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Liquidity Pooling as a Sustainable Alternative to Yield Farming in Decentralized Finance

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Abstract
The evolution of decentralized finance (DeFi) has introduced novel methods for cryptocurrency-based income generation, particularly **yield farming** and **liquidity pooling**. While yield farming gained rapid popularity due to initially high returns, it has proven to be largely unsustainable and volatile. This paper explores the fundamental limitations of yield farming, including unstable returns, inflationary token models, and high entry barriers. In contrast, liquidity pooling offers a more stable and usage-driven revenue model. This study evaluates the risks and advantages associated with both approaches and advocates for liquidity pooling as a more reliable long-term investment strategy within the DeFi ecosystem.
Keywords: Liquidity pooling, Yield Farming, Decentralized Finance

1. Introduction
Decentralized Finance (DeFi) has disrupted traditional financial systems by enabling trustless lending, borrowing, and trading without intermediaries. Two of the most popular mechanisms for earning passive income in DeFi are **yield farming** and **liquidity pooling**. While both aim to reward users for contributing assets to the ecosystem, they differ significantly in sustainability, risk, and reward mechanisms.

Yield Farming and Its Impact on Blockchain's Reputation

The Initial Boom: Fueling DeFi Growth

Yield farming played a pivotal role in the **explosive growth of decentralized finance** between 2020 and 2022. Platforms like **Compound**, **Yearn Finance**, and **SushiSwap** gained massive traction by offering high APYs and liquidity mining incentives, attracting billions in Total Value Locked (TVL). This rapid inflow of capital brought:

- **Public attention to DeFi and smart contracts**
- Increased adoption of **Ethereum** and other blockchain networks (e.g., BNB Chain, Avalanche)

- Momentum for **Layer-2 scaling solutions**, needed to accommodate the rising transaction volumes

Yield farming, at its peak, was seen as **blockchain's answer to traditional finance**, offering democratized access to passive income.

The Flip Side: Volatility, Exploits, and Reputational Damage

Despite its contributions to adoption, yield farming also introduced several **reputational challenges** that continue to impact blockchain credibility:

Token Inflation and Unsustainable Models

Many protocols created excessive amounts of reward tokens to attract liquidity. These **hyperinflationary tokenomics** led to:

- Rapid devaluation of farming rewards
- "Pump-and-dump" cycles by opportunistic whales
- Erosion of investor trust in DeFi token ecosystems

Example: In many projects, tokens dropped over 90% in value within weeks of launch, leaving small investors at a loss.

Smart Contract Exploits and Rug Pulls

Yield farming platforms, often launched rapidly and without rigorous audits, became prime targets for:

- **Flash loan attacks** (e.g., Harvest Finance hack)
- **Reentrancy bugs**
- **Admin key exploits and exit scams**

These incidents resulted in **hundreds of millions of dollars in user losses**, severely damaging blockchain's image in mainstream finance and media.

Short-Term Speculation over Long-Term Value

Yield farming incentivized users to **chase high APYs** without understanding the underlying protocol. As a result:

- Many projects lacked actual utility or innovation
- The focus shifted from long-term use cases to short-term gains
- Blockchain became associated with "get-rich-quick" schemes

This **speculative environment** made institutional and risk-averse investors hesitant to explore blockchain-based financial tools.

Regulatory Scrutiny Intensifies

As yield farming projects proliferated, **regulators** worldwide began issuing warnings or taking action against DeFi protocols:

- The **SEC and CFTC** in the U.S. questioned the legality of yield farming tokens as unregistered securities.
- **Consumer protection agencies** flagged DeFi protocols for misleading advertising and risk disclosure failures.

This increased scrutiny, while necessary, was catalyzed largely by **irresponsible practices and losses** stemming from farming-based projects — thereby slowing down blockchain adoption in regulated markets.

Perception Shift Among Developers and Users

As more users experienced **losses due to farming volatility or scams**, the community began demanding:

- **Greater transparency in tokenomics**
- **Third-party audits**
- **Shift from yield farming to utility-focused models**, such as Real Yield (revenue-sharing) or staking with value-backed tokens

The reputational damage from reckless farming projects led to the rise of more **sustainable DeFi ecosystems**, where **utility, governance, and security** take precedence over unsustainable returns. While yield farming undeniably contributed to early DeFi growth, its **excessive risk, lack of regulation, and unsustainable models** have significantly impacted the reputation of blockchain. From **token crashes and rug pulls** to **regulatory crackdowns**, the darker side of yield farming has shifted the narrative from innovation to speculation.

As the DeFi ecosystem matures, **liquidity pooling, real-yield protocols, and utility-backed staking** offer a more sustainable path forward — helping rebuild trust in blockchain as a viable foundation for the future of finance.

2. Yield Farming: Promise vs. Reality

2.1 Definition and Mechanism

Yield farming involves staking or lending cryptocurrencies on DeFi protocols to earn rewards, typically in the form of protocol-native tokens.

2.2 Illusion of High Returns

Many yield farming schemes advertise extremely high APYs (Annual Percentage Yields), especially in their early stages. However, these high returns are often:

- **Short-lived** due to rapid token inflation.
- **Volatile** as reward rates decline with increased participation.
- **Unsustainable**, as the model relies on continuous new user inflow (similar to Ponzi dynamics in some cases).

2.3 Entry Barriers and Declining Rewards

Protocols like Ethereum 2.0 require **32 ETH** for solo staking. In networks like TRON, staking returns are **capped at approximately 4%**, and further diluted as more users join, reflecting the **diminishing marginal return** principle.

3. Liquidity Pooling: A Practical Revenue Model

3.1 Definition and Operation

Liquidity pooling involves depositing token pairs into decentralized exchanges (e.g., Uniswap, Curve, PancakeSwap) to facilitate asset swaps. In return, liquidity providers (LPs) earn a share of transaction fees.

3.2 Reward Source Stability

Unlike yield farming, liquidity pooling derives income from **actual trading volume** rather than token incentives. This provides:

- A **usage-based, consistent revenue stream**.
- Reduced reliance on volatile token economics.

3.3 Lower Risk and Broader Accessibility

Liquidity pools—especially those involving stablecoins (e.g., USDC/DAI)—offer reduced **impermanent loss** and lower risk, making them suitable for conservative investors. Furthermore, many platforms allow participation with small capital, lowering the **entry barrier**.

4. Comparative Analysis

Criteria	Yield Farming	Liquidity Pooling
Return Source	Protocol-native token incentives	Trading fees from DEX activity
Return Stability	Highly volatile, short-term	Moderate but more stable
Token Inflation Risk	High	Low
Entry Barrier	Often high (e.g., 32 ETH)	Generally low
Market Dependency	Incentive-driven	Usage-driven
Security Risks	High (rug pulls, smart contract bugs)	Moderate (contract risks, impermanent loss)

5. Risks and Limitations

5.1 For Yield Farming:

- **Impermanent Loss** due to token price fluctuations.
- **Smart Contract Vulnerabilities**.
- **Unsustainable Tokenomics**.
- **Rug Pulls** and malicious developers.

5.2 For Liquidity Pooling:

- **Impermanent Loss** (in volatile asset pairs).
- **Smart Contract Exploits**.
- **Lower yield in low-volume pairs**.

6. Conclusion and Recommendations

This paper concludes that while yield farming may offer short-term gains, it is largely unsustainable and highly speculative. In contrast, liquidity pooling—though not without risks—provides a **more transparent, sustainable, and usage-driven** alternative for revenue generation in DeFi.

Investors seeking stability and **long-term yield** should prioritize **well-audited liquidity pools**, particularly those involving **stablecoins** or **blue-chip pairs (e.g., ETH/USDC)**. The future of DeFi income likely lies in **utility-aligned incentives**, not speculative farming.

7. Future Work

Further research may explore:

- Performance benchmarking of LP returns over time.
- Tools for managing impermanent loss.
- Portfolio optimization strategies using a mix of staking, pooling, and lending.

Expert Perspective: Yield Farming as a Short-Vision Approach

As a blockchain expert actively involved in yield farming strategies, I have personally observed that while **yield farming initially appears lucrative**, it represents a **short-sighted, speculative approach** to decentralized finance. Many participants are drawn to high APYs without understanding the economic mechanics behind the protocols. This lack of vision leads to a flawed expectation of **consistent profits** from systems inherently designed to taper off over time.

The Illusion of Fast Gains

Users often prefer quick, exaggerated returns offered by yield farming without evaluating the **underlying risks**, such as:

- Protocol instability
- Unsustainable inflation
- Temporary reward subsidies

When returns inevitably diminish—either due to token devaluation, saturation of stakers, or project limitations—these users **blame the blockchain technology itself**, rather than the flawed incentive model.

A Missed Opportunity: Neglecting Liquidity Pooling

Ironically, **the overhyped narrative of yield farming** has discouraged many users from exploring **liquidity pooling**, which is:

- Functionally essential to decentralized exchanges (DEXs)
- More transparent, with return rates based on actual usage (trading fees)
- Designed to scale with real-world utility, not speculative inflation

By prioritizing **speculation over strategy**, many users miss out on the **long-term, consistent revenue streams** and **protocol growth benefits** that liquidity pooling provides.

Reclaiming the DeFi Vision

Blockchain and DeFi were created to **democratize finance**, not replicate centralized speculation in a decentralized wrapper. The current user behavior, driven by yield farming hype, deviates from this original mission. The community must now **redirect focus** toward:

- Sustainable DeFi models like liquidity pools
- Educating users on token utility vs. reward inflation
- Aligning incentives with protocol health and long-term engagement

Only by embracing **visionary strategies**, such as liquidity pooling, can the blockchain ecosystem fulfill its promise of decentralized, stable, and inclusive finance.

Yield farming, though instrumental in DeFi's early popularity, has inadvertently **distorted public perception** of blockchain technology. Its short-termism, high risk, and reward volatility have disillusioned users and contributed to misinformed skepticism. In contrast, **liquidity pooling offers a long-term, usage-based revenue model**, grounded in the fundamental principles of decentralization.

To protect blockchain's credibility and promote sustainable adoption, the DeFi community—users, developers, and experts alike—must **shift attention from speculative farming** to models that generate **real value and stable returns**. Liquidity pooling stands as a prime example of this evolution.

The Yield Farming Illusion: A Dialogue of False Assurance

In the iconic film *Krantiveer*, Nana Patekar delivers a hard-hitting line:

"Aaj toh main tumhe bacha loonga... kal tumhe kaun bachayega?"

("Today, I may save you… but who will save you tomorrow?")

This line mirrors the deceptive promise made by many yield farming protocols, which lure users with unsustainable rewards. If **yield farming were Nana Patekar**, it might say:

"Aaj toh main tumhe 100% APY de doonga… lekin kal tumhe ye return kaun dega?"

("Today, I'll give you 100% return… but who will give you this return tomorrow?")

This fictionalized statement captures the **ephemeral nature of yield farming**—an approach that thrives on initial excitement and collapses under the weight of inflation, declining token value, and protocol saturation. It promises big today, but delivers regret tomorrow.

Users, blinded by **short-term greed**, fail to ask the most important question:

"Is this model sustainable? What happens when the token rewards run dry?"

By using this cinematic parallel, we remind the DeFi community to **look beyond flashy numbers** and to invest in protocols with **long-term utility, transparent models, and real value**—such as **liquidity pooling**. Let the ecosystem learn that:

"Blockchain is not a shortcut to riches—it's a path to financial transformation, but only if walked wisely."

Reference

Gupta, M., Gupta, D., & Duggal, A. (2023). NFT Culture: A New Era. Scientific Journal of Metaverse and Blockchain Technologies, 1(1), 57–62. https://doi.org/10.36676/sjmbt.v1i1.08 DOI: https://doi.org/10.36676/sjmbt.v1i1.08

Gupta, D., & Gupta, S. (2023). Exploring world famous NFT Scripts: A Global Discovery. Scientific Journal of Metaverse and Blockchain Technologies, 1(1), 63–71. https://doi.org/10.36676/sjmbt.v1i1.09

M. Gupta, "Reviewing the Relationship Between Blockchain and NFT With World Famous NFT Market Places", SJMBT, vol. 1, no. 1, pp. 1–8, Dec. 2023. DOI: https://doi.org/10.36676/sjmbt.v1i1.01

R. Gupta, M. Gupta, and D. Gupta, "Role of Liquidity Pool in Stabilizing Value of Token", SJMBT, vol. 1, no. 1, pp. 9–17, Dec. 2023. DOI: https://doi.org/10.36676/sjmbt.v1i1.02 DOI: https://doi.org/10.36676/sjmbt.v1i1.02

M. GUPTA and D. Gupta, "Investigating Role of Blockchain in Making your Greetings Valuable", URR, vol. 10, no. 4, pp. 69–74, Dec. 2023. DOI: https://doi.org/10.36676/urr.2023-v10i4-009 DOI: https://doi.org/10.36676/urr.2023-v10i4-009

R. Issalh, A. Gupta, and M. Gupta, "PI Network: A Revolution", SJMBT, vol. 1, no. 1, pp. 18–27, Dec. 2023. DOI: https://doi.org/10.36676/sjmbt.v1i1.03 DOI: https://doi.org/10.36676/sjmbt.v1i1.03

A. Duggal, M. Gupta, and D. Gupta, "Significance of Nft Avtaars In Metaverse And Their Promotion: Case Study", SJMBT, vol. 1, no. 1, pp. 28–36, Dec. 2023. DOI: https://doi.org/10.36676/sjmbt.v1i1.04 DOI: https://doi.org/10.36676/sjmbt.v1i1.04

M. Gupta, "Say No to Speculation in Crypto market during NFT trades: Technical and Financial Guidelines", SJMBT, vol. 1, no. 1, pp. 37–42, Dec. 2023. DOI: https://doi.org/10.36676/sjmbt.v1i1.05 DOI: https://doi.org/10.36676/sjmbt.v1i1.05

A. Singla, M. Singla, and M. Gupta, "Unpacking the Impact of Bitcoin Halving on the Crypto Market: Benefits and Limitations", SJMBT, vol. 1, no. 1, pp. 43–50, Dec. 2023. DOI: https://doi.org/10.36676/sjmbt.v1i1.06 DOI: https://doi.org/10.36676/sjmbt.v1i1.06

Gupta and P. Jain, "Expected Impact of Decentralization Using Blockchain Based Technologies", SJMBT, vol. 1, no. 1, pp. 51–56, Dec. 2023. DOI: https://doi.org/10.36676/sjmbt.v1i1.07 DOI: https://doi.org/10.36676/sjmbt.v1i1.07

D. Gupta and S. Gupta, "Exploring world famous NFT Scripts: A Global Discovery", SJMBT, vol. 1, no. 1, pp. 63–71, Dec. 2023. DOI: https://doi.org/10.36676/sjmbt.v1i1.09 DOI: https://doi.org/10.36676/sjmbt.v1i1.09

M. Gupta, "Integration of IoT and Blockchain for user Authentication", SJMBT, vol. 1, no. 1, pp. 72–84, Dec. 2023. DOI: https://doi.org/10.36676/sjmbt.v1i1.10 DOI: https://doi.org/10.36676/sjmbt.v1i1.10

A. Singla and M. Gupta, "Investigating Deep learning models for NFT classification: A Review", SJMBT, vol. 1, no. 1, pp. 91–98, Dec. 2023. DOI: https://doi.org/10.36676/sjmbt.v1i1.12 DOI: https://doi.org/10.36676/sjmbt.v1i1.12

Issalh, R., Gupta, D., & Gupta, M. (2023). RESEARCHER ECONOMY: A REVOLUTION BY 9NFTMANIA FOR PRESENT ALPHA MALE. Scientific Journal of Metaverse and Blockchain Technologies, 1(1), 99-104. https://doi.org/10.36676/sjmbt.v1i1.13 DOI: https://doi.org/10.36676/sjmbt.v1i1.13

Gupta, D. (2024). The Role of Volunteers vs. Investors and Speculators in the Cryptocurrency Market: A Comparative Study of Reputation and Value Building. Scientific Journal of Metaverse and Blockchain Technologies, 2(Special), 18–26. https://doi.org/10.36676/sjmbt.v2.iSpecial.50 DOI: https://doi.org/10.36676/sjmbt.v2.iSpecial.50

Singla, A. (2024). Reviewing Limited Supply Crypto Projects: ULTIMA, COREDAOVIP. Scientific Journal of Metaverse and Blockchain Technologies, 2(2), 111–123. https://doi.org/10.36676/sjmbt.v2.i2.41 DOI: https://doi.org/10.36676/sjmbt.v2.i2.41

Ashutosh, & Gupta, M. (2024). Investigating the Narrative of Trinity: 9NFTMANIA, Premium Domain, COREDAOVIP. Scientific Journal of Metaverse and Blockchain Technologies, 2(2), 124–137. https://doi.org/10.36676/sjmbt.v2.i2.42

Ashutosh, & Gupta, M. (2024). Investigating the Narrative of Trinity: 9NFTMANIA, Premium Domain, COREDAOVIP. Scientific Journal of Metaverse and Blockchain Technologies, 2(2), 124–137. https://doi.org/10.36676/sjmbt.v2.i2.42 DOI: https://doi.org/10.36676/sjmbt.v2.i2.42

Singla, A. (2024). Exploring Liquidity Pooling and Automated Trading with COREDAOVIP Token in Decentralized Exchanges. Scientific Journal of Metaverse and Blockchain Technologies,2(2),1-12. https://doi.org/10.36676/sjmbt.v2.i2.26 DOI: https://doi.org/10.36676/sjmbt.v2.i2.26

Meenu. (2024). COREDAO.VIP: Crypto-Based Liquidity Pool Creation for Profit Maximization. Scientific Journal of Metaverse and Blockchain Technologies, 2(2), 150–156. https://doi.org/10.36676/sjmbt.v2.i2.44 DOI: https://doi.org/10.36676/sjmbt.v2.i2.44