost efficiency, its responsible use depends on a clear understanding of risks, compliance, and operational readiness.

- **Evolving Regulatory Environments:** Crypto regulations differ widely by country and can change rapidly. Agencies must monitor local laws, sanctions regimes, and tax or reporting requirements to ensure full compliance before implementation.
- **Institutional Capacity:** Both Mercy Corps and implementing partners (IPs) need adequate technical capacity, internal controls, and trained staff to manage digital wallets, verify transactions, and troubleshoot issues.
- **Data Protection and Cybersecurity:** Digital assets require strict adherence to data protection standards, secure wallet management, and robust digital security protocols to prevent hacking or misuse of sensitive participant data.
- **Sustainability and Exit Strategies:** Programs must plan for long-term sustainability, including reliable off-ramp options that allow conversion to local currency and clear exit strategies once pilots end.
- **Market Volatility:** Although stablecoins like USDC are pegged to fiat currency, they remain subject to issuer and market risks. Diversifying across stablecoins and transfer methods can help reduce exposure.
- **Legal Requirements and Compliance:** Agencies must ensure all crypto-based transactions comply with international financial laws, donor regulations, and anti-money-laundering (AML) and counter-terrorism-financing (CTF) frameworks.
- **Contextual Fit and Diversification:** Crypto should complement, not replace, other delivery channels. Transfer modalities must be chosen based on context — balancing speed, access, cost, and regulatory feasibility.

- **Advocacy and Enabling Environment:** In contexts where the infrastructure and communities are ready but legal restrictions persist, agencies can play a constructive role in evidence-based advocacy to influence regulators and donors toward enabling frameworks for responsible innovation.

From Disruption to Opportunity

In a world where institutional aid is under threat, Mercy Corps' innovation strategy provides a compelling pathway forward. Mercy Corps is demonstrating how crypto and digital innovations — when designed with ethics, inclusivity, and rigor — can unlock smarter, faster, and fairer assistance.

Moving forward Mercy Corps will continue to pilot and learn with a focus on looking beyond efficiency metrics to assess impact and sustainability of crypto currencies and blockchain enabled technologies for CVA, to standardize and build on best practices, and to explore ethical considerations with the adoption of new technologies in the humanitarian space.

By continuing to test, learn, and advocate for safe and appropriate digital innovations, Mercy Corps aims to build a future where humanitarian cash assistance is faster, fairer, and more resilient—bridging today's crises with tomorrow's possibilities.

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