Project Proposal

AgriCredit Suite: an agricultural enterprise system that turns its own records into credit

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Submitted to	VAARTA Organising Committee
Competition	VAARTA - The Next Chapter. Team Challenge: Ignite The Build
Topic	Topic 1 - The Business Under Our Nose
Date	11 September 2026
Version	3.0

Table of Contents

Executive Summary **3**

1. Introduction **4**

1.1 Background 4

1.2 The opportunity 4

1.3 How this document fits together 4

2. Problem Statement **5**

2.1 The farmer cannot be assessed 5

2.2 The lender cannot find a loan it can write 5

2.3 The agricultural business is already lending, blind 5

2.4 What is actually missing 5

3. Objectives **6**

4. The Proposed Solution **7**

4.1 What the system does 7

4.2 What the ERP records, and which check reads it 7

4.3 How credit is assessed 8

4.4 How much can be borrowed 8

4.5 How the money moves 10

4.6 Where the fintech piece fits 10

5. What Already Exists **11**

5.1 Agricultural enterprise software 11

5.2 Agricultural credit in Nepal 12

5.3 The gap 13

6. Why This Organisation **13**

7. Market and Commercial Potential **14**

7.1 Who buys it in Nepal 14

7.2 Candidate lending partners 15

7.3 Outside Nepal 15

8. The Financial Case **16**

8.1 What it costs to build 16

8.2 What it earns 16

8.3 The four assumptions that decide the answer 17

9. Approach **17**

10. Risks **17**

11. Expected Outcomes **18**

12. Conclusion and Recommendation **18**

References **19**

Appendix A: Supporting documents **22**

Appendix B: Land measures used in this document **22**

Executive Summary

An agricultural business in Nepal runs on paper. What was bought, what went to which field, what it cost, what came back at harvest, what was lost on the way, what is owed to whom - all of it sits in registers and spreadsheets that do not agree. The business cannot say what a crop cost until long after the season is over, and it has nothing a bank will accept.

The same missing records shut the farmer out. Nepal has 4.13 million agricultural holdings averaging half a hectare, and 3.45 million of them are under one hectare. Much of that land is worked by people who do not own it. A bank asks for land as security, so the farmer is refused however well they farm. Yet banks must hold at least a tenth of their lending in agriculture, and that lending is now the single largest source of their bad debt.

We propose one system that solves both. AgriCredit Suite records what an agricultural business actually does: suppliers and purchasing, input stock with batch and expiry, wastage and write-off, field work and its cost, harvest and grading, buyer contracts, sales and money owed. On its own it replaces the paper and tells the business what a crop cost while the season is still running.

Every cost is dated and tied to one crop on one plot. That gives the system something no lender in Nepal has: a checkable figure for what has been put into a crop still growing in the field. A credit module reads that figure, adds five more checks, and returns a score, a risk band and a limit sized to the crop. The money never reaches the farmer as cash. It becomes seed and fertiliser collected from an approved supplier, and it is repaid out of what the buyer pays for the harvest.

The limit follows the crop, not a fixed ceiling. A grower on 45 bighas of paddy qualifies for about NPR 2.99 million. A producer group aggregating 1,000 bighas supports a facility of about NPR 66.48 million, shared as sub-limits among its members. A farmer with no record is not refused; a starter facility is available against a verified tenancy and a confirmed buyer order.

The rules already allow it. Monetary policy for 2025/26 permits lending of up to NPR 1 million against a farmer's own produce rather than against land. The central bank's digital lending guideline, amended on 9 June 2026, permits a technology company to assist a bank with credit analysis and loan processing, with consent and data protection, the bank keeping the risk. No rule change is needed.

The commercial case. A twelve-month build and pilot on the organisation's own farms is estimated at NPR 10.23 million. Each enrolled plot is modelled to contribute NPR 7,720 a year from four separate revenue lines, and the build cost is recovered during the second year. The system is also saleable, first to the businesses that already advance inputs to growers and already carry that risk without records.

What we are asking for. Approval to build and pilot the system on the organisation's own operations for one crop cycle, with a named sponsor and protected time for the team. No outside farmer is enrolled and no lender is approached until the valuation has been reconciled against the finance ledger.

1. Introduction

1.1 Background

Agriculture is about a quarter of Nepal's economy and occupies more than half of the working population. The 2021/22 agricultural census records 4,130,789 holdings over 2.22 million hectares, an average of 0.54 hectares each. Only 875 holdings in the whole country exceed ten hectares (National Statistics Office, 2023). This is an industry of very small units.

Table 1

Agricultural holdings in Nepal, by size.

Holding size	Number of holdings	Share	Area held (ha)
Under 1 hectare	3,449,086	83.5%	1,260,202
1 to 1.99 hectares	427,037	10.3%	576,347
2 to 4.99 hectares	115,308	2.8%	315,399
5 hectares and above	7,854	0.2%	60,049
All holdings	**4,130,789**	**100%**	**2,218,410**

Note. National Statistics Office, National Sample Census of Agriculture 2021/22. Shares calculated from the published counts.

Farming on that scale is expensive relative to what it returns. A district study of paddy puts the cost of cultivation at NPR 140,234 per hectare against a gross return of NPR 158,163, a benefit-to-cost ratio of 1.13 (Agribiop, 2023). National average paddy yield is 3.98 tonnes per hectare (Ministry of Agriculture and Livestock Development, 2024). On that margin, a farmer who cannot fund inputs in the right week does not simply earn less. The season stops being viable.

1.2 The opportunity

Two things changed recently and neither has been used.

Monetary policy for 2025/26 permits lending of up to NPR 1 million against a farmer's own produce rather than against land. And the central bank's digital lending guideline, amended on 9 June 2026, permits a borrower to be assessed from transaction records, payment history and other business data instead of conventional income documents. It also permits a technology company to assist a bank with credit analysis and loan processing, with the customer's consent and data protection, the bank retaining the risk.

Both provisions need something nobody has: a dated, checkable, machine-readable record of a farm's operations. That record is the product proposed here.

1.3 How this document fits together

One idea runs through every section that follows, and it is worth stating once so the rest reads as a single argument.

The enterprise system comes first. It records purchasing, stock, field work, harvest, buyer contracts and sales, and it is worth buying for that alone. Because every entry is dated and tied to one crop on one plot, the same records add up to a figure nobody in Nepal has today: what has been put into a crop that is still in the field. The credit module reads that figure and five other things the system already holds, and returns a score, a band and a limit. The fintech layer is what carries the result: the bank sees

the file through a consented connection, the money leaves as input packages redeemed at a supplier over the national payment rails, and recovery comes out of the buyer's payment.

So: **records first, then the number, then the score and the limit, then the money.** Section 4 sets out that chain. Section 5 shows that nobody else has built it. Sections 6 to 8 show why this organisation can, who buys it and what it earns.

2. Problem Statement

Three parties are stuck, and they are stuck on the same thing.

2.1 The farmer cannot be assessed

A bank in Nepal lends against immovable property. A farmer working land under a tenancy or rental arrangement has no certificate to offer, and those arrangements are widespread, informal and legally insecure (Giri & Goswami, 2024). The conversation ends before anyone looks at how well the farmer farms.

Nor is there a credit score to fall back on. The Credit Information Bureau holds the records of borrowers at member institutions, but a bureau record is by construction built from previous formal loans - which is exactly what this population has never had. A bureau score, when it arrives, will not reach them.

So the farmer borrows from a trader at a rate that takes the season's margin, or farms less land than they could work.

2.2 The lender cannot find a loan it can write

Commercial banks must hold at least ten per cent of outstanding loans in agriculture, with higher aggregate requirements for development banks and finance companies. This is not optional.

The result of lending under obligation, without a way to judge the borrower, is now measurable: agriculture is the single largest component of the banking system's non-performing loans, at 23.5 per cent, ahead of construction and trade (Kathmandu Post, 2026a). The difficulty is not appetite. It is that no agricultural applicant arrives with a file that can be assessed.

2.3 The agricultural business is already lending, blind

A company that buys from smallholders is already a lender, whether it says so or not. It sends out seed and fertiliser on account and deducts the value at payment. It carries the default risk. It does this on records kept in notebooks, so it cannot refinance the exposure with a bank.

When its own cash runs short, the farmer waits. One sugar mill was reported owing cane growers about NPR 60 million with payment two years overdue, and planted area fell in response (Kathmandu Post, 2026b).

2.4 What is actually missing

Not capital, and not willingness. What is missing is a number.

Nobody can say what a crop still standing in a field is worth. Without it the farmer has no security to offer, the bank has nothing to underwrite, and the business cannot show anyone the credit it is already extending. Everything in this proposal exists to produce that number and then use it.

3. Objectives

General objective. To build an agricultural enterprise system whose ordinary operating records are sufficient, checkable and acceptable as the basis for lending working capital to farmers who cannot offer land as security.

Specific objectives.

1. To record the operating cycle of an agricultural business in one system: suppliers, purchasing, stock with batch and expiry, wastage, field work and its cost, harvest, buyer contracts and sales.
2. To attach every cost to the crop and plot that incurred it, on the day it was incurred, in entries that can be corrected only by reversal.
3. To state, for any crop on any date, what has been invested in it, traceable to source entries.
4. To assess creditworthiness by a disclosed rule set in which every factor and its evidence is visible to the farmer and the lender.
5. To size the limit to the crop rather than to a fixed ceiling, within what the regulator permits for each lending route.
6. To release credit as input packages through the national payment rails, recovered from the buyer's payment at harvest.
7. To prove the valuation against the finance ledger on the organisation's own operations before any outside farmer is enrolled.

4. The Proposed Solution

4.1 What the system does

The system is an agricultural ERP first. Everything in the Operations and Trade groups below is ordinary enterprise software - purchasing, stock, costing, sales - and an agricultural business needs it whether or not a single loan is ever written. The Credit group is the third of three, and it exists only because the first two are there.

Table 2
What the system covers.

Group	What it covers
Operations	Grower and plot register with tenure and lease documents; crop planning and the crop calendar; suppliers, purchase orders, goods receipt and inspection; stock with batch, expiry, transfer and issue to a named plot; wastage and write-off with a reason code and a named authorising officer; field work and cost capture; harvest, grading and yield
Trade	Buyer register and forward contracts; delivery against contract; grading adjustment; the amount due to each grower; sales, dispatch and money owed; traceability from a delivered lot back to the plot, the inputs and their supplier
Credit	Valuation of the growing crop against the crop calendar; the scorecard, the risk band and the limit; the credit file for the lender; disbursement as input packages and recovery at harvest

Note. The modules, their features and the twenty-six use cases that exercise them are specified in the ERP and Credit Use Case Specification, listed in Appendix A. They are not repeated here.

Three things are outside this proposal and are stated so they are not assumed. The system does not lend: a regulated institution carries the exposure. It does not estimate the value of a future harvest; it reports cost recorded to date and planned cost still to come, which follows the treatment of biological assets where fair value cannot be measured reliably (International Accounting Standards Board, 2001). And it does not require the farmer to own a smartphone: where they do not, the field officer records for them.

4.2 What the ERP records, and which check reads it

This is the join between the two halves, and it is the whole proposal in one table. Nothing in the right-hand column is collected for the credit module. Every one of these entries is made because the business needs it to run.

Table 3
Every credit input is an ordinary operating record.

ERP record	Who enters it, and when	What the credit module does with it
Grower and plot register, with the tenancy or lease document	Field officer, at registration	Check 1, verified tenancy and remaining term. Tenure qualifies the farmer instead of disqualifying them
Crop plan against the crop calendar	Set at sowing from the crop template	Check 3, spending against plan. Also supplies the planned cost still to come

ERP record	Who enters it, and when	What the credit module does with it
Purchase order, goods receipt, and stock issued to a named plot	Store and procurement, on the day	Builds the cost recorded to date, which is the base the limit is worked out from
Field work, labour and machinery entries	Supervisor, daily	Adds to the same cost base
Wastage and write-off with a reason code and an authorising officer	Store, when it happens	Reduces the base and is disclosed to the lender rather than hidden
Harvest and grading record	Weighbridge and grading, at receipt	Check 2, recorded yield history
Delivery against a buyer contract	Dispatch	Check 4, past delivery performance
Buyer forward contract and its value	Trade, when signed	Check 5, confirmed forward order. Also sets the 80 per cent contract test on the limit
Farmer group membership	Grower register	Check 6, standing in a registered group

Note. A business that runs the Operations and Trade groups and never enables Credit still gets every entry above. The credit file is a by-product of the bookkeeping, not an extra burden on the farmer.

4.3 How credit is assessed

Six checks, fixed weights, and the evidence shown beside each. The method is a disclosed rule set rather than a learned model, so a credit committee can inspect and amend it and a farmer can be told the reason for a decision. Guidance on credit scoring where borrowers have no file supports disclosing the method (Consultative Group to Assist the Poor, 2019; Grow Asia & Grameen Foundation, 2020).

Table 4

The six checks.

Check	Weight	What it reads
Verified tenancy or lease, and remaining term	20%	The captured lease document and its expiry
Recorded yield history	25%	Completed seasons already on the system
Spending against the crop calendar	15%	Cost recorded to date against the plan
Past delivery performance	20%	Delivered against committed quantity
Confirmed forward purchase order	15%	A named buyer's order and its value
Standing in a registered farmer group	5%	Membership and its duration

Note. The weights are proposed for a lender's credit committee to adopt or amend. They are not statistically calibrated and no claim to calibration is made.

Evidence supports assessment of this kind. Non-traditional information predicts repayment where neither collateral nor credit history exists (Klinger et al., 2016), and experimental work shows such appraisal materially changes access for borrowers a collateral test excludes (Alibhai et al., 2022).

4.4 How much can be borrowed

The limit is worked out in four steps. The assessed base is the crop's value to date plus the planned cost still to come. The band from the scorecard sets the share of that base that may be lent - 70 per cent for band A, 60 for band B, 45 for band C. The result is then tested against the confirmed buyer

order and reduced if it exceeds 80 per cent of it, so the loan never exceeds what the harvest is contracted to pay. Finally it is capped at the ceiling of the lending route.

Table 5

Lending routes and their ceilings.

Tier	Borrower	Route	Ceiling	Basis
T1	Individual farmer	Fully digital, automated	NPR 200,000	Digital lending guideline, individual
T2	Registered agricultural enterprise, or produce as security	Digital working capital	NPR 1,000,000	Digital lending guideline; and monetary policy 2025/26 for lending against a farmer's own produce
T3	Commercial grower	Conventional agricultural loan, eligible for interest subsidy. We supply the file, the bank underwrites	NPR 5,000,000	The agriculture ceiling under the interest subsidy scheme restructured with effect from 11 August 2025
T4	Producer group or co-operative	Facility to the entity, with sub-limits per member	Assessed	The lender's own exposure policy

Note. NPR 200,000 is the ceiling on fully automated digital lending to an individual and the limit of the farmer credit card. It is not a ceiling on agricultural credit. Above NPR 1 million the loan is conventional and the lender underwrites it; our role is to supply the file, not to automate the decision.

Table 6

Two worked examples.

Step	Commercial grower, 45 bighas	Producer group, 1,000 bighas
Area	30.48 ha	677.26 ha
Planned season cost	NPR 4,274,000	NPR 94,977,000
Score and band	802 of 900, band A	Band A at block level
Band proportion	70 per cent	70 per cent
Approved limit	**NPR 2,991,000**	**NPR 66,484,000**
Route	Tier 3, bank underwrites	Tier 4, facility to the co-operative

Note. Cost per hectare from a 2023 district study of paddy. A single holder cannot lawfully farm 1,000 bighas in the Terai: the Land Act caps business landholding at 11 bighas there, and only 875 holdings in the country exceed ten hectares. A block that size is a co-operative of roughly 1,250 small growers under one buyer contract, and each member's sub-limit is set by their own score.

A farmer with no record. Two of the six checks read history, so a farmer in a first season can reach at most 495 of 900 and would be referred. Every new farmer would be excluded - precisely the people the system exists for. A starter route sets those two checks aside and rescales the other four. In exchange the buyer's order cannot be waived, a field officer must verify the plot physically, and the share lent falls to 40 per cent, capped at Tier 1. From the second season the standard route applies.

4.5 How the money moves

The approved limit becomes dated input packages timed to the crop stages not yet started, each redeemed at an approved supplier. No cash reaches the borrower. Suppliers are settled in bulk through the national payment rails, and recovery is taken from the buyer's payment before the balance is remitted to the grower.

This matters more than it sounds. Comparative research finds in-kind credit through a buyer relationship outperforms cash credit for comparable borrowers (Ruml, 2022). And the regulator has documented subsidised agricultural credit ending up in real estate and vehicles. Releasing value as goods does not police that behaviour; it makes it impossible.

One published finding shapes the design more than any other. A randomised trial of digital agricultural credit in Ghana found input spending rose but production, sales and profit did not, and only a minority of farmers received inputs within the period promised (Karlan et al., 2025). The binding variable is delivery timing, not assessment. Packages are therefore dated against the crop calendar, and the interval from approval to delivery is measured as a condition of the pilot.

4.6 Where the fintech piece fits

Three connections make the chain work, and none of them requires anything to be invented.

To the farmer, through a phone. The grower sees the same score, the same evidence and the same limit the lender sees, in Nepali, on an ordinary Android handset, and accepts the offer there. Where the farmer has no smartphone - still the common case - the field officer's device does the same job and the farmer signs on it. Nepal has the mobile base for this: mobile banking and wallet accounts now run into the tens of millions and retail QR payment is ordinary behaviour (Nepal Rastra Bank, 2025b).

To the lender, through a consented connection. The bank does not receive a spreadsheet. It receives the credit file - the score, each of the six checks with the records behind it, the valuation, the proposed limit and the buyer contract - over an interface, with the farmer's consent recorded and withdrawable. That is exactly the arrangement the amended digital lending guideline contemplates, in which a technology company assists with credit analysis and loan processing while the bank underwrites and carries the exposure (Nepal Rastra Bank, 2026b). The decision stays with the bank's credit officer, who can see and override every input.

To the money, through the national rails. An approved limit is not a transfer to a personal account. It becomes dated input packages redeemed at an approved supplier, and the supplier is settled through connectIPS or NEPALPAY QR, the national payment infrastructure operated by Nepal Clearing House Limited (Nepal Clearing House Limited, 2026). Recovery is deducted from the buyer's payment before the balance is remitted to the grower. Every leg leaves an electronic record, which is what allows the exposure to be refinanced later.

The engineering consequence is worth stating plainly: the credit module has no payment functions of its own. It produces an instruction, and licensed institutions and licensed rails carry it.

5. What Already Exists

5.1 Agricultural enterprise software

An established category, and a capable one. Four products were reviewed line by line against their own published material, on the capabilities an agricultural business in Nepal would actually shop for. The first eight rows are the enterprise software itself. The last five are where the difference is.

Table 7
Published capabilities of established agricultural enterprise software, and of the proposed system.

Capability	AgriERP	FarmERP	AGRIVI	Cropin	Proposed
Crop planning, calendar and field operations	Yes	Yes	Yes	Yes	Yes
Suppliers, purchase orders, goods receipt and inspection	Yes	Yes	Not published	Not published	Yes
Stock with batch, expiry, transfer and issue to a named plot	Yes	Partly	By integration	Not published	Yes
Wastage and write-off with a reason code	Yes	Partly	Not published	Not published	Yes
Buyer register, sales, dispatch and contract farming	Yes	Yes	Partly	Not published	Yes
Traceability from a delivered lot back to plot and inputs	Yes	Yes	Yes	Partly	Yes
Cost per crop cycle posted to a finance ledger	Yes	Yes	Costs only	Not published	Yes
Grower app with offline capture in the field	Yes	Yes	Yes	Yes	Yes
Credit assessment from the enterprise's own cost postings	**No**	**No**	**No**	**No**	**Yes**
A loan limit, a risk band and the evidence shown to the farmer	**No**	**No**	**No**	**No**	**Yes**

Capability	AgriERP	FarmERP	AGRIVI	Cropin	Proposed
Release as input packages and recovery from the buyer payment	**No**	**No**	**No**	**No**	**Yes**
Built to the Nepal lending routes and their ceilings	**No**	**No**	**No**	**No**	**Yes**
Nepali language, NPR, and the national payment rails	Not published	Not published	Not published	Not published	**Yes**

Note. Compiled in September 2026 from each vendor's own product pages; where a page does not state a capability this table says so rather than assuming. None of the four publishes pricing, and none claims Nepali language or a Nepal presence. The last column states what the proposed system is designed to do. No part of it is built yet.

Three of them do touch credit, and the difference matters. Cropin markets agri-lending and agri-insurance as served industries and claims risk assessment and disbursal support for banks from acreage and yield data. AGRIVI markets to banks, offering to feed farm data into the bank's own credit-risk scoring platform. FarmERP publishes a machine-learning farmer score, though its page does not describe it in credit terms at all. All three sit beside the lender and read the land from the outside: satellite imagery, geotagged plots, acreage and forecast yield. None of them scores from what the business itself posted - the purchase order, the goods receipt, the issue to the plot, the wastage note, the weighbridge ticket - and none sets a limit, releases it as goods or recovers it from a buyer payment.

Why would a business already running FarmERP switch? Not for the first eight rows. On ordinary enterprise features these products are mature and we say so plainly. The reason to switch is in the last five: a business changes system when the new one does something the old one cannot, and what none of them can do is turn the ledger the business already keeps into a loan the farmer can actually draw this season. Add to that the ordinary reasons a Nepali buyer chooses local software: an interface and reports in Nepali, figures in NPR, settlement over connectIPS, the lending routes and their ceilings already built in, support in the same time zone, and no foreign-currency licence fee. Where the Group is both the software owner and the off-taker, the switch is not a purchase decision at all.

5.2 Agricultural credit in Nepal

Credit scoring for agricultural lending has been attempted domestically. A Nepali product applies machine-learning scoring to loan appraisal and reports deployments at a microfinance institution and a development bank. It sits on the lender's side and does not hold the farmer's operating record. Its current status is unconfirmed and is listed in section 10 for verification.

The state instruments are the farmer credit card, at NPR 25,000 to 200,000 with no cash withdrawal, and the provision in monetary policy for 2025/26 permitting up to NPR 1 million against a farmer's own produce. The second is the more significant. It is lending against produce rather than land, and it needs an assessment method that does not yet exist.

5.3 The gap

Enterprise software does not assess credit. Credit products do not hold farm records. Neither the market review nor the literature turned up the combination proposed here: an auditable operating record used as the basis of a disclosed assessment, with verified tenure treated as a qualifying factor rather than a disqualifying one.

The honest claim is narrower than novelty and much harder to attack. Lending inputs to farmers without collateral is established practice - Apollo Agriculture does it at scale in Kenya, and the State Bank of Pakistan published guidelines for financing contract farmers against a buyer agreement in 2014. Farm software is an established category. Putting the two together, on the farmer's own records, is what has not been done.

6. Why This Organisation

Four advantages, none of which a competitor can buy.

The first season of data costs us nothing and costs everyone else everything. A new entrant must persuade farmers to record a full season before it can calibrate anything. We can run that season on our own fields.

We can be the buyer as well as the platform. An independent software vendor must find a purchaser before a loan can be structured. Where the Group is the off-taker, that dependency is internal.

We build rather than rent. No licence fee, no foreign currency exposure, and the intellectual property stays in the Group and can be sold on.

We are transparent where the competition is not. The closest comparator underwrites from satellite data and a model the farmer cannot see. A rule-based score with its evidence printed beside it is easier for a Nepali credit committee to accept and easier for a regulator to approve.

To these can be added the assets already held: agricultural operations to run the pilot on, buying relationships that supply the confirmed orders, an in-house software team, an existing discipline of tracking cost against a job, and banking relationships that shorten the path to a lender. Confirming the scale of each with the responsible business heads is the first task of the pilot.

7. Market and Commercial Potential

7.1 Who buys it in Nepal

Not farmers. The first customers are the businesses that already advance inputs to growers and already carry the risk informally. They buy the operations half first, because it solves a problem they have this season.

Table 8
Domestic segments and why each buys.

Segment	Why	Buys first
Sugar mills with cane growers	Existing input advance and deduction arrangements, and public payment arrears. The system makes those advances auditable and refinanceable	Operations
Dairy processors and co-operatives	Daily collection from thousands of small suppliers, and an assured payment stream to lend against	Operations
Poultry and feed integrators	Already supply chicks and feed on account. That is this loan structure, running without the records to fund it	Credit
Tea and coffee estates with outgrowers	Plot-level traceability is required for export certification regardless of credit	Operations
Agricultural co-operatives and federations	Member demand for input credit that is not available anywhere else	Credit
Banks and microfinance institutions	A directed lending obligation and a shortage of assessable agricultural files	Credit

7.2 Candidate lending partners

No institution has been approached, and that is deliberate: the approach is made with a completed season of evidence rather than with a proposal. But the candidates are specific.

Table 9

Candidate lending partners.

Institution	Class	Why it fits	Verified?
Agricultural Development Bank Limited	A	Statutory rural credit mandate, 51 per cent government owned, 279 branches, and a named agricultural product. The natural anchor	Mandate and reach confirmed; portfolio not
Global IME Bank Limited	A	Publishes an agricultural loan to NPR 10 million, presently collateral-based. Our file is what removes that condition	Product and limit confirmed
Muktinath Bikas Bank Limited	B	Runs agricultural cooperative pilots and already uses third-party credit scoring. Integration is not hypothetical here	Class confirmed; both activities reported
Sana Kisan Bikas Laghubitta	D	Lends wholesale to small farmer cooperatives, which lend on to members. The same shape as our producer group tier	Model confirmed; scale not
Nepal Bank, Nepal SBI, Machhapuchchhre	A	Each publishes a named agricultural product, so the appetite is declared	Names confirmed; terms not

Note. Class is the Nepal Rastra Bank licensing class: A commercial bank, B development bank, D microfinance. Classes were checked against the regulator's own list of licensed institutions as at mid-February 2026, on which Muktinath Bikas Bank appears as a national-level class B development bank, not a commercial bank (Nepal Rastra Bank, 2026c). Where this table says something is unverified it must not be stated to a panel as fact.

Three arguments would get any of them to the table. They are obliged to lend to agriculture and are losing more money there than anywhere else. The regulator amended the digital lending guideline in June 2026 to permit exactly this arrangement. And the wholesale route to co-operatives already exists; what it lacks is a way to assess the members behind them.

7.3 Outside Nepal

The design rests on four conditions rather than anything peculiar to Nepal: smallholder-dominated farming, tenancy without secure title, a regulatory obligation on banks to lend to agriculture, and existing contract farming. India, Bangladesh and the Philippines have all four. India is the largest and has the strongest equivalent obligation, priority sector lending at 18 per cent of adjusted net bank credit with a sub-target for small and marginal farmers (Reserve Bank of India, 2025). Data residency requirements in these markets are a hosting cost rather than a legal barrier. Rules on repatriating software export earnings have not been confirmed and no claim is made.

8. The Financial Case

8.1 What it costs to build

Table 10
Estimated first-year cost.

Item	Basis	NPR
Product build, in-house	4 full-time equivalents x 12 months x 150,000 loaded	7,200,000
Infrastructure, licences and field devices	Hosting and devices	900,000
Pilot field operations and training	Field officers, travel, grower onboarding	1,200,000
Contingency	10 per cent	930,000
Total		**10,230,000**

8.2 What it earns

Four revenue lines from three different payers, so the business does not depend on persuading farmers to buy software.

Table 11
Contribution per enrolled plot, per year.

Line	Basis	NPR
Platform fee	1,200 x 2 seasons	2,400
Credit origination fee	1.0 per cent of 90,000	900
Margin on input packages	8 per cent of 45,000	3,600
Margin on aggregated produce	3 per cent of 180,000	5,400
Total revenue		**12,300**
Direct cost	Field officer, hosting, credit provision, logistics	(4,580)
Contribution		**7,720**

Table 12
Indicative three-year position, NPR.

Measure	Year 1	Year 2	Year 3
Plots enrolled at year end	5,000	15,000	30,000
Gross contribution	11,580,000	77,200,000	169,840,000
Build and central overhead	(10,230,000)	(18,000,000)	(32,000,000)
Net contribution	**1,350,000**	**59,200,000**	**137,840,000**

Note. The first-year cost is recovered between month 11 and month 14 on this ramp, and is stated as a range rather than a date.

8.3 The four assumptions that decide the answer

Every input above is an estimate adopted for modelling. Four of them move the result, and they are named here so that a reader can test the case rather than take it on trust. In order of effect: produce value per plot per year, taken as NPR 180,000; input basket value per plot, taken as NPR 45,000; field officer cost and plots per officer, taken as NPR 420,000 and 250; and average credit size, taken as NPR 90,000, which matters least. If only one is verified before this goes further, verify the first.

9. Approach

The work runs in four stages over twelve months, each ending in a test. A stage does not begin until the preceding test has passed, and a failed test stops the work for review rather than letting it continue.

Table 13

The four stages and the test at each.

Stage	Months	What happens	The test
Definition	1 to 2	District, crop and cohort selected. The assets in section 6 confirmed with named owners. Current practice measured as a baseline	A signed cohort and a confirmed asset list
Build	3 to 5	The operations and trade functions built. The organisation's own plots enrolled. Store, purchasing and field staff trained	One full month captured with no gaps
Validation	6 to 8	Valuation run against a live season. Finance reconciles it against the ledger	The valuation agrees with finance within an agreed tolerance
Credit pilot	9 to 12	The credit functions built. Payment rail enrolment completed. Credit file agreed with a lender. First disbursement in kind, and recovery at harvest	The file format is accepted, packages arrive on their scheduled dates, and recovery happens at harvest

Note. This is the shape of the work, not a delivery plan. A detailed plan is written after approval, not before it.

10. Risks

Table 14

The principal risks and the response to each.

Risk	Assessment	Response
The farmer sells the harvest elsewhere and recovery fails	High. The characteristic failure of contract farming (Ton et al., 2018; Vicol et al., 2022)	Payment routed through the platform and recovery taken before remittance. Provided for in the credit loss provision. Mitigated, never eliminated
Input packages arrive late, so the credit changes nothing	High, and evidenced (Karlan et al., 2025)	Packages dated against the crop calendar, and the interval from approval to delivery measured as a condition of the pilot

Risk	Assessment	Response
Recording is incomplete and the valuation is unreliable	Medium	Field officer verification, and a scorecard check that penalises departure from the calendar, so a gap shows as a lower score rather than a silent error
No lender accepts the credit file	Medium. None approached, by design	The first three stages need no lender. Candidates are named in section 7.2 and approached with a season of evidence behind us
Crop loss from weather or disease	Medium. Crop insurance in Nepal is thin (Kathmandu Post, 2026c)	Exposure limited by the band proportion, the contract test, and release in stages rather than one advance
The team is not given protected time	Certain without a sponsor	Stated openly. Without it the twelve-month shape does not hold, and we say so rather than assuming it away

Two matters are unverified at the date of this proposal and are recorded as such: the current status of the domestic comparator in section 5.2, and whether the farmer credit card limit has changed since 2023. Neither affects the design.

11. Expected Outcomes

Table 15
What each party gets, and how it would be measured.

Who	Outcome	Measure
The organisation	Crop cost known during the season rather than reconstructed after it	Days from period end to a reconciled crop cost
The organisation	Stock attributable to the field that used it, and losses recorded against a cause	Stock variance at count; value written off by reason code
The organisation	Informal grower advances turned into an assessable, refinanceable position	Value of advances accepted by a lender
The farmer	Input credit at the week of the calendar when it is needed, without owning land	Share of the cohort approved; days from approval to delivery
The lender	Agricultural exposures supported by dated evidence	Portfolio quality against the institution's existing agricultural book
The organisation	A software asset saleable to the segments in section 7	Contracted subscriptions from year 2

12. Conclusion and Recommendation

An agricultural business in Nepal is already carrying the credit risk of its growers. It advances inputs, deducts at payment, carries the losses, and keeps the record in a notebook. The farmer is refused by a bank for want of a land certificate that a tenant will never have. Both are held back by the same missing number.

The system proposed here produces that number in the ordinary course of running the business, and then uses it. The operations half pays for itself in stock control, supplier management and knowing what a crop cost. The credit half turns the same record into a file a lender can act on, sized to the crop rather than to an arbitrary ceiling, released as goods and recovered from the harvest.

It is recommended that the work be approved for one crop cycle on the organisation's own operations, with a named sponsor at business head level and protected time for four people. No capital is sought beyond the estimate in Table 10, and no lender is asked to decide anything before the evidence exists.

What that produces after twelve months is a valuation reconciled against the finance ledger, a credit file format a bank has accepted, and one loan delivered as goods and recovered at harvest. That is either the beginning of a business or a clear answer that it is not one. Both are worth more than the notebook.

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Appendix A: Supporting documents

Table A1

Documents supporting this proposal.

Document	Contents
Product Overview	The short version: what the product is, in ten pages
How It Works	One season followed from beginning to end, with the timeline, the assessment and the failure cases
ERP and Credit Use Case Specification	The modules, the features of each, and twenty-six use cases
System Diagrams	Actors and use cases; the purchasing cycle; the assessment workflow; the application sequence; the layered view
Literature Review	The published research relied upon, including the findings adverse to this proposal
Source Register	Every source cited, the claim it supports, and where it is used

Appendix B: Land measures used in this document

Table B1

Nepali land measures and their metric equivalents.

Unit	Region	Sub-units	Hectares	Square metres
1 bigha	Terai	20 kattha	0.677263	6,772.63
1 kattha	Terai	20 dhur	0.033863	338.63
1 ropani	Hills	16 aana	0.050874	508.74
1 aana	Hills	4 paisa	0.003180	31.80

Note. One bigha is approximately 13.31 ropani. The conversions are exact by definition.