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Overnight Hackathon

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8th mile

Moonwalkers

Sristi Bora

Khushi Jain

Aditi

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Problem Statement

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Agricultural Input Subsidy Leakage Detection

- The Indian government provides large fertilizer and input subsidies to farmers through registered dealers, but a significant portion is leaked via inflated beneficiary lists, ghost farmers, and diversion of subsidised inputs to the open market.
- Current controls focus only on “input side” records (who bought subsidised fertilizer), with very weak visibility into whether those inputs translate into reasonable crop output in that region and season.
- As a result, honest farmers face stock shortages and delayed access to subsidies, while networks of dealers and fake beneficiaries repeatedly exploit the system without being detected as a pattern.

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Proposed Solution

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- Three-layer verification: Cross-checks dealer sale records, farmer output logs, and regional yield benchmarks.
- Risk scoring: Calculates risk levels by comparing input use vs. actual yield and seasonal patterns.
- Clasification Attributes : Green = normal, Yellow = monitor, Red = audit & investigation.

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Key Features

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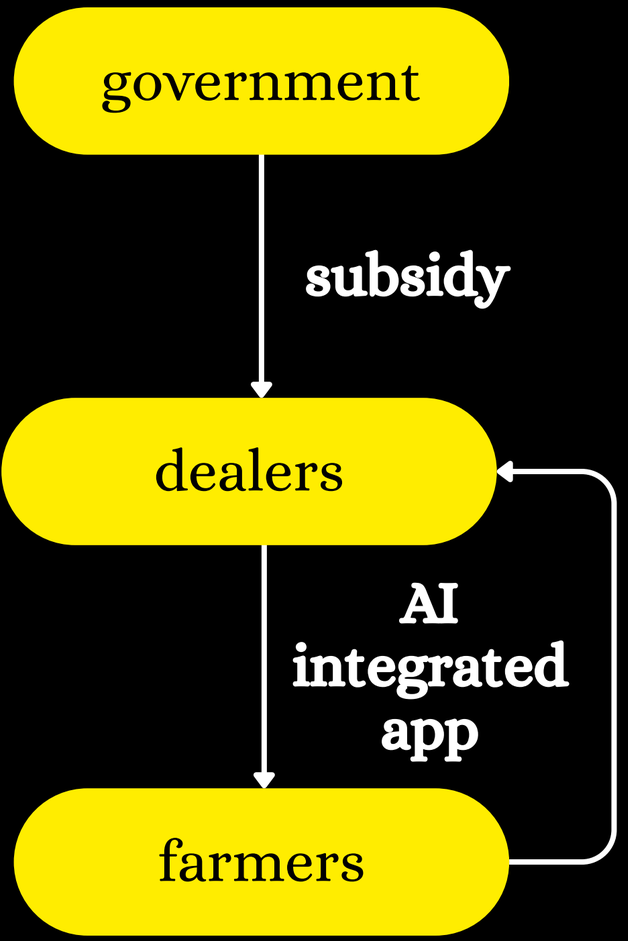

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Tech Stack

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- Python/SQL integrated database management system
- Python libraries and modules (pandas, pip install etc)
- ID3 decision tree algorithm

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Target for next checkpoint

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- Having a more detailed analysis about the farmers and dealers.
- Training model to analyse data in the given database

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System Architecture

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Challenges Faced

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Future Scope

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Integrating hardware and software for our solution (creating an app, GPS trackers etc).

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Thank You