



OpenG2P in Agriculture

Farmer Registry for Digital Agriculture

In partnership with
the Ethiopian Agricultural Transformation
Institute (ATI), Government of Ethiopia.



Use Case

OpenG2P is supporting the **Ethiopian Agricultural Transformation Institute** (ATI) to establish a unified Farmer Registry that serves as a single, reliable source of farmer data. The Registry collects farmer and farm-level information, including:

- Demographic details of the farmer
- Household details
- Crop details such as crop name, planted date
- Socio-economic details i.e., education, income, participation in welfare programmes etc.
- Farmland details, i.e., location, size, boundaries, ownership, current use, farm type etc
- Livestock details such as breed and head count

The registry enables targeted delivery of agricultural services (crop advisory, market information, agriculture input vouchers, etc.), improves coordination across programs (such as farmer credit programs) and strengthens Ethiopia’s digital agriculture ecosystem. The registry leverages the national digital identity (Fayda ID) for trusted authentication and verification of farmers and, in the future, will integrate with systems such as OpenAgrinet.



PROVIDING ACCESS Registry infrastructure is live and capable of enrolling the target population. The system is available for use. Measured by: Is a digital registry deployed for this program? Does it cover the eligible population geographically?	DRIVING ADOPTION People are actively enrolled. Records exist with verified identity, consent, and data quality checks passed. Measured by: # of verified beneficiary records in registry % linked to foundational ID (e.g. Fayda)	INCENTIVISING USAGE Registry data is actively consumed — programs query it, services are delivered through it, and updates flow back. Measured by: # of API calls / data requests # of programs or agencies drawing from the registry	DELIVERING IMPACT Registry-enabled delivery demonstrably improves targeting, reduces exclusion errors, and reaches underserved populations. Measured by: Improved targeting Financial inclusion rates
OpenG2P Farmer Registry live Deployed; targets ~17M smallholder farmers nationally	– 543K* since Aug 2025 (ATI + third party drive) – Target: 1M by end 2026; 5M proposed to World Bank.	Integration with Banks in Progress API integration with banks to access farmer records for disbursing credit. OpenAgriNet will also integrate with registry.	Currently Unavailable. Field observations or longitudinal studies required



Technology

The OpenG2P platform provides reusable digital public infrastructure for farmer data management. The OpenG2P Registry module connects multiple data sources to create a comprehensive Farmer Profile. The registry imports unique phone numbers from existing **ATI databases such as the crop advisory hotline, input voucher system, and market information system** which consist of farmers who have previously used these services. A new farmer record is created against the phone number. The record is then updated via a separate enumeration exercise. The registry connects with the **National Rural Land Administration System** to import land parcel ID and other ownership details. The land parcel ID is collected on the field, shared with NRLAIS, and land details are retrieved. Consent is taken from the farmer during enumeration and stored as an artefact in the consent management module of the registry. Farmer data is shared from the registry to consumers only if consent is given and the consumer is authorised to access the data. These data sources are not seeded with Fayda ID as yet, so the registry pulls data using other unique identifiers such as land parcel ID or phone numbers.

Core Capabilities

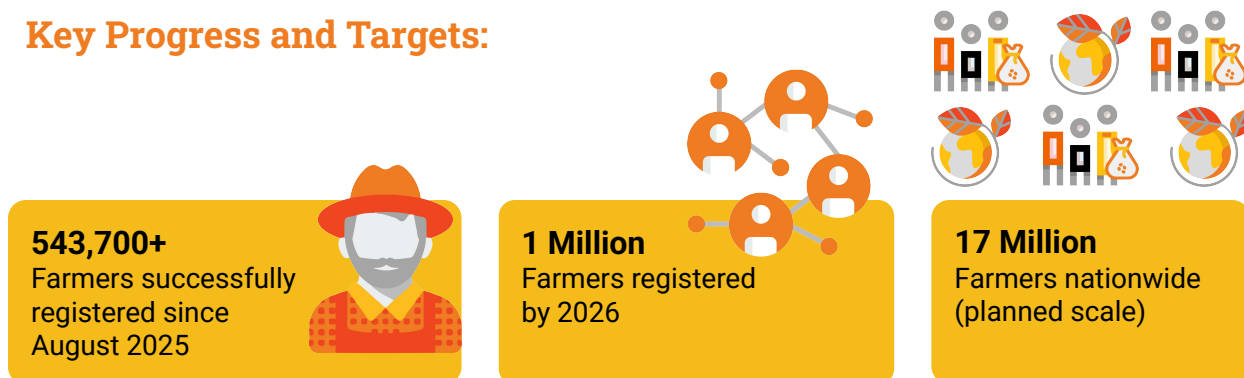
- Farmer Registry linked with Fayda Digital ID.
- Integration with advisory, finance, and market services - Currently, banks are accessing farmer records through an interface where they upload a signed consent form from the farmer who approaches the bank for a loan. The required data is pushed through an asynchronous mechanism based on [WebSub protocol](#) into the bank's system. The registry can also integrate with other systems via DCI standard-compliant APIs.
- Dynamic UI rendering for adaptable workflows - Dynamic UI Rendering is a capability in OpenG2P's latest Gen 2 Registry Platform that eliminates the need for custom software development every time a new registry is set up or modified. It is *dynamic* because once a program team defines the data schema, the system becomes immediately aware of it. From that point, an authorised user can configure everything through the interface itself: sections of the registry, the forms for data entry, the widgets (interactive UI elements like dropdowns, date pickers, or lookup fields), and deduplication rules. No developer involvement is required. This feature enables registry workflows such as intake - the process by which a new person is registered - and change requests - the process by which updates to existing records are proposed, reviewed, and approved - to be managed entirely through the UI and thus adaptable to a country's rules and requirements. This version of the registry was released on 8 May 2026 and will be deployed in production for Farmer Registry and the National Social Registry in Ethiopia.
- Interoperability with program information systems - Currently, the registry is not connected to any program information systems. However, it is capable of interoperability through standards-compliant APIs.
- Integration with multiple data layers, including satellite, field, and farmer data - Currently, the registry connects to ATI databases on crop advisory, input voucher, and market information systems. It connects to the NRLAIS to fetch land details of farmers (See *Technology* section above).



Impact

The implementation demonstrates how digital public infrastructure can enable scalable agricultural service delivery. The platform enables improved targeting of subsidies, advisory services, financial access, and aggregation/market linkages for farmers while enabling data-driven decision-making for agricultural programs.

Key Progress and Targets:



For more information:
info@openg2p.org | openg2p.org

