

Proof of Impact for Social Bonds via Crypto Community Currencies (CCCs)

Planned Pilot in Kenya 2018

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Will Ruddick Director of Community Currencies will@bancor.network

<https://grassrootseconomics.wixsite.com/proof-of-impact>

Crypto Community Currencies (CCCs) flowing through communities, geographic regions and municipalities can provide both auditable and audit-free mechanisms to measure economic, environmental, and social indicators and impacts. Measurements of CCC transactions and user demographics can be packaged into valuable indexes for development. Sustainable Development Goals (SDGs), in this light, can be used among other indexes as standards for Social Bonds tokens which impact investors, governments, aid organizations and individuals can purchase, trade and donate on international markets.

Rather than an aid industry that pays for impacts before they exist we can encourage more impacts by moving to an aid industry which values development *intrinsically* through measurements of specific development categories (SDGs) - as evidenced by CCC transaction data. Furthermore, aid organizations and impact investors alike, can use these systems transparently to see the use and impact of their investments or donations as they flow into communities, circulate and develop thriving local economies and industries.

Beyond creating the first decentralized market for cryptocurrencies, Bancor is working to enable communities and supporting organizations around the world to create their own currencies and use them as proof of impact. By focusing on the core units of the economy, communities, and enabling them to develop and trade their own abundance without the need for paper currencies or interest bearing debt, blockchain technologies can tackle world poverty and environmental collapse. User generated Currencies focusing on communities (Crypto Community Currencies) are a key element in this mission. Blockchain technology can enable as little as \$1 to buy the crypto version of carbon credit, and as little as 10 cents of tomatoes to be tradable for school fees in rural Kenya.

The ability to scale development solutions across to the 2+ Billion people living in extreme poverty and environmental disaster have been elusive due to intrinsic problems with the current economic system. Community Currencies have been piloted (via paper vouchers such as Bangla-Pesa) for 8+ years in Kenya to solve the intrinsic problems of unsustainable development funding. Bancor is currently working to digitize these currency models and enable these CCCs to be both intertradable and backed with reserves. A key element in these pilots are the creation of tax filled community funds and voting systems tied to Sustainable Development Goals. User opt-in data will be used in various ways to develop SDG tokens.

This work pulls in the entire aid industry in developing standards for these tokens and their auditing systems. Once piloted and shown to be verifiable and scalable - these open source systems and standards can create a new form of international aid and impact investment market - similar to carbon credits - but decentralized, transparent and further reaching in scope. Integrating these tokens into a

Social Bond framework is a possible mechanism for funding needed development. Social Bonds as colored coins can be tied to the proof of impact and grow in value (mature) as their impacts increase.

Appendix A: Contents for further development:

1. CCs and Impacts
 - a. CC Models - See Sarafu-Credit (<https://en.wikipedia.org/wiki/Sarafu-Credit>)
 - b. Impacts Economic & Social
(<https://www.grassrootseconomics.org/community-currencies>)
2. Data Types and Collection
 - a. Indexing and Packaging Data
 - b. Validation of Data
 - c. Standards:
 - i. Auditing & Legality
3. Social Bonds based on SDG tokens
 - a. Smart Contracts
 - b. Econometrics & Markets

Appendix B: Visualization of Proof of Impact for Social Bonds through CCCs:

<https://grassrootseconomics.wixsite.com/proof-of-impact>

Appendix C: SDGs Measurements - Measurement, calculation, time comparison, relative change over time, comparison to other communities and over- all indexes. The goal is how much information can we automatically capture without audit and identify the need audits. Community Fund Categories below refer to usage of CCCs taxation and other provided serves that are deemed to fit into various SDG categories (https://en.wikipedia.org/wiki/Sustainable_Development_Goals).

Sustainable Development Goals and their basic measurements using CCCs:

1. **No Poverty:** Amount of trade per day per person (compared to poverty line).
2. **No Hunger:** The amount of trade for food. (purchase/seller categories) for users or through user demographics labeled as food sellers
3. **Health:** The amount of trade for health services. (User category)
4. **Education:** The amount of trade going to schools (User category)
5. **Gender Equality:** The relative amount of trade for women and men (User demographics)
6. **Clean Water:** The amount of money spent on water. (Item category and Seller type total expenditure)
7. **Renewable Energy:** The amount spent on solar (Seller type)
8. **Economic Health:** Overall trade in the community per capita
9. **Innovation and Infrastructure:** Trade related to public works / roads and construction (Categories+community funds)
10. **Reduced inequality:** (Inequality): The Gini Index of members based on their total balances (bCC + any other)
11. **Sustainable Communities:** Community fund, Taxation payments and the market volatility (range of total trade volume over a month)
12. **Responsible consumption:** Local circulation rates - number of transactions per day per capita, Number of responsible purchases (purchase categories)
13. **Climate Action:** Community Fund Categories
14. **Life Below water:** Community Fund Categories
15. **Life on Land:** Community Fund Categories
16. **Peace and Justice:** Community Fund Categories
17. **Partnerships:** Community Size, Number of traders, connected communities and supporters, partners, NGOs