



nila.land

Concept  
Risk & Roadmap  
Legal  
Financials

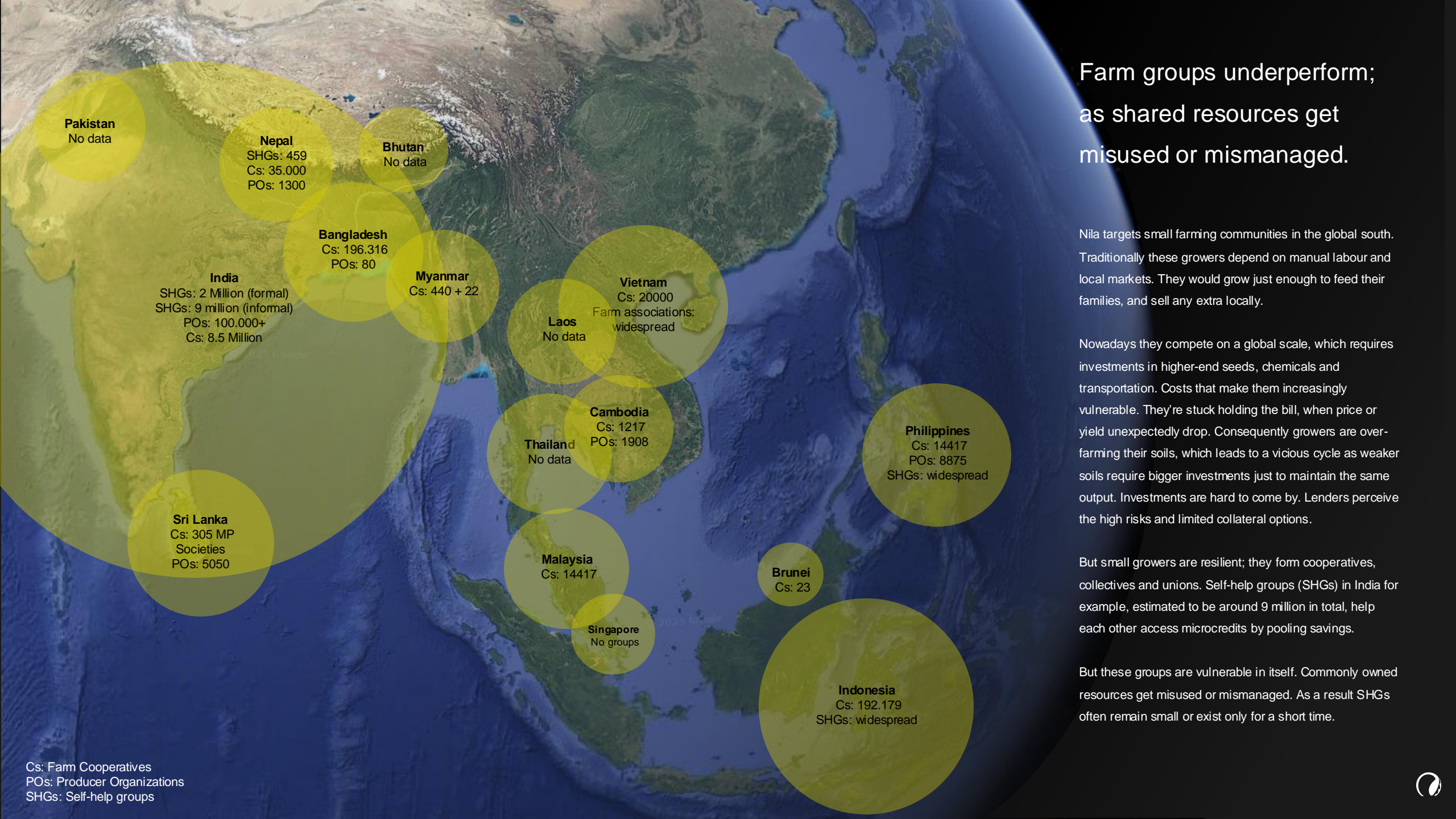


Nila lets small growers scale cooperatively;  
cutting through decades of entrenched  
procedures and unfavorable conditions.

The innovation in a nutshell

Nila gives small growers their first liquid assets, enabling them to *trade value* in rules-based, open, digital, and data-driven systems.





**Pakistan**  
No data

**Nepal**  
SHGs: 459  
Cs: 35.000  
POs: 1300

**Bhutan**  
No data

**Bangladesh**  
Cs: 196.316  
POs: 80

**India**  
SHGs: 2 Million (formal)  
SHGs: 9 million (informal)  
POs: 100.000+  
Cs: 8.5 Million

**Myanmar**  
Cs: 440 + 22

**Vietnam**  
Cs: 20000  
Farm associations:  
widespread

**Laos**  
No data

**Cambodia**  
Cs: 1217  
POs: 1908

**Thailand**  
No data

**Philippines**  
Cs: 14417  
POs: 8875  
SHGs: widespread

**Sri Lanka**  
Cs: 305 MP  
Societies  
POs: 5050

**Malaysia**  
Cs: 14417

**Brunei**  
Cs: 23

**Singapore**  
No groups

**Indonesia**  
Cs: 192.179  
SHGs: widespread

Cs: Farm Cooperatives  
POs: Producer Organizations  
SHGs: Self-help groups

Farm groups underperform;  
as shared resources get  
misused or mismanaged.

Nila targets small farming communities in the global south. Traditionally these growers depend on manual labour and local markets. They would grow just enough to feed their families, and sell any extra locally.

Nowadays they compete on a global scale, which requires investments in higher-end seeds, chemicals and transportation. Costs that make them increasingly vulnerable. They're stuck holding the bill, when price or yield unexpectedly drop. Consequently growers are over-farming their soils, which leads to a vicious cycle as weaker soils require bigger investments just to maintain the same output. Investments are hard to come by. Lenders perceive the high risks and limited collateral options.

But small growers are resilient; they form cooperatives, collectives and unions. Self-help groups (SHGs) in India for example, estimated to be around 9 million in total, help each other access microcredits by pooling savings.

But these groups are vulnerable in itself. Commonly owned resources get misused or mismanaged. As a result SHGs often remain small or exist only for a short time.



Agricultural loans are super pricey mainly because farmers don't have enough liquid assets to offer as collateral.

	Formal Ag-lending USD BILLIONS (2024)		APY (%) **	Delinquencies	Regulated	Source	Informal Lending Share	Workforce (%)*	GDP (%)*
1 India	\$	274,38	9 to 25%	4.3%	Heavy	Institutional	Large	46	18
2 Sri Lanka	\$	0,34	9 to 14%	very high	Low	Foreign	Large	28	8
3 Pakistan	\$	4,53	0 to 7%	1.16%	Low	Institutional	Large	42	24
4 Bangladesh	\$	3,36	9% (capped)	8.7%	Low	Microfinance	Very large	38	11
5 Nepal	\$	4,13	5 to 6% (subsidized)	5.4%	Low	Commercial	Small	62	24
6 Bhutan	\$	2,69	9.5% (capped)	1.79%	Heavy	Institutional	Balanced	50	13
7 Myanmar	\$	1,80	25 to 100%	-	Low	Microfinance	Large	70	22
8 Laos	\$	-	36% to 100%	high	Heavy	Microfinance	Very large	70	24
9 Vietnam	\$	33,10	4-8% (subsidized)	2.0%	Heavy	Institutional	Balanced	29	12
10 Cambodia	\$	8,00	18 to 30%+	high	Low	Commercial	Balanced	31	21
11 Thailand	\$	4,10	4-8% (subsidized)	1.97%	Heavy	Institutional	Small	32	9
12 Malaysia	\$	1,15	4-15%+ (subsidized)	low	Heavy	Institutional	Very small	11	7
13 Singapore	\$	-	-	-	-	-	-	0	0
14 Indonesia	\$	34,31	6-15%+ (subsidized)	2.74%	Heavy	Institutional	Balanced	28	12
15 Philippines	\$	-	9-15%	high	Low	Microfinance	Very large	22	9
16 Brunei	\$	-	-	-	Very heavy	Gov. Scheme	-	0	0

\* Share of agricultural sector

\*\* We can safely assume that the low-end rates are available to big corporate farms, while small growers limited choice





Certification and documentation are crucial for market access, yet they are often too complicated and expensive for small growers.



#### Barriers:

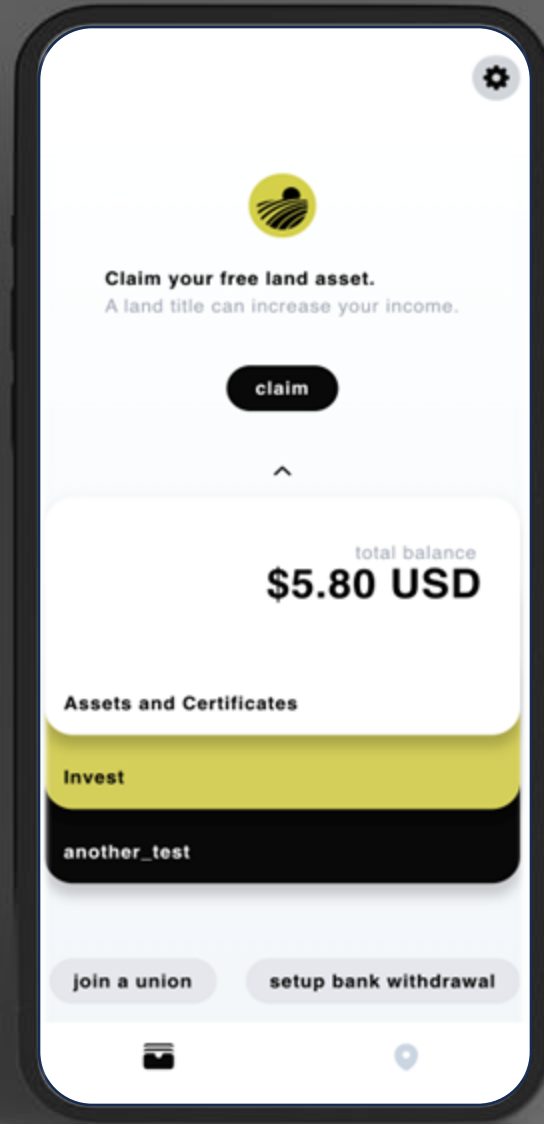
- Documents submitted in English (India)
- Extensive manual record-keeping
- Technical Capacity Gaps
- Volume and Quality requirements
- Unequal bargaining power
- National restrictions

#### Cost:

- 💰 Paperwork
- 💰 + Upfront cost to adopt / learn new practices
- 💰 ++ Inspection fees, additional remoteness charges
- 💰 +++ Potential rejection
- 💰 ++++ Renewal costs
- 💰 +++++ Fees for clearance, logistics, intermediary services
- 💰 ++++++ Price volatility and market risks
- 💰 ++++++ Delayed Payments

# Nila App

one-click web3 wallet



## All-in-one web app:

- Secured Keys (AES-256 encryption)
- Key recovery method
- Wallet with limited tokens
- Available in local currencies (INR)
- Gas subsidies
- No KYC (except when using on/off ramps)
- One-tab field bordering (high accuracy GPS required)
- Local tax compliant (India)
- Phone-Number Sign-Up (OTP)
- Simplified onboarding (WhatsApp link)





Nila tech stack



Type: Contract Templates  
Chains: EVM (Polygon)



Type: non-transferable token (SBT)  
Amount: unlimited  
contract: `0x663DC13009D004aF3654a45f22A215De71633918`  
Chains: Polygon  
Distribution: Verified owners of agricultural lands globally.  
Metadata: Property outline and Farm name



Type: multibasket stablecoin  
Amount: unlimited  
contract: `0x10D11eDD572ccb54D6D59f07521eA071Ed1C326E`  
Chains: Polygon  
Distribution: Grants & offramp swaps



Objective 1: Launch 1000 union contracts

Leaders earn a fee for each commodity they trade.

progress:  (1/1000)



Objective 2: Mint 1000000 Land Titles

Union members with a title can claim grants and qualify for a loan.

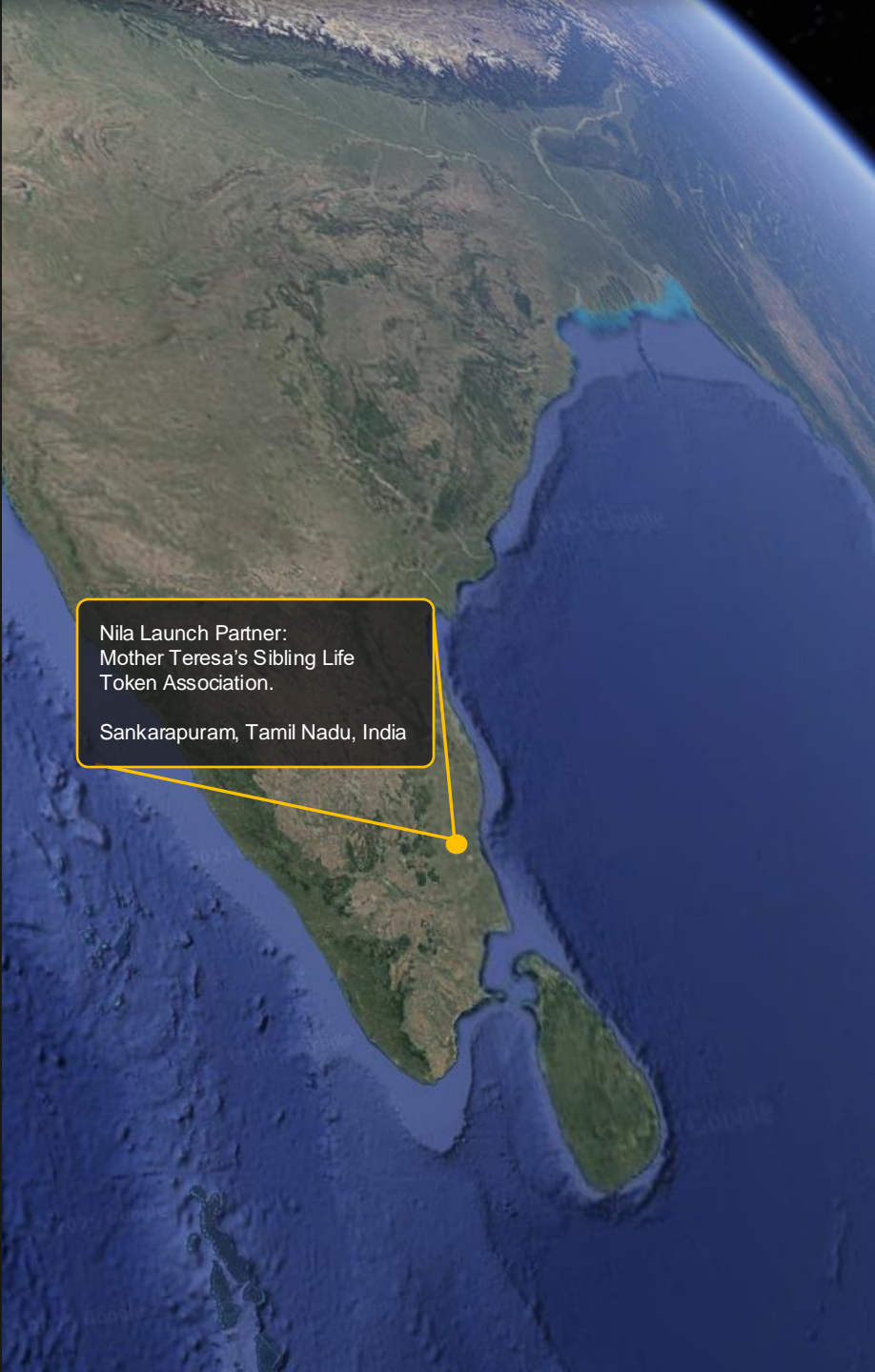
progress:  (900/1,000,000)



Objective 3: Lock USD\$ 100 Million in Union Contracts

Collateral to qualify for loans, and earn interest.

progress:  (300/100,000,000)



## Nila accreditations

	Certificate	Label	Measures	Availability	Application	Cost	Expiration	Proof (remotely observed, testimonials)
1	Nila grants		Loyalty	Limited	staking	free	Exponential decay	transaction records
2	Protected Origin (PDO)		Location	Crop spec.	none	1 Nila	1 year	land title location
3	Food quality		Freshness & Quality	Regional	form	1 Nila	1 year	harvest dates, phenological growth patterns and peer signatures
4	Sustainability		Environmentally conscious	Regional	form	5 Nila	3 monthly	soil health and moisture fluctuations, phenological growth patterns and peer signatures
5	Fair trade		Working conditions	Regional	form	1 Nila	1 year	peer signatures
6	Organic		Ecological conditions	Regional	form	10 Nila	3 monthly	soil health, biosphere indicators, neighbour data, peer signatures

\* None of the credentials require field visits. All proof is collected using a mix of asset movement (on-chain), transaction patterns, remote sensing data and affidavits signed digitally in the Nila App.



# Digital credit unions

We are building something real. It takes time.

## Issues

Misuse of funds by members or leaders

Depleted soils make many members non-eligible for a loan.

Limited input/offset possibilities

Members and leaders have no liquid assets

Groupthink lead to trust issues and favoritism.

Local contributions are not enough to cover costs.

## Solutions

Freeze collateral if remote data does not show any activity

Union resource pools to stimulate regenerative practices; no-till, crop rotation, (green) manure. Use of alternative inputs.

Grants & Discounts (early network incentives)

Fund selection is data dependend (cap rate & farm score)

Allow external stablecoin investments in unions.

Contracts autonomously execute payouts

Demand is declared before fund acceptance\*

Land titles  
Cap rate (operating income)

Use option trading to hedge price volatility

Parametric insurance

Collectibles and other digital assets.

Allow external fungible tokens investments attached to UMA option hedge.

3th party export or domestic RWA food tokens

- Basic template contracts do not force traders to buy the supply.
- Not yet implemented



# NIN tokens

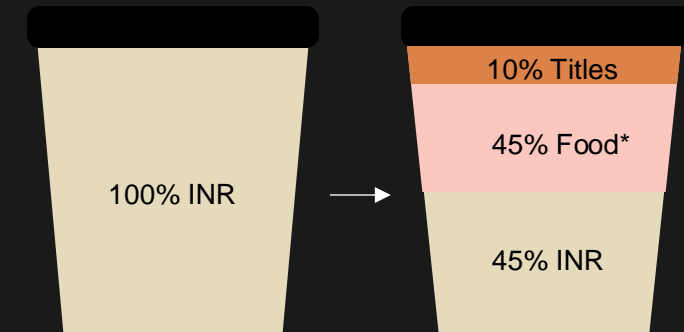
Digital asset with price stability but elastic supply

Nila introduces a NIN ERC20 token that is pegged to basket of other digital and fiat tokens.

NIN is primarily backed by Indian Rupees on an auditable fiat bank account. At first NIN maintain a 1:1 peg, but as multiple asset become available, a part of the peg will be changed to include Titles, Food commodity tokens or anything else the community decides.

A free peg is important to increase financial efficiency to overcome the cyclical nature of agri-finance. Food tokens for example could be used as collateral once our remote sensing nodes detect a new cultivation at a specific stage. This could free up liquidity that can be used by others to overcome the scarce liquidity period.

From a 1:1 peg to a basket of tokens to improve liquidity cycles.

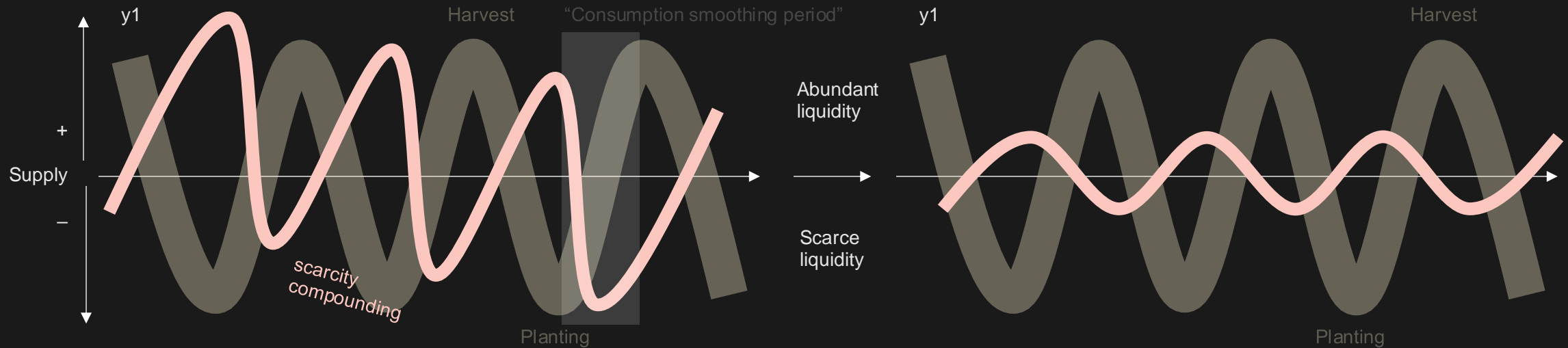


\* Primarily focused on 3th party RWA assets.



# Pre-harvest liquidity

Flatten the liquidity cycle in agriculture



Supply follows seasonality in cropping, as finance demands increases during the season.

Nila's stablecoins are designed to flatten liquidity cycles in agriculture. This is a prominent issue as income arrives only once or twice a year. Before harvest, when the capital needs is highest, farmers do what is called 'consumption smoothing'.

In multi-season regions, this effect often compounds as the next seeds and prework has to be financed.

This effect is the origin of a lot of government guarantee and subsidy schemes. Financial examples are direct cash transfers, minimum pricing and subsidized insurance, these interventions can distort markets substantially.

Nila targets the scarcity by temporarily reducing the peg pre-harvest, and repegging when liquidity is abundant.

It allows farmers to take up additional funds for very low interest rates, if the crops monitored are healthy. This is viable as the risk period (to harvest) at these moments is drastically reduced.

Union contracts are programmed to dissolve these loans first.



# User journey

## *A union leaders' journey*

Get a digital wallet and buy some coins. Then go to Nila.land and create a contract. Share a sign-up link to members.

Bootstrap your union with grants, discounts and trade partnerships. Build the liquidity to accept grow challenges.

List demands from traders; provide funding first, additional services later.

Earn a fee on each traded commodity

## *A farmers' journey*

Generate a land title of a property with the Nila.land app. Join a local union begin investing in neighboring farms.

Wait to be selected yourself. Increase selection chances by lowering P/E rates and by improving soil quality.

Accept funds to grow crops on selected fields. Make sure the crops are delivered before a specific date, then pay back the loan.

Repeat the farm/investment cycle





# Union FAQ

In what currency is debt nominated?

In a local stable coin. Union members that use the Nila app can hold Nila Tokens or USDC. Either one can be used to invest and earn interest. Contracts swap the token with a country specific stable coin when deposited. Contracts then swap the stable back to Nila when the loan is dissolved. Any interest is paid in Nila, directly to the investor. This includes investments done in USDC.

I need a land title to be eligible for a loan, how do I get one?

When you use the Nila App and walk to your fields, you can quickly create your own unique land title by simply requesting the border of each field. Select them carefully as detection of fraud will freeze all your assets. It often takes several tries. If you don't have data or a strong GPS connection, go try to get either one, if it fails we allow you to manually pan to a field center. Be aware, field verification will be more strict.

Why would I hold Nila tokens?

Nila tokens give holders strong benefits. Holders are entitled to token grants. Holders are more likely to get selected for loan (not applicable for USDC holders). Holders also share in any profits made by the union contract (if the leader decides to distribute these). Certificates are paid with Nila. Finally Nila holders are de facto network owners, we strongly support services build on-top or with Nila assets to reward Nila holders for their contributions.

What remote-sensing data is used and how is it extracted.

Nila uses satellite data to rank agricultural properties and verify ownership. We also build proprietary software to border fields, estimate yields, soil health and moisture metrics. For these inputs Nila uses Sentinel1 and Sentinel2 data from the European Space Agency.

The algorithms are consistent and predictable in their output, but most important they are objective and rational, within an acceptable margin if error.

Why would I join a union?

Unions are important for Nila. Only Union members can invest or receive a loan. When you do not have any debt, you can change Unions any time. Any investment and interest will be paid out to you, you only cannot claim the interest periodically.

What other services can use Nila assets and the network

Nila assets are valuable as real-world data is captured verifiably and with high stakes. Public use is permitted, but to receive any support or direct user access, reciprocal efforts should be coded-into any services. We think token rewards or profit sharing with our network.



# Risks

risk	impact	mitigation
------	--------	------------

Nila initial phase

Nila Maturity phase

Markets /  
Financial

farmland too dispersed	high oracle cost	regional focus		
insufficient APY on farmland	token sales failures	speculation & grants	yield from apps build on Nila	
distrust in digital tools	low app uptake	direct \$\$ feedback	save in USD	peer review
distrust in newcomers	low app uptake	Social share/dissemination (Whatsapp links)		Influential partners
Too low farmland value for invest.		no farm growth	focus on low-income countries	Increase min. token buyback policy
refinance service doesn't increase sales potential		no farm growth	grants & subsidies	
tracking cost too high		short runway	regional focus	increase contract fees
disregard once all vested tokens burned			farmer defaults	focus on diversification of portfolios

Operational

social distance of crypto and farm communities	low app uptake	Rewards for 'Bridgers' (crypto urbanites orig. from rural villages)	
cumbersome farm registration	low app uptake	Better UX (single point field borders)	peer appraisal discovery (others got \$)
core team focus on farmers	no investors to buy tokens	Memeification and community building	
	project with a larger goal – no quick rich scheme	long duration project	call yourself a bear market winner
	no or departing investors on L1 chain	desertification	multi-chain approach

Regulatory

high lobbying power of incumbents	regulatory pressure	increased decentralization
agriculture as 'cradle of ideology'	regulatory pressure	politicians share in profits



## Growth strategy

The Global South

Nila focus is on farm groups in the Global South. But anyone can create and use Nila contracts without permission. Members who sign up are eligible to receive a small grant.

Super unions:

Support  
Legal,  
Partnerships,  
\$\$

Unions that make great leaps; in minted land titles, grants and commodities traded, get extensive support, both financial and marketing/sales.

Focus on:

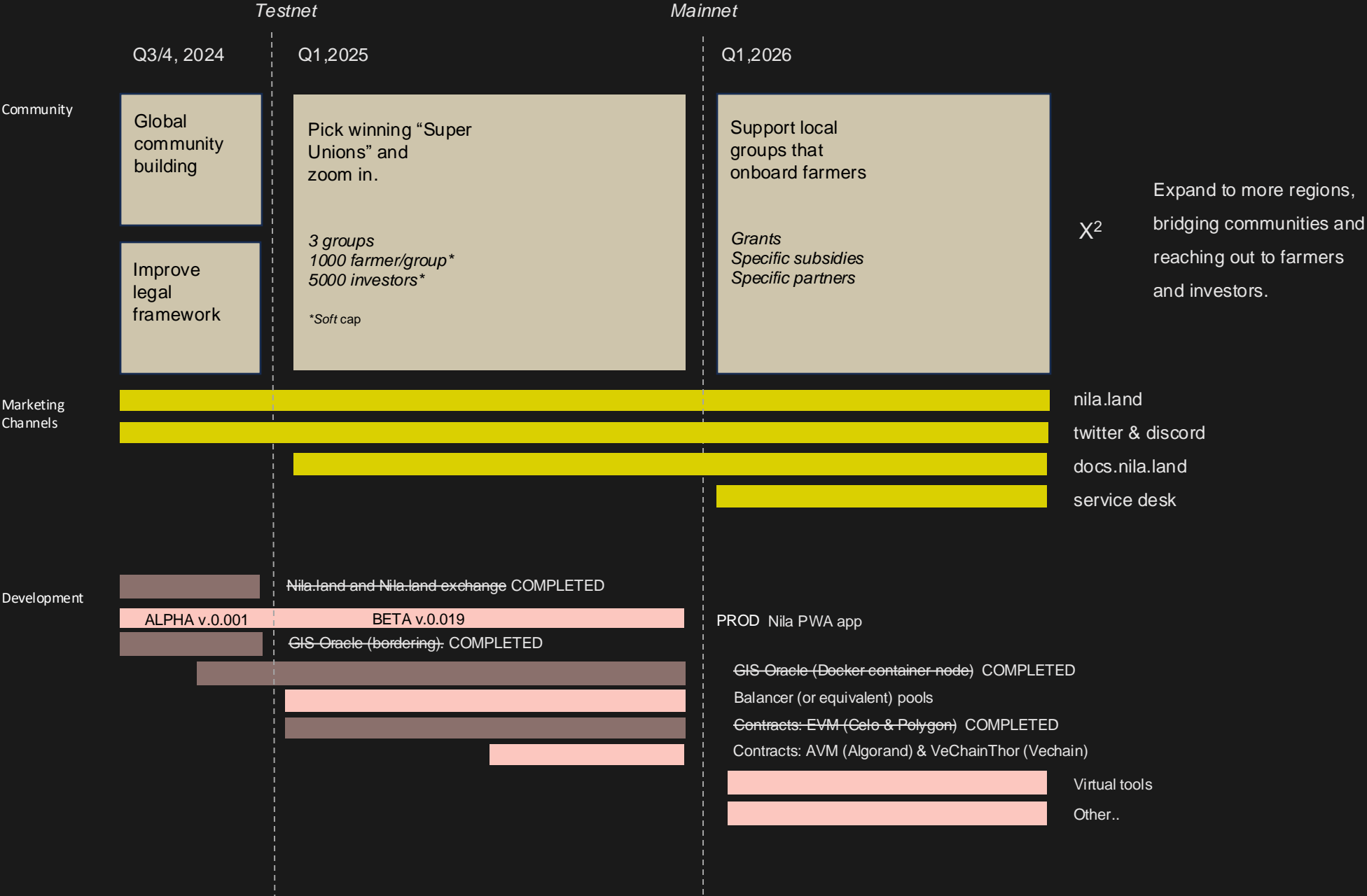
Best UX  
Best storytelling  
Best dev support

We always reward participation and make opportunity tangible.

"Other farmers in this area got \$\$\$"



Roadmap



Why will Nila succeed?

Organic growth, relentless focus, originality,  
genuine and *no, we don't sell land.*

“Finally web3 makes real-world impact.”



# Legal

Is it possible to design some intermediate between ICO and stable business models?

- Nila requires USDC back 1:1 or 1:0.75
- individuals have to pay TDS on if exceeding 50k rupee, or in some cases 10k.
- 30% VDA profit tax is applicable to the grant and any profits made from investing.

Nila provides two type of tokens. Each defined separately due to its utility in the network.

Type	Class	Impact
1. Land titles	Digital collectible	Soulbound token, appraised and transferable (by union leader)
2. Nila governance token	Digital commodity	Restricted for some jurisdictions

**\*\***The legal classification of each token type differs depending on the jurisdiction. Key takeaways from some authorities are that there is public utility in fractionalized farmland tokens, in the form of 'in kind' rewards and utility to manage virtual farmland. There can also be an expectation of a profit from the effort of others (Howey Test). Namely the farmer his work in the fields. However Nila farmers do not directly distribute profits to their token buyers. There is no expectation of dividend paid from the farmer to the token holders. Holders benefit from farm profits in secondary revenue and token inflation.

**\*\***As a preliminary measure due to the lack of definitive guidance for DAOs in many jurisdictions, Nila farmers and token buyers are required to connect a onramp service before purchasing any tokens. Onramp service are centralized entities that bridge the digital asset space with the traditional financial world. Nila wishes to cooperate with any jurisdiction it works in.



# Financials – income statement

Chitta vs. Nila income and profits

	Chitta Budget 2023	Nila Actual 2024	Nila Forecast 2025
	\$ 220.000,-	\$20,000,-	\$150k
Gross profit	\$220.000,-	\$19.450,-	\$148.500,-
%	100%	97.25%	99%
Expenses:			
Community building	0k	4k	95k
Product & Technology	25k	12.95k	26k
Crypto security	0k	0k	5k
Sales and Lobbying	12k	0k	3k
Legal	0k	1k	3k
Other expenses	1.5k	1.5k	5k
Net revenue	\$181.500,-	\$0,-	\$11.500,-
%	82.5%	0%	7.74%





## Financials – revenue channels

*Chitta revenue channels. vs. Nila revenue potential*

