Arable FAQ [Draft]

Abstract

Arable is a decentralised farmable synthetic asset issuance protocol. These synths are collateralized by ACRE (Arable native token). This pooled collateral model enables users to perform exchange and farm synths with the smart contract. This mechanism solves the time and fee issues experienced in current farming experience.

Synthetix already has proven that synths are secure enough to exist for trading.
Therefore minting traditional synths is not a problem. The challenging problem is to come up with an economic model of where the rewards from farming should be generated.

Generally, Farming consists of single token staking and liquidity mining.
The core logic is to create synths on a network that exists on the alt-chain. Synths minters are responsible for fully backing the amount of minted assets and the rewards to be given to yield farmers. E.g. If $arSOL$ (Arable's synth for Solana) is minted on Avalanche network, minters should be responsible for backing $arSOL$ staking rewards are automatically given to farmers, and the minters' debt is automatically increased. This solution needs to cooperate with an oracle service for specific asset's price and farming rewards information.

FAQs

- **What products will be exist on the protocol**
  - ACRE airdrop application [Will be ready before token launch]
  - ACRE staking and liquidity mining application [Will be ready before token launch]
  - Synths minter application for stakers
  - Zero slippage DEX platform that supports arable synths based on oracle price
  - Generalized farming application connected to oracle for APY
  - Governance system
  - Universal cross-chain bridge - zero slippage swap between same synths $arSOL_{Avalanche}$ / $arSOL_{Polygon}$ / $arSOL_{Cosmos}$, and also with native token$arSOL$/ SOL
- **Where minters get ACRE tokens?**

Minters get ACRE tokens from airdrop if they previously hold AVAX or PNG, Buy on DEX or get ACRE rewards from staking and liquidity mining.

- **Are minters actually profitable?**

Minter profit = P_{minter}

ACRE staking rewards for minter = SR_{minter}

Farming reward for minted synths = FR_{synths}

Synths Farming and Trading fees paid by farmers = Fee_{synths}

Synths Minted amount = $Synths_{minted}$

Bridging fee for minted = $BridgeFee_{minted-synths}$

Bridging fee for reward synths = $BridgeFee_{reward-synths}$

$$P_{minter} = SR_{minter} - FR_{synths}$$

If they do mirrored farming on native chain, their profit will be

$$P_{minter} = SR_{minter} + Fee_{synths} - BridgeFee_{minted-synths} - BridgeFee_{reward-synths}$$

Here, the **bridging fee** is related to the amount of tokens moving from native chain to synths chain or synths chain to native chain.

If a person is already doing farming on a native chain already for the amount he minted on synthetic chain, the reward is calculated like below

$$P_{minter} = SR_{minter} + Fee_{synths} - BridgeFee_{reward-synths}$$

In the future we are looking to build a zero fee bridge by incentivizing bridge nodes with ACRE tokens. At that time the profit is calculated like below

$$P_{minter} = SR_{minter} + Fee_{synths}$$

This way minters won’t get any risks, other than the issue of liquidation for sudden price changes for ACRE and synths’ price volatility.

To help minters from liquidation risks, protocol could make a delay on liquidation until it reaches, super-min-collateralization-ratio for well known minters who join Arable insurance.

- **What security problems exist for minters?**

  As in synthetix, synths minters will be getting risks of price volatility of synthetic assets and the native token ACRE.

  To reduce risks, we will be introducing a stable coin collateral model as well to help minters to look after only synths' price volatility.

- **What security problems exist for farmers?**

  The issue that the farmers can get is minters' collateral could have been liquidated for price volatility. At the time of liquidation, farmers will get the synths locked on the contract fully back to their wallet along with the percentage of liquidated ACRE as rewards to let them have time to rebuild their portfolio.

  To prevent liquidation events, protocol will introduce insurance for important assets that are not needed to be liquidated.

- **What is the limitation of this solution?**

  The liquidation could be the limitation of this solution, protocol insurance could help with this.

- **How does it work for native token hacks?**

  If native chain is hacked, the price of native token goes down a lot and the supply of token goes to a hacker. Hacker can sell that amount on native-chain and other exchanges but since our protocol is synths, they don't have a way to sell that amount on our liquidity.

  To secure farmers, we could introduce insurance farming to provide farmers to be able to get their tokens back at the time of price before hack.

  For minters who lost a lot from mirroring, insurance ACRE tokens will be given to those members.

- **What should be the penalty duration for liquidation?**

  It should be different by asset and the native staking pools. Minimum penalty duration could be 3 days to give time to stakers.

- **How much percentage of synths should be in DEX and how much percentage in farming?**

  Since we provide zero slippage DEX, the protocol will natively burn and mint tokens for synths for swap rather than using liquidity like Uniswap.

- **What is the detailed liquidation flow?**

  Liquidators find the position and initiate liquidate transactions.

Liquidation is done per address. Liquidation is not done fully, the liquidation amount will be done until the c-ratio meets target ratio.

To avoid all of the minted synths to be in farm, we will need to keep the specific percentage of synths to be available on external platforms for trading rather than putting all for farming.

In case there isn't any liquidity for synths as all are on farm, we need to figure out how to resolve the liquidations. This is usually when the farm is pretty unhealthy.
Unhealthy farms could be paused or closed by governance.

When the farm is unhealthy and closed by governance, liquidated ACRE will be used to pay farmers and liquidators.

The detailed flow for the liquidation event for Synthetix can be found here.

- **What ratio should be maintained between protocol farming TVL and ACRE liquidity to make the protocol secure?**
  Need to be discussed with finance experts. By design, TVL is not able to overflow ACRE_staked_amount / liquidation_threshold_collateralization_ratio.
- **Where the actual bridge fees should be given?**
  As described before, when there are bridges for synths and native assets, bridge fees will be given in ACRE for bridgers.
  But before the bridge, ACRE staking rewards are pretty high for its tokenomics mechanism and it’s enough for paying the bridge fee.
- **What are the collaterals to be used for minting Arable synths?The collateral and Debt for minters (stakers)**
  As a first stage, only ACRE token is used as collateral to mint synths. After some time, other tokens like USDT or synths itself could be used as collateral after serious consideration - the rewards will be given in ACRE if he maintain the c-ratio
- **What is Debt on Arable protocol?**
  The debt is how much synths minters minted on the protocol
- **Is it okay to combine all collateral in a single pool?**

Liquidation is done per address. Which asset of farmers should be returned back to USDT or in ACRE? It should be discussed with financial advisors.

- **What kind of users are on the protocol and what are their rewards and the roles?**
  Minters (Stakers): Get ACRE, stake it, mint synths, sell synths on Arable DEX and do mirror actions on native chain to get ACRE staking reward and service fee from synths farmers.
  Farmers: Buy synths from Arable DEX and do staking or yield farming to get the same yield they can get from native chains - farmers need to pay a specific fee to minters for minting synths.
  Liquidators: Watch the liquidatable positions of minters that collateralization ratio does not meet and liquidate, liquidators get rewards per liquidation event.
  ACRE LPs: Provide liquidity to ACRE token on DEX and lock it on the liquidity mining contract to get liquidity mining rewards.
- **What if synths are minted based on farming requests and mint when mirrored assets are already created by verified members?** It will take time for farmers but minters will be better but protocol is built for farmers and minters would need to provide the best environment for farmers and for that they are getting high rewards.
- **What kind of actions exist on the protocol?**
  ACRE staking - staked ACRE is collateral for minting synths, should we split the staking pools per synths or combine them all into one? If we combine all, the debt would be hard to manage. Staking should be splitted based on the synths. For important synths with high APY, should people be rewarded more?
  If a minter is doing mirrored farming on the nativenetwork, it could be registered on off-chain, so that others can check what pools are missing.
  ACRE unstaking - unlock duration could be 21 days for security.
  ACRE rewards for stakers - only people who minted synths will get this reward that maintain the good collateralization ratio.
  ACRE LP staking: LP staking will be mostly high at initial and after some time when trading fee is high enough and the liquidity is enough, more will be given to stakers (synths minters).
  Minting synths: Is it risky to give collateral for high reward synths? No. The minters get more rewards from the farming fees as long as they provide more profitable farm tokens as synths.
  Burning synths: Farmers can buy synths for the amount minted by minters.
  Synths staking: Farmers can farm any synths on the pools provided by the protocol.

Synths unstaking: Unlock duration should be set based on native chain unlock duration + bridging time + little margin.

Synths farming rewards - whose debt should be increased for the token rewards given to the farmer? The debt of minters who minted the synths should be increased proportionally based on minted amount.

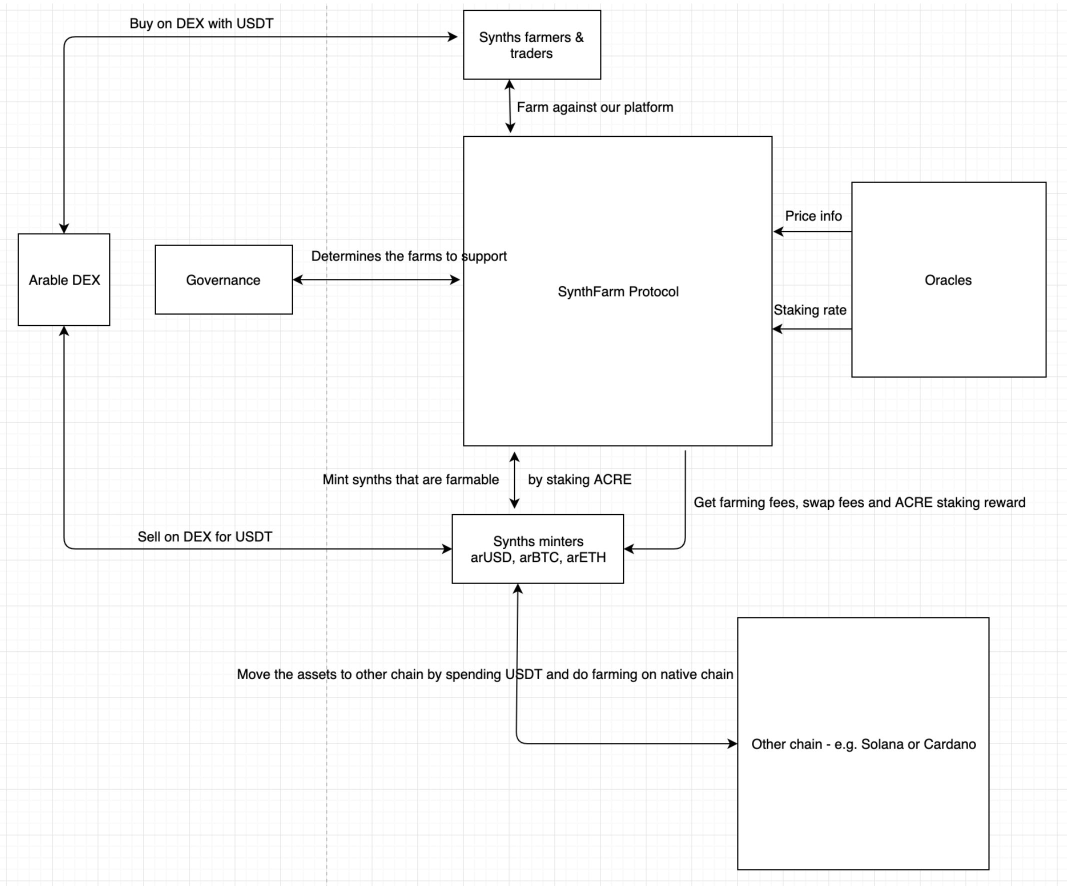
ACRE rewards for farmers: This is just for bootstrapping farmers and the rewards won't exist after a specific period of time when protocol reaches enough farmers.

- **What is a detailed flow for minters (stakers) to participate in?**
  - To mint synths on our platform, minters need to purchase our native token – ACRE (synths farm token).
  - The platform doesn't care if minters do actual farming on the native network but recommends them to run action on native chains to not lose their assets for giving farming rewards to farmers.
  - The profit minters get while running the service on our platform is
    A. They get ACRE as reward based on the amounts of synths they have minted
    B. They get synths itself that is spent by users for trading fee and farming fee
  - Minters could lose assets while moving assets either when using centralized exchange or decentralized exchange or cross-chain bridge.

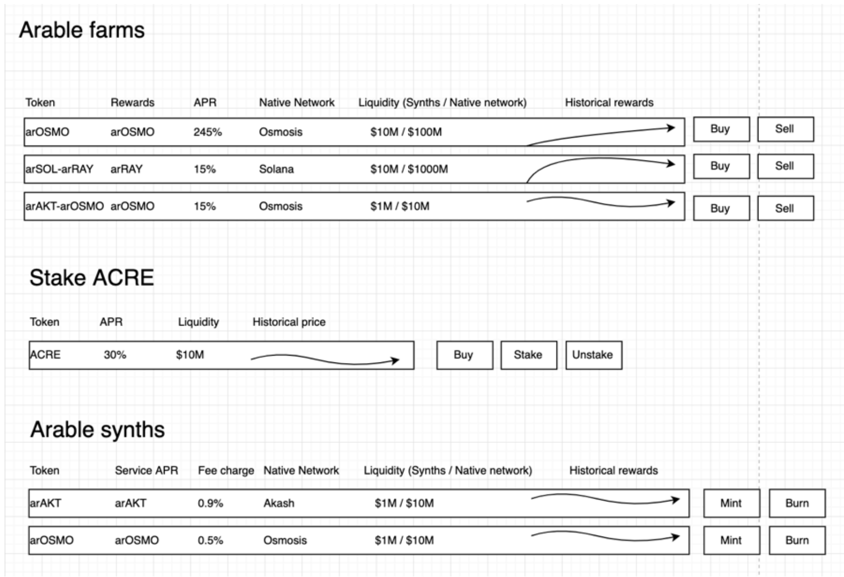
- **What is the FAQ for farmers**
  - Farmers provide 0.9% of their farming and trading fees to minters as without minters, they can't do farming of the assets. It's similar to the commission rate on delegated proof of staking systems.
  - Farmers provide 0.1% of their farming and trading fees to the protocol developers to incentivize developers to build a better system.
  - Arable incentivizes farmers to do farming on the protocol with ACRE tokens.
  - Yield farmers can farm other ecosystem's assets with nearly the same APY without using cross-chain bridges – e.g. they are not needed to cross Polkadot, Cardano, Cosmos, Solana and those bridges that they feel are inconvenient.
  - Other ecosystem assets like SOL or ATOM can be used widely in Avalanche based DeFi applications – No popular DeFi apps are not available on the Cosmos ecosystem, but these assets can be used on popular apps like Compound or Aave.

- Traders can trade various of assets without chain variers and high trading and bridge fees – and reduce time for setting up

- **Arable workflow**



- **Arable minter app wireframe**



- **Social links**

  https://github.com/ArableProtocol/arableintro/blob/main/Arable%20Protocol%20%5BDraft%5D.pdf - Arable paper

  https://github.com/ArableProtocol/arableintro/blob/main/Arable%20FAQ%20%5BDraft%5D.pdf - Arable FAQ

  https://arablefi.com - Website

  https://medium.com/@ArableProtocol - Medium

  https://github.com/ArableProtocol - Github - source code is closed until launch

  https://discord.gg/CwW8fVwVxe - Discord

  https://t.me/ArableProtocol - Telegram

  https://twitter.com/ArableProtocol - Twitter

  https://www.linkedin.com/company/arable-protocol - Linkedin

  contact@arablefi.com - Contact email

  https://docs.arablefi.com/ - Protocol docs