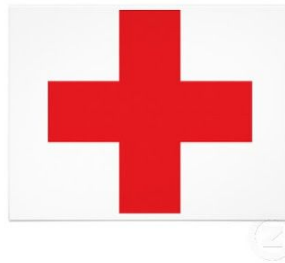




BLOCKSCIENCE



Red Cross CIC  
Ecosystem Role Taxonomy Document  
May 26, 2020

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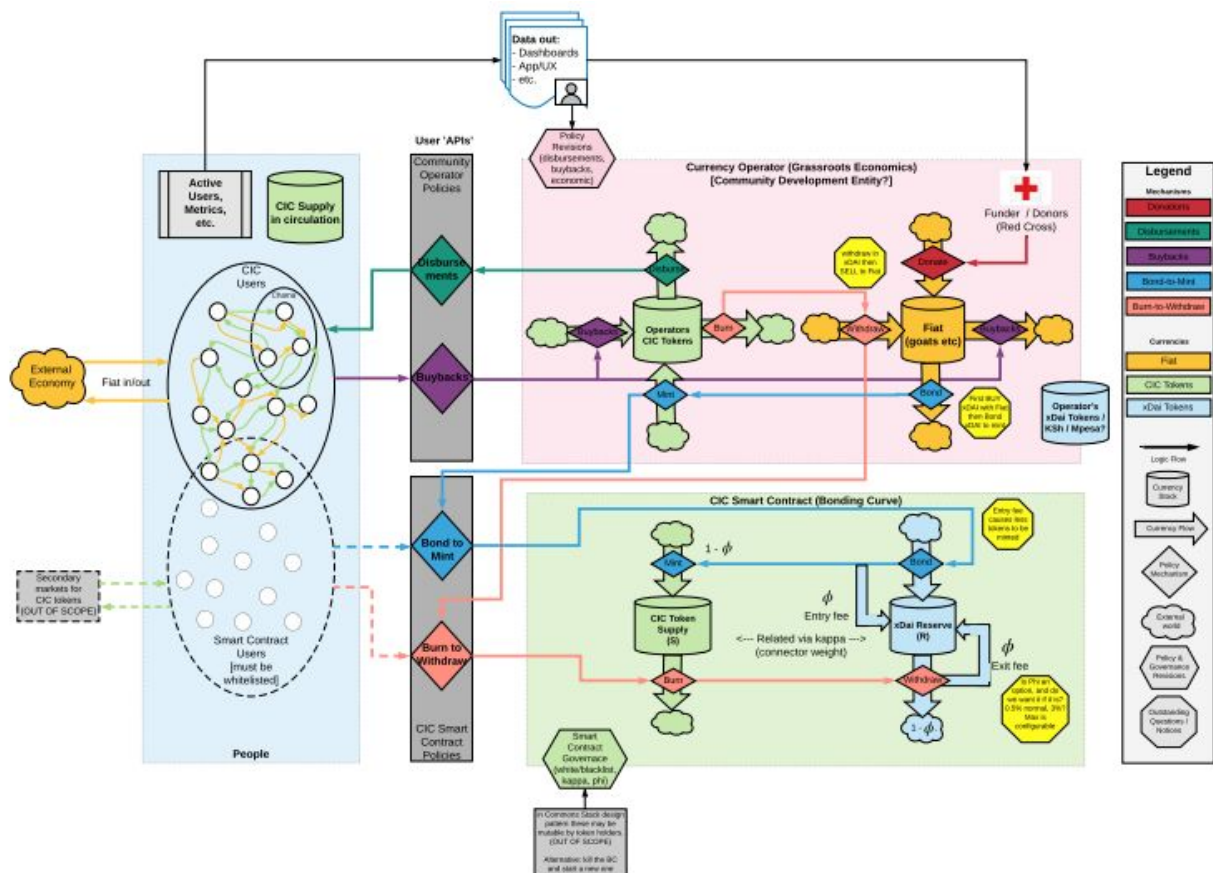
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# Role Taxonomy Overview

The proposed taxonomy below is intended to reflect the core roles for the Client platform. Note that roles are not necessarily mutually exclusive; thus an entity could play more than one role.

BlockScience's intent is to create a taxonomy of roles that specifies the Definition, Actions that can be executed, Value Flows to and from each role, and Examples of entities that perform the role. In many cases, there is also a taxonomy that describes the relationships between the roles.

System diagram:



Ref: <https://www.lucidchart.com/invitations/accept/bee8ea36-bd65-4bd6-9f1d-08be2af147ea>

Platform Incentives doc:

[https://github.com/GrassrootsEconomics/CIC-Docs/blob/master/spec/001\\_platform\\_incentives.md](https://github.com/GrassrootsEconomics/CIC-Docs/blob/master/spec/001_platform_incentives.md)

xDAI Migration spec:

[https://github.com/GrassrootsEconomics/CIC-Docs/blob/master/spec/xdai\\_migration.md](https://github.com/GrassrootsEconomics/CIC-Docs/blob/master/spec/xdai_migration.md)

# CIC Ecosystem Roles

## Institutional Roles

### CIC Funder

- Definition
  - Entity providing funds to create & sustain value of community inclusion currency system.
- Motivation
  - High leverage & effective aid delivery
- Allowed actions
  - Interact with operator
  - Provide funds for CIC instantiation (hatch)
  - Purchase more CIC currency as community investment
- Examples of the Role:
  - Red Cross
- Value Flows
  - Provide funds to operator in fiat
  - Receive impact measurements & KPIs to inform future decisions
- KPIs
  - [Dashboard](#) results
    - Impact multiplier
      - Local circulation / donor spend
    - # Users, txn volume
    - Monthly transaction quantity & volume
      - Broken down by spend category
      - Broken down by location (?) e.g. rural vs urban
      - Broken down by gender

### CIC Operator

- Definition
  - Entity operating CIC currency system
- Motivation
  - Maintaining community economic health
- Allowed actions
  - Collect funds from funder
  - Instantiate (not necessarily) / operate CIC system
  - Distribute CICs to local community savings groups
- Examples of the Role:
  - Grassroots Economics
- Value Flows

- Receive funds from donors or funders in fiat
- Disbursals & buybacks to CIC community according to policies below
- Bond-to-Mint & Burn-to-Withdraw from bonding curve according to economic policy
- Managing KPI dataflows from communities to funders
- KPIs
  - [Dashboard](#) results
    - Impact multiplier over traditional aid
      - Reclamation amounts
    - # Users, txn volume
    - Monthly transaction quantity & volume
      - Broken down by spend category
      - Broken down by location (?) e.g. rural vs urban
      - Broken down by gender
- Policy Decisions
  - **Disbursements**
    - *Airdrop*: New users get 50 Sarafu CIC
    - *Fill profile bonus*: New users that fill out their profiles (name, business, location, gender, call line office) get additional 400 Sarafu CIC
    - *Referral bonus*: Users that refer other users get 100 Sarafu - after that new user has begun to trade
    - *Chama bonus*: Savings Groups get 10,000 Sarafu divided between their members after 2 months of trading.
    - *Usage bonus*: Users get a daily or weekly Sarafu bonus depending on how they trade. They are ranked by the number of other people they trade above 20 Sarafu with and awarded based on their percentage of such overall trade. (Possibly moving to k-cycle centrality).
    - *Donation bonus*: Anyone with Mpesa or Bonga points can send them to Grassroots Economics to receive additional Sarafu
  - **Buybacks (Agent\_out)**
    - *Chama redemption*: Savings Groups can redeem 50% of their Sarafu Balance for Kenyan Shillings each month but must have spent (given loans) of at least as much as they want to cash out. Cashing out is done using donor funds by Grassroots Economics Foundation and Sarafu is valued **1:1 with Kenyan shillings** using eMoney (Mpesa).
  - **Reclamations**
    - *Holding Fee*: If an account is dormant (no trades in or out) for 7 days 20 Sarafu are deducted and added back to the pool.
  - **Bonding curve economic policy**
    - *Reserve ratio*: Targeted reserve ratio of 25% collateral (4 Ksh of CICs issued for every 1 KSh in reserve)
    - *Fees*: Entry and exit fees on conversion between reserve and supply in both directions is done via blockchain and added to the reserve.
      - reconfigurable to max 3% (avg 0.5% according to katanapools)
    - *BondtoMint*: If the reserve of Sarafu is depleted below accepted tolerance, the operator (and other donors) can add more reserve and mint more tokens at cheaper exchange rates to distribute according to disbursement policies.

- *BurntoWithdraw*: If the reserve of Sarafu exceeds accepted tolerance, the operator (and other donors) can burn Sarafu and withdraw excess reserve at favorable exchange rates to redeem Sarafu according to buyback policy.

## CIC Governor (TBD)

- Definition
  - Decision maker on contract as decided by operator & funder
  - Multisig with X signing addresses (3 of 5, eg)
  - Smart contract owner

## Grouped Agent Roles

### Community Savings Group (Chamas)

- Definition
  - Community savings group, composed of individual users
- Motivation
  - Local economic resilience
- Allowed actions
  - Allowable CIC cash out to fiat equivalent to monthly CIC spend, up to 50% CIC holding max
- Examples of the Role:
  - Peku VLSA
- Value Flows
  - User currency flows in & out as per rules of the chama
- KPIs
  - Group savings & loans amounts
  - Community wellbeing
- Policies
  - Savings & lending policies per local context

# Individual Agent Roles

## Community currency user

- Definition
  - Active user of CIC currency
- Motivation
  - Local economic inclusion
- Allowed actions
  - Eligible for operator disbursements
  - Allowable CIC cash out to fiat equivalent to monthly CIC spend, up to 50% CIC holding max through chama
  - Earn / transact in CICs
- Examples of the Role:
  - Mama Songa
- Value Flows
  - Receive disbursements from operator
  - Earning & transacting in CICs with other agents
  - Redeem CICs for fiat through chamas according to operator buyback/redemption policies
- KPIs
  - Personal holdings of fiat & CICs

## Trader / Arbitrageur

- Definition
  - A user interacting with the bonding curve smart contract
- Motivation
  - Impact investment with the intention of profit
- Allowed actions
  - Mint & burn CICs to bonding curve
- Examples of the Role:
  - Foreign impact investor
- Value Flows
  - Send/receive 'fiat' & CICs to/from bonding curve smart contract
- KPIs
  - Impact delivered
  - Financial return