Ahan : Liquid Staking 2.0 | Bridging DeFi and Real-World Assets with Agro-Commodities

Abstract: This white paper introduces a novel *Web3* and *blockchain-based* liquid staking solution that unlocks the potential of real-world assets (**RWA**s) in Decentralized Finance (**DeFi**). Our platform allows users to put their stablecoins to work by staking them and earning rewards through participation in liquidity pools backed by non-perishable agro-commodities. These commodities represent a stable and uncorrelated asset class, offering diversification and potential risk mitigation for DeFi users. Additionally, the solution leverages liquid staking mechanisms, providing users with readily tradable tokens representing their staked stablecoins and a share of the underlying commodities. Furthermore, we champion the long-term sustainability of smallholder farmers. By deploying stablecoins, our platform facilitates direct purchases from farmers, bypassing middlemen and reducing unnecessary fees. This empowers them to earn more revenue per unit of produce, directly impacting their financial well-being. This approach fosters financial inclusion for farmers and strengthens the entire agricultural value chain through transparent and efficient transactions..

1. Introduction

The rise of **DeFi** has opened new avenues for financial inclusion and innovation. However, the ecosystem primarily relies on volatile crypto assets, exposing users to significant risk. This white paper proposes a solution that integrates the stability of **real-world assets** with the efficiency of DeFi through liquid staking for **agro-commodities**.

2. Problem Statement

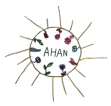
- **Limited access to RWAs** : Traditional DeFi users lack easy access to invest in and benefit from non-crypto assets like commodities.
- **Illiquidity of Staked Assets** : Staking often involves locking assets for extended periods, hindering their utility within DeFi.
- **Volatility Exposure** : The reliance solely on crypto assets exposes users to significant price fluctuations within the DeFi ecosystem.
- **Competition from Traditional Players**: The established dominance of the "Big ABCDs" (Archer Daniels Midland, Bunge, Cargill, and Louis Dreyfus) in agro-commodity trading poses a challenge for new entrants.

3. The Opportunity: Unleashing Stablecoin Potential

The current DeFi landscape presents a unique opportunity for our liquid staking solution. Here's why:

- **Massive Stablecoin Market**: Stablecoins, pegged to fiat currencies, have a commanding market size of **139 Billion USD**, representing a significant **7% of the total crypto market**.
- **Underutilized Stablecoin Yields**: With yields on stablecoins currently below **5%**, there's a large pool of capital seeking better returns.

This highlights a need for innovative solutions that unlock the potential of these underutilized stablecoins. Our platform offers a compelling option for stablecoin holders, allowing them to:



- **Earn Attractive Returns**: Participate in liquidity pools backed by real-world assets with the potential for higher and more stable yields (upto 12%) compared to traditional DeFi staking options.
- **Diversify Portfolios**: Gain exposure to a new asset class (agro-commodities) that offers diversification and potentially mitigates risks associated with volatile crypto assets.

4. Proposed Solution

Our platform introduces a novel liquid staking solution for agro-commodities:

- **Staked Stablecoins**: Users deposit stablecoins (e.g., USDC, DAI) into designated smart contracts.
- **Liquidity Pools**: The deposited stablecoins are used to create liquidity pools backed by physical agro-commodities (e.g., coffee beans, grains, spices).
- **Liquid Staking Tokens (LSTs)**: Users receive LSTs representing their share of the stablecoin pool and the underlying commodities.
- **Daily Staking Rewards**: Stakers earn a portion of the profits generated from the commodities, distributed proportionally based on their LST holdings.

4. Benefits

- **Access to RWAs**: DeFi users gain exposure to a stable and uncorrelated asset class, diversifying their portfolios and mitigating risk.
- **Liquidity**: LSTs are freely tradable on decentralized exchanges, allowing users to access their staked stablecoins without unstaking.
- **Transparency & Security**: The platform leverages blockchain technology for secure and transparent storage of commodity ownership records and transaction history.
- **Real-world Utility**: The platform can facilitate additional functionalities like commodity derivatives or on-chain financing for agricultural producers.
- **Competitive Advantage**: By offering DeFi users access to RWAs with greater liquidity and transparency compared to traditional trading channels, our platform can compete effectively with the Big ABCDs.

5. Technical Architecture

The platform will utilize the following technologies:

- **Smart Contracts**: Automate the creation and management of liquidity pools, allocation of LSTs, and distribution of staking rewards.
- **Blockchain Network**: Provides a secure and transparent environment for recording transactions and asset ownership.
- **Oracles**: Connect the DeFi platform to real-world data feeds reflecting commodity prices and market information.

6. Tokenomics: Ahan DAO (AHAN)

To govern the platform and incentivize participation, a native token called Ahan DAO (AHAN) will be created with a total supply of 1 billion tokens. The distribution will be as follows:

- **Investors (24%)**: This allocation will be distributed to early investors and venture capitalists who provide financial backing to the project.
- **Custodians (12%)**: This allocation is dedicated to the custodians responsible for the safekeeping of the physical agro-commodities backing the liquidity pools.
- **Ahan Foundation (45%)**: This portion will be reserved for the Ahan Foundation, a non-profit entity responsible for platform development, governance initiatives, and ecosystem growth.
- **Team (12%)**: The team allocation will be distributed to the core development team and key personnel to incentivize long-term commitment and platform success.
- **Community (7%)**: The remaining tokens will be allocated to the community through various initiatives such as liquidity mining, airdrops, and bug bounty programs.

6.1AHAN Utility

AHAN tokens will serve several purposes within the Ahan DAO ecosystem:

- **Governance**: AHAN holders will participate in platform governance by voting on proposals related to fee structures, pool creation, and future development initiatives.
- **Staking Rewards**: A portion of platform profits may be distributed to AHAN stakers, further incentivizing token holding and platform participation.

7. Security Considerations

- **Smart Contract Audits**: Rigorous audits by independent security firms ensure the security and functionality of smart contracts.
- **Multi-Signature Wallets**: Secure storage of real-world commodities with a multi-signature wallet system for enhanced control.
- **Decentralized Governance**: Community governance processes allow users to contribute to platform development and decisions impacting risk management.

8. Conclusion

This liquid staking solution unlocks the potential of RWAs in DeFi, offering users access to a stable asset class and providing benefits like liquidity and diversification. By bridging the gap between DeFi and real-world assets with agro-commodities, the platform contributes to a more robust and inclusive financial ecosystem.

9. Future Developments

- Integration with other DeFi applications like lending protocols and derivatives markets.
- Expansion to support a wider range of non-perishable agro-commodities.
- Development of on-chain insurance solutions to mitigate potential risks associated with physical commodities.