OpenG2P

for Agriculture



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85% of the world's farms are smaller than two hectares. Smallholders produce 60% of food in low- and lower-middle-income countries[1]. However, their informal, small-scale operations often leave them invisible to government support systems.

Without verified identity and land records, they struggle to access credit. Paper lists and disconnected databases make subsidies and inputs slow, duplicated,s or unevenly distributed, while advisory services reach few farmers with limited plot-, crop- or season-specific guidance. Farmers need to be uniquely identified, with their land and crops recorded, so subsidies, credit, insurance and timely advice reach them when needed.

Meanwhile, **2.1 billion people faced food insecurity in 2025**, underscoring the need to boost farmer productivity[2].



A digital farmer registry — one verified record per farmer, linked to national ID and land data — turns agriculture from a sector governed by estimates into one governed by evidence.



Digitisation helps deliver benefits to the right farmers, improve access to inputs and credit, and provide tailored advice — boosting agricultural productivity.

Technology

OpenG2P is a set of open-source building blocks for governments, available as a Digital Public Good: free to use and adapt, with no licence fees and no vendor lock-in. Its Registry module is the foundation — a configurable system for building authoritative registries of people and entities.

The Farmer Registry is an agriculture-configured Registry module that brings together each farmer's **identity, household, land and ownership/tenancy details, geo-location, crops, livestock, inputs, access to water, machinery and finance, cooperative memberships, and supporting documents** such as land titles and tenancy agreements. This single profile supports **subsidies, agricultural finance, insurance, and extension services**.



Key Capabilities

- **Base Platform:** Can be extended to multiple agricultural registries – farmer, land, crop, livestock, etc.
- **Change Management and Approvals**: All data modifications in the registry are processed through a change request workflow.
- **Data Exchange**: Data ingestion from existing databases and data sharing to consumers of farmer data. For e.g. cooperative farms offering farmer loans may request the Farmer Registry for verified farmer data before sanctioning a loan.
- **Consent Manager**: Microservice to govern all outbound data sharing from the registry. The Registry shares personal data with an external partner only when a verifiable consent is present.
- **Interoperable Module:** Connects with external systems e.g. national ID, payment systems, etc for greater coordination across the agricultural ecosystem.
- **Data Security**: Protects sensitive farmer data and audit features to track every action (entries, updates, approvals, etc.) within the Registry.

OPENG2P IN ACTION

Programme	Use Case	Government Partner	Reach / Potential Impact
Farmer Registry (Ethiopia)	Registering farmers, managing their data, and enabling secure data exchange to deliver targeted services.	Agricultural Transformation Institute (ATI)	15-17 million farmers country-wide
Farmer Registry (Sri Lanka)	Importing and securely managing existing farmer data and enabling use of data for program planning.	Department of Agriculture	1.4 million farmers

References:

1. FAO. 2025. In Brief to The State of Food and Agriculture 2025 – Addressing land degradation across landholding scales. Rome. https://doi.org/10.4060/cd7071en
2. FAO, IFAD, UNICEF, WFP and WHO. 2026. The State of Food Security and Nutrition in the World 2026 – Understanding and addressing the high cost of a healthy diet. Rome.https://doi.org/10.4060/cd8306en







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