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From Agents to Anchors: Grassroots Economists and the Future of Community-Led Financial Infrastructure

Written by *Dr. Senka Hadzic*

Kenya is often celebrated as a global pioneer in mobile money. The rise of M-Pesa transformed how millions of people send, save, and spend, leading many to regard it as a blueprint for digital financial inclusion. Yet over 40% of Kenya's population remains in poverty, particularly in rural and informal settlements.[1] This gap highlights that despite fintech advances, many remain outside resilient and accessible financial systems.

This tension raises a broader question: what kinds of infrastructure actually matter most for financial inclusion? Beyond apps, networks, and ledgers, could the most critical enablers be the people who stitch these systems into everyday life? Community-led approaches and the intermediaries supporting them reveal an alternative path.

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[1] https://stories.telesky.co.ke/kenyas-poverty-rate-nears-40-knbs-report-highlights-alarming-trends/

The Emergence of Community Asset Vouchers

Since 2010, the Grassroots Economics Foundation in Kenya has pioneered Community Asset Vouchers (CAVs): local digital vouchers issued and exchanged within neighborhood economies. One such initiative, the Sarafu Network, has facilitated over 251,449 peer-to-peer exchanges across 4,476 users during a two-year period.[2] Unlike national currency systems backed by reserves, CAVs rely on mutual commitments of goods and services within communities. For example, a farmer might issue CAVs promising future maize harvests and use them to buy carpentry services from a neighbor, who later spends those same CAVs on school meals. The Sarafu Network, stewarded by Grassroots Economics as a public commons, enables such vouchers to circulate as collective promises, where each fulfilled service strengthens mutual trust rather than creating financial debt. Trust is maintained because reputation, peer review, and transparent records ensure that those who fail to honor their promises lose the ability to issue or trade further, making social trust, not coercion, the foundation of enforcement.

This logic is not new. It echoes long-standing African traditions of rotational labor and informal savings groups, where reciprocity and obligation (not profit margins!) structure collective survival. What technology has enabled is a broader reach and durability of these systems, making economic flows visible to participants, governments, and donors.

Yet, technology is only one half of the story—and not always the decisive half.

The Hidden Workforce of Inclusion: Grassroots Economists

If the infrastructure of CAVs appears digital, their true foundations are human. The often overlooked drivers of financial interoperability in these contexts are “Grassroots Economists,” trained local agents who facilitate coordination, mediate trust, and steward the community’s collective resources.

These individuals embody a paradox: they are both agents of a digital system and anchors of cultural memory. By drawing on rituals of reciprocity and familiar social practices, they translate technical protocols into lived and trusted experiences. Their presence is what prevents the blockchain from becoming an alien artifact in the community. Instead, it becomes a tool under collective stewardship.

From fieldwork in Kilifi County, we encounter stories that illustrate this dynamic vividly. For instance, families can still obtain food through community voucher credit extended by local shopkeepers, with repayment deferred until they are able — echoing traditional systems of

[2] https://grassecon.substack.com/p/2025-sarafu-network-study-results

reciprocity such as *Mweria*.[3] Here, the "currency" is less a form of money than a collective promise, facilitated through trust built by human intermediaries. Without such agents, digital interoperability risks excluding those it aims to include.

Liquidity Without Scarcity: The Multiplier Effect

A striking outcome of the Sarafu system has been its capacity to multiply liquidity. Analyses of Sarafu transaction data indicate that community vouchers recirculate multiple times before redemption, amplifying their impact on local trade. This circulation effect has been observed to stabilize informal economies and reinforce community resilience during systemic shocks such as COVID-19 and climate-driven drought.[4]

Unlike speculative forms of digital currency, these vouchers are not commodities. Their value is relational, anchored in the collective willingness of participants to accept and honor them. What circulates is not abstract scarcity but socially embedded abundance—a recognition that everyone has something to contribute, provided there exists a system to coordinate it.

Technologies as Coordination Tool—and Risk

The integration of blockchain into the Sarafu Network since 2019 has delivered gains in transparency and cross-community interoperability. Shared ledgers allow multiple communities to settle obligations across different regions, broadening trade and stabilizing value.

However, around 22% of potential users remain excluded due to limited digital literacy or lack of access to smartphones. Here again, human agents mediate the divide, translating technical protocols into socially meaningful practices.

Interoperability without local anchoring threatens to reproduce the same inequities it claims to solve.

Digital Commons and Local Economies

One of the more innovative extensions of CAVs lies in linking vouchers with community-owned digital infrastructures—such as locally maintained content servers and wireless networks.[5] One

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[3] William O. Ruddick: Grassroots Economics: Reflection and Practice. Available online at https://willruddick.substack.com/p/grassroots-economics-the-book-is

[4] Mattsson, C. E. S., Ruddick, W., et al. (2022). Sarafu Community Inclusion Currency 2020–2021. Scientific Data, 9, Article 446. https://www.nature.com/articles/s41597-022-01539-4

[5] Keegan White, David Lloyd Johnson, Senka Hadzic, and Melissa Densmore. 2023. Community Networks powered by Community Currencies. In Proceedings of the 6th ACM SIGCAS/SIGCHI Conference on Computing and Sustainable Societies (COMPASS '23). Association for Computing Machinery, New York, NY, USA, 120–123. https://doi.org/10.1145/3588001.3609372

such example is the iNethi system, an open-source framework that enables ‘offline’ content sharing and consumption. Through iNethi, locally generated resources such as educational materials, news, or cultural media are cached and distributed across community networks.

What makes this significant for financial inclusion is the way stewardship is rewarded. Participants who host content, maintain connectivity nodes, or contribute educational resources receive community vouchers that can be redeemed for internet access. Here, vouchers serve not only as a medium of exchange but as an incentive for maintaining shared digital assets - turning transactions into acts of stewardship.[6]

These digital commons are not just technical backbones; they are social arenas where stewardship is rewarded, and where content and connectivity become joint economic goods.

Design Principles for Solidarity Finance

From Kenya’s CAVs, a set of design principles emerges—ones that may guide future digital financial systems seeking to serve marginalized communities:

- **Trust is the true interoperability**: The effectiveness of any digital solution depends less on protocol standards and more on the intermediary figures who embed them in social relations.

- **Liquidity can be regenerative**: When currencies are backed by commitments rather than reserves, exchange itself becomes a mechanism for reinforcing community resilience.

- **Technology must remain accountable to context**: Digital infrastructures that disregard literacy, device access, or cultural fluency risk deepening exclusion. Systems must be adaptive to local realities.

- **Infrastructure is more than pipes and code**: Community-owned networks and shared digital commons demonstrate that financial inclusion can be linked to broader forms of collective care.

Why This Matters Beyond Kenya

Although rooted in Kenyan community economies, these practices resonate globally. Mutual aid cooperatives in Latin America, Indigenous credit circles in Southeast Asia, and emerging forms of solidarity finance in Europe all embody similar values and practices. They are not about

[6] Community networks meet community currencies: A guide to powering community currencies from local clouds. 2023. Available at: https://cnlearning.apc.org/resources/community-networs-meet-community-currencies/

disruption, in the Silicon Valley sense, but about remembering—retrieving collective traditions of exchange and updating them with digital tools where useful.

This perspective connects deeply with debates on open financial systems and interoperability. International institutions and nonprofits like the Interledger Foundation, which steward cross-border payments protocols, might ask: who are the key actors, and what are their incentives? The case of Grassroots Economists suggests that the answer lies not only in institutions or networks but in people who act simultaneously as technical stewards, cultural anchors, and translators of trust.

If global systems aspire to financial inclusion, they must learn from these micro-economies: inclusion is not primarily a technical architecture but a social fabric. By centering human intermediaries alongside digital tools, we may begin to design systems that genuinely expand the horizon of economic possibility.

Bio - *Dr Senka Hadzic is a* telecommunication engineer (PhD) and digital development expert working on digital inclusion.