Safrochain

Whitepaper

Empowering Africa Through a Unified,
Human-Centered Blockchain

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Safrochain Foundation

https://safrochain.com

Contents

1 Abstract

Safrochain is an African-centered blockchain built on the Cosmos SDK, designed to foster financial and cultural sovereignty across the continent. By minting non-US stablecoins pegged to local African currencies, providing human application support, and fostering deep community integration, Safrochain empowers emerging markets, facilitates trade within and between African trading blocs, and revolutionizes industries from music to agriculture to remittances.

Through early participation incentives and a feedback-driven development model, Safrochain is not merely a protocol — it is a movement to reclaim unity and build decentralized prosperity through grassroot participation. *We The People* are called to self-determine.

Safrochain targets the African youth joining a rapidly expanding gig economy where individuals bear growing responsibility for generating and controlling their own livelihoods. By combining the reach of mobile money with the sovereignty of self-custody, Safrochain offers a credible, human-centered alternative to the incumbent financial stack.

1B SAF · 2% max inflation · IBC · 54 nations

1a. Compliance Statements

1. This whitepaper has not been approved by any competent authority in any jurisdiction. The Safrochain Foundation is solely responsible for its content.
2. To the best of the knowledge of the Foundation's management body, the information presented is fair, clear, and not misleading, and this whitepaper makes no omission likely to affect its import.
3. SAF tokens may lose value in part or in full, may not always be transferable, and may not be liquid.
4. SAF tokens are not covered by any investor compensation scheme or deposit guarantee scheme in any jurisdiction.
5. This whitepaper does not constitute a prospectus, financial advice, legal advice, tax advice, or an offer to sell securities in any jurisdiction. Readers should conduct their own research and seek professional advice where appropriate.

2 Vision

Africa remains rich in culture, talent, and resources, but lacks a unifying financial and digital infrastructure. Safrochain exists to address this void with a blockchain that is purpose-built for the continent.

> *"Unity is proclaimed but not realized."*
>
> We The People aim to change that by connecting artists, entrepreneurs, and citizens through a seamless Web3 ecosystem.

2.1 Four Core Principles

African-First
Utility, governance, and identity rooted in African contexts

Youth-Empowering
Self-custody is key in a connected, mobile-first world

Human-Centered
Low barriers to entry; human support at every touchpoint

Community-Driven
Development and decisions made by and for the community

3 Key Features

3.1 Non-US Stablecoin Issuance

US pegged stablecoins dominate the crypto industry. Settlements of many commodities are denominated in USD and trade transactions are often carried out in USD. However, Africa accounts for less than 3% of international trade, which limits the amount of USD required while local currencies are already being digitised through mobile money, which consists in granting quasi-banking licenses to telecommunication companies. Safrochain aims to leverage the grassroot familiarity of digital currencies with the need to tap into digital incomes for everyday usage.

While mobile-to-mobile transactions within the same network are relatively cheap, mobile-to-cash are expensive and intra-network transfers are often impossible. Mobile networks in Africa are often unreliable and even when available users can be unable to withdraw their earnings for cash. A multi-asset stablecoin (SAF) pegged to a basket of African currencies and commodities

can solve the inter-network issue while offering users the ability to withdraw based on their access to the internet only.

This implementation reduces reliance on the USD and mitigates US-centric regulatory risks while lowering the barrier to usage on blockchain applications.

> **Why local stablecoins matter:** Locally-denominated stablecoins let users assess revenues and costs in familiar terms, enable cross-border trade within African trading blocs, reduce reliance on USD, and mitigate US-centric regulatory risk — all while lowering on-ramp friction for the unbanked.

3.2 Focus on Emerging Markets

Light nodes and mobile-first wallets. Safrochain aims to be accessible within Africa. Currently, running blockchain applications in developed nations requires considerable investments. Whereas Bitcoin mining was accessible in its early phases, it is now an endeavor that no single entrepreneur can undertake. The geographic distribution of Bitcoin nodes is no longer an instrument of expansion and inclusion, but an indication of power and inefficiencies. Even Ethereum or Cardano no longer offer accessible nodes and validation settings at the reach of an African entrepreneur. Securing blockchain networks has become the privy of the rich. Safrochain offers an opportunity for inclusion by offering a Layer-1 alternative for which participants would be incentivized to invest while generating incomes to sustain expansion. It is in essence the appropriate scale at which Africans can fully participate and contribute. Less demanding technical specifications associated with the launch network size allow entrepreneurs in Africa the ability to join early while also offering like-minded individuals across the world the opportunity to power a network on which many of the promises of the blockchain would be realized.

Offline-first support and off-ramp fiat integrations. Safrochain is a community-led initiative which places the human at the center of technology. As such, the support within Safrochain and its applications are real-world application (RWA) first and foremost. The ability to account for local currencies in the form of stablecoins offers users a stable off-ramp option when needed.

Serving the gig economies. The gig economy may be a new term in developed nations, but it has always been known as the informal economy elsewhere. Safrochain is aimed towards urban and rural entrepreneurs, gig workers, and small merchants who have high velocity in transaction frequency and low denominations in transaction volume. These tend to be unbanked and rely on digital means to earn and spend given their busy schedules. A trip to the bank would cost them productive hours. Workers in the gig economy would most likely not be formally banked, so they would not be holding accounts to which Safrochain would link. Instead, locally-denominated stablecoins with reserves held by community pools until a legal Safrochain entity takes custody

of reserves would turn the creation of a bank on its head. The unbanked can organically create banks that do cater to their needs and Safrochain aims to be powering such a digital bank.

3.3 Trading Bloc Legislation Compatibility

Safrochain inherently has a built-in compliance layer for ECOWAS, EAC, SADC, COMESA and AfCFTA standards given that users are transacting in their local currencies. Off-chain reserves are meant to support off-ramping needs which open the constitution of financial channels across trading blocks that no single currency can achieve. Safrochain encourages inter-African trade and local economic integration by offering the ability to on-ramp in one country and off-ramp in another using digital stablecoins backed by community pools. These pools are incentivized to offer liquidity in exchange of on-chain tokens based on redemption rates set by users.

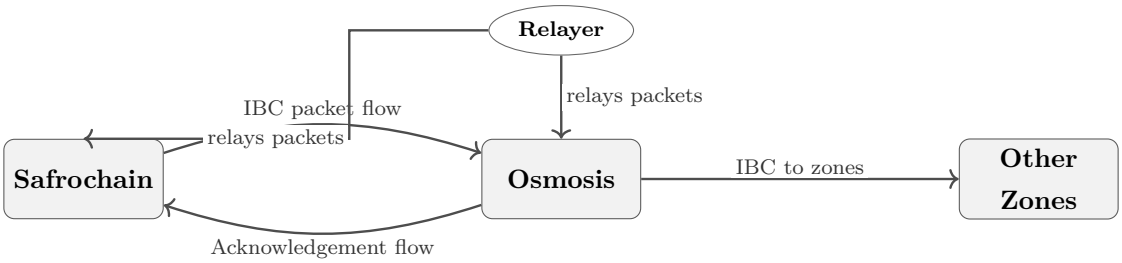
3.4 Music & Creative Industries

> Through on-chain infrastructure, artists can tokenize their work, sell directly to fans, and automate royalties via smart contracts. Safrochain extends NFT use cases beyond static images to film, literature, tourism, and fashion — with on-chain provenance and programmable splits.

Developing economies lack support for artists through the formal sectors. Open markets for arts are a sight tourists have come to expect with cash as the only means of exchange. Other artists fare worse as their products are not always as easily handled as sculptures and paintings. Songs and poems cannot be experienced on the spot for cash unless when attending a live concert. Through the blockchain, artists can tokenize their work, sell directly to fans, and automate royalties through smart contracts. NFTs are the prime example of this medium of trade, but their use cases are still limited to digital static images. Safrochain aims to expand the use case to film, literature, tourism, and fashion.

3.5 Interoperability

IBC-enabled (Inter-Blockchain Communication) for seamless integration with the Cosmos Hub ecosystem and beyond, Safrochain opens the world to emerging economies. Users can access popular stablecoins, offer their tokens and services across chains and benefit from familiarity in user experience. Technically, Safrochain is what is known as an “App-Chain” which warrants full control and in the African context, full self-determination.



IBC lets Safrochain plug into liquid DeFi hubs like Osmosis, Injective, dYdX which offers African users the ability to exchange tokens with few intermediaries. Through the IBC, African users can also access lending, borrowing, and yield opportunities otherwise restricted by geography or KYC verifications that do not consider some African contexts such as the lack of postal codes in several countries, or even full civic addresses in some. By being accessible from other Cosmos zones through the IBC, SAF can become a recognized liquidity pair across the Cosmos ecosystem, increasing adoption and stability. Bridges to Ethereum, Solana, Cardano, and other chains based on the Cosmos SDK flexibility will be considered and submitted for governance action.

By being interoperable, Safrochain avoids isolation risks as users can open connections to other zones within the ecosystem to meet their needs without having to leave Safrochain. If one chain faces liquidity issues, users can route through another IBC zone and in the case of SAF, this ensures stability against shocks in local currencies constituting its reserves.

3.6 Light Wallets + Real World Support

A blockchain is only as impactful as its accessibility. For Africa, where the majority of users interact with financial services primarily through mobile phones, light wallets are the gateway to adoption. Safrochain prioritizes low-bandwidth, mobile-friendly wallets designed for real-world usage.

QR Code Payments: Simplifies merchant and peer-to-peer transactions, enabling anyone with a smartphone to scan and pay instantly, without typing long addresses.

Fiat On/Off Ramps: Direct integration with mobile money operators, bank APIs, and community liquidity providers makes it possible to easily exchange between local fiat currencies and Safrochain tokens (e.g., SAF).

Integration with POS systems: To make blockchain usable beyond speculation, Safrochain wallets will be integrated with existing POS systems in: *Local Markets & Shops*—vendors can accept payments directly in SAF or other Safrochain assets via the integration of mobile money and off-ramp local pool providers; *Trips and Events*—micro-transactions, such as motorcycle rides, can be processed without the burden of high fees, unlocking everyday crypto payments; *Cross-border Trade*—merchants can use POS integration for settlement in multiple currencies via IBC interoperability and local liquidity pool hubs. This positions Safrochain as an alternative

payment rail, competing directly with legacy mobile money systems but offering lower fees, faster settlements, and cross-border capability.

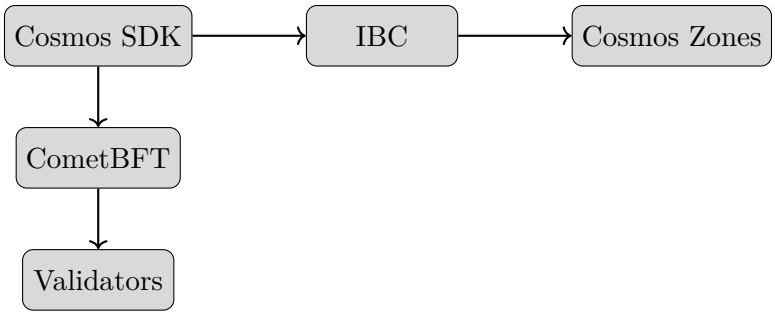
Optional KYC through Community Hubs: Safrochain embraces inclusive financial access by making KYC optional and community-driven. Trusted community hubs, training centers, and cooperatives serve as local validators of identity, offering KYC services for those who want to access advanced features (credit, larger transfers, compliance-required applications). Users can transact freely in small amounts without mandatory KYC, ensuring financial inclusion for the unbanked and those without formal documents. Users can unlock higher transaction limits and additional services by voluntarily engaging with community hubs. This approach balances regulatory compliance with Africa's reality, where many citizens lack government-issued ID but can still be verified by their community networks.

3.7 Human-Centered Engagement

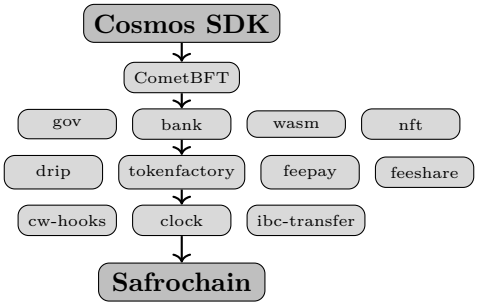
Founders believe in the role of humanity within the Blockchain ecosystems. In-app chat, community voting, and local meetups keep users engaged with real human contact.

4 Technical Architecture

Safrochain is built on the Cosmos SDK, a modular framework for application-specific blockchains. The architecture consists of three main layers: the **application layer** (Cosmos SDK modules and CosmWasm), the **consensus layer** (CometBFT), and the **network layer** (P2P, validators, IBC relayers).



4.1 Stack Overview



The Cosmos SDK provides foundational modules for account management, token transfers, staking, and governance. CometBFT handles consensus and peer-to-peer networking with instant finality. Safrochain extends the base SDK with custom modules for stablecoin issuance, smart contracts, NFTs, fee sharing, and inter-chain communication.

4.2 Node Software

The Safrochain node binary `safrochaind` provides the full node and validator client.

Command	Description
`safrochaind start`	Run the full node
`safrochaind tx bank send ...`	Send tokens between addresses
`safrochaind tx gov submit-proposal ...`	Submit a governance proposal
`safrochaind tx wasm execute ...`	Execute a CosmWasm smart contract
`safrochaind query bank balances`	Query token balances
`safrochaind keys add mykey`	Create a new key pair

Table 1: Key `safrochaind` CLI commands.

Light nodes and mobile-first wallets connect to full nodes via RPC and gRPC, enabling low-bandwidth access for users in emerging markets.

4.3 Core Chain Parameters

Parameter	Value
minimum-gas-prices	`0.002usaf`

Table 2: Key chain parameters. Minimum gas price ensures validators are compensated and the chain remains spam-resistant.

4.4 Staking Parameters

Parameter	Value
unbonding time	14 days
max validators	100
max entries	7
historical entries	10000
bond denom	`usaf`

Table 3: Staking parameters (current working set).

4.5 Governance Parameters

Parameter	Value
voting period	7 days
min deposit	10000000
max deposit period	2 days
quorum	33.4%
threshold	50%
veto threshold	33.4%

Table 4: Governance parameters (current working set).

4.6 Distribution Parameters

Parameter	Value
community tax	0.1%
base proposer reward	1%
bonus proposer reward	0
withdraw addr enabled	true

Table 5: Distribution parameters (current working set).

Parameter values above are a working specification and may be adjusted before mainnet launch through governance and release operations.

5 Protocol Modules

Safrochain integrates a set of Cosmos SDK and custom modules, exposed via `safrochaind tx` and `safrochaind query`. The following table maps each module to its whitepaper relevance.

Module	Purpose
`bank`	Token transfers, SAF/usaf balances
`gov`	Proposals, quadratic voting, on-chain governance
`wasm`	CosmWasm smart contracts (Safrimba, tontines)
`nft`	Music, creative assets, education certificates
`tokenfactory`	Stablecoin issuance, SAF creation
`drip`	Drip and liquidity incentives
`feepay`	Fee sponsorship for improved UX
`feeshare`	Revenue sharing for dApp developers
`clock`	Time-based consensus and logic
`cw-hooks`	CosmWasm hooks (e.g., post-transfer callbacks)
`ibc-transfer`	Cross-chain token transfers via IBC
`staking`	Validators, delegation, bonding
`slashing`	Validator penalties for misbehavior
`vesting`	Team and community vesting schedules
`mint`	Inflation, staking rewards distribution

Table 6: Protocol modules (pro of TEX UI design).

5.1 Key Modules

Bank & Tokenfactory. The `bank` module handles native token transfers. `tokenfactory` enables creation of denoms (e.g., SAF stablecoins) pegged to African currencies and commodities.

Wasm & CW-Hooks. CosmWasm (`wasm`) powers smart contracts for tontines, DeFi, and dApps. `cw-hooks` allow contracts to react to token transfers, enabling automated royalties and pool logic.

Gov & Feeshare. Governance proposals are submitted and voted on via `gov`. `feeshare` distributes transaction fee revenue to dApp developers, incentivizing ecosystem growth.

IBC-Transfer. Inter-Blockchain Communication enables trustless transfers between Safrochain and other Cosmos zones (Osmosis, Cosmos Hub, etc.), supporting remittances and cross-chain DeFi.

6 Security & Consensus

Safrochain is built as a fork of Juno and adapted for the protocol goals described in this whitepaper.

6.1 Validator Set

Safrochain uses CometBFT's Proof-of-Stake (PoS) consensus. Validators stake SAF tokens to participate in block production. The validator set is determined by bonded stake; the top validators by stake participate in consensus. This design incentivizes decentralization while

allowing African entrepreneurs to run nodes at an appropriate scale.

6.2 Slashing

The `slashing` module penalizes validators for double-signing, downtime, or other misbehavior. Penalties include loss of bonded tokens and temporary jail. Slashing protects the network from Byzantine actors and encourages reliable infrastructure.

Parameter	Value
signed blocks window	10000
min signed per window	95%
downtime jail duration	10 mins
slash fraction double sign	5%
slash fraction downtime	1%

Table 7: Slashing parameters (current working set; to be adjusted before mainnet where required).

6.3 Finality

CometBFT provides instant finality: once a block is committed, it cannot be reverted under normal operation. This is critical for payments and remittances, where users need certainty that transactions are settled.

6.4 Upgrades

Protocol upgrades are coordinated through governance. The `upgrade` module enables scheduled network upgrades (e.g., new module parameters, bug fixes) with minimal downtime.

Pre-upgrade phase. Upgrade proposals define scope, target block/height windows, and operator runbooks. Validators and node operators coordinate binaries, snapshots, and staged rehearsal before execution.

Contingency phase. If severe issues are detected during rollout, incident communications are published through official channels and operators follow contingency instructions (for example, temporary halt/hold procedures and patched release rollout).

Post-upgrade verification. After activation, operators validate chain liveness, finality, block production consistency, and critical module behavior before upgrade completion is declared.

6.5 Security Assurance and Bug Bounty

Security assurance work is staged across testnet and post-launch operations, including continuous hardening, operational monitoring, and external review planning.

Safrochain Foundation (SF) will publish a bug bounty program after launch. Scope, reward

tiers, and disclosure procedures will be announced in the post-mainnet security policy.

6a. Sustainability Indicators

Safrochain uses CometBFT Proof-of-Stake consensus, which does not rely on energy-intensive mining. The environmental profile below will be updated annually post-mainnet based on actual validator node data.

Indicator	Estimated value (pre-mainnet)	Methodology
Annual energy consumption	Target < 500,000 kWh/year	Bottom-up node estimation
Renewable energy share	Target > 30%	Geographic validator distribution + public regional electricity datasets
Scope 1 GHG emissions	0.00 tCO_2e/year (no direct controlled emissions)	—
Scope 2 GHG emissions	Baseline published post-mainnet	Node location × regional grid intensity
Energy per transaction	Target < 0.0002 kWh/tx	Network throughput estimate
GHG per transaction	Target < 0.0001 $kgCO_2e$/tx	Derived from Scope 2 / tx volume

Table 8: Estimated sustainability indicators and reporting methodology.

Reporting note: The first measured baselines for annual energy consumption, renewable energy share, and Scope 2 GHG emissions are published after mainnet launch, then updated annually in the Sustainability Report.

Estimated figures will be replaced with audited actuals in the first annual Sustainability Report, to be published within 6 months of mainnet launch. The methodology follows a bottom-up approach: validator node hardware requirements are used to estimate per-node energy draw, multiplied by active node count, then weighted by geographic distribution and regional grid carbon intensity using public data from national energy authorities.

Comparative note. Cardano's Ouroboros PoS network consumes approximately 813,456 kWh/year for its full global validator set (per MiCA disclosure, April 2025). Safrochain's smaller initial validator set (target: 100 validators at mainnet) is expected to consume significantly less energy in absolute terms while aiming for comparable per-transaction efficiency.

7 Economic Model

7.1 Safrochain Tokenomics

7.1.1 Core Parameters

- **Total supply:** $S_{\text{total}} = 10^9$ SAF (1 billion)
- **Base denomination:** 1 SAF $= 10^6$ usaf
- **Inflation cap:** $\pi_{\max} = 2\%$ per annum
- **Proposal threshold:** 1% of staked SAF

7.1.2 Vesting Formula

For linear vesting after a cliff period:

$$V(t) = V_0 + (1 - V_0) \cdot \frac{\max(0, t - t_c)}{T_v} \tag{1}$$

V_0 — TGE unlock fraction.

t_c — cliff duration in months.

T_v — linear vesting duration in months.

t — elapsed time in months from TGE.

7.1.3 SAF Design and Peg Operations

SAF is designed as a local-economy settlement asset for African market use cases, including remittances, merchant payments, and cooperative savings flows. Issuance and redemption policy is governed at protocol level and implemented through approved treasury and liquidity operations.

Issuance and redemption model. New SAF supply is created only through governance-approved procedures and corresponding reserve or liquidity commitments. Redemption flows are processed through approved channels and policy controls to reduce discretionary handling risk.

Peg and reserve policy. SAF targets a basket-aligned stability policy. Basket composition, operational tolerance bands, and rebalancing logic are set by governance and can be revised after launch based on liquidity, market behavior, and compliance constraints.

Stress handling. During market dislocation or liquidity stress, governance may activate temporary safeguards (for example, paced redemption windows, temporary parameter tightening, or reserve rebalancing actions) to prioritize orderly market function and user protection.

7.2 Token Distribution

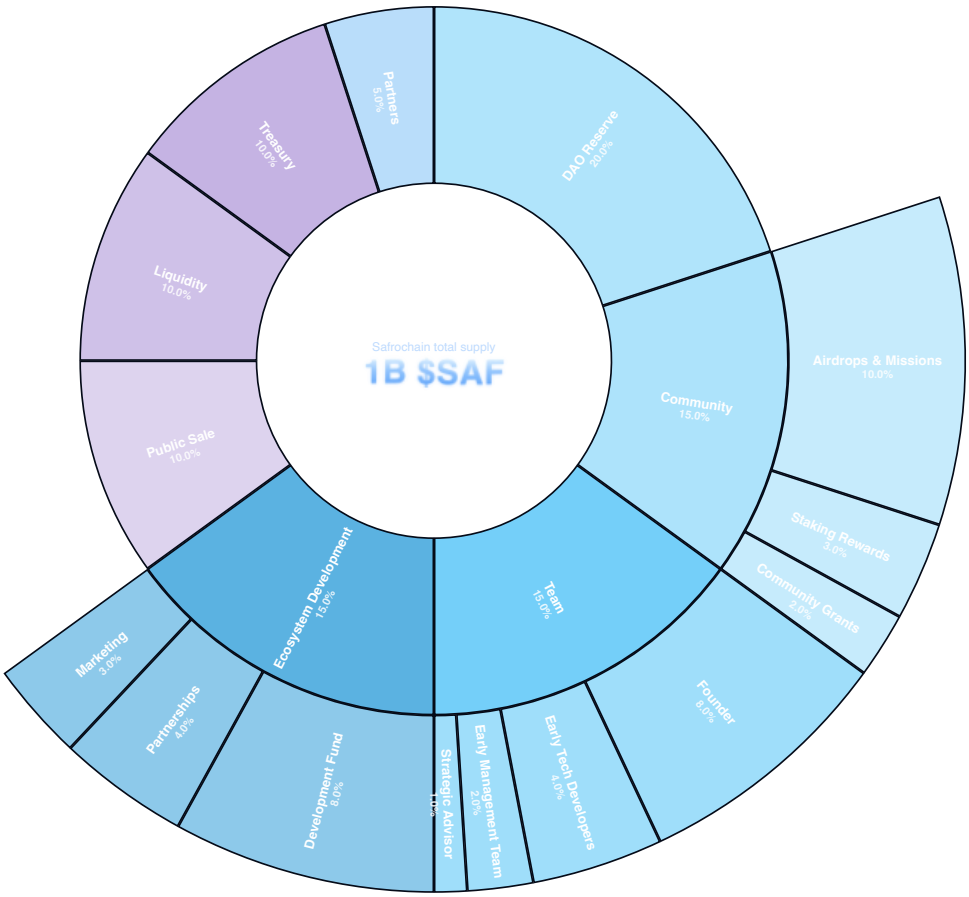


Figure 1: Token distribution — 1 billion SAF across eight allocation categories.

7.3 Community Breakdown

Community (150M SAF): Airdrops & Missions (100M), Staking Rewards (30M), Community Grants (20M). Team (150M): Founder, Early Tech, Early Management, Strategic Advisor. Ecosystem (150M): Development Fund, Partnerships, Marketing.

7.4 Inflation and Minting Mechanism

Safrochain adopts a fixed, predictable inflation policy to support long-term stability, network security, and end-user adoption. Inflation is set at **2% per year** for the **first five years** after mainnet launch, applied linearly and consistently.

Rationale: (1) Predictable launch conditions for holders, stakers, and developers. (2) Time to bootstrap the ecosystem toward a high bonded ratio via staking rewards and fee revenue. (3)

Category	Allocation	SAF	Purpose
DAO Reserve	20%	200M	Governance and decision-making
Community	15%	150M	Airdrops, staking rewards, grants
Team	15%	150M	Founders, tech, management, advisors
Ecosystem Dev	15%	150M	Dev fund, partnerships, marketing
Public Sale	10%	100M	Equitable access from day one
Liquidity	10%	100M	DEX and CEX liquidity pools
Treasury	10%	100M	Future development, DAO-voted
Partners	5%	50M	Strategic alliances

Table 9: Token allocation by category (1 billion SAF total supply).

Figure 2: Community allocation: 150 M SAF across airdrops and missions, staking rewards, and community grants.

Controlled dilution: about +10% supply after five years before any burn. (4) After five years, any change to the inflation rate is decided by on-chain governance.

$$\Delta S(y) = S_{\text{total}} \times \pi_{\max} = 10^9 \times 0.02 = 20{,}000{,}000 \text{ SAF/year} \tag{2}$$

$$\frac{V_{\text{bonded}}}{S_{\text{circulating}}} \geq q \tag{3}$$

$$\frac{V_{\text{yes}}}{V_{\text{yes}} + V_{\text{no}} + V_{\text{abstain}}} \geq t \tag{4}$$

where q is the quorum ratio and t is the passing threshold ratio in Section 4.5.

7.5 Vesting Schedules

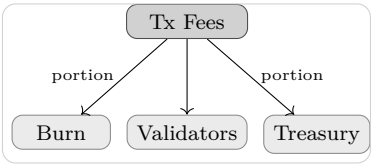
Figure 3: Vesting schedules by stakeholder category. X-axis: months post-TGE; Y-axis: cumulative unlock (%).

Category	TGE	Cliff	Vesting
Community Airdrop	0%	0 mo	6 mo linear
Public Sale	10%	0 mo	6 mo linear
Founders	0%	6 mo	24 mo linear
Early Management	0%	6 mo	18 mo linear
Technical Contributors	0%	3 mo	18 mo linear
Strategic Advisor	0%	3 mo	12 mo linear

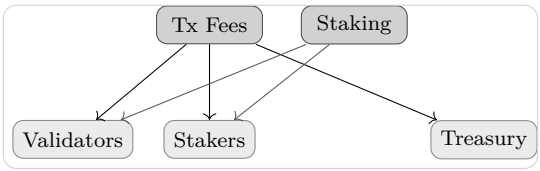
Table 10: Vesting schedules by category (pro of TEX UI design).

Cliff and vesting windows range from 3 to 24 months depending on category, and may be adjusted by governance before mainnet where required.

7.6 Revenue Sources



Validator and Node Fees: Staking rewards and transaction fees. Small registration or unjail fees contribute to the DAO Treasury.



Transaction Fees: A portion burned for deflationary pressure; the rest distributed among validators, stakers, and the DAO Treasury.

$$S_{t+1} = S_t + \Delta S_t - B_t \tag{5}$$

Treasury Investments: Community-approved assets, liquidity pools, or stable yield protocols. Returns transparently reported and redistributed.

> **Deflationary mechanic:** The burn mechanism ensures that as network activity grows, SAF supply contracts. Combined with a 2% inflation cap, this creates long-term supply pressure that aligns validator incentives with ecosystem growth.

7a. SAF Token Legal Classification

SAF is the native staking, governance, and settlement token of the Safrochain network. It does not grant access to a specific good or service provided by an issuer or service provider. Accordingly, SAF does not meet the criteria for a Utility Token under applicable crypto-asset regulations.

SAF is classified as an **Other Crypto-Asset**: a decentralized, open-source digital asset whose supply, issuance, and governance are determined by protocol rules and on-chain community

governance, not by any single controlling entity.

SAF holders acquire the right to transfer SAF on-chain, delegate or bond SAF to validators, participate in on-chain governance votes, and earn staking rewards proportional to bonded stake. SAF holders do not acquire any equity or debt claim against the Safrochain Foundation, any right to dividends or guaranteed financial return, or any right to specific goods or services.

Digital Token Identifier (DTI): A Digital Token Identifier registration application will be submitted upon mainnet launch and the identifier will be published at `https://docs.safrochain.com` after issuance.

7b. Purchaser Rights and Obligations

Rights. Ownership of SAF grants the right to store, transfer, stake, and use SAF within the Safrochain network, subject to its consensus rules and cryptographic security mechanisms. SAF holders may participate in on-chain governance by voting directly or delegating voting power to validators.

Obligations. Users are solely responsible for managing their private keys and wallets. Loss of private key access results in permanent loss of associated SAF. Users must comply with all applicable laws and regulations in their respective jurisdictions, including anti-money laundering (AML) and tax obligations.

Transfer restrictions. There are no protocol-level restrictions on SAF transferability beyond standard network fees and block confirmation times. Vesting schedules (Section 7.5) restrict transfers for team, advisor, and ecosystem allocations until the applicable unlock dates. Users in jurisdictions that impose legal restrictions on crypto-asset ownership or transfer remain responsible for their own compliance.

Supply adjustment. Safrochain does not operate dynamic supply adjustment protocols that respond to market demand. Supply changes are limited to: (a) the fixed 2% annual inflation for the first five years post-mainnet; (b) the transaction fee burn mechanism described in Section 7.6; (c) any subsequent parameter changes approved by on-chain governance. No entity, including the Safrochain Foundation, can unilaterally modify the token supply outside of these mechanisms.

Token value protection. There are no token value protection schemes, price stabilization mechanisms (beyond SAF stablecoin peg operations described in Section 7.1.3), or compensation schemes covering SAF price depreciation.

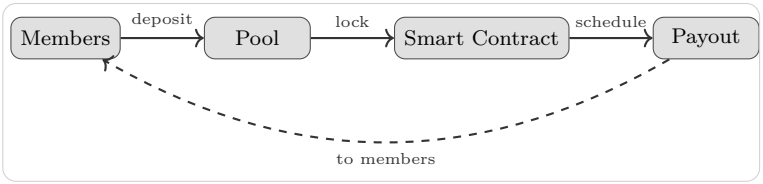
Modifications to rights and obligations. Changes to any of the above require an on-chain governance proposal passing the thresholds defined in Section 4.5. The Foundation may not unilaterally alter these parameters.

8 Use Cases by Sector

Feature	Tontines	Agriculture	Remittances	Music
Smart contracts	✓	✓	✓	✓
Stablecoins	✓	✓	✓	—
NFTs	✓	—	—	✓
IBC	—	✓	✓	✓

Figure 4: Use case matrix by sector (Porter-style matrix).

8.1 Grassroots Saving and Solidarity Pools (Safrimba Tontines)



- **Digital Tontines:** Blockchain-based tontines, pooling funds transparently while eliminating fraud risk
- **Smart Contract Governance:** Automated payout schedules and voting rules ensure fair management without intermediaries
- **Incentivized Saving:** Members earn SAF / usaf-denominated rewards or reputation points for consistent participation, building trust and financial discipline
- **Resilience Tool:** Provides local communities with an alternative to unstable banking systems and predatory lending
- **Fast, Low-Cost Transactions:** Micro-payments, QR-based merchant integration for affordable everyday transactions
- **NFT-Based Achievements:** Education certificates from universities and training centers; cultural assets (African art, music, heritage) with automatic royalties; gaming economy with transferable in-game assets across platforms

8.2 Agriculture

Supply chain transparency: farmers, cooperatives, and consumers can trace crops from seed to market, reducing fraud and increasing export value. Tokenized crop futures allow farmers to pre-sell future harvests as tokenized contracts, unlocking early liquidity. Co-op financing: farmers' cooperatives pool SAF-backed funds for equipment, fertilizers, and logistics. Agricultural insurance: smart contracts release payouts automatically in case of climate shocks or yield loss.

8.3 Remittances

The remittance opportunity: Africa receives over $100B in remittances annually. Traditional providers charge 5–12% per transaction, taking days to settle. Safrochain reduces this to under 0.1% with instant CometBFT finality and mobile-first light wallets.

- Stablecoin transfers in seconds at a fraction of traditional cost
- Mobile wallet integration converts SAF directly to local currency at competitive rates
- Financial inclusion for rural families who access funds without relying on expensive intermediaries
- Circular economy: remittances flow directly into tontines, co-ops, or investments, multiplying impact

9 Community & Governance: "We The People"

At the heart of Safrochain lies the principle of "We The People", a declaration that power belongs to the users. Rather than concentrating authority in corporations or states, Safrochain returns it to the community of contributors, creators, and citizens who sustain the ecosystem.

9.1 On-Chain Governance

Safrochain uses standard Cosmos SDK on-chain governance. All parameter changes, software upgrades, and treasury spends are decided by token-holder votes.

Voting power is proportional to bonded (staked) SAF. Token holders delegate to validators or vote directly; only bonded SAF counts toward quorum and outcome.

9.2 Governance Implementation Policy

Governance is executed through proposal lifecycle controls (deposit, voting, tally, and execution) with explicit thresholds for quorum, passage, and veto. Operationally, proposals are discussed

Proposal Type	Description
Parameter Change	Modify on-chain module parameters
Software Upgrade	Coordinate protocol upgrades across validators
Community Spend	Allocate treasury funds for grants or bounties
Text Proposal	Non-binding signal votes; community discussion

Table 11: Governance proposal types available on Safrochain.

off-chain, submitted on-chain, and only enacted when chain-level conditions are met.

The active governance controls used by the network are defined in the Governance Parameters table in the Technical Architecture section (voting period, deposit windows, quorum, threshold, and veto threshold). Any change to those controls must itself pass governance.

Foundation veto: The Foundation may exercise a veto only to block proposals that conflict with the chain's security or legal commitments. This power is used transparently and exclusively in exceptional cases.

9.3 Community Treasury and Regional Hubs

Safrochain maintains a Community Treasury funded by transaction fees, staking rewards, and ecosystem allocations. This treasury finances grants for developers and researchers, and regional hubs that bring blockchain opportunities to African cities and emerging markets. Each regional hub operates semi-autonomously, with oversight from the community.

9.4 Participatory Governance

Every Safrochain user holds a voice. The platform employs a **quadratic voting** mechanism to prevent plutocracy: large holders cannot simply dominate decisions. Through governance portals, members can:

- Submit and debate proposals before on-chain voting
- Vote with quadratic weighting proportional to staked SAF
- Delegate votes to trusted representatives
- Track spending and outcomes through transparency dashboards

9.5 Recognition and Reputation

Users earn badges and reputation scores through consistent voting, verified project contributions, community education, and peer endorsements. Badges can unlock early feature access,

governance bonuses, or eligibility for Ambassador Programs.

9.6 Vision

Safrochain envisions governance not as bureaucracy, but as a living civic economy: a network where Africans and emerging-market innovators can directly shape the digital systems they rely on. Through this model, "We The People" becomes more than a slogan; it becomes a technology of empowerment.

10 Onboarding Strategy: Building the First 1,000 Active Users

Safrochain's adoption strategy begins where blockchain meets real people: in communities, creative industries, and youth-led innovation spaces. The objective is to reach 1,000 active users who understand, trust, and participate in the ecosystem.

10.1 Strategic Partnerships

- Local cooperatives become early nodes of economic experimentation
- Artist collectives and music communities leverage Safrochain for creative rights management and cross-border royalties
- Youth tech hubs act as incubators for the next generation of blockchain developers

10.2 Street Teams and Community Ambassadors

Dedicated street teams and local ambassadors introduce Safrochain directly to neighborhoods, campuses, and marketplaces, organizing demos, mini-workshops, and digital wallet installations. Ambassadors are compensated through Safrochain's community treasury.

10.3 Train-the-Trainer Model

10.4 Light Wallets with Preloaded Content

Each wallet comes preloaded with a small amount of native tokens, educational modules in local languages, and access links to help centers and community groups.

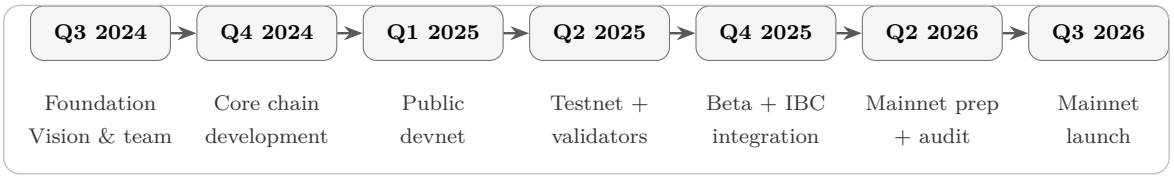
10.5 Mobile-First Applications

All Safrochain tools are designed for smartphone accessibility: simplified UI, SMS and USSD integrations, seamless onboarding through referral codes and QR scans, offline caching for low-connectivity areas.

10.6 Success Metrics — The 1,000-User Target

Active	At least one transaction or governance action per week
Educated	Completion of introductory onboarding modules
Connected	Engaged in a local hub or online governance forum
Empowered	Earning or saving through at least one Safrochain tool

11 Roadmap



Phase	Period	Milestones
Foundation	Q3 2024	Concept, vision, chain architecture, team formation
Core Dev	Q4 2024	Chain implementation, base SDK modules, internal testnet
Devnet	Q1 2025	Core modules deployed, faucet live, public devnet open
Testnet	Q2 2025	Hub mainnet, 150+ validators onboarded, staking live
Beta	Q4 2025	Safrimba beta, Osmosis IBC integration, Foundation incorporation
Mainnet Prep	Q2 2026	Genesis validators, airdrop strategy finalized, Audit #2
Mainnet	Q3 2026	Genesis launch, full ecosystem live, CEX listings

Table 12: Safrochain roadmap phases and key milestones.

11.1 Near-Term Priorities (Q4 2025 – Q2 2026)

- **Safrimba Beta Launch:** First real-money tontines and micro-savings on testnet with selected community participants across West and East Africa

- **Osmosis IBC Integration:** SAF liquidity pair on Osmosis DEX, enabling cross-chain swaps and DeFi access for African users
- **Foundation Incorporation:** Legal entity established in Mauritius under the Foundations Act 2012 — FSC supervised
- **DTI & LEI Registration:** Submit Digital Token Identifier and Legal Entity Identifier applications upon FSC registration completion (Q4 2025 – Q1 2026)
- **Sustainability Baseline Report:** Publish estimated environmental metrics for the testnet validator set (Q2 2026)
- **SIP Framework Publication:** Publish the Safrochain Improvement Proposal process documentation and template at `https://docs.safrochain.com` (Q1 2026)
- **Airdrop Strategy:** Define eligibility criteria, snapshot dates, and distribution mechanics for the genesis community airdrop
- **Security Audit #2:** Third-party audit of all custom modules before mainnet

11.2 Mainnet Launch (Q3 2026)

Mainnet genesis marks the transition from community-governed testnet to a fully live, production blockchain. Day-one deliverables include: active validator set, SAF deployed, Safrimba tontines on mainnet, IBC channels open, and the DAO treasury funded and under token-holder control.

12 Safrochain Foundation

The Safrochain Foundation is the legal entity dedicated to the development, governance, and sustainable fund management of the Safrochain ecosystem.

12.1 Legal Structure

Registered	Governance	Treasury
Mauritius	4 Council Members	Public Multisig
Foundations Act 2012	12 Team Members	On-chain Transparent
FSC Supervised	4-of-6 Multisig	DAO Controlled

12.1.1 12.1b Financial Condition

The Safrochain Foundation was incorporated under the Foundations Act 2012 (Mauritius) and is supervised by the Financial Services Commission (FSC). Share capital and equity position will be disclosed in the Foundation's first annual report, to be published within 12 months of incorporation. The Foundation maintains operational reserves sufficient to fund protocol development, security audits, and ecosystem grants through mainnet launch (Q3 2026) and the 12 months following.

12.1.2 12.1c Legal Entity Identifier

A Legal Entity Identifier (LEI) application will be submitted upon completion of FSC registration. The LEI code will be published at `https://docs.safrochain.com` upon issuance.

12.5 Founding Team

The Safrochain Foundation is governed and operated by a founding team with professional backgrounds spanning blockchain engineering, operations, community development, and go-to-market strategy, with deep experience in African markets and comparable emerging-market contexts worldwide. All council members are named below in accordance with the Foundation's obligations under the Foundations Act 2012 (Mauritius) and as required by institutional disclosure standards.

Full Name	Location	Function
Frédéric Nkundabenshi Samvura	Canada	Co-Founder & Chief Operations Officer
Dan Baruka	Mauritius	Co-Founder & Chief Technology Officer
Josephine Ndeze Uwase	Mauritius	Executive Director
Eliel Mathe	Kenya	First Technical Advisor
Zedeal Group Hub Ltd	Mauritius	Legal Secretary

Table 13: Founding team and legal secretary (disclosure roster).

Frédéric Nkundabenshi Samvura — Co-Founder & Chief Operations Officer

Frédéric co-founded Safrochain with a mandate to build the operational infrastructure required to bring a community-first blockchain to production. Based in Canada, he brings cross-continental experience bridging diaspora and emerging-market communities with global decentralized technology ecosystems. At Safrochain, Frédéric oversees Foundation operations, treasury governance, strategic partnerships, and the coordination of testnet-to-mainnet execution.

Dan Baruka — Co-Founder & Chief Technology Officer

Dan co-founded Safrochain and leads all technical architecture and protocol development. Based in Mauritius, he is responsible for the Cosmos SDK implementation, CometBFT consensus configuration, CosmWasm smart contract modules, and IBC integration, aligned with open-source norms and interoperability expectations shared across the global Cosmos ecosystem. Dan leads the engineering team through testnet, security audits, and the mainnet genesis launch planned for Q3 2026.

Josephine Ndeze Uwase — Executive Director

Josephine serves as Executive Director of the Safrochain Foundation, holding legal and operational accountability for the Foundation's activities under Mauritius law. Based in Mauritius, she oversees Foundation governance, FSC regulatory compliance, fund allocation, and the Foundation's public institutional relationships with stakeholders regionally and internationally. Josephine ensures that the "We The People" governance mandate is implemented with transparency and accountability at every phase.

Eliel Mathe — First Technical Advisor

Eliel serves as Safrochain's First Technical Advisor, providing expert guidance on protocol architecture, validator infrastructure, and the Cosmos ecosystem. Based in Kenya, he combines hands-on experience with deployments in East Africa with broader practice in how global validator sets, relayers, and upgrades behave under real-world bandwidth and uptime constraints—insights that inform Safrochain's mobile-first and light-node priorities without limiting participation to any single geography. Eliel advises the engineering team on network security, upgrade coordination, and IBC relayer operations.

Zedeal Group Hub Ltd — Legal Secretary

Zedeal Group Hub Ltd is a Mauritius-based corporate services firm serving as Legal Secretary to the Safrochain Foundation. Zedeal provides registered office services, statutory compliance, and Foundation administration under the Foundations Act 2012, ensuring that the Foundation meets all FSC supervisory requirements throughout its operational lifecycle.

12.5.1 Governance and Accountability

No single founding team member holds unilateral control over the Foundation treasury or protocol governance. All treasury movements require a 4-of-6 multisig from designated council members as specified in Section 12.2. On-chain governance proposals require the thresholds defined in Section 4.5 and are open to all SAF token holders regardless of their relationship to the founding team.

Role bucket	Share	SAF	Cliff / vesting
Founder	8%	80M	6 mo cliff; 24 mo linear
Early Tech Developers	4%	40M	3 mo cliff; 18 mo linear
Early Management Team	2%	20M	6 mo cliff; 18 mo linear
Strategic Advisor	1%	10M	3 mo cliff; 12 mo linear

Table 14: Team category allocation within the 15% Team tranche (summary).

Total Team allocation: 15% (150,000,000 SAF), structured for long-term alignment and enforced at protocol level.

Token allocations held by the founding team — specifically the Team category (15% of total supply, 150,000,000 SAF) — are subject to the vesting schedules defined in Section 7.5, with a 6-month cliff and 24-month linear vesting for founders and a 6-month cliff and 18-month linear vesting for early management. These schedules are enforced at the protocol level and cannot be modified by the Foundation without an on-chain governance vote.

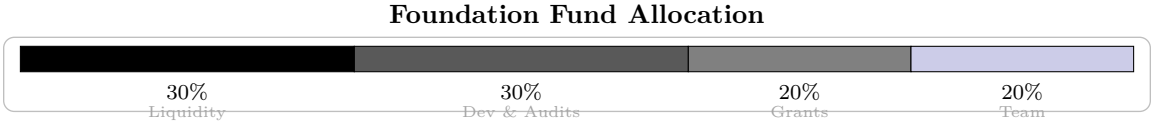
- Founders hold 8% with the longest vesting window (24 months) among team categories.
- Technical contributors are incentivized with a dedicated allocation and competitive vesting terms.
- Treasury and team positions are secured with multi-signature wallets where applicable.

Council members with SAF token allocations must abstain from any on-chain governance proposal that would exclusively and directly benefit their personal token position. This restriction is recorded in the Foundation's bylaws and enforced through the governance implementation policy described in Section 9.2.

12.2 Multisig

The Foundation will use **multisig** for treasury operations.

12.3 Fund Allocation



12.4 Foundation Purpose

- **Technical Development:** Mainnet launch, security audits, and protocol upgrades
- **Ecosystem Support:** Grants for dApps, developer bounties, and strategic partnerships

Category	Share	Purpose
Liquidity	30%	DEX and CEX market-making, SAF peg stability
Dev & Audits	30%	Protocol development, security audits, infrastructure
Grants	20%	dApp bounties, ecosystem builders, research
Team	20%	Core contributors compensation

Table 15: Foundation fund allocation across strategic categories.

- **Infrastructure:** Validators, full nodes, and IBC relayer operations
- **Adoption:** Africa-first outreach, onboarding programs, and emerging-market expansion

No single party controls the treasury. All fund movements require a 4-of-6 multisig from designated council members and are publicly verifiable on-chain. The Foundation's long-term goal is to transfer full governance authority to the token-holder community as the ecosystem matures.

12.5 Conflicts of Interest

The following potential conflicts of interest are disclosed:

- Foundation council members hold SAF token allocations subject to vesting schedules defined in Section 7.5. Council members may not vote on governance proposals that directly and exclusively benefit their personal token positions.
- The founding team holds 15% of total SAF supply (150M SAF) subject to a 6-month cliff and 24-month linear vesting. This creates alignment with long-term network success, while also creating meaningful early governance influence.
- The Foundation multisig requires 4-of-6 council signatures. No single individual controls treasury movements.
- There are no arrangements under which any third party has paid or agreed to pay the Foundation in exchange for favorable protocol treatment, token allocation, or governance outcomes.

12.6 Applicable Law and Competent Court

The Safrochain Foundation is incorporated under the Foundations Act 2012 (Mauritius) and regulated by the Financial Services Commission of Mauritius. All disputes involving the Foundation, its treasury operations, or obligations arising from this whitepaper are subject to the jurisdiction of the Courts of Mauritius, in accordance with Mauritius law.

SAF operates as a decentralized, open-source blockchain asset with no single issuing entity. Applicable laws governing SAF transactions, trading, staking, and user compliance depend on the legal requirements of each user's jurisdiction. Users are solely responsible for determining and complying with the regulations applicable to them.

13 Conclusion

Safrochain is more than a blockchain.

It is a call to action. Africa deserves tools designed for its realities and ambitions. By aligning technology with community, commerce, and culture, we are building a decentralized foundation for a united continent.

Join us. Build with us. Become Safrochain.

13.1 Summary

This whitepaper has outlined the vision, design, and roadmap of Safrochain:

- **Vision and mission.** An African-centered L1 built on the Cosmos SDK to foster financial and cultural sovereignty, targeting emerging markets, grassroots savings (e.g. tontines), agriculture, remittances, and creative economies.
- **Technology.** Cosmos SDK and CometBFT, with IBC for interoperability, WASM smart contracts, token factory, NFT and fee-sharing modules, and a fixed minimum gas price (e.g. 0.002 usaf) for predictable costs.
- **Tokenomics.** A fixed supply of 1 billion SAF; 2% annual inflation for the first five years; clear allocation (DAO, community, team, ecosystem, public sale, liquidity, treasury, partners) and vesting schedules for all stakeholder categories; fee burn and revenue sharing to align long-term incentives.
- **Governance.** On-chain, staker-driven governance for parameter changes, upgrades, and treasury spending; the Foundation supports bootstrapping and education while the network remains decentralized.
- **Roadmap and foundation.** Phased rollout from testnet to mainnet and ecosystem growth; a dedicated foundation for grants, partnerships, and multisig-managed treasury.

The vision articulated here is not a distant aspiration — it is an active construction, built block by block, community by community, across Africa and the diaspora. Every validator who joins, every tontine that settles on-chain, every artist who mints their first NFT, and every entrepreneur who sends a cross-border payment brings Safrochain closer to its purpose.

13.2 Next Steps

Stakeholders can engage by running nodes or validators, staking SAF, participating in governance, building dApps (e.g. Safrimba for payments and remittances), or contributing to documentation and community efforts. Technical details, CLI usage, and trading-bloc context are summarized in the Glossary; the roadmap and foundation sections describe timelines and funding channels.

13.3 Disclaimer

This whitepaper is for informational and educational purposes only. It does not constitute financial, legal, tax, or investment advice. SAF and any products or services described herein may be subject to regulatory uncertainty or change in one or more jurisdictions. Readers should conduct their own research and seek professional advice where appropriate. The Safrochain Foundation and contributors do not guarantee any particular outcome, adoption, or performance of the network or its tokens.

13.4 Risks and Limitations

Offer-related risks. SAF has no guaranteed liquidity at launch. Price is subject to high volatility driven by market sentiment, macroeconomic conditions, and speculative activity. Exchange listings are not guaranteed. Thin early liquidity may make it difficult to buy or sell SAF at expected prices.

Issuer-related risks. The Safrochain Foundation is a newly established legal entity without a multi-year operating track record. Key-person dependency exists in the founding team during the pre-mainnet phase. The Foundation's ability to fund operations depends on treasury token allocations whose market value is uncertain at launch.

Token-related risks. SAF may lose value in part or in full. It may not be accepted as a means of payment outside the Safrochain ecosystem. Stablecoin peg operations carry reserve and redemption risks as described in Section 7.1.3. Holders are responsible for self-custody; loss of private keys results in permanent loss of funds.

Project implementation risks. Mainnet launch may be delayed beyond Q3 2026 due to audit findings, governance coordination delays, validator onboarding challenges, or regulatory developments. Protocol upgrades require community consensus and may be delayed or contested.

Targeted use cases depend on real-world adoption that cannot be guaranteed.

Technology risks. CosmWasm smart contracts may contain vulnerabilities despite audits. IBC relayer failures or bridge exploits could disrupt cross-chain functionality. Validator concentration could reduce decentralization. CometBFT consensus requires sufficient bonded stake participation; if validator participation drops below safe levels, the network may halt. Long-term quantum computing advances may require cryptographic upgrades.

Regulatory and policy risks. Stablecoin treatment, payment licensing, and cross-border compliance requirements may evolve in ways that affect SAF issuance, distribution, or redemption. African trading bloc regulations (ECOWAS, EAC, SADC, COMESA, AfCFTA) are developing and may impose new requirements. Safrochain Foundation does not provide legal or compliance advice to users.

Governance risks. Low participation rates in on-chain votes may result in proposals passing with insufficiently broad consensus. The Foundation veto power, while limited to security and legal emergencies, introduces a degree of centralization during the bootstrapping phase.

Mitigation measures. Security audits before mainnet, IBC interoperability reducing single-chain dependency, slashing mechanisms protecting against validator misbehavior, quadratic voting reducing plutocracy risk, Foundation multisig requiring 4-of-6 signatories for treasury movements, and a phased testnet-to-mainnet rollout with community validators.

Website	**GitHub**	**Community**	**Documentation**
safrochain.com	github.com/Safrochain-Org	Discord & Telegram	docs.safrochain.com

14 Glossary & Appendix

14.1 Glossary

- **SAF** — Safrochain native token. Total supply: 1 billion.
- **usaf** — Base denomination. 1 SAF = 1,000,000 usaf.
- **SAF** — Safrochain token used across transfers, governance, and settlement flows in this document.
- **IBC** — Inter-Blockchain Communication. Protocol for trustless transfers between Cosmos chains.
- **Tontine** — A rotating savings group. Members pool funds; payouts follow a schedule. Safrimba implements digital tontines on-chain.

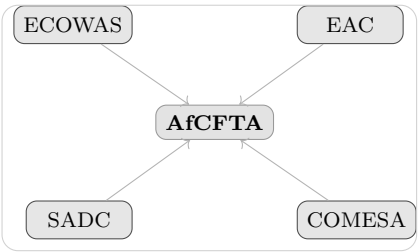
- **CosmWasm** — WebAssembly-based smart contract platform used by Safrochain.
- **CometBFT** — Consensus engine (formerly Tendermint). Provides PoS and instant finality.
- **App-Chain** — Application-specific blockchain. Safrochain is an App-Chain in the Cosmos ecosystem.

14.2 CLI Quick Reference

```
# Key safrochaind commands
safrochaind start              # Run full node
safrochaind tx bank send ...   # Send tokens
safrochaind tx gov submit-proposal ...
safrochaind tx wasm execute ...
safrochaind query bank balances <addr>
safrochaind query gov proposals
safrochaind keys add mykey
```

14.3 Trading Blocs

Safrochain targets compliance with African trading bloc standards:



- **ECOWAS** — Economic Community of West African States
- **EAC** — East African Community
- **SADC** — Southern African Development Community
- **COMESA** — Common Market for Eastern and Southern Africa
- **AfCFTA** — African Continental Free Trade Area

14.4 References

- Cosmos SDK Documentation: `https://docs.cosmos.network`
- CometBFT Documentation: `https://docs.cometbft.com`

- IBC Documentation and Spec: `https://ibc.cosmos.network`
- CosmWasm Documentation: `https://docs.cosmwasm.com`
- Juno Documentation: `https://docs.junonetwork.io`

14.5 Token Identifiers

- **DTI (Digital Token Identifier)** — A unique ISO 24165 identifier for SAF, to be registered upon mainnet launch.
- **LEI (Legal Entity Identifier)** — A unique ISO 17442 identifier for the Safrochain Foundation, to be applied for upon FSC registration.
- **MiCAR** — Markets in Crypto-Assets Regulation (EU) 2023/1114. Safrochain is not an EEA entity but references MiCAR standards as a global best-practice benchmark.
- **CIP / SIP** — Cardano Improvement Proposal / Safrochain Improvement Proposal. SIPs follow the lifecycle Draft → Community Discussion → On-Chain Vote → Implementation.