European Journal of Social Sciences Studies
ISSN: 2501-8590
ISSN-L: 2501-8590
Available on-line at: www.oapub.org/soc

DOI: 10.46827/ejsss.v9i6.1689 Volume 9 | Issue 6 | 2024

"GAMING THE SYSTEM": HOW COMMUNITIES STRATEGIZE AROUND CURRENCIES, CONVERTIBILITY AND CASH TRANSFERS IN KENYA

Richard Dimba Kiaka[1i],
Michael Odero Oloko[2],
Juan Ocampo[3],
Ester Barinaga[4]
[1]Jaramogi Oginga Odinga University of Science and Technology (JOOUST) and School for Field Studies, Kenya
[2]Jaramogi Oginga Odinga University of Science and Technology (JOOUST), Kenya
[3]Centre for Entrepreneurship, Department of Business Administration, University of Lund, Sweden
[4]Department of Business Humanities and Law, Copenhagen Business School, Denmark
and
Centre for Entrepreneurship, Department of Business Administration, University of Lund, Sweden

Abstract:
We draw from ongoing empirical research on the evolution of community currencies in Kenya, to analyse ways through which beneficiaries of cash transfers mediated by a community cryptocurrency – Sarafu – appropriate power and assert agency to obtain optimum financial benefits of the development intervention. We found that beneficiaries of the intervention have developed a deep knowledge of converting Sarafu to donor-funded cash transfers in the national currency. Consequently, the beneficiaries innovatively game conversion rules, both as individual efforts and collective action, to increase the economic benefits they draw from the cash transfers. We argue that development beneficiaries, instead of merely being subjects of development intervention, are active makers of their own economic lives and have a profound understanding of

[i] Correspondence: email dimbakiaka1983@gmail.com, rkiaka@jooust.ac.ke, rkiaka@fieldstudies.org

development projects, which they creatively exploit for their own benefit. By doing so, we further argue, beneficiaries contribute to the continuous structuring of interventions by putting development agencies on their toes and forcing them to revise their approaches and strengthen weak points. We conclude that assigning agency to development beneficiaries has the theoretical benefit of unravelling and appreciating the multidirectional flows of power in development assistance. Findings call for the need to involve beneficiaries in development interventions from its very conception.

Keywords: agency, cash transfers, community currencies, cryptocurrencies, Sarafu, Kenya

1. Introduction

Cash transfers has become increasingly considered as a way of making development assistance work for vulnerable populations. Cash transfers, in this paper, are direct payments of development aid, made to eligible groups of people as safety nets in response to the hard economic situations they live in. We consider both conditional cash transfers, which are made on the condition that the recipient meets specified criteria (Fiszbein and Schady 2009) and unconditional cash transfers, made without any conditions required for the recipient (Gliszczynski 2015). In 2018, four UN agencies with significant influence on humanitarian assistance – namely; Office for the Coordination of Humanitarian Assistance (OCHA), United Nations High Commission for Refugees (UNHCR), World Food Programme (WFP) and United Nations Children Fund (UNICEF) – signed a statement that identified "*cash-based assistance as one of the most significant reforms in humanitarian assistance in recent years*" (OCHA et al. 12/5/2018).

In Kenya, Ikiara (2009) has shown that cash transfers have been a well-established concept of development assistance since early 2000, though its success attracts as much support as critique (Cookson 2018; Ellis 2008; Hughes 2019). A fundamental critique is that cash transfers often fail to help build stronger economies of vulnerable and marginalised communities (Bornstein 2019). As cash donation is transferred to beneficiaries, they soon use it to purchase goods and services which are largely imported from outside their communities, leaving local resources largely underutilised. Thus, a major gap that exists in cash transfers is ensuring that they support local productive capacities. This can be achieved, Bornstein argues, if cash transfer "*is viewed as seed funding for the creation of a local medium of exchange*" that can help vulnerable communities to deploy their underutilised resources (market, labour and ideas) and generate financial capital (Bornstein 2019, p. 1). This concern becomes a fundamental justification and a necessary loop for embedding cash transfers into community currencies since the latter is already designed to be a local complementary medium of exchange in vulnerable and marginalised communities in Kenya and beyond (Barinaga et al. 2019; Cauvet and Mwangi 2019; Dissaux 2014; Fare et al. 2015). Along this grain of thought, community currencies are seen by some development agencies, such as the Kenya Red Cross Society

(KRCS), as a financial innovation that can leverage existing aid into effective and efficient use with a greater positive impact on the local economies of vulnerable and marginalised communities (Bornstein 2019).

From late 2019 through to October 2020, KRCS teamed up with Grassroots Economics (GE)– a local NGO in Kenya – to experiment on how to integrate cash transfers to vulnerable and marginalised communities to Sarafu community currency designed and promoted by GE. The idea was that by taking advantage of the Sarafu circulation data trail on a Blockchain technology, donor money from KRCS could be used to convert users' accumulated Sarafu savings into the national currency. Various rules and procedures were created by KRCS and GE to govern conversions and transactions. In their post-project evaluations, KRCS and GE hailed these experiments for making development aid reach the most vulnerable people in pilot communities of Mukuru Kayaba slum (Nairobi) and Kasemeni villages (coastal Kenya), especially in times of great economic turmoil caused by the COVID-19 pandemic.

In this paper, we analyse how the possibility of converting Sarafu local currency to access cash transfers in Kenya Shillings (KES), changed the users' relationships with the community currencies by reproducing the overreliance on conventional money, thereby contradicting the philosophy of local currencies. We show that users of Sarafu who were beneficiaries of the KRCS's cash transfers devised ways, largely invisible to KRCS and GE, through which they circumvented the strict rules that governed access to Sarafu-mediated cash transfers with the ultimate goal of meeting their own financial needs. The beneficiaries discovered lacunas in the rules of currency conversion and innovated practices by which they circumvented those rules, thereby converting more Sarafu for more cash transfers in KES. We refer to the processes of circumventing the rules as "gaming the system".

We proceed as follows: We first explain what community currencies are and their rationales, then we present the theoretical framework, where we draw from development literature that leans on Giddens' "duality of structure" (Giddens 1984, 1991) to explain the transformative relationship between development as a structured intervention and beneficiaries as active constituent agents structuring interventions. Next, we describe the ethnographic setting of our research by paying particular attention to the vulnerabilities and marginality as identities of morality that warrant cash transfers in the Mukuru Kayaba slum and Kasemeni location. We thereafter explain the methods used for data collection and analysis. Next, we explain how cash transfers have been integrated into the community currencies through Sarafu conversion. We thereafter discuss the various gaming strategies that Sarafu users employ to carve room for agency towards conversion rules. Finally, we revert to the theoretical framework and discuss how the analysis of the data relates to concepts of power and agency and conclude by discussing some theoretical and substantive implications of gaming development assistance.

2. Community currencies and their rationales

Community currencies, refer to an array of "*parallel exchange mechanisms designed to exist alongside conventional money, meeting needs that conventional money neglects [or has denied]*" (Seyfang and Longhurst 2016, p. 5). By meeting the neglected needs, which may include, amongst other things, the socio-economic needs of people living on the margins of a capitalistic market economy, community currencies are thus promoted by mainly civil society organizations as models or ideas that assert the hope for inclusive economic growth. Though seen as grassroots financial innovations, that help to keep money circulating within a locality, Community Currencies are not entirely endemic to places. They are part of global networks that promote alternative pathways to socio-economic development (Seyfang & Longhurst, 2013). Across this network, the idea is transported by various actors from one context or locality to another to address local developmental challenges which are embedded in global economic, social and political problems.

In Kenya, Sarafu community cryptocurrencies are created and distributed by a local NGO – Grassroots Economics (GE) – to provide a local medium of exchange that can empower local economic growth in communities where the national legal tender is hard to come by (Barinaga et al. 2019).[ii] Users of Sarafu send digital tokens using their cell phones via a USSD code within the network, leaving a trail of records of transactions that show users' economic behaviours.

2.1 Structure and human agency in development intervention

Foucauldian approaches have dominated studies of agency in development assistance by looking at dynamics of power in rationalising practices that aid recipients conform to (Rossi 2004). The theoretical perspective analyses development assistance as regimes of practices and configurations of power that proscribe an order or structure that is "*external to individual or collective actors, and to a large extent unacknowledged*" (Rossi 2004, p. 2). Development assistance thus is a hegemonic disciplining structure (Lynch 2011) that attaches morally charged and historically rooted identities to aid beneficiaries, such as "the vulnerable", "the marginalised" and "the poor". Development is the power that intervenes on the social and political field of beneficiaries to make better their needy conditions. The poor, the vulnerable and marginalised are to be intervened upon so that their situation can change towards a normative view of modernity, rather than the other way around (Escobar 2011). Beneficiaries are subjects to be controlled and cannot escape the normative rationalities of development (Rossi 2004).

While this perspective helps to unpack the power relations and resultant hierarchies established by development assistance, it tells very little about power and

[ii] We use the term "community cryptocurrencies" because, by the time of conducting fieldwork, Sarafu was based on smart contracts backed by blockchain technology (xDAI and previously POA), which is driving force behind well-known crypto currencies such as Bitcoin, Etherium etc. The term helps to maintain the necessary and obvious distinction between community cryptocurrencies and other paper based as well digital community currencies which are not back by blockchain technology.

assigns no agency as experienced by actors occupying lower hierarchies of power –the vulnerable, the marginalised and the poor – whose social fields must be intervened upon through designed projects. These actors remain theorised as subjects of development with no control of their own economic situation and lack the potential to negotiate the course that leads to their livelihoods destinies. From this analytical angle, development only remains a constraining structure.

Reorienting development intervention in Anthony Giddens' theorisation of agency and structure helps to address this theoretical shortcoming by understanding structure beyond its limiting property. For Giddens, the structure is both limiting and enabling to its constituent actors (Giddens 1984). That is, the structure is both organising and organised respectively. Organising in the sense that it constrains the behaviour of socialised individuals by providing them with pre-existing meanings and codes of behaviour, "*responsible for common awareness of the settings of action and a meaningful social world*" (Rossi 2004, p. 2). It is organised because constituent individuals have the potency to be reflexive in relation to the codes of behaviour and pre-existing meanings, and critically induce change. Giddens refers to this transformative power of individual and collective actors as *agency* (Giddens 1984, 1991). Thus, acting within the freedom of their agency, individuals have a way of going beyond and above a pattern of conduct (pre)determined by structural forces. Along this theoretical grain, power relations in development can be theorised within the domains of what Giddens calls "*duality of structure*" (Giddens 1984). That is, while development rationality is so compelling on subjects – especially the marginalised, vulnerable and poor –, weak as they are, these beneficiaries are endowed with a transformative power that helps them to manoeuvre the compelling force. By virtue that these marginal groups and individuals have human agency, "*they can do anything which is not already present, suggested, or imposed on them by their society and social group*" (Rossi 2004, p. 4; Ortner 1984, p. 155).

Many are the instances where beneficiaries of development assistance employ multiple strategies in order to negotiate or resist projects to fulfil their own objectives or interests (Long 1989; Arce et al. 1994; Grillo and Stirrat 1997; Arce and Long 2000; Scott 1985). Norman Long, by coining the concept *social interface,* conceptualised development interventions as conflictive power fields where knowledge and interests of both development agents and beneficiaries are often contested and negotiated yielding unexpected outcomes (Long 1989; Long 2003, 2004; Long and Long 1992). David Mosse, further challenges the Foucauldian view that development exclusively involves a unidirectional flow of power from development agencies to the recipients (Mosse 2005). He shows the possibility of beneficiaries appropriating power and asserting agency in the realm of development policy or intervention. They, the beneficiaries, can deploy their agency in less combative manner to negotiate favourable outcomes through countertendencies (Arce and Long 2000) or through everyday forms of resistance as Scott (1985) posits. Either way, a deep local knowledge of the development interventions necessitates the flow of beneficiaries' transformative capability (Long and Long 1992).

We situate the behaviour of the users of Sarafu cryptocurrencies in this theoretical framing, in the realm of a cash transfer programme implemented through converting the community crypto into national currency. We see the relationship between Sarafu users and the project as indicative of the duality of structure (Giddens 1984; Rossi 2004) in that: One, the project organises beneficiaries (Sarafu users) by setting off to intervene on the economic situation to cushion them from economic consequences of vulnerability and marginality. Development agencies, GE and KRCS, set rules that steer the behaviour and conduct of the beneficiaries towards that economic destiny. Two, the project is organised by beneficiaries in the sense that, through gaming that system of governance, they create "*room of manoeuvre from below*" thereby aiding them to pursue their projects within the development project (Arce et al. 1994; Long 1989; Long 2004). By doing so, beneficiaries unconsciously and unexpectedly force GE and KRCS to redesign the project to seal the loopholes that beneficiaries exploit.

2.2 Ethnographic setting

This paper draws from fieldwork that Richard Kiaka conducted in Mukuru Kayaba slum in Nairobi City and Kasemeni location in rural coastal Kenya (Kwale County). The two areas have seen an intensive experimentation of cash transfers to inhabitants. Mukuru Kayaba is a slum community located in south-eastern Nairobi, between the industrial area and South B – a middle-class residential area. The name 'Mukuru', in Kikuyu language, literally means a dumping site –a place to discard useless materials. The neighbourhood is the site of an old quarry where most of the stones used to build the surrounding factories were excavated. Parts of the area later became a dumping site for industrial as well as household waste. As a "dumping site", Mukuru may also symbolise a place inhabited by the outcast of capitalistic market economy (Bauman 2013), in a city characterised by great economic inequality.

Mukuru Kayaba is inhabited by some 83,000 inhabitants (Kenya Red Cross 2020) of multi-ethnic communities, the majority of whom are living in tiny, one-roomed corrugated iron sheet dwellings measuring approximately 9 square metres. The informal settlement is less than one square kilometre in area, indicating a high population density. Mukuru Kayaba is fraught with numerous challenges such as crime, air pollution, water shortages, drug abuse, and fire tragedies among others. Very few homes have electricity, and more than 50 families share a communal water tap and a latrine or toilet facility. These challenges persist alongside a fragile economy and livelihood system that lean on informal businesses and labour provision both within the settlement and outside in the neighbouring industries, residential areas and city centre. The informal economy is uncertain, offering only low and insecure incomes. Considering these living conditions, inhabitants of Mukuru Kayaba are vulnerable to disasters such as fire outbreaks, floods and hygiene-related epidemics. Their livelihoods are also highly susceptible to national economic shocks such as those associated with the COVID-19 pandemic. In short, the people of Mukuru Kayaba live precarious lives characterised by high unemployment, lack of money to support basic household needs, starvation and hunger and general poor

health. These conditions of life fit what GE and KRCS refer to as *vulnerable* and *marginalised* communities requiring interventions including through cash transfers. Indeed, cash transfers have become part of the livelihoods of the slum (Kenya Red Cross 2020), as they are seen to be cushioning households against the consequences of economic meltdowns and emergencies. Mukuru Kayaba joined Sarafu currencies in 2019 and became part of the experiment on converting the community crypto to donor-availed cash transfers in Kenya Shillings (KES).

Kasemeni is a rural location comprising of several villages situated west of Mombasa town in coastal Kenya in the devolved administrative area of Kwale County. Kasemeni is sparsely populated with a total population of 33,642 and a population density of 160.3 persons per square Km. People live in small clustered villages made up of households comprising of some 6 persons (Kenya National Bureau of Statistics 2020). Most people living in Kasemeni identify themselves as Duruma people, one of the Mijikenda communities in coastal Kenya. Crop farming largely supports the livelihoods of Kasemeni communities but is severely constrained by poor soils and frequent droughts. Consequently, the place is highly food insecure. A few households complement crop production by keeping livestock. Money for daily household needs is hard to come by in Kasemeni and is sought through low-paying casual labour, petty businesses and remittances from family members employed in Mombasa City. Kenya's constitution (The Constituion of Kenya 2010) and government reports (Government of Kenya 2014; National Gender and Equality Commission of Kenya 2018) categorise the area as marginalised and vulnerable. Marginality is evident in high illiteracy levels, unemployment, and poorly developed infrastructure such as roads, water and other social services. Vulnerability in the area is shaped by aridity and poor soils resulting in precarious and insufficient food production.

The marginalisation and vulnerability of Kasemeni provide a fertile ground for development assistance in the area. These include relief food distribution, climate change responsive farming, and micro-credit initiatives for community groups. Through these interventions, development organisations (re)cast donor funding as a safety net for communities living in Kasemeni. GE introduced community currencies in Kasemeni in 2015. It is one of the areas where Sarafu's conversion to donor funds in KES was significant from mid-2019 until July 2020.

3. Data and methods

Fieldwork that informs this paper took a cumulative 5 months conducted at different field visit periods. That is, February 2020; July and August 2021; November and December 2022. Data on gaming strategies and how they are explained was collected through qualitative interviews with Sarafu users and GE field staff. In Mukuru Kayaba, 31 one-on-one qualitative interviews were conducted with individual users, while in Kasemeni, 6 Focus Group Discussions (each ranging from 8 to 12 participants) were conducted with self-help groups, who played a central role in Sarafu conversion and

around which most of the collective action of gaming is also demonstrated. Beginning in 2020, GE allowed Safrafu conversion to KES to be done only through these self-help groups (Barinaga 2020). Interviews with GE field staff were crucial because they occupied a more complex position in the whole system of Sarafu conversion. On the one hand, they created a crucial link between GE and communities by ensuring that the organisation's decisions on Sarafu currencies were implemented. On the other hand, and simultaneously so, they were users of Sarafu as well as beneficiaries of cash transfers. Hence, they were also affected by decisions and rules of conversion. Consequently, GE field officers had unique lived-experiences both on how gaming is crafted and executed and changes that GE made to avert gaming.

In line with grounded theory, we took an inductive approach to analyse the empirical material from interviews and focus group discussions in three steps (Charmaz 2006; Glaser et al. 1968). First, we meticulously read and scrutinised transcripts and field notes on respondents' experience with Sarafu and conversion to Kenya shillings, in order to generate thematic lines and code the text accordingly. For each thematic line, we opened a file with all the quotes, vignettes and descriptions coded under that theme. These files were re-read several times in an attempt to confirm, reject, or modify coded themes. Many of the themes oscillated around four strategies for increasing financial benefits from Sarafu conversion. The second step for the analysis of empirical material implied generating a frame for interpreting the strategies. The relevant files were then read again in search of underlying themes. The four strategies slowly emerged as intentional ways of through which Sarafu users cheat the relatively strict conversion system, for economic ends. In the third and final step, we re-read again the categorised material looking for examples, excerpts and vignettes that could help us modify, refute, or nuance the frames of interpretation. These were triangulated with further qualitative interviews with development personalities from GE and KRCS. We have used anonyms for interview data to protect the identity of respondents. Transactional data on Sarafu usage was obtained from the dashboard of the Sarafu system maintained by GE based on records on the xDAI blockchain which was available for public access.[iii]

However, due to the nature of the phenomenon (trying to cheat the system), it was difficult to get an accurate number of the scale of the phenomenon from these transactional data. Data from the Sarafu dashboard cannot tell whether the transaction was true or fake. Furthermore, Sarafu users do not have an incentive to tell that they cheat the system to allow a survey that can determine the scale of cheating. We therefore rely on qualitative data from individual and group interviews, including those conducted several months after conversion ceased, which confess to intentional cheating of the conversion system. What is important here, therefore, is not how many people can cheat the system, but that the possibility of converting Sarafu to the national currency changed users' relations to the complementary currencies in ways that have far-reaching implications, on the one hand, for the way in which cash transfer programmes tap onto

[iii] See https://dashboard.sarafu.network/ last accessed on January 5, 2021.

new technologies, and the other hand, the meanings that are often associated with complementary currencies.

4. Embedding cash transfers in Sarafu community cryptocurrencies

4.1 Convertibility becomes crucial

Kenya Red Cross Society (KRCS) began supporting cash-for-communal work programs around 2013 in food-insecure places in Kenya, including food-for-workin Kasemeni location. Food for work ended around 2018 due to a lack of further funding. Exceptions were recorded in areas where Sarafu community currencies were used to fill the cash gap left by insufficient circulation of KES (Bornstein, 2019). In mid-2019, KRCS teamed up with GE and blockchain technology engineers to experiment Sarafu-mediated cash transfer programme to help cash-starved communities grow their own local economies. The aim was to improve the efficiency and effectiveness of development aid so that it goes to the most vulnerable people and realise a greater positive impact in a sustainable manner. The project was implemented by allowing users to convert their accumulated Sarafu to donor funds in Kenya Shillings (KES), at the rate of one Sarafu equals one KES. Rules were designed by GE to ensure that these conditions were observed.

4.2 Rules for Sarafu-mediated cash transfers

KRCS received donations in fiat currencies, from various donors and partners, that was meant for cash transfers to support the resilience of vulnerable and marginalised communities during times of emergencies such as the economic downturn caused by COVID-19 pandemic (Kiaka et al. 2021), droughts and floods. Beneficiaries of the intervention in the pilot communities had to register as users of Sarafu. The donor funds in national currencies were made available to beneficiaries through three main routes. First, beneficiaries received 400 tokens in their phones upon registering in the Sarafu network. This digital wallet could grow through revenues that users get from sale of goods and services. A user then converted a percentage of the accumulated Sarafu to donor funds in KES – a process that was locally known as "cashing out". GE rules regulated how much of the accumulated Sarafu individuals could convert into KES. That is, in mid-2019, users could covert up to 10% of their account balances weekly through an agent appointed by GE. In early 2020, rules changed and neither individuals nor agents were allowed to convert Sarafu. Only saving and loaning groups formed by users were allowed to do monthly conversions. The limit was however increased to up to 50% of group balances. In the second quarter of 2020 running until the end of June, groups were only allowed to cash out up to KES30,000 monthly.

The second route was through earning bonuses in Sarafu or KES. These bonuses were paid to Sarafu users by GE to reward good gestures such as registering a new member into the Sarafu network and helping to trigger wider circulation of Sarafu. That is, hypothetically, A trades with B, C and D in Sarafu enabling the transactional network to grow. User A therefore qualifies for a reward for being an active user of Sarafu and

triggering network growth. At the time of fieldwork, bonuses came from a Sarafu fund built through a hoarding tax of 2% on the balances of inactive accounts. These rewards were first paid to the user in Sarafu who then converted them into KES through the process described in the foregoing paragraph. As of December 2020, bonuses were paid directly in KES by GE using donor funds to user mobile phone accounts (M-pesa or Aritel Money) or as airtime.

A third route involved exchanging Sarafu for goods, especially food. This route was initiated by GE in July 2020 after cashing out for KES was stopped when donor funds for cash transfers ended. Local vendors were identified by GE field officers and contracted to sell food items of a specified amount to users' savings and loaning groups. GE paid bonuses to groups that were actively loaning out Sarafu to members and recovering those loans, thus indicating that the groups were actively helping to circulate Sarafu. At the end of the month, GE calculated the bonus for active groups in KES and sent the list with the amounts to the vendor who then sold its food items to the groups in exchange for Sarafu. Vendors sent the Sarafu to GE to convert to KES at the rate of one Sarafu equals one KES.

All these routes allowed Sarafu users to access the economic benefits of cash transfers albeit in a restricted manner through rules and procedures established and enforced by GE, and demonstrating the structuring aspect of development. Compelling as the rules were, beneficiaries gamed them to carve room for agencies to stretch their access to economic opportunities offered by cash transfers.

4.3 Strategies for gaming the system

A. Registering multiple phone numbers

Registration into the Sarafu network happened through a USSD code. Prepared with a sim card and a phone, an individual was able to register and join the currency and begin to make payments in Sarafu. Upon registration, users got 400 tokens transferred to their individual mobile phones by GE. Users knew that the 400 Sarafu could be converted at least in part to KES. Knowing that the Sarafu system could only identify users by their phone numbers, not by their names, users began registering more than one phone number on the Sarafu network. The trick was, said James, a male Sarafu user in Mukuru Kayaba:

> *"A person with 3 Safaricom lines and 3 Airtel lines would register all of them on the Sarafu network. Upon registration, the person got 400 Sarafu tokens on each line totalling to 2,400 Sarafu (equivalent to KES2,400). The Sarafu system digitally identified these as 6 different users, each of whom received 400 Sarafu from GE."*[iv]

By registering multiple phone numbers, Sarafu users carved out room for the agency that enabled them to circumvent three rules that governed Sarafu conversion and access to cash transfers. First, as the quote from James above illustrates, it presented the

[iv] Interview with James in Mukuru Kayaba on 07.12.2020.

economic advantage of getting more Sarafu upon registration. This increased users' disposable income in Sarafu. While GE and KRCS may have considered 400 Sarafu tokens as a reasonable "starter pack" for the newly registered users, in terms of their basic needs, the users needed more. Nevertheless, the decision regarding the "starter pack" had been reached and passed into a rule by GE based on a rough estimate of the daily expenditure of a household of 5 persons (Ruddick 1/17/2021). Instead of antagonising GE and KRCS about it, exploiting the blind spot made possible by digital identification through phone numbers alone and gaming GE and KRCS became a quieter way of circumventing the rule of the initial amounts granted to users.

Second, by registering multiple phone numbers on the network, an individual user created a room to manoeuvre the rule on the limit for cashing out. Throughout its implementation, the amount that an individual or a group was able to cash out was caped at 10% of the balance (September 2019 – January 2020), then up to 50% of the balance (January – March 2020) and finally to a maximum of KES30,000 between April and July 2020. Registration of multiple phone numbers as a tool for asserting agency was effective over the first two periods of conversion. By holding a balance in all phone numbers registered on the Sarafu network, individual users increased the absolute amount they could cash out in KES. That is, if each of the 3 lines registered by a user has a balance of 1,000 Sarafu, then the user could cash out KES100 or KES500 from each line on a 10% or 50% balance respectively. Here, the gaming strategy even attracted the support of the Sarafu converting agents appointed by GE in the communities (in 2019), indicating collective efforts in appropriating transformative power over the development intervention. For example, an agent was said to have helped school-going teenagers to buy SIM cards and registered them on the Sarafu network using her national ID Card. The agent thereafter converted for them the Sarafu to KES, thus increasing her maximum balance that she could in turn convert with GE.

Thirdly, registering multiple lines aided the exercise of agency over rules that governed bonus distribution. As discussed earlier in the paper, a bonus was granted to active users based on transactions they created on the system. That is:

> *""A" buys from B, C and D, who in turn trade with E, F and G. "A" is therefore considered a pivotal user for this network and is awarded a bonus [by GE] based on a formula that is also weighted by the active network that "A" has triggered."*[v]

Bonuses also came in form of rewards to those who recommended new users to the system. Initially, the bonus was sent in Sarafu currency to the pivotal user in the network, as illustrated in the vignette above. Later, bonuses were sent in KES to their regular mobile phone banking accounts (M-Pesa or Airtel Money). Registering many phone lines helped a user in two ways. One, it helped the user to connect to the new lines through transactions thus faking the network and earning a bonus; the more this network creation was faked the more bonus earned. Two, while registering new lines to the

[v] Interview with GE official on 31/12/2020 in Kilifi.

network, one would also pretend to be recommending them to the Sarafu network thus earning further rewards.

B. Non-consensual registration

Registering to use Sarafu currencies and join the network is a voluntary undertaking. A new user had to be informed by officers from GE or KRCS or existing users, of the reasons, advantages and risks of using Sarafu as a medium of local economic exchanges. This means that free and prior informed consent of the potential user had to be sought and given even if not formally registered. As mentioned already, registering a new user had two economic benefits. That is, 400 Sarafu (equivalent to KES400) was immediately transferred to the newcomer. The recommender also received a bonus. These two economic benefits became attractive for gaming through registering people to the network neither with their knowledge nor consent. The voice of a Sarafu user in Mukuru Kayaba quoted below helps to illustrate this gaming strategy.

> "*You know, when people realised that there is money in Sarafu, they would ask a friend or neighbour for their phones, especially the elderly and illiterate. They would say, "let me send a text message to my brother or sister or so and so". Meanwhile, they registered the person and quickly transferred the 400 Sarafu tokens to their lines. They got the Sarafu which they cashed out, and got the bonus for registering the person, albeit without him knowing, leave alone giving permission*".[vi]

Similar accounts were given in Kasemeni, where some elderly women with very little literacy abilities had their phone numbers registered in the network without their knowledge. This kind of gaming even took GE and KRCS field officers by surprise as one of them reported during an interview:

> "*During mass registration sponsored by KRCS in April [2020], we would go to people, they would accept to be registered to Sarafu network only to find that both of their phone numbers had been registered as users in the Sarafu system without their knowledge or consent*."[vii]

Registering people without their knowledge or consent became an innovative strategy through which Sarafu users deploy their agency to expand their economic space by: transferring the 400 Sarafu to their digital wallets immediately and gain KES upon conversion or simply use the Sarafu to purchase goods; and earning bonus for recommending and registering a new user to the Sarafu network.

[vi] Interview with Peter in Mukuru Kayaba on 07/12/2020.
[vii] Interview with a GE field officer on 08/12/2020 in Mukuru Kayaba.

C. Faking transactions

Bonus earning is based on the networks that are created through transactions. These transactions are believed by GE and KRCS to be representing economic exchanges of goods and services. Bonuses, whether given in Sarafu or KES, offer financial incentives for circulating Sarafu. Especially after the direct conversion of Sarafu stopped in July 2020, bonuses in KES became a highly hoped-for motivation for using Sarafu because they bring in much-needed cash to individual users. At the time of fieldwork, users knew that the more they transacted using Sarafu the more bonuses they earned. In addition, they knew that GE could not easily know whether or not transactions they made meant actual purchases of goods and services. Their knowledge of this lacuna prompted them to fake transactions that created new means to access bonus opportunities. An account of a Sarafu user illustrates the point here:

> *"We just transfer Sarafu to each other. The system captures that we have purchased a good say, food or water, but in real life we have purchased nothing. It is all to show GE or KRCS that there is a transaction. So, for example, I send 100 Sarafu to Peter, Peter sends me 30 and another person and the network grows, but we keep records so that in the end we balance our "trade". So, for GE, the network performs well and we get bonuses."*[viii]

The aim of this practice was, first, to get the bonus payable in Sarafu or KES to pivotal users who helped trigger a transaction network and consequently enhanced the circulation of Sarafu. Secondly, faking transactions enabled users to circumvent the 2% hoarding tax charged on the balance of a Sarafu account that has performed no transaction for a month. After the direct conversion of Sarafu to KES ended in July 2020, Sarafu transactions dropped as many local businesses accepted less of Sarafu for their commodities or none at all. To discourage what GE called Sarafu hoarding, that was largely caused by the "inability to use Sarafu", GE enforced a monthly hoarding tax. That is a deduction of 2% of the balance of an account that remained inactive for a month. GE in its endeavour to encourage the circulation of Sarafu told users to trade rather than hold the Sarafu. In response, users faked transactions to exert agency over the tax and reduced its effects on their Sarafu balances. They metaphorically referred to the practice of faking transactions as "trading", the very term that GE used to encourage them to circulate Sarafu, as the excerpt from a focus group discussion below illustrates:

> **RK:** *"Now that you say it is difficult to buy in Sarafu because traders don't want to accept Sarafu that they cannot cash out, what do you do with the Sarafu?"*
> **Joan:** *"We just trade with Sarafu. If you don't move the Sarafu you get a deduction on your account every month. Though, we have complained about it."*
> **RK:** *"How do you trade? You just said most traders do not accept Sarafu for their goods."*
> **Joan:** *"We just send Sarafu to each other. I send him, he sends to her and she sends to me. And we are active. Groups loan Sarafu to us and we stay for a while with it and we return*

[viii] Interview with a Sarafu user on 08/12/2020 in Mukuru Kayaba.

it. As long as Sarafu is moving from one person to the other and from group to members and back, you are safe from the deduction. You also earn a bonus, you know."[ix]

Ethical consideration of faking transactions was less of an issue for the users who did it. What was important for them was that they knew that the Sarafu system did not know whether or not a transaction means the actual purchase of goods and services, and this created a space for them to deploy their collective human agency to circumvent the holding tax rule and simultaneously earned a bonus. While acknowledging that fake transactions took place at some point, GE argued that the bonuses that users earned through the practice were too little to incentivise cheating. Nevertheless, in Mukuru Kayaba and Kasemeni where people lived on very little cash incomes, even a slight increase in those incomes would make huge differences for many household economies.

D. Same people in multiple groups

In early 2020, GE decided that the conversion of Sarafu to KES would be done through groups (Barinaga 2020). Initially, groups were allowed, once a month, to send 50% of their Sarafu balances to GE to convert to KES availed by donors as cash transfers. Upon receiving the KES, groups could independently decide what to do with it. In Mukuru Kayaba, the trend was to distribute the KES to group members at 50% of their Sarafu savings in the group. In Kasemeni, the common practice was to purchase food from a wholesale store and retail it to Sarafu users at 100% Sarafu payment. Later, these conversions were capped at a maximum of KES30,000 (USD300) per group per month. Gaming this rule was more pronounced in Mukuru Kayaba where the KES was distributed to members. To increase their economic returns of converting Sarafu to KES, users became members of multiple groups. The trick was, as the chairman of a group in Mukuru Kayaba explained:

"*If I have 5,000 Sarafu, then I can save portions in different groups, each of which can convert up to a maximum of KES30,000. I can therefore diversify my conversion points and get more KES than I would if I belonged to a single group*."[x]

While belonging to multiple groups is a common practice of diversifying savings paths and sources of loans amongst low-income traders and people in Kenya, in this case, as interviews revealed, the practice was a strategic creation of room to manoeuvre a Sarafu conversion rule by beneficiaries to increase economic benefits of cash transfers. Through such practices, users actively carved out spaces for agencies with which they stretched the maximum Sarafu conversions allowed by GE and KRCS.

[ix] Conversation with Joan during a focus group discussion on 24/12/2020 in Kasemeni.
[x] Interview with Kevin in Mukuru Kayaba on 10/01/2020.

4.4 Implications of gaming the system

Carving room for the agency through gaming the Sarafu system and its conversion for cash transfers in KES had two significant outcomes. First, GE and KRCS reported a significant increase in registration and circulation of Sarafu especially between March and July when conversion for cash transfers and gaming peaked. For example, the number of registered users more than doubled between March and April, 2020, rising from less than 4,000 in end of February to more than 8,000 beginning of May in the same year (Figure 1). In Mukuru Kayaba where the presence of KRCS was significant through its cash transfer programme, it was reported that averagely, 500 people signed up to use the Sarafu daily (Yusuf 6/25/2020). Similarly, the number of groups registered in the network increased. The number of transactions also increased by a factor of five from less than 10,000 in February to over 50,000 in July, 2020 (Figure 2). There was also a corresponding exponential growth in trade volume from less than 4 million Sarafu by the end of February to more than 36 million Sarafu in June, 2020. While the figures were initially interpreted by the development actors (KRCS in collaboration with GE) as indicators of increased economic activity, in light of the empirical material, a more accurate interpretation would point to the extent of active strategizing from beneficiaries. These figures point to the degree to which people that were considered passive recipients of cash transfers were in fact active actors of their own economic space.

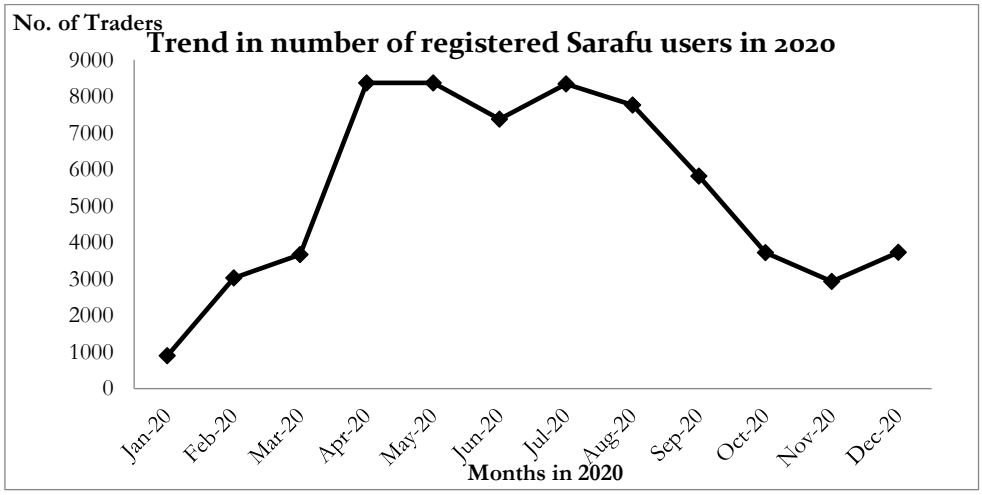

Figure 1: Registered Sarafu users across months in 2020[xi]

[xi] Data available at https://dashboard.sarafu.network/, last accessed January 5, 2021.

Figure 2: Trend in Sarafu transactions in 2020[xii]

The second implication emerged from the fact that not all gaming went unnoticed by GE or KRCS. In some cases, changes in Sarafu conversion rules were a correctional reaction by GE to seal the loopholes that were exploited by gamers. For example, the registration of school-going teenagers and faking transactions by an agent may have been a contributing factor for GE to stop the services of agents and allow conversion through groups only. Also, Registration of multiple phone numbers was flagged by GE as an serious concern. In response, GE planned to make registration more rigorous by requiring registered users to attach copies of their national identity cards alongside the phone number registered in order to fortify their digital identities.[xiii] Whether this planned action will succeed in containing gaming remains speculative. What was certain was that by "gaming the system" through multiple registrations in the Sarafu network, beneficiaries of cash transfers evidently created room for agency and consequently shaped the trajectory of projects that aimed to intervene upon their conditions of marginality and vulnerability. As low as they are in the development assistance hierarchies, beneficiaries constantly put GE and KRCS on their toes, emphasising the need to genuinely involve them in the entire process of development projects.

5. Discussions and conclusion

The analyses underscore that aid beneficiaries, as active makers of their own economic lives, are in control of the development assistance, in this case, Sarafu-mediated cash transfers. In order to advance their "projects" within the intervention, beneficiaries who occupy lower hierarchies, and therefore limited agency, in relation to the developers,

[xii] See note [xi].

[xiii] Interview with a GE official on 31/12/2020 in Kilifi.

appropriate power and assert agency in order to achieve favourable outcomes. This is in stark contrast to dominant approaches of theorising power relations in development assistance that draw from Foucauldian notions of subjectification (Escobar 2011; Ferguson 1990; Escobar 1984). Subjectification sees development assistance as structures of knowledge and power which (pre)determine the ways in which development projects function to deliver known and rationalised outcomes to beneficiaries in specific historical contexts (Ferguson 1990; Rossi 2004). In such analysis, aid beneficiaries are conceived as devoid of agency, their active strategies and empowered subjectivities are absent from the analysis. Beneficiaries are theoretically reduced to objects of pity (vulnerable and marginalised), only to be intervened upon and controlled by development projects and cannot escape the rationalities that produce those projects.

That Sarafu users were able to successfully game the conversion system that was to intervene upon them and their lives and increase their access to cash transfers for their own economic benefit, was a demonstration that relations in development assistance do not exclusively involve a unidirectional flow of power from the developers to the recipients (Mosse 2005). Instead, these relations and power flows are multiplex, flowing in multiple directions and yielding uncertain outcomes (Schnegg 2018; Schnegg and Kiaka 2019). Much as power is deployed from development agencies to the beneficiaries by designing projects that attempt to make better the lives of the latter in ways (pre)determined by the former, beneficiaries also out of their deep knowledge of the intervening projects exert agency, however limited, to create "*room for manoeuvre*" from below (Rossi 2004, p. 4). The gaming that Sarafu users staged to circumvent proscribed conversion rules, and the changes that GE and KRCS were forced to make to seal the loopholes, argue for development as the outcome of struggles and negotiations between actors, including beneficiaries, controlling different stakes of power.

Accordingly, Sarafu-mediated cash transfers have become a social interface where countertendencies occur, key of which are those exerted by beneficiaries (Long 1989; Long 2003, 2004). Thus, beneficiaries can deploy their agency to create room for manoeuvre around a structure that intervenes on them (Long 1989; Long 2004; Arce and Long 2000; Mosse 2005). As the analyses have illuminated, Sarafu-mediated cash transfers program, through rules of conversion, controlled beneficiaries' access to donor funded cash transfers. Simultaneously, Sarafu users, whether selfishly or not, habour the desire to maximise the economic benefits inherent in cash transfers. Instead of being passive recipients of aid who follow the rules of conversion, they actively resist the rules to define and shape their own economic lives and goals that aid might avail (Mosse 2005). Resistance in this context is one that is pulling an intervening system towards their desired goal rather than pushing back an unjust system, where tools of engagement would be exiting or voicing up (Hirschman 1970). As the data shows, the aim of the gamers was not to do away with cash transfers or the complementary currency. As it were, cash transfer was an expression of empathy by KRCS and GE for the vulnerable situation of Sarafu users. Recipients could not voice up to demand more from a programme that had only empathized with their vulnerability, for such an act would be

deemed unappreciative and immoral. In addition, to being morally unacceptable, a benefactor-beneficiary relationship that constitutes donor-funded cash transfers is embedded in power or hierarchical asymmetries. Accordingly, Sarafu users were constrained by the fear of losing all the cash transfers if they demanded more. Jack Knight taught us that the bargaining power of individuals is a function of how much they can lose in a specific situation (Knight 1992, p. 148). If individuals are likely to lose a lot and this is known, the bargaining power is low. In contrast, if actors know that they have little or nothing to lose, they can engage much more forcibly. In the context of Sarafu-mediated cash transfers, users (the beneficiaries) had very low bargaining power vis-a-vis KRCS and GE (the benefactors). In light of these realities, voicing would not only be immoral, but also an unwise and impossible option to think of. At the same time, it should also be remembered that Sarafu users would still benefit from cash transfers even if they never gamed its conversion to KES. That is, they would still convert within the set rules. Consequently, Hirschman's exit option (Hirschman 1970) was neither possible nor necessary for the gamers.

Gaming the conversion rules represented an innovative option of resistance that is not meant to destroy a financial innovation system and cash transfer programme, for the beneficiaries are aware of and appreciate the economic benefits that come with the two intertwined projects, as well as the risks and constraints that comes with directly demanding more from it. Rather, resistance here is located in working around the rules that limit the maximisation of cash transfer benefits. As Antonio Negri asserts:

> "*Resistance is no longer a form of reaction but a form of production and action [….]. Resistance is no longer one of factory workers; it is a completely new resistance based on innovativeness [….]. It is the capacity to develop new, constitutive potentialities that go beyond reigning forms of domination*." (Negri 2006, p. 54)

Gaming the system, we suggest, could become Hirschman's fourth option – an amphibious or hybrid option of response that combines both loyalty and exit (Hirschman 1970). Sarafu users pretended to be loyal by registering as new users and trading, yet quietly exited the rules that constrined how much they could convert hence increasing the economic benefit they could draw from the programme. Exiting rules while faking loyalty to gain benefits beyond formally allowable limits, we argue, are forms of an inspiring resistance (van der Ploeg et al. 2007).

Gaming the Sarafu convertibility system reveals a few theoretical and substantive implications relating to the adoption of technological innovations in humanitarian aid as well as the designing of complementary currencies. We discuss three of these and their consequences. Firstly, and similar to what studies of gaming both performance output systems in the UK (Bevan and Hood 2006) and project evaluation in Ghana (Sabbi and Stroh 2020) have shown, the outcome of such evaluation runs the risk of not taking into consideration the influence of gaming on the data they rely on. As the analysis shows, between March and July, when gaming was at its peak, KRCS and GE reported positive

performance of the Sarafu-mediated cash transfers program. It is important to appreciate that gaming might have influenced the exponential rise of registered users and a number of transactions. Secondly, through gaming the system, beneficiaries contribute to the continuous improvement of Sarafu-mediated cash transfers. When the developers learn of the situations where beneficiaries game the system, they review their approach, identify the lacunae and make effort to seal them, even if it means introducing new rules. To contain the registration of multiple lines on the Sarafu platform by a single user, GE planned to expand on ways of digitally identifying users beyond mobile phone numbers. As this happened more lacunae were identified and exploited by the Sarafu users leading to a continuous learning and revision of the system, a fundamental outcome of the creative actions of aid beneficiaries, and a significant justification for the need to actively involve them throughout the intervention process.

Thirdly, the possibility of conversion changes the function of complementary currencies. Complementary currencies are conceptualized as a local money system which are used for trading between local people, to complement national currency to meet a wide range of economic, socio-cultural, political and/or environmental objectives (Seyfang 2002). In essence, the local currencies build on and enhance trading relationships, to make goods and services available for people with limited access to national currencies. In this regard, local currencies are 'monies' that exist purely as a trading mechanism but are not commodities in themselves. That convertibility was made possible in the case of Sarafu, as the analysis shows, the local currency itself became a commodity. Convertibility amounted to selling Sarafu for the national currency, thus commodifying the complementary currency and promptly changing its function to a store of value (Barinaga et al. 2021). This significantly changes the way users relate to community currencies itself. For example, it encourages hoarding and speculation of the community currencies for the sake of converting it to the conventional money instead of spending and earning it as they satisfy basic needs. It also changes the way users relate to each other to enhance the circulation of local currencies. As local currencies are forms of collective action, the very use of local currencies depends on trust and community cohesion (Kiguru and Upadhyaya 2019; Seyfang 2001, 2002, 2003). Sarafu-mediated cash transfers being a monetary system designed by external actors and not the communities themselves, does not rely on the extant networks of trust, but on the promise that users would get conventional money. That we saw collective gaming taking place was indicative that the possibility to convert introduced a comparative economic advantage that reoriented the (re)deployment of the role of trust and community cohesion towards getting hold of the Kenya Shillings, then to enhance the local movement of goods and services that previously was constrained by scarcity of the national currency.

The change in users' relations with the local currencies has two consequences. One, it limits the genuine flow of complementary currencies in local communities. For example, several months after conversion stopped, many users still held thousands of Sarafu in their e-wallets, either because they had no incentive to use it, or they were still hoping to cash it out for Kenya Shilling in a possible future conversion. Indeed, after GE

confirmed that there will be no more conversion, thousands of those who registered to use Sarafu saw the currency as worthless, not bothered that their balances are reduced by the continuing hoarding taxation. Although they had goods and services to exchange amongst themselves, most insisted that their interest in using Sarafu for these economic transactions could only be resuscitated by a reintroduction of the possibility to convert. We therefore caution that conversion creates a theoretical shift from local currencies as valued through economic exchanges of goods and services (including skills and energy) by local communities (Seyfang 2001), to that which is backed by a fiat currency in Kenya shillings made. Like Barinaga et al. (2021), we suggest that if community currencies are to circulate locally and work alongside conventional money, as a complement, they shouldn't be convertible. If possible, they should be delinked from conventional money.

Two, the possibility to convert reproduces the overreliance on conventional money and exposure to inequalities and monetary risks, which contradicts the philosophy of local currencies. Literature on community currencies has shown that many community currencies were founded as counterworks to the inequalities and vulnerabilities that overreliance on conventional monetary systems has created. Younger and literate users who could use mobile phones swiftly, registered many lines and non-consenting new users to the Sarafu network, were privileged in accessing more cash transfers than older and illiterate users who are more vulnerable. This reproduces the unequal access to monetary resources inherent in a capital market economy where those who control capital (including skills and market information) have an upper hand in accessing and accumulating monetary resources.

Acknowledgement

The research presented in this article was funded by the Danish Ministry of Foreign Affairs, grant no. GFIIEG 18-11-CBS. We are indebted to all the people who volunteered information and data analysed in this paper. We thank Grassroots Economics for their support during data collection and constructive critique on our interpretation of the data. Finally, we are grateful to Maria-Jose Zapata Campos and anonymous reviewers whose comments on previous drafts helped to improve the quality of this paper.

Conflict of Interest Statement

The authors declare no conflicts of interest.

About the Authors

Richard Dimba Kiaka is a Lecturer at the School for Field Studies, Centre for Wildlife Management Studies in Kenya (www.fieldstudies.org/centers/kenya/). By the time of conducting the research presented here, Richard was a post-doctoral researcher at Jaramogi Oginga Odinga University of Science and Technology (JOOUST) in Kenya.
ORCID: https://orcid.org/0000-0002-1499-7804

Micheal Odero Oloko is an Associate Professor in the Department of Agricultural Engineering and Energy Technology at Jaramogi Oginga Odinga University of Science and Technology (JOOUST) in Kenya.
Juan Ocampo is a PhD Student at the Centre for Entrepreneurship, Department of Business Administration, University of Lund, Sweden.
Ester Barinaga is a Professor at the Department of Business Humanities and Law, at the Copenhagen Business School, and at the Centre for Entrepreneurship, Department of Business Administration, University of Lund, Sweden.

Bibliography

Arce, Alberto; Long, Norman (2000): Anthropology, development, and modernities: exploring discourses, counter-tendencies, and violence: Psychology Press.

Arce, Alberto; Villarreal, Magdalena; Vries, Pieter de (1994): The social construction of rural development: discourses, practices and power: London: Longman (202).

Barinaga, Ester (2020): A route to postcapitalist money? Embedding the production of money in community structures. In *Frontiers in Blockchain*.

Barinaga, E., Honzawa, A., Ocampo, J., Raffaelli, P., & Ussher, L. (2021). Commons-based monies for an inclusive and resilient future. Arkbound Foundation (Ed.), *Climate Adaptation: Accounts of Resilience, Self-sufficiency and Systems Change*, Arkbound Foundation, 301-321.

Barinaga, Ester; Oloko, Michael; Ruddick, Will (2019): Community Currencies as Means of Local Economic Empowerment: Innovations from Mombasa and Nairobi to Kisumu, Kenya.

Bauman, Zygmunt (2013): Wasted lives: Modernity and its outcasts. Cambridge, UK: John Wiley & Sons.

Bornstein, Adams (2019): Community Inclusion Currencies: Lasting Solutions with Early Action and Resilience Financing. With the assistance of Will Ruddick, Nick Williams. Danish Red Cross. Addis Ababa.

Cauvet, Marion; Mwangi, Ruth (2019): Community for the Local Economy: A Case Study of Kenya's Sarafu Voucher Systems. In Mabrouka M'Barek, Giorgos Velegraks, Raphael Hoetmer, Ana Rodriguez (Eds.): Cities of Dignity: Urban Transformations Around the World. Brussels: Rosa Luxemburg Stiftung, pp. 210–237.

Charmaz, Kathy (2006): Constructing grounded theory: A practical guide through qualitative analysis. London: Sage.

Cookson, Tara Patricia (2018): Unjust Conditions: Women's Work and the Hidden Cost of Cash Transfer Programs: University of California Press Oakland, CA.

Dissaux, Tristan (2014): Endogenous Development and Complementary Currencies in Africa. Paris: Veblen Institute.

Ellis, Frank (2008): 'We are all poor here': economic difference, social divisiveness, and targeting cash transfers in Sub-Saharan Africa. In *Social protection for the Poorest in Africa: Learning from Experience*.

Escobar, Arturo (1984): Discourse and power in development: Michel Foucault and the relevance of his work to the Third World. In *Alternatives* 10 (3), pp. 377–400.

Escobar, Arturo (2011): Encountering development: The making and unmaking of the Third World: Princeton University Press.

Fare, Marie; Freitas, Carlos de; Meyer, Camille (2015): Territorial development and Community currencies. In *International Journal of Community Currency Research* 19 (D), pp. 6–17.

Ferguson, James (1990): The anti-politics machine:'development', depoliticization and bureaucratic power in Lesotho: CUP Archive.

Ferguson, James (2015): Give a Man a Fish: Reflections on the New Politics of Distribution. Durham and London: Duke University Press.

Fiszbein, Ariel; Schady, Norbert R. (2009): Conditional cash transfers: reducing present and future poverty: The World Bank.

Giddens, Anthony (1984): The constitution of society: Outline of the theory of structuration: Univ of California Press.

Giddens, Anthony (1991): Structuration theory. In *Past, Present and Future. In: Bryant, C. and Jary, D.(eds.). Giddens' Theory of Structuration. A Critical Appreciation. London: Routledge*, pp. 55–66.

Glaser, Barney G.; Strauss, Anselm L.; Strutzel, Elizabeth (1968): The discovery of grounded theory; strategies for qualitative research. In *Nursing Research* 17 (4), p. 364.

Gliszczynski, Moritz von (2015): Cash Transfers and Basic Social Protection: Springer.

Government of Kenya (2014): Vulnerable and Marginalised Groups Plan (VMGP) for Mwache Multipurpose Dam. Ministry of Environment, Water and Natural Resources. Nairobi, Kenya (Water Security and Climate Resilience in Coastal Region). Available online at http://documents1.worldbank.org/curated/en/904781468272714247/text/IPP7500P1455590Kenya0Box385359B00PUBLIC0.txt, checked on 1/8/2021.

Grillo, Ralph D.; Stirrat, Roderick L. (1997): Discourses of development: Anthropological perspectives: Routledge.

Hirschman, Albert O. (1970): Exit, voice, and loyalty: Responses to decline in firms, organizations, and states: Harvard University Press.

Hughes, Christina (2019): Reexamining the Influence of Conditional Cash Transfers on Migration From a Gendered Lens. In *Demography* 56 (5), pp. 1573–1605.

Ikiara, Gerrishon K. (2009): Political Economy of Cash Transfers in Kenya. Overseas Development Institute. London.

Kenya National Bureau of Statistics (2020): 2019 Kenya Population and Housing Census Volume II: Distribution of Population by Administrative Units. Nairobi, Kenya. Available online at https://www.knbs.or.ke/?wpdmpro=2019-kenya-population-

and-housing-census-volume-ii-distribution-of-population-by-administrative-units, checked on 1/8/2021.

Kenya Red Cross (2020): CIC: Mukuru Kayaba Rapid Survey Analysis Brief. Nairobi, Kenya.

Kiaka, R., Chikulo, S., Slootheer, S., & Hebinck, P. (2021). "The street is ours". A comparative analysis of street trading, Covid-19 and new street geographies in Harare, Zimbabwe and Kisumu, Kenya. *Food Security*, 1-19.

Knight, Jack (1992): Institutions and social conflict. Cambridge, UK: Cambridge University Press.

Long, N. E. (1989): Encounters at the interface: a perspective on social discontinuities in rural development: Wageningen University (Wageningen Sociologische Studies, No.27).

Long, Norman (2003): Development sociology: actor perspectives. London and New York: Routledge.

Long, Norman (2004): Actors, interfaces and development intervention: meanings, purposes and powers. In *Development intervention: Actor and activity perspectives*, pp. 14–36.

Long, Norman; Long, Ann (1992): Battlefields of knowledge: the interlocking of theory and practice in social research and development: Routledge.

Lynch, R. A. (2011): Foucault's theory of power. In D. Taylor (Ed.): Michel Foucault: Key Concepts. New York: Acumen Publishing Ltd, pp. 13–26.

Mosse, David (2005): Cultivating development: An ethnography of aid policy and practice (edition): London.

National Gender and Equality Commission of Kenya (2018): Unmasking Ethnic Minorities and Marginalized Communities in Kenya. Who and Where? National Gender and Equality Commission. Nairobi, Kenya. Available online at https://www.ngeckenya.org/Downloads/Unmasking%20Ethnic%20Minorities%20and%20Marginalized%20Communities%20in%20Kenya.pdf, checked on 1/8/2021.

Negri, Antonio (2006): Movimenti nell'impero: passaggi e paesaggi. Milano: Rafaello Cortina editorre.

OCHA; UNHCR; WFP; UNICEF (12/5/2018): Statement from the principals of OCHA, UNHCR, WFP AND UNICEF on Cash Assistance. Available online at https://reliefweb.int/sites/reliefweb.int/files/resources/2018-12-05-FINAL%20Statement%20on%20Cash.pdf.

Ortner, S. (1984): Theory in anthropology since the sixties. Comparative Study of Society and History, 16, 126-166.

Peter, North (2010): Local Money. Dartington: Green Books.

Rossi, Benedetta (2004): Revisiting Foucauldian approaches: Power dynamics in development projects. In *Journal of Development Studies* 40 (6), pp. 1–29.

Ruddick, Will (2021): How were initial amounts paid to Sarafu users determined by GE? WhatsApp messaging to Richard Kiaka. Kenya, 1/17/2021. Smart Phone.

Schnegg, Michael (2018): Institutional multiplexity: Social networks and community-based natural resource management. In *Sustainability Science* 13 (4), pp. 1017–1030.

Schnegg, Michael; Kiaka, Richard Dimba (2019): The economic value of water: The contradictions and consequences of a prominent development model in Namibia. In *Economic Anthropology* 6 (6), pp. 264–276.

Scott, James C. (1985): Weapons of the weak: Everyday forms of peasant resistance: Yale University Press.

Seyfang, Gill (2001): Money that makes a change: community currencies, north and south. In Caroline Sweetman (Ed.): Gender, development and money, vol. 9: Taylor & Francis Ltd., pp. 60–69.

Seyfang, Gill (2002): Tackling social exclusion with community currencies: learning from LETS to Time Banks. In *International Journal of Community Currency Research* 6 (1), pp. 1–11.

Seyfang, Gill; Longhurst, Noel (2016): What influences the diffusion of grassroots innovations for sustainability? Investigating community currency niches. In *Technology Analysis & Strategic Management* 28 (1), pp. 1–23.

The Constitution of Kenya (2010): Government of Kenya.

van der Ploeg, Jan D.; Jingzhong, Ye; Schneider, Sergio (2007): Resistance of the third kind and the construction of sustainability. In *Journal of Peasant Studies* 39 (1), pp. 133–173.

Yusuf, Mohammed (6/25/2020): Kenyans Turn to Community Initiative Currency to Stay Afloat. Nairobi. Voice of America. Available online at https://www.voanews.com/africa/kenyans-turn-community-initiative-currency-stay-afloat, checked on 1/17/2021.