Tọrònet

Blockchain to *serve* human aspirations

LITE PAPER

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INTRODUCTION

The paper is the official short form version of the larger and more detailed White Paper for the layer 1 blockchain known as TọròNet. It explains what TọròNet tokens are, the Web3 context they fit into, how they work, example use cases, and what their future is.

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TọròNet is a layer one blockchain that was envisioned, conceived, and launched by its founders – Dr. Kehinde Alabi, Prof. Weinhan Lee, Dr. Ndidi Nnoli-Edozien, Mr. Arkan Akin & Mr. Bolaji Akinboro.

The word "Tóró" is a Yoruba word from West Africa. It means 3-pence and references both the unit of accounting and system of exchange in Yoruba societies in pre-fiat currency days.
"Tóró" invokes a time when financial systems operated through peer-to-peer transactions rather than under a centralized financial system.
Thus, "Tóró" now represents a connection between what was and is coming into being.

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WHAT IS TÒRÒNET?

TòròNet is a layer 1 blockchain protocol that supports smart contracts.

Its native token, the Tòrò, is a fully backed stablecoin that serves as an inter-operable & cross-chain settlement layer for the community. The TòròNet blockchain is an essential building block of a Defi framework that enables blockchains to fulfill their promise of making aspirational products and opportunities more accessible for millions of unbanked and underbanked communities. The Defi framework or Web 3.0 provides an alternative model of increasing access to a means of acquiring shelter, food, energy, credit, smartphones (the 21st-century gateway into the global workforce), a clean environment, and equity for millions of people across the world.
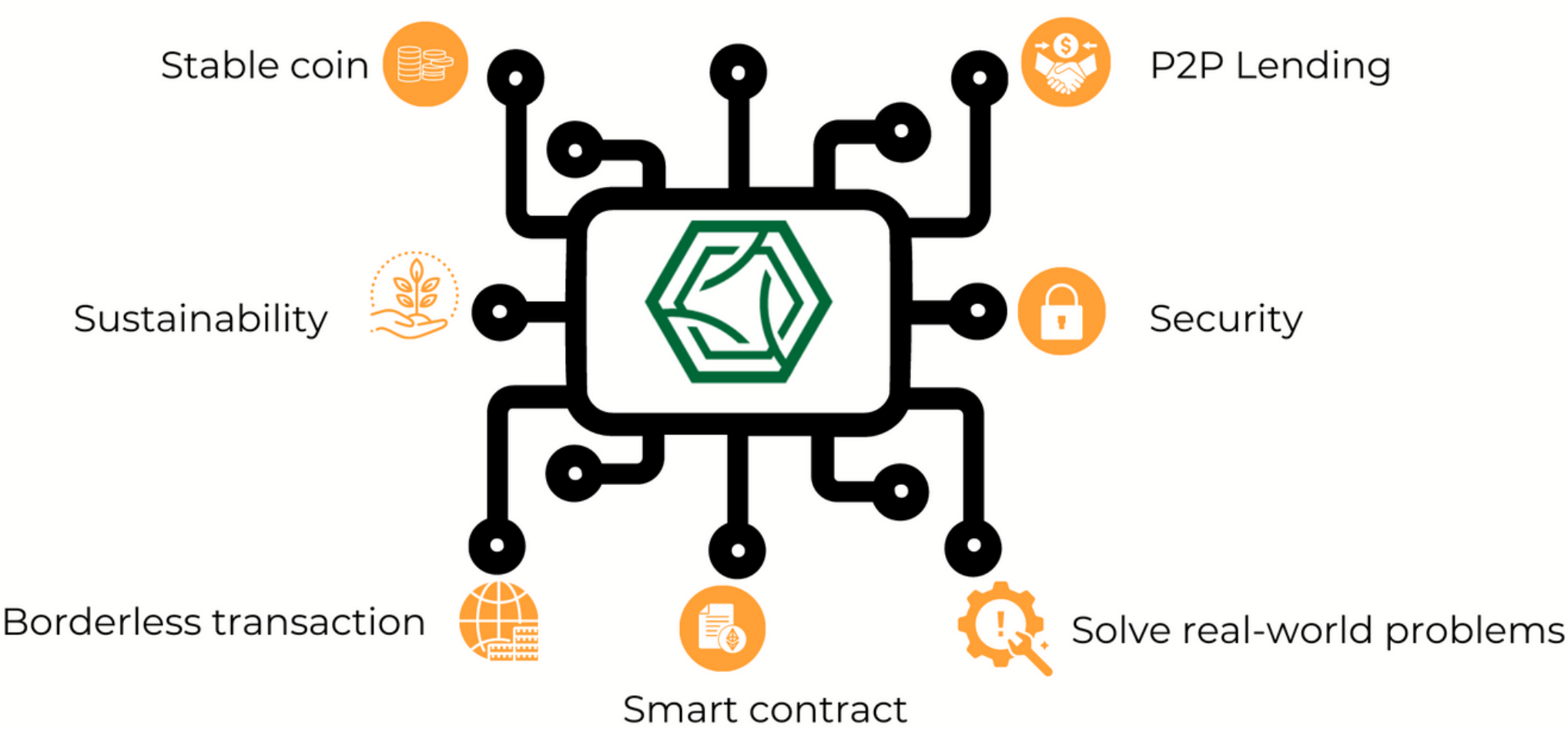
**Unique features of Toronet Blockchain**

INTRODUCING THE "TÒRÒ-VERSE"

WHAT IS THE TÒRÒNET COMMUNITY?

The TòròNet community forms a decentralized ecosystem (DeEcos) that uses the blockchain as a mechanism to achieve individual and community aspirations. Through utilizing the TòròNet native tokens and engaging with the various project tokens built on the blockchain platform, the TòròNet community is able to build towards a reshaping of how economic systems function for unbanked, underbanked, and marginalized communities. Through the blockchain, the community is able to realize their aspirations for a better life in the 21st century.
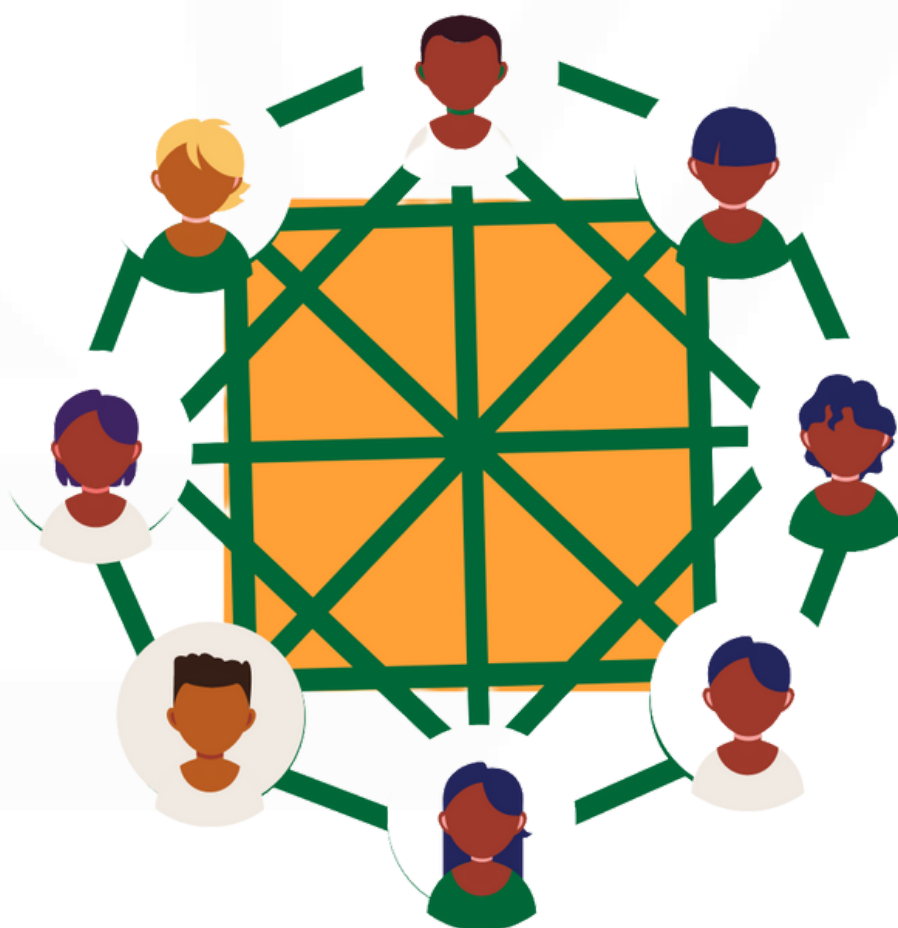
Centralized framework   Decentralized framework

INTRODUCING THE "TỌRỌ-VERSE"

WHAT ARE THE TỌRỌ TOKENS?

TọrọNet Tokens are transferable, asset-backed tokens that serve as assets, credentials, affiliations, and aspirations on the TọrọNet blockchain. There are two types of tokens that exist on the TọrọNet blockchain.

1. Tọrọ: This is the blockchain native token and the gateway and settlement token for the network.
2. Project Tokens: These are designed to help individuals and communities meet specialized aspirations through the bockchain.

TọrọNet Tokens are explained in further detail in the "TọrọNet Tokens and Project Tokens" section

KEY FEATURES OF THE BLOCKCHAIN

TọrọNet, as a blockchain, is designed and implemented as a protocol that enables the separation of assets from chains. Through this protocol, TọrọNet thus enables the free movement of assets across chains and among assets on the same chain.

The TọrọNet chain is a dedicated Turing-complete blockchain, with the capability to administer contracts for the decentralized finance (TọrọNet) ecosystem.

The function set includes among others:

- Development of stablecoins denominated in the local currencies in each community.
- Decentralized lending contracts.
- Tokenization of title or provenance system (NFTs).
- Tokenized marketplace for the agricultural sector.
- Decentralized Ricardian agricultural loan system.
- Decentralized pricing oracles
- The decentralized exchange consists of local currency and digital assets, tokens, and token derivatives.

TọrọNet mainnet went live in H1, 2022, 6 projects and their project tokens are going live on the network in Q3 2022.

TÒRÒNET TOKENS AND PROJECT TOKENS

TÒRÒNET TOKENS EXPLAINED

TòròNet tokens are transferable assets that represent the:

- Human aspirations (demand) for a real-world service,
- Financing (investment), and
- Fulfillment (supply) on the TòròNet chain.

The industry lexicon of mining, staking, yield-farming, etc takes on a real-world meaning on TòròNet. Mining on TòròNet implies an action in the real world that is represented on the chain as a token and yield farming implies a staking or investment decision that returns a yield agreed democratically on the platform. We have created a unique blend of fungible and non-fungible tokens on this platform to achieve this programmatically. To better illustrate this, please refer to the following case study as an example:

> Imagine we have a young woman called Aicha in rural Senegal, who wants to start working remotely and achieve greater social mobility.
> However, to do so, she needs to have a laptop to find and keep up with her employment. With the TòròNet blockchain, Aicha creates an "aspiration" using our mobile or web app. Once the aspiration is made, a financier — for example a woman called Tino in South Africa — can finance that aspiration. Tino is "staking" toro tokens to finance Aicha's "aspiration".
> Later on, Aicha will repay Tino at a premium, which is the "yield". Thus, Tino and Aicha both benefit from this transaction, as Aicha now owns her laptop, and Tino has earned a yield. In this way, yield farming has taken on a practical meaning in the real world, as it is used to finance the aspirations of real people within the community,

TòròNet is launching with the following tokens
  i. The blockchain native token (the Tòrò)
  ii. The project tokens

WHAT ARE TỜRỌNET TOKENS?

TỜRỌNET PROJECT TOKENS

NAME OF PROJECT TOKEN	DETAILS
Aspiro Token	Designed to solve the access to smartphones problem. It is mined as an NFT when the aspiration for a phone is created, yield farmed when a holder of Tọrọ backs that aspiration, and it becomes tradable after the merchant has fulfilled the aspiration and the Aspiro token is paying out a yield to the yield farmer.
HOME Token	Designed to solve the access to affordable homes problem. It is mined as an NFT when the aspiration for a home is created, yield farmed when a holder of Tọrọ backs that aspiration, and becomes tradable after the developer/owner has fulfilled the aspiration and the HOME token is paying out a yield.
EMI Loan Token	Designed to solve the access to affordable nano loans for small businesses. It is mined as an NFT when the aspiration for a nano-loan is created, yield farmed when a holder of Tọrọ backs that aspiration, and becomes tradable after the lender has fulfilled the aspiration and the EMIL token is paying out a yield.

WHAT ARE TÒRÒNET TOKENS?

NAME OF PROJECT TOKEN	DETAILS
Agro Token	Designed to solve the access to market and high-quality inputs for smallholder farmers. It is mined as an NFT when the aspiration for farm inputs or sales produce is created, yield farmed when a holder of Tòrò backs that aspiration and becomes tradable after the agro-dealer has fulfilled the aspiration and the Agro-Token is paying out a yield.
Plastoken	Designed to solve the plastic waste problem. It is mined as an NFT when plastic waste is returned for recycling, yield farmed when a holder of Tòrò backs that aspiration, and becomes tradable after the plastic waste fulfillment center has fulfilled the aspiration and the Plastoken is paying out a yield.
Espees Token	Designed to solve digital marketplace, rewards, payments & stickiness problems within a community or ecosystem. It is mined as an NFT when content is created or an ecosystem activity takes place, and yield is farmed by community members who desire to hold those tokens as a payment/lending mechanism within the community.

THE TECHNICAL SPECIFICATIONS OF TỌRỌNET TOKENS

The TọrọNet chain is developed as a new system of interconnected stable coins and related derived contract assets that are denominated similar to local currencies, and in a manner that is immediately more natural in local communities. This constitution of TọrọNet thus results in tokens that are amenable for commerce.

The TọrọNet blockchain is a ledger consisting of accounts and balances. The code base was initially set up from the Ethereum code, and then subsequently developed to add the desired features described in the solution section, replacing certain features including the fee system, and proof of work consensus algorithm.

The TọrọNet consensus process is a proof of authority consensus model and is a modification of the proof of work and proof of stake algorithms. We have designed the TọrọNet chain as a dedicated Turing-complete blockchain, with the capability to administer contracts for the decentralized finance (TọrọNet) ecosystem.

TọrọNetChain uses tokens TọrọNet to bring in external tokens to TọrọNetChain in a trustless manner and allow trustless financial contracts and trading of all major crypto asset tokens. The token standards are similar to ERC20 on Ethereum and Omni on the Bitcoin blockchain. Through this standard, TọrọNetChain allows tokenization of any asset including fiat currencies and cryptocurrencies. All tokens created on the network are asset-backed tokens created with the backing of crypto assets or fiat currencies.

The TọrọNet blockchain includes a decentralized exchange within the network. Several assets can be traded or exchanged for each other based on the exchange rate determined by oracles within the blockchain. The exchange allows trading (exchange) of several assets including fiat currencies in operating communities, Tọrọs, derived Tọrọs, and several cryptocurrencies including Bitcoin and Ethereum.

THE TECHNICAL SPECIFICATIONS OF TỌRỌNET TOKENS

The TọrọNet blockchain by virtue of the type of smart contracts it fundamentally supports is designed to be a multi-role blockchain. This is distinct from virtually any other blockchain but is necessary to make the blockchain useful in addressing the real financial and commercial needs of the communities it addresses.

For instance, on the Bitcoin or Ethereum blockchain, all users of the blockchain have the same role and privileges on the blockchain.

On the TọrọNet, all users start off with the same fundamental access. This includes an account, an ability to deposit funds, create stablecoin of equal value to fiat or crypto assets they deposit, and transfer assets (make payments) to any other user on the network.

However, to participate in some smart contract activities, several roles are created by the contracts, and users may apply to, or be assigned to those roles according to the terms of the contract. These roles provide the users with access to features of different contracts to enable the terms of the contracts.

All the Blockchain assets are asset-backed and are denominated in currency local to end users. Smart contracts enforce terms of commercial and financial operations as much as possible & transactions are designed such that the reserve gains slightly in value from every transaction. This is usually accomplished by including a small transaction fee or setting an exchange rate between assets such that the reserve gains when translating from one asset type or token to another.

SPECIAL FEATURES OF TỌRỌNET AND ITS TOKENS

There are 4 key differentiators which make TọrọNet unique and designed in the opposite of the majority of blockchain projects.

1. Real-world impact first

Everything done at TọrọNet, including current and future projects, is designed to respond to real-world problems. Projects on TọrọNet are easy to explain and understand because they solve concrete problems in the real world.

TọrọNet doesn't need a multi-million-dollar fund to incentivize projects to find a use-case for the blockchain. We do the opposite: we only build projects that have a fundamentally sound use-case first, then a token economy that helps to enable the project, not the other way around. This enables our system to remain efficient and scalable (fast and cheap) but most importantly to create an environment where only trusted parties operate and use resources.

2. Inverse Tokenomics

TọrọNet uses inverse tokenomics because first tokens are funded and then they are used to distribute and move value according to the needs of a specific project.

Anyone familiar with the crypto space knows that most projects first create a token out of thin air and only then the token appreciates if others buy it. The main goal is to incentivize people, mostly retail, to buy a token in the hope of making a profit via a contraption which is most often than not, based on attracting hype and creating demand, not creating value.

In this model, initial investors and mostly VCs profit by financing the project early on and selling when the desired market starts buying it.

Some retail investors make money if they can enter and exit at the right time but in most cases, they are left holding a bag with no value, losing all their investment. Terra Labs' UST stablecoin and Luna tokens are the latest and most shocking examples of wiping out around $50 billion in a matter of days. This doesn't necessarily need to be intentional, but it is by design.

3. Creation of value and reproductive economies

TòròNet creates value by solving real-world problems, not by creating demand. We do this by carefully creating solutions that leverage technology to jumpstart self-sustaining ecosystems.

Projects built on TòròNet address major issues in a financially sustainable fashion. We move away from the dominant model of grant-based sustainability financing toward a stakeholder approach. This means that project financiers and investors help deliver long-term impact in a traceable, measurable, and economically sustainable fashion.

Sustainability doesn't need to be thought of as a cost or a handout, but rather, as a way of creating value that profits all participants in an ecosystem in a holistic fashion. Done correctly, we believe this approach leads to the creation of virtuous circles that unlock value and allows for investors and participants to each earn a fair share while responding to concrete problems.

4. Creation Tradeable collaterals

TòròNet formulation utilizes the advantages of blockchain smart contracts to manage a marketplace & the financing for human aspirations for real-world items and enforce deal terms. TòròNet also introduces tradeable collaterals. This is a new concept brought to the blockchain space on the realization that a lot of times liquidity can frequently exist in different geographical locations. In such situations, owners of such resources would like to benefit from returns that could accrue from putting such resources to work in form of making loans in the locations where they are needed. However, there currently exists no procedure to allow this to occur without risking those resources due to a lack of ability to perform due diligence on borrowers or monitor performance, or enforce the terms of the loans.

SPECIAL FEATURES OF TÒRÒNET AND ITS TOKENS

A tradeable collateral contract allows the resource to be collateralized on the blockchain in its own jurisdiction, and the power of the collateral traded to a member of the blockchain in the local jurisdiction, who has the local knowledge, access, and proximity to borrowers and is able to process such loans. The eventual tradable contract is structured such that the operator has no means of monetizing the collateral besides the successful performance of the loans, and is incentivized to receive rewards only on performance. The operator also is required to stake other resources to guarantee the loan activity.

Finally, the local collateral on the loan is still retained in the form of tokenized assets, including deeds, auto, or smartphone registration to which the blockchain Foundation retains rights until the terms of the loans are satisfied.

TÒRÒNET PERFORMANCE AND SCALABILITY

The following table compares Bitcoin and its forks, as well as Ethereum, to TorọNet performance:

	Block time (S)	Block size (MB)	Tx Blockspace (%of block size)	Min tx (B)	Avg tx (B)	Max tps
Bitcoin core	600	1	98%	220	500	7.6
Bitcoin cash	600	10	98%	220	500	76
Bitcoin SV	600	32	98%	220	500	243.28
Ethereum	13.5	10	100%	21k	60k	35.27
TÒRÒNET CHAIN	2	100	100%	21k	60k	2362

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WHAT IS THE FUTURE OF TÒRÒNET?

We see the platform as the one that fulfills all the promises and potential of Web 3.0.

Web 3.0 at its core reorders the power relations within society; it enables the stakeholders in the community to have a say in their future rather than centralized authorities determining their future. It ushers in true democracy and an economic system in which the benefits are distributed more equitably between producers, consumers, and state actors. An example of a segment of society that needs reordering is digital advertising in which the advertising dollars that accrue to the platform and none of it accrues to the netizens whose personal data have been sold to advertisers.

That said, web 3.0 is in an interesting phase of its evolution. Regulators are trying to protect the wider financial system from the risks of the crypto-currency, businesses especially the monopoly platforms are trying to protect their business models from the shift of power to the data owner, and entire sectors are developing new business models around the utility, securitization, asset tokenization, data tokenization capability of the blockchain.

The world is at a crossroads where it will go in either of two directions: Web 3.0 for humanity or humanity or web3.0. Choose the former, join TòròNet.