ZERNOFI

WHITEPAPER · V1.0

Real Crops. Real Yield. Zero Volatility.

The first RWA aggregator bringing tokenized Ukrainian agricultural assets to Solana — earning real USDC yield from verified wheat and snail farms.

Built for **Solana Global Hackathon** · RWA Track

May 2026

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Executive Summary

> ZernoFi is a Solana-native RWA aggregator that lets crypto investors earn stable USDC yield from real agribusinesses — without exposure to token volatility, lockup prisons, or banking gatekeepers.

Global agriculture suffers from a chronic financing gap. Farmers wait weeks for capital while seasons don't. Meanwhile, crypto investors are exhausted by reflexive token emissions and circular yield. **Real-World Assets (RWA)** bridge these two worlds — and Solana, with sub-second settlement and negligible fees, is the natural rail.

ZernoFi tokenizes the future harvest of verified Ukrainian farms into investment pools. Investors deposit USDC, earn yield from actual crop sales, and additionally farm **$UAAGRO** — our governance and yield-boost token. Every farm is verified by on-chain oracles (Pyth / Switchboard) and legal documents stored on IPFS.

18–24%	$100	~400ms	3-layer
TARGET APY IN USDC	MINIMUM ENTRY	SOLANA SETTLEMENT	RISK PROTECTION

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The Problem

A $160 billion gap

According to the World Bank and FAO, the global annual financing gap in agriculture exceeds **$160 billion**. Farmers — especially mid-sized operations — cannot access bank capital quickly enough to fund seasonal operations: seeds, fertilizer, fuel, equipment, labor.

Two broken markets meet

For agriculture: bank financing takes 30–90 days. Harvest windows don't wait. Loan approval is opaque, paper-heavy, and demands collateral that small farms lack.

For crypto investors: "real yield" usually means yield denominated in a token whose price collapses faster than the yield accrues. Stable yield in stablecoins, backed by physical assets with cash flows, barely exists.

Why no one has solved it

- **TradFi:** $50,000+ minimum tickets, opaque reporting, illiquid lockups
- **Existing RWA protocols:** mostly US Treasury bills or real-estate — minimal exposure to agri-cashflows
- **Generic DeFi:** circular tokenomics — yield paid in the same token that's diluting

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The ZernoFi Solution

A single aggregator platform where verified agribusinesses tokenize future harvests as USDC-denominated investment pools — settled by Solana smart contracts.

How a pool works

- **1. Farm verification.** Legal docs (land titles, contracts) uploaded to IPFS. Harvest oracles via Pyth / Switchboard.
- **2. Pool deployment.** Anchor smart contract deployed with target raise, term (6–12 months), and target APY.
- **3. Investor deposit.** Users supply USDC, receive a pool token representing their share.
- **4. Harvest cycle.** Farm operates. ZernoFi monitors via oracles and physical audits.
- **5. Distribution.** Crop sold (often to pre-arranged buyer). Proceeds convert to USDC. Dividends distributed pro-rata.
- **6. Bonus:** Throughout the cycle, investors farm **$UAAGRO**.

KEY DIFFERENTIATOR

Yield is paid in **USDC, not $UAAGRO**. The base return is decoupled from our token's price. $UAAGRO is purely upside — boost, governance, secondary liquidity.

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$UAAGRO Token

$UAAGRO is the platform's utility and governance token. It is **not** required to earn yield — it amplifies it.

Utility

FUNCTION	MECHANISM
Yield Boost	Stake $UAAGRO → pool APY increases by +3 percentage points (e.g. 18.5% → 21.5%)
Early Access	48-hour priority window on new pools — limited high-margin exotic farm allocations
Governance	Vote on new pool whitelisting, fee structure, and reserve-fund deployment
Fee Discount	Up to 10% reduction in platform fees for holders of 5,000+ $UAAGRO
Liquidity	Listed on Jupiter / Raydium — exit by selling $UAAGRO, no waiting for harvest

Tokenomics

PARAMETER	VALUE
Total Supply	1,000,000,000 $UAAGRO
Standard	SPL Token (Solana)
Community Yield & Staking	45%
Ecosystem Growth & LP	25%
Core Team & Advisors (4-yr vest)	15%
Private Sale	10%
Public IDO	5%

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Market Opportunity

$160B	$2.5B	$11M
TAM	SAM	SOM YEAR 1–3

TAM — Total Addressable Market

Annual global agricultural financing gap, per World Bank & FAO research. Total volume of capital farmers seek but cannot access through traditional banking.

SAM — Serviceable Available Market

Tokenizable share of Ukrainian agricultural exports (~$25B/year) plus European RWA-DeFi opportunity. We estimate ~10% is realistically tokenizable for working-capital cycles.

SOM — Year 1–3 Target

Based on confirmed partner pipeline:

- **5–7 snail farms** — niche, high-margin, EU export-grade ($5–10M Ukrainian annual export)
- **10 wheat producers** — scalable, comprehensible asset class ($1–2M per 3,000–5,000 ha season)
- Total target TVL: **$11–15M** by end of Year 2

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Competitive Advantage

FEATURE	TRADITIONAL DEFI	TRADFI AGRI	ZERNOFI
Yield Source	Token emissions	Crop sales	**Crop sales**
Settlement	Minutes / Hours	30–90 days	**~400ms**
Entry Minimum	None	$50,000+	**$100**
Volatility Risk	Extreme	Low–Medium	**Low (USDC)**
Transparency	Smart contract only	Bank-opaque	**On-chain + IPFS**
Liquidity	DEX pools	Locked	**$UAAGRO on Jupiter**

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Technical Architecture

Smart contracts (Anchor framework, Solana)

- **PoolFactory:** deploys individual pool contracts upon governance approval
- **Pool:** handles deposits, share-token minting, harvest distribution
- **UAAGROStaking:** tracks $UAAGRO stake balances and yield-boost eligibility
- **Treasury:** manages reserve fund and platform fees

Oracle layer

Pyth Network supplies real-time prices for wheat, EU snail markets, USDC. **Switchboard** handles custom data feeds — verified harvest volumes, on-site audits, insurance-status updates.

Off-chain verification

- Land titles & lease agreements — hashed and stored on IPFS, referenced on-chain
- Insurance policies — verified by independent agronomic auditors before pool deployment
- Quarterly on-site visits documented and reported to governance

Frontend & UX

Wallet integration: Phantom, Backpack, Solflare. The investor dashboard tracks active positions, accrued USDC dividends, $UAAGRO balance, staking status, and transaction history. Built mobile-first.

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Risk Framework

Agricultural investment carries real risks. We mitigate — we don't pretend they don't exist.

Triple-layer protection on every pool

LAYER	COVERAGE
Physical crop insurance	Covers weather, disease, fire — claims pay directly to the pool
On-chain reserve fund	5% of every pool's raise diverts to a shared reserve for shortfall events
Smart contract audit	Independent Anchor audit before mainnet deployment of every new contract version

Risk categories & treatment

Production risk

Weather, disease, equipment failure → covered by crop insurance; reserve fund tops up shortfalls; geographic diversification at protocol level.

Market risk

Crop price drops between planting and sale → partial pre-sale agreements with EU/Asian buyers locked in before pool deployment.

Operational risk

Farm management failure → quarterly on-site audits, milestone-based fund release (not all capital released at deposit).

Smart contract & regulatory risk

Anchor audit, bug bounty, time-locked admin functions, multi-sig treasury. Legal structure in an established jurisdiction; ongoing legal counsel for evolving DeFi / RWA regulation.

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Roadmap

PHASE	MILESTONE	STATUS
Q2 2026	Protocol launch — Wheat & Escargot pools live on Solana	Now
Q3 2026	$UAAGRO listing on Jupiter — Yield Boost activated	In progress
Q4 2026	Independent security audit published	Planned
Q1 2027	Scale to $11M TVL — 5–7 snail farms + 10 wheat producers	Planned
Q2 2027	Cross-chain bridge for non-Solana investors	Planned
Q3 2027	International expansion — new crops, regions, full DAO	Planned

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Team

ZernoFi is led by a small, focused co-founding team combining Web2 operational experience with deep data and analytics expertise.

MEMBER	BACKGROUND
Oleksii Marek · Co-founder & Strategy	Co-founder of a Web2 marketing agency. Brings go-to-market, partnership, and operational discipline to ZernoFi's growth and farm onboarding.
Maryna Marek · Co-founder & Data / BI	Senior BI Analyst with strong data, analytics, and reporting background. Owns risk modeling, pool analytics, and investor reporting.

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Conclusion

> ZernoFi turns the chronic illiquidity of farmland into accessible, stable, on-chain yield — and gives crypto capital its first credible bridge to physical agricultural cash flow.

The thesis is simple: **real businesses produce real cash flows.** When you put them on Solana, you get the speed and transparency of crypto with the predictability of agriculture. Investors earn stablecoin dividends, farmers get fast capital, and everyone wins from the optionality of $UAAGRO.

We are not a token in search of a use case. We are a protocol with first partners already signed, a working dashboard, and a clear path to $11M TVL by end of Year 2. The market gap is $160 billion. We're starting with the first $11 million.

Ukrainian Soil. Solana Speed. Your Yield.

Risk Disclosure. ZernoFi pools involve real-world agricultural risk including but not limited to weather events, market price fluctuations, crop disease, and operational failures. While all pools carry physical crop insurance and on-chain reserve protections, target APYs are **targets — not guarantees.** Past performance does not indicate future results. This whitepaper is for informational purposes only and does not constitute financial, investment, legal, or tax advice. Invest only what you can afford to lose. Regulatory treatment of tokens evolves and may differ by jurisdiction. Consult qualified professionals before participating.