TECH4BHARAT 2026

JanAI Mass Entrepreneurship Challenge

Problem Statements for Field Research

8 themes | 20 problem statements

An initiative of Karnataka Arya Vysya Mahasabha, in partnership with JanAI and in collaboration with RV College of Engineering

October 2026

About the challenge

Tech4Bharat is the hackathon of the Global Accelerator Vision Summit 2026, run as the JanAI Mass Entrepreneurship Challenge. It is an initiative of Karnataka Arya Vysya Mahasabha, in partnership with JanAI and in collaboration with RV College of Engineering. Student teams take on twenty real problems faced by small enterprises and the people they serve across Bharat, organised under eight sectoral themes.

The statements draw on the field inventory of rural MSME problems compiled by Madan Padaki and on the JanAI rural agentic AI problem set.

The eight themes

Each theme groups two to four problem statements. The tag on every statement shows whether it calls for an Agentic AI system or an Applied AI system.

Theme	Name	Problem statements
1	**Real Estate & Land**	**1.1** Turning owned land into a home **1.2** Unclear land records
2	**Jeweltech**	**2.1** Verifying gold value **2.2** Gold issued to karigars
3	**MSME Finance & Compliance**	**3.1** Compliance paperwork **3.2** Formal credit and schemes
4	**Manufacturing & Industry**	**4.1** Raw material buying and quoting **4.2** Defect inspection **4.3** Machine breakdowns
5	**Retail, FMCG & Logistics**	**5.1** Kirana stock **5.2** Village group buying **5.3** Rural freight
6	**Agriculture & Food Processing**	**6.1** Farm produce selling **6.2** Livestock health **6.3** Micro food processors **6.4** FPO supply reliability
7	**Arts, Crafts, Heritage & Talent**	**7.1** Artisans and weavers **7.2** Folk artists and heritage hosts
8	**Youth & Women Empowerment**	**8.1** SHG order fulfilment and pay **8.2** Rural youth jobs

How to use these statements

Each statement describes a problem and leaves the solution entirely to you. We expect teams to take a statement into the field, sit with the enterprises and families who live with it, test what is written here against

what they find, and only then define the solution they want to build on the hackathon platform. Every statement follows the same layout:

1. The problem, as defined by the organising committee
2. Who lives with this
3. How it gets handled today
4. What it costs
5. Who else is in the picture
6. What makes it hard
7. Boundaries any solution has to respect
8. Questions to take into the field
9. Following the money, a pointer for thinking about who might pay

What we expect you to build

Most statements are marked Agentic AI. These call for a system that pursues a goal over many steps on behalf of its user: it plans, acts in external systems, keeps memory of the case, recovers when something fails and seeks human approval before any action involving money, legal commitment or personal data. Sandboxed or simulated integrations are allowed as long as they are disclosed, and the bar is a system that acts for its user, well beyond answering questions.

Statements marked Applied AI Systems put the depth of the model, data or optimisation at the core, whether that is vision on commodity hardware, speech in Indian languages, forecasting under uncertainty, risk modelling, optimisation or market design. These are judged on measured performance.

Conditions every solution works within

The people in these statements speak their own languages and often mix them, many have limited literacy, most use entry-level Android phones, and connectivity comes and goes. Solutions are expected to be voice-first and vernacular, to hold up in those conditions, and to offer an assisted path through a JanAI Café wherever documents, authentication or physical presence are needed. Consent is explicit, data collection stays limited to what the task needs, and mock integrations are clearly labelled wherever public or banking systems lack open interfaces.

Evaluation

Submissions are judged on two dimensions. The technical dimension covers architecture, quality of AI, a working prototype and innovation, while the entrepreneurial dimension covers problem relevance, market, business model, scalability and job creation. Final criteria and weightages are published with the registration details.

Theme 1: Real Estate & Land

Unlocking the value of the largest asset most rural families own.

1.1 Rural families cannot turn land they own into a home

AGENTIC AI

The problem. Information on housing schemes, subsidies, finance, approvals, construction costs and contractors is scattered across offices and people. Applications stall on missing or inconsistent documents, and families depend on middlemen to move a process that can run for many months.

Who lives with this. These are families who own a plot, often still recorded in a grandparent's name, while living in a kutcha or half-built house on uneven farm or wage income.

How it gets handled today. Families learn about schemes from neighbours or agents, document mismatches surface only after an application bounces, and the gaps between construction-linked instalments get bridged with borrowed money.

What it costs. It costs months of delay, lost wages, the middleman's cut and interest on loans, and sometimes a family abandons the attempt altogether.

Who else is in the picture.

1. Panchayat and revenue offices
2. Banks and housing finance companies
3. Masons and material dealers
4. Local agents

What makes it hard. These are long-running cases with many external parties, and every route must be grounded in actual scheme rules, which vary by state and budget year.

Boundaries. Recommendations cite published scheme rules, and the family approves every submission and payment.

Questions to take into the field.

1. Where did the last few families who started a house get stuck, and what got them moving again?
2. How often does a name mismatch on the land record surface only after applying?
3. How do families bridge the gap between instalments, and at what cost?
4. What does the local agent do that the family cannot?
5. Which office visit eats the most days?
6. What would a bank need to see before lending to a family with no salary slip?

Following the money. Find out who else is waiting for that roof to go up.

1.2 Land records are too unclear to sell, inherit or borrow against

AGENTIC AI

The problem. Ownership, inheritance, mutation and boundary records are hard to understand for families whose land is their main asset. Rural property rarely has a credible valuation, so it cannot be used as collateral and lenders stay away.

Who lives with this. These are farming households whose land was passed down without formal partition, often with a record that still shows a parent who died years ago.

How it gets handled today. The village accountant, taluk office, document writer and lawyer each hold one piece of the picture, while banks prefer to lend against crops or gold.

What it costs. Land that cannot be sold fairly, inherited cleanly or pledged pushes families toward moneylenders and into disputes that run for years.

Who else is in the picture.

1. Revenue and survey offices
2. Document writers and advocates
3. Banks, NBFCs and cooperatives
4. Co-heirs, including those who left the village

What makes it hard. There are few comparable transactions, valuations must avoid overestimates that harm borrowers, and record systems vary by region.

Boundaries. The system prepares the case while ownership decisions stay with revenue authorities and courts, and every valuation carries a stated range and confidence.

Questions to take into the field.

1. How many families hold land still recorded in a deceased person's name, and what stops them correcting it?
2. What does the local branch ask for before accepting land as collateral?
3. How does this village currently decide what a plot is worth?
4. Where do records disagree most often: names, extents or boundaries?
5. Who settles boundary disputes today, and how long does it take?
6. What does a family spend, in money and days, to sort out a land issue?

Following the money. Spend time with the people who turn rural land away as collateral, and with those who charge families to read their own records.

Theme 2: Jeweltech

The small-town jeweller and the artisan goldsmith: high-value trade, run on trust and notebooks.

2.1 Customers cannot verify what their gold is worth, and small jewellers cannot prove it

APPLIED AI SYSTEMS

The problem. Old-gold exchange and purchases at small jewellers rely on the jeweller's word for purity, weight deductions and making charges. Customers, many of them rural and first-time buyers, cannot check the numbers, disputes erode trust, and small jewellers struggle to keep hallmarking (HUID) and stock records in order.

Who lives with this. These are families exchanging old household gold, often ahead of a wedding, and the one or two counter jewellers in small towns who serve them.

How it gets handled today. Purity is judged by touchstone or by a karat meter if the shop owns one, deductions are quoted verbally, and HUID and stock records live in registers or basic billing software.

What it costs. Customers suspect a short count on every exchange, honest jewellers lose ground to chains that look more transparent, and record lapses invite compliance trouble.

Who else is in the picture.

1. Hallmarking centres
2. Bullion suppliers setting the day's rate
3. Chain jewellers competing on trust
4. Gold loan lenders

What makes it hard. Purity cannot be judged from photos, and any answer has to combine instrument readings and records honestly while resisting misuse by either side.

Boundaries. Purity claims rest on instrument readings or hallmark records, and any simulated readings are clearly labelled.

Questions to take into the field.

1. How does a customer decide today whether an exchange was fair?
2. What deductions does a jeweller apply on old gold, and how are they explained?
3. How often do disputes happen, and how are they settled?
4. What does the shop use to test purity, and do customers trust it?
5. How are HUID and stock records kept today, and what goes wrong?
6. What would a jeweller gain from being able to prove his numbers?

Following the money. Think about who else would like to see a clean record of a family's gold.

2.2 Gold given to karigars for job-work is tracked on trust, and disputes follow

AGENTIC AI

The problem. Jewellers issue gold to artisan goldsmiths by weight and receive finished pieces back with agreed wastage. Tracking issue, return, wastage, deadlines and payments across many karigars and custom orders is manual, which causes losses, disputes, missed delivery dates and late payment to artisans.

Who lives with this. These are karigars working from small workshops or home for several jewellers at once, and the jewellers juggling custom orders across many of them.

How it gets handled today. Issues are noted in a notebook or on a slip, wastage is agreed verbally, deadlines are chased by phone, and accounts are squared up at month end.

What it costs. It costs unexplained gold losses, disputes that sour long relationships, missed wedding dates and artisans waiting weeks to be paid.

Who else is in the picture.

1. Jewellers and their counter staff
2. Karigars and their helpers
3. Customers with fixed occasion dates
4. Refiners who recover gold from workshop scrap

What makes it hard. Accuracy has to hold at the level of weight, the audit trail has to be one both parties accept, and fairness matters most to the artisan, who has less power.

Boundaries. Settlements go to both parties for approval, and each karigar has full access to his own account.

Questions to take into the field.

1. How is gold issued and recorded today, and who holds the record?
2. How is wastage agreed, and how often is it disputed?
3. What happens when a piece is late for a wedding?
4. How long does a karigar wait to be paid after delivery?
5. What does a karigar do when the jeweller's number differs from his own?
6. How many karigars and open orders does a typical shop handle at once?

Following the money. A karigar with a clean record of work delivered looks very different to anyone deciding whether to trust him.

Theme 3: MSME Finance & Compliance

Standing in for the back office and the finance team that a micro enterprise cannot afford.

3.1 Micro enterprises lose time and profit to compliance paperwork

AGENTIC AI

The problem. GST filing through accountants costs ₹1,500–3,000 per filing and 8–12% of annual profits. Owners spend 15–20 hours a month on paperwork, TDS and e-way bills, and consignments are held for missed documents.

Who lives with this. These are traders, small manufacturers, transporters and service businesses just above the GST threshold, where the owner either keeps the books himself or pays a part-time accountant.

How it gets handled today. Bills pile up in a bag or a WhatsApp chat until the accountant collects them, e-way bills get generated at the last minute, and notices often arrive before anyone has noticed a problem.

What it costs. Beyond the fees and hours, owners pay late fees and interest, lose input credit when suppliers file badly, and watch consignments sit at checkpoints.

Who else is in the picture.

1. Accountants and tax practitioners
2. Suppliers whose filings affect input credit
3. Transporters carrying e-way bills
4. The GST department and portal

What makes it hard. Answers have to stay correct under rules that keep changing, and there is a strict line between preparing a return and filing it.

Boundaries. Filing stays with the owner or a professional, and is simulated during the hackathon.

Questions to take into the field.

1. Which compliance task takes the most hours each month, and who does it?
2. How do bills and payment records reach the accountant today?
3. How often has a consignment been held, and why?
4. How does the owner hear about a rule change?
5. What happens when a supplier's filing does not match the purchase?
6. How much does the owner understand of the return filed in his name?

Following the money. Ask an accountant how many more clients he could carry if half the sorting arrived done.

3.2 Viable small businesses cannot reach formal credit or the schemes meant for them

AGENTIC AI

The problem. MSMEs miss 70–80% of schemes they qualify for (MUDRA, PMEGP, Stand-Up India, CGTMSE). Loans need 15–20 documents and months of follow-up, middlemen take 10–15%, and without ITRs or audited statements many viable businesses end up with moneylenders at 24–36%.

Who lives with this. These are tailors, fabricators, dairy units and SHG-run enterprises with steady UPI flows and no paperwork a bank recognises.

How it gets handled today. Owners hear about schemes from a bank mitra, an agent or a neighbour, collect documents over months, and often fall back on a moneylender when the file stalls.

What it costs. Expensive working capital eats margins, and growth gets postponed season after season.

Who else is in the picture.

1. Bank branches and NBFCs
2. District industries centres and scheme agencies
3. Business correspondents and agents
4. SHG federations

What makes it hard. Every eligibility claim must cite its source, and any risk assessment has to be calibrated, fair across gender and region, and explainable.

Boundaries. Financial data is used only with consent, and the entrepreneur approves every application.

Questions to take into the field.

1. Which schemes has this business heard of, and from whom?
2. What did the last loan attempt require, and where did it stall?
3. What does the agent charge, and what does he actually do?
4. What informal records exist, and would the owner share them?
5. What does a branch manager need to see before saying yes?
6. Why do eligible applicants drop out midway?

Following the money. Every incomplete file costs a lender time. Find out how much.

Theme 4: Manufacturing & Industry

Units of 5–50 workers that carry India's manufacturing jobs but run on phone calls, estimates and ageing machines.

4.1 Small factories overpay for raw material and quote orders at a loss

AGENTIC AI

The problem. Buying material means calling 5–10 suppliers repeatedly and still missing better deals. Costing is approximate, so units either quote at a loss or lose the order, and they rarely sell beyond their local network.

Who lives with this. These are owners of fabrication, plastics, garment and component units who handle purchase and quoting themselves between running the shop floor.

How it gets handled today. Rates arrive by phone and WhatsApp and get compared on paper, quotes are worked out by rule of thumb, and most business comes from a few familiar local buyers.

What it costs. Units overpay for material, take orders that lose money, miss bids they should have won, and stay dependent on a handful of customers.

Who else is in the picture.

1. Suppliers and traders
2. Buyers and their purchase teams
3. Transporters, who shape landed cost
4. Industrial associations and clusters

What makes it hard. Quotes are unstructured and multilingual, prices are volatile, and vague buyer specifications have to be mapped to what the shop floor can really produce.

Boundaries. Any negotiation stays within limits the owner sets, and a person makes every award and payment.

Questions to take into the field.

1. How many suppliers does the owner call for a typical purchase, and how long does it take?
2. How are quotes compared, and which costs get missed?
3. How was the last quote to a buyer worked out?
4. How often has an order turned out to be a loss?
5. Where do new buyer enquiries come from today?
6. Would neighbouring units buy together?

Following the money. Somebody gains when a unit stops overpaying. Work out who, and by how much.

4.2 Manual inspection lets defects through and keeps small units out of bigger supply chains

APPLIED AI SYSTEMS

The problem. Manual inspection misses 10–15% of defects. Industrial machine vision is costly and needs specialists, so small units cannot show the consistent quality larger buyers demand.

Who lives with this. These are small units making components, packaging or textiles, where inspection is done by eye by whoever is free on the line.

How it gets handled today. Workers check samples by sight, rejections are often discovered at the buyer's end, and quality records are thin or missing.

What it costs. It shows up as rejected consignments, chargebacks and lost access to larger buyers who want proof of consistent quality.

Who else is in the picture.

1. Line workers and supervisors
2. Buyers' quality teams
3. Larger suppliers sourcing from small units
4. Testing labs

What makes it hard. There is very little data, lighting is uncontrolled, and labelling is done by people who are not experts.

Boundaries. Quality records reflect what was actually inspected, and the owner signs off on every batch record.

Questions to take into the field.

1. Which defects matter most to the buyer, and how are they spotted today?
2. How often are consignments rejected?
3. What does the buyer ask for as proof of quality?
4. What are the lighting and space like where inspection happens?
5. How often does the product change?
6. Who would label defects, and how much time do they have?

Following the money. Ask what it would take for a large buyer to start trusting a small unit's own quality records.

4.3 Small factories lose production to breakdowns they cannot see coming

AGENTIC AI

The problem. Powerlooms, flour mills, pump sets and small machine shops run old equipment without condition monitoring or a maintenance team. Breakdowns are unplanned, spare parts are sourced in a hurry, and every day of downtime eats into thin margins.

Who lives with this. These are owners running second-hand or ageing machines who double as the maintenance department and judge machine health by sound and feel.

How it gets handled today. Machines run until they fail, then the owner calls whichever mechanic is free and sends someone to town for the part.

What it costs. It costs lost production days, missed deliveries, emergency prices for parts and wages paid to workers standing idle.

Who else is in the picture.

1. Local technicians and mechanics
2. Spare part dealers
3. Equipment makers and dealers
4. Workers who notice the early signs

What makes it hard. There is no labelled fault data, so anything useful has to learn from weeks of normal running on unlabelled, ageing machines, and keep working offline.

Boundaries. Any decision to stop production rests with the owner, and hardware may be prototyped or simulated with recorded signals.

Questions to take into the field.

1. Which machine failed last, how long was it down, and what did that cost?
2. What did workers notice before it failed?
3. How long does it take to find a technician and a part?
4. Are there idle windows when repairs could happen without losing output?
5. What is the power and phone signal like on the shop floor?
6. What record of past repairs exists?

Following the money. A technician who knew which machines were about to fail would plan his week very differently.

Theme 5: Retail, FMCG & Logistics

The last mile of consumer goods and freight: millions of kiranas, the villages they serve and the vehicles that reach them.

5.1 Kiranas tie up cash in dead stock while running out of what sells

AGENTIC AI

The problem. Kiranas lose 15–20% of working capital to dead stock while running out of fast movers. ₹5,000–10,000 of stock expires every month, festival demand is guessed, and most shops have no billing system to learn from.

Who lives with this. These are owner-run shops with a helper or two, extending credit to regular customers and buying from several distributors and the wholesale market.

How it gets handled today. Stock is tracked by memory and a glance at the shelf, orders go in when the salesman visits, and expired goods are found on the shelf rather than flagged in advance.

What it costs. Beyond the dead stock and expiries, shops lose sales on empty shelves and lose customers to quick commerce.

Who else is in the picture.

1. Distributors and their salesmen
2. Wholesale markets
3. FMCG brands
4. Neighbouring shops

What makes it hard. There is no clean data, thousands of items go by local names, and anything built has to prove useful within a week of starting.

Boundaries. Purchases stay within a cash budget the owner sets, and the owner approves every order.

Questions to take into the field.

1. How does the owner decide what to reorder today?
2. What expired last month, and why?
3. Which items run out most often, especially near festivals?
4. What records exist, from UPI alerts to khata books to distributor bills?
5. How does customer credit affect what the shop can buy?
6. Would the owner order jointly with a neighbouring shop?

Following the money. Think about who would value knowing what a thousand small shops will need next week.

5.2 Villages buy everything in small lots with no bargaining power

APPLIED AI SYSTEMS

The problem. Households, farmers and village businesses buy consumer goods, inputs and supplies individually, so they pay more, and brands and distributors cannot see rural demand well enough to serve it.

Who lives with this. These are households, small farmers and village businesses buying from the local shop, the weekly shandy or a trip to town.

How it gets handled today. Purchases are made one at a time at retail prices, with the occasional informal group buy organised through an SHG or a trusted local figure.

What it costs. It costs higher prices, time spent travelling to town, and online deals that never reach the village.

Who else is in the picture.

1. Local shopkeepers
2. Distributors and brands
3. SHGs and panchayats
4. Online sellers trying to reach rural pin codes

What makes it hard. The market design has to be fair and resistant to manipulation, and the demand being forecast has never been recorded.

Boundaries. Prices and allocations are visible to every participant, and each person commits only their own money.

Questions to take into the field.

1. What does a household buy regularly, and where?
2. Has the village ever pooled purchases, and what happened?
3. Whom would people trust to hold money or goods for the group?
4. How would local shopkeepers react to group buying?
5. What reaches the village online today, and what does not?
6. How far do people travel for a cheaper price?

Following the money. A village that can tell a supplier what it will buy next month looks very different from the distributor's chair.

5.3 Rural freight moves half-empty, late and at high cost

APPLIED AI SYSTEMS

The problem. Farmers with produce ready and units waiting for materials struggle to find an affordable vehicle at the right time. Trips run part-loaded because neighbouring loads are never combined, and a cancellation means starting over.

Who lives with this. These are farmers with a harvest to move, small units waiting on materials, and informal transporters who own one or two tempos or tractors.

How it gets handled today. People phone a driver they know, wait, pay for a full trip on a part load, and the vehicle usually comes back empty.

What it costs. Freight per unit stays high, produce spoils while it waits, and transporters lose money on every empty return.

Who else is in the picture.

1. Tempo and tractor owners
2. Mandi traders and commission agents
3. FPOs
4. Input dealers and small factories

What makes it hard. It is a large combinatorial problem with uncertain demand, and the transporters are informal operators who have to be brought on board. Teams may use classical or quantum-inspired methods benchmarked against a simple baseline, and quantum hardware is optional.

Boundaries. Every shipper on a shared trip sees how its price was set, and transporters take loads by choice.

Questions to take into the field.

1. How does a farmer find a vehicle today, and how long does it take?
2. How full is the average trip, outbound and back?
3. What happens when a transporter cancels?
4. Would neighbours share a vehicle, and how would they want the cost split?
5. How do transporters find return loads?
6. What does a part-load trip cost compared with a full one?

Following the money. Look at the empty return leg from the transporter's side.

Theme 6: Agriculture & Food Processing

Farm and livestock households deciding under weather, price and perishability risk, and the micro processors and collectives that turn produce into food.

6.1 Farmers sell at the wrong time, place and price

AGENTIC AI

The problem. Farmers sell at local mandi rates without knowing better nearby prices, losing ₹5,000–20,000 per cycle, and 20–30% post-harvest losses come from poor storage and timing.

Who lives with this. These are small and marginal farmers with a harvest to sell, little storage of their own and an urgent need for cash.

How it gets handled today. Most sell to the local commission agent or trader, often the same person who advanced inputs on credit, at whatever price is quoted that day.

What it costs. Beyond the lost income per cycle, farmers stay tied to a trader through debt and absorb the spoilage when they cannot store or move produce in time.

Who else is in the picture.

1. Commission agents and traders
2. Mandis and e-NAM
3. Warehouses and cold storage
4. FPOs
5. Banks offering credit against stored produce

What makes it hard. Local price data is sparse, perishability is hard to model, and any useful outcome depends on coordinating many parties.

Boundaries. The farmer makes the call on when and where to sell, and every forecast states its uncertainty.

Questions to take into the field.

1. Where did the farmer sell last season, and why there?
2. How did he learn the day's price?
3. Does he owe the trader money, and does that decide where he sells?
4. What storage is available nearby, and at what cost?
5. How much was lost to spoilage last harvest?
6. Would he wait for a better price if he could borrow against stored produce?

Following the money. The gap between what the farmer gets and what the market pays is somebody's income today.

6.2 A sick animal or a missed vaccination wipes out household income

AGENTIC AI

The problem. For families that depend on cattle, buffaloes, goats or poultry, illness or a missed vaccination directly cuts income, and veterinary access and reliable market information are limited.

Who lives with this. These are households with a few animals, where women often handle daily care and milk goes to a cooperative or a local buyer.

How it gets handled today. Families try home remedies first, then call a paravet or travel to the government vet, vaccinate when a camp comes through, and keep each animal's history in their heads.

What it costs. It costs lost milk, dead animals, missed breeding cycles and distress sales when money runs short.

Who else is in the picture.

1. Veterinarians and paravets
2. Dairy cooperatives
3. Livestock insurers
4. Feed and medicine suppliers

What makes it hard. Triage has to be safe and support the vet rather than replace one, and most animals carry no tags to identify them.

Boundaries. Diagnosis and treatment stay with a veterinarian, and urgent cases reach one quickly.

Questions to take into the field.

1. When an animal fell sick last, what did the family do first?
2. How far is the nearest vet, and how quickly can one come?
3. How does the family know when a vaccination is due?
4. How are animals told apart, and are any tagged?
5. What does the family lose when an animal misses a breeding cycle?
6. Is the animal insured, and what does a claim need?

Following the money. Healthier, recorded animals matter to more people than the family that owns them.

6.3 Micro food processors cannot meet the requirements to sell beyond their town

AGENTIC AI

The problem. Home-based and micro food units (pickles, snacks, spices, millets, flour mills) handle food safety registration, labelling, batch records, shelf life and costing informally. This keeps them out of organised retail and e-commerce, where buyers ask for compliant labels and traceable batches.

Who lives with this. These are home-based and micro units, many of them run by women, selling locally, at fairs and over WhatsApp.

How it gets handled today. Registration is done once or never, labels are printed locally or handwritten, recipes and batches live in memory, and prices are set by guesswork.

What it costs. Units stay locked out of retail shelves and marketplaces, carry the risk of penalties, and often sell below their true cost.

Who else is in the picture.

1. Food safety officers
2. Retailers and online marketplaces
3. Packaging suppliers
4. Testing labs

What makes it hard. The rules vary by product and by scale, and a supporting system has to stay on the support side of compliance.

Boundaries. Certifying that food is safe stays with authorities and accredited labs, and a person signs off on every label and cost.

Questions to take into the field.

1. Which registration does the unit hold, and what does it believe it needs?
2. What did a retailer or marketplace ask for when it last tried to sell beyond town?
3. How are batches and ingredients recorded today?
4. How is shelf life decided?
5. How is the selling price worked out?
6. What would happen if a batch went bad after sale?

Following the money. Ask a retail buyer what it costs to find a small supplier whose paperwork is already in order.

6.4 Food processors cannot rely on farmer collectives for steady supply

APPLIED AI SYSTEMS

The problem. Unpredictable yield and quality stop FPOs from committing to the regular supply contracts that processors and institutional buyers need, so both sides lose.

Who lives with this. These are FPO managers and boards with members on small plots, and the processors and institutional buyers who need steady volumes from them.

How it gets handled today. Commitments rest on rough estimates made at sowing, and grade becomes clear only when produce reaches the collection point.

What it costs. It costs broken contracts, penalties, distress sales of surplus and buyers who quietly go elsewhere.

Who else is in the picture.

1. FPO staff and boards
2. Member farmers
3. Processors and retailers
4. Agronomists and extension workers

What makes it hard. The data is mixed and low resolution, and buyers need calibrated uncertainty rather than a single number.

Boundaries. Forecasts carry stated confidence, and contract decisions stay with the FPO board.

Questions to take into the field.

1. How does the FPO estimate its volume today, and how far off was it last season?
2. Which grades does the buyer pay for?
3. Why do members sell outside the FPO?
4. What do members already record about their sowing?
5. What happens when the FPO falls short on a contract?
6. What would a buyer accept as a credible forecast?

Following the money. Look at what a buyer spends today covering for supply that never arrived.

Theme 7: Arts, Crafts, Heritage & Talent

Living traditions that can sustain livelihoods if they reach the right buyers and audiences.

7.1 Artisans and weavers depend on middlemen and rarely reach buyers who value their craft

AGENTIC AI

The problem. Craft products rarely reach buyers beyond local fairs and traders. Listing online needs photography and digital skills, the story and origin of the craft is lost, and negotiating with bulk buyers is intimidating without market-rate information.

Who lives with this. These are weavers, potters and wood and metal craftspeople working from home or in clusters, selling through traders, fairs and cooperatives.

How it gets handled today. The trader sets the price and the maker's name disappears along the way, a few try selling online with phone photos, and bulk orders get negotiated without any sense of market rates.

What it costs. Margins stay thin, middlemen keep the larger share, the craft's story is lost, and younger family members drift away from the work.

Who else is in the picture.

1. Traders and master craftspeople
2. Cooperatives and handicraft boards
3. Online and open-network sellers
4. Designers and boutique buyers

What makes it hard. Presentation has to stay faithful to the product, and pricing has to be grounded in real market rates.

Boundaries. Listings describe the product exactly as it is, and every commitment returns to the artisan for approval.

Questions to take into the field.

1. Who buys from the artisan today, and at what price compared with the final retail price?
2. What happened the last time they tried selling online?
3. What makes their craft distinct, in their own words?
4. How do they price a piece?
5. What did the last bulk order demand, and how was it negotiated?
6. Who in the household handles the phone and payments?

Following the money. Find out what buyers far from the village pay for a story they can trust.

7.2 Folk artists, performers and heritage hosts cannot get regular, paid bookings

AGENTIC AI

The problem. Folk performers, craft demonstrators, local guides and heritage homestays get work by word of mouth. They have no portfolio, no clear pricing and no contracts, payments are delayed, and money from heritage tourism and events bypasses the village.

Who lives with this. These are folk performers, craft demonstrators, local guides and heritage homestay hosts, many of whom are not online at all.

How it gets handled today. Bookings come through word of mouth, an event manager or a single local contact, fees are agreed verbally, and payment arrives late or in pieces.

What it costs. Income stays irregular, artists underprice themselves, and most tourism money stays with operators based outside the village.

Who else is in the picture.

1. Event managers
2. Schools and colleges
3. Tour operators and travellers
4. Corporate event teams
5. State culture and tourism departments

What makes it hard. Talent and trust have to be verified on both sides, pricing has to be fair, and scheduling has to work around travel and seasons.

Boundaries. Artists confirm every booking and fee, and payments are followed until they arrive.

Questions to take into the field.

1. How did the last three bookings come in, and what did they pay?
2. How long did payment take?
3. How is a fee decided, and is travel counted?
4. Which seasons are busy, and which are dead?
5. What worries an organiser about booking someone unknown?
6. How much does the village earn from visitors today, and who keeps it?

Following the money. Ask organisers what they spend today finding authentic performers, and how much of it reaches the performer.

Theme 8: Youth & Women Empowerment

Women-led collectives and rural youth looking for fair work and fair pay.

8.1 Women's self-help groups lose orders and members' trust because fulfilment and pay are chaotic

AGENTIC AI

The problem. Splitting a bulk order across 10–15 members, holding quality, consolidating output and sharing payment is chaotic, and manual accounting erodes trust. Members also underprice by 30–40% because material, labour and margin are never calculated.

Who lives with this. These are SHGs taking on bulk orders for garments, food or crafts, where one leader coordinates members who work from home.

How it gets handled today. The leader divides work verbally and tracks it in a notebook, quality gets checked only when output comes together, and payment is split by estimate.

What it costs. Beyond lost margin, groups miss deadlines, see batches rejected, and lose members who no longer trust the accounts.

Who else is in the picture.

1. SHG federations and livelihood mission staff
2. Buyers placing bulk orders
3. Material suppliers
4. Banks linked to the group

What makes it hard. Allocation and payout have to be fair, quality in handmade goods is subjective, and many members have low literacy.

Boundaries. Every member can see and hear her own record, and the group approves every payout.

Questions to take into the field.

1. How was the last bulk order divided, and who decided?
2. How do members know what they earned?
3. What happened when a member fell behind?
4. How is quality checked, and who has the final word?
5. How was the price for the order worked out?
6. How do members who cannot read keep track of their work today?

Following the money. A group that delivers on time, every time, becomes a supplier worth seeking out.

8.2 Rural youth cannot find work that fits, and small employers cannot find them

AGENTIC AI

The problem. Young rural workers lack a reliable way to find work that matches their skills, location and income needs. Employers take 2–3 months to hire by word of mouth, and 40–50% of hires fail within three months.

Who lives with this. These are young people with school, ITI or college qualifications looking for local or seasonal work, and small employers who need hands quickly.

How it gets handled today. Jobs travel through relatives, WhatsApp forwards and agents, and employers hire whoever a contact recommends.

What it costs. Beyond slow hiring and early exits, workers lose money to fake listings and unpaid wages.

Who else is in the picture.

1. Small employers
2. Skilling centres and ITIs
3. Placement agents
4. Panchayats and employment schemes

What makes it hard. Workers need protection from fraudulent listings, bias has to be controlled, and skills have to be verified from video.

Boundaries. Listings are checked before they reach workers, and a worker's details go to an employer only with consent.

Questions to take into the field.

1. How did young people here find their last job?
2. Why did the last hire leave within three months?
3. What does an employer check before hiring?
4. How far will a worker travel, and for what wage?
5. Has anyone here been cheated by a fake listing?
6. Which skills do employers say are missing?

Following the money. Ask an employer what a bad hire costs.