WHAT IS ARABLE?

**A SYNTHETIC
FARMING PROTOCOL**

A PLACE WHERE

**FARMERS
PARTICIPATE IN
SYNTHETIC FARMING
AND TRADING
&
MINTERS ISSUE arUSD
STABLE ASSETS**

ARABLE – Litepaper
Revised: June 15, 2022

INTRODUCING ARABLE: A FARMABLE SYNTHETIC ASSET PROTOCOL

Arable is the first **synthetic farming protocol** dedicated to helping yield farmers access the assets and yields of multiple blockchains (such as Ethereum, Avalanche, Solana, or Polygon) from a single chain.

Since summer 2020, **yield farming** has been a tremendous engine for the growth of decentralized finance protocols. In essence, token holders with excess liquidity can provide their assets and stake them or place them in liquidity pools. In exchange, the liquidity providers receive native tokens for participating in the ecosystem as rewards. This helps ecosystems foster deeper liquidity, a prerequisite for the smooth operation of lending platforms or allowing traders to trade on decentralized exchanges.

Many blockchains are now supporting liquidity mining pools and are providing incentive mechanisms, but **transferring the assets between chains takes time, costs fees**, and requires **protocol, chain, and bridge-specific knowledge**. Additionally, moving assets and investing across various protocols is not intuitive and the operational burden and risk are heavy. This may confuse users about which chain they should pledge allegiance to for yield farming and as a result, miss out on farming opportunities.

Synthetic assets (or synths) are essentially tokenized derivatives that tie the value of an asset (the synth) to an already existing asset without owning the underlying asset. They are similar to derivatives in traditional finance but take the process one step further by creating a record on the blockchain, which adds security and traceability. Additionally, they solve the interoperability problem and its complications in trading across multiple chains. For example, since the asset issuance format is different between Ethereum and Solana, assets cannot be cross-leveraged. Synthetic assets solve this problem by **replicating the assets** on the target blockchain in the desired format.

ARABLE's goal is to provide an environment where yield farmers can **access and intuitively use all the crypto farms on a single chain**, where the users receive the **same rewards as they would on native chains**. The environment is supported by incentivized collateral providers (also known as minters).
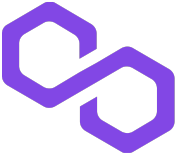
As yield farmers, we are acutely aware of the issues faced by the community because of the differences between chains: security risks, operational risks, technological differences between chains, liquidity fragmentation, fees, etc. We are convinced that

synthetic farming will provide a breakthrough in yield farming and enable new ways to **create, collateralize, and use any asset in productive ways**.

WHY DO WE THINK ARABLE IS CRUCIAL IN TODAY'S DEFI ECOSYSTEM?

1. Market fragmentation

For DeFi (decentralized finance) users, making sense of the **unfolding multi-chain universe** is becoming increasingly difficult. For example, yield farmers can choose from the following chains today, among many others:

Ethereum	Cosmos	Avalanche	Polygon	Solana

Although the abundance of choice is a **positive** for yield farmers, it also **creates the following issues**:
- **Technical complications** unique to each platform
- **Learning curve** to leverage the technologies available
- Increased **risk of technical failure** due to the multiple tools used

Giving access to all the cross-chain assets and farms on a single chain can **streamline and simplify the workflows of DeFi users**.

2. Strategy optimization

As popular projects such as yearn.finance have demonstrated, **consolidating** yield farming activities on a single platform creates many benefits, such as cost savings (gas) and economies of scale, and can capture a more significant portion of rewards. ARABLE allows yield farmers to utilize synthetic assets and farms to let them gain efficiency by using a single chain.

3. ARABLE's unique value proposition

Today, many platforms allow yield farmers to aggregate yield chain by chain. However, no platform allows such aggregation for **cross-chain assets and farms**.

The key components of the ARABLE platform will be:
- An intuitive **dashboard** where yield farmers have an overview of their yield generating stakes, liquidity pools, or synths
- **Synthetic assets**, such as arETH, arCRV, which mirror existing assets and are unique to ARABLE
- **Synthetic farms**, through synthetic farming users can access multiple crypto farms on a single chain.

Synthetix has proven that **synthetic assets** are secure enough and that they can be used for trading. Therefore, synthetic assets are not a foreign concept to most yield farmers.

However, the challenge is building a system that guarantees farming rewards for the assets minted. In other words, an incentive system that allows the creation of sustainable **synthetic farms**.

The core logic is to create an environment of **synthetic liquidity** in which **synthetic assets** can be created that exist on an alternative chain:

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- **Minters mint the stable asset arUSD** and are responsible for the collateralization of the minted assets and the rewards paid out to yield farmers. This arUSD liquidity facilitates the ability of the protocol to mint other synthetic assets for trading and farming.

- The protocol uses an oracle service for asset prices and yield calculation. For example, suppose the asset arSOL (a synth for SOL on ARABLE) is minted on the Avalanche network. In that case, minters should be responsible for backing the arSOL staking rewards, which are automatically given to farmers. The minters' debt is automatically increased proportionally based on minted arUSD.

TECHNICAL IMPLEMENTATION

1. What are "synthetic assets"?

First, it may be helpful to clarify what synthetic assets are.

Synthetic assets are derivatives of existing assets in a specific environment. In our case, **"synths"** (short for synthetic assets) are assets that were originally created on another blockchain. For example, ETH is the native token of the Ethereum network, and it will exist as **arETH** on the ARABLE protocol.

All synthetic assets at Arable are backed by over-collaterized minting of **arUSD**, a stable asset pegged to the USD.

Synthetic and derivative assets are a multi-trillion dollar **market in traditional finance**, which has barely been tapped in the blockchain space.

We believe facilitating the minting of such assets would unlock **a new era of yield farming** and be a material contribution to the growth of the blockchain ecosystem.
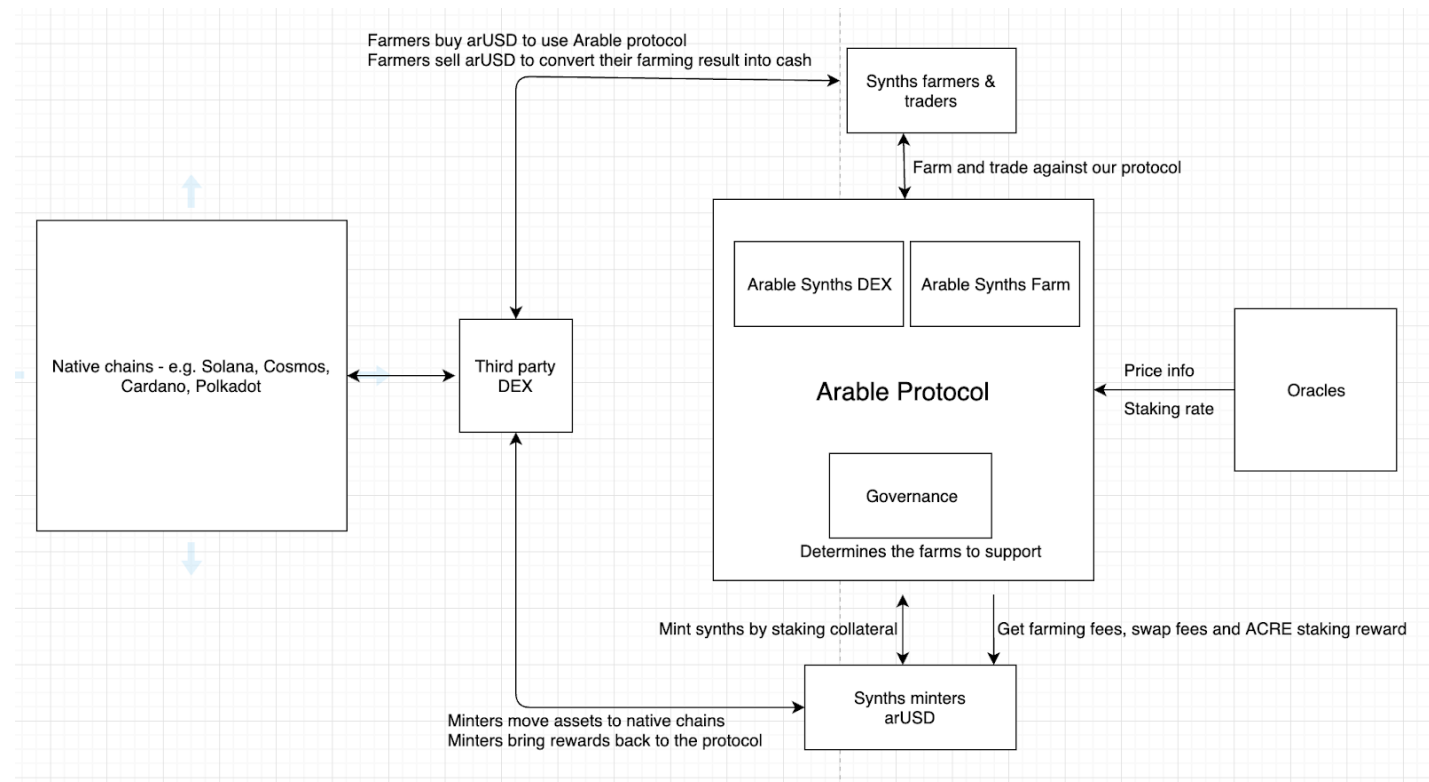
Comparison with other solutions

Technical Solution	Examples	Comments	Arable
Bridges	Avalanche, Polygon…	Allowing the transfer of assets from one chain to the other is useful, and allowing them to be farmed is the next logical step.	Arable allows the farming of all cross-chain assets, creating new possibilities for their usage.
Wallets	C98…	Multi-chain wallets are useful but offer limited capabilities for farmers.	Arable allows the consolidation of assets and provides many additional features.

Synthetic assets	SNX	Existing platforms allow the trading of synths, but not their farming	Enabling the use of synths for yield farming unlocks new possibilities for liquidity providers

2. Synthetic asset minting process

The minting process relies on the following components of the platform:

- **arUSD minting application** including secure oracle integration

- A **zero slippage DEX platform** that supports Arable synths

- A **generalized and intuitive farming interface**

- A **governance system** that puts the future of the protocol in the hands of its stakeholders.

KEY TERMS

ACRE: The native protocol token.

ARABLE: The name of the protocol.

arBTC: A synthetic derivative of BTC.

arETH: A synthetic derivative of ETH.

Farm: Is the action of providing assets or liquidity to a system, and receiving native tokens as an incentive.

Mint: The minting is the issuance process of arUSD on ARABLE.

Synths: Short for synthetic assets. Synths are assets that are a derivative of another existing asset.

LINKS

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Twitter: @ArableProtocol

Telegram: @ArableProtocol

Discord: https://discord.gg/arable