A Global Farm Registry for the United Nations
Harnessing the power of GS1 Global Location Numbers for food security and sustainability

As the world’s population grows to approximately 9 billion by 2050, the demand on global food systems will continue to intensify. To ensure the growing population can overcome hunger and malnutrition without compromising biodiversity and eco-systems, there must be a reduction in food loss and waste—which the FAO estimates to be about 30 percent of all food produced. Improvements are needed in productivity and the use of natural resources; for example, food production currently uses 79.5 percent of all water used as well as a reduction in the use of herbicides, pesticides and fertilisers.

The emergence of corporate and third-party sustainability standards and certification schemes over the past 20 years have spurred the adoption of more sustainable production systems, in conjunction with developments in agricultural policy, and greater public awareness of sustainability issues. However, these respond largely to expectations of consumers in developed countries and their requirements have put added pressure on farmers, especially in developing countries.

Questions remain as to whether it is reasonable, or even possible, to compel all farmers to become certified to one or more voluntary international standards. A new approach is clearly needed that will make it easier, more cost effective, and attractive for farmers worldwide to willingly adopt safer and more sustainable production practices.

Introducing the UNGC and the International Trade Centre

The United Nations Global Compact (UNGC) initiative was started 15 years ago and is a platform for businesses to contribute to the achievement of UN goals – originally the Millennium Development Goals (MDGs), and soon the Sustainable Development Goals (SDGs), which will be adopted in September 2015. Key among the SDGs is the imperative to end hunger, achieve food security, improve nutrition and promote sustainable agriculture.

"Looking forward 15 years, sustainability for the planet and for food security will require that every individual is a contributor," explains Dr. Puvan J. Selvanathan, Head of Food and Agriculture with the UNGC. “For producers, this means producing more in sustainable ways, and for consumers, it means wasting less."
And for all stakeholders along the supply chain—shippers, logistic services providers and grocers, it means adopting sustainable processes as the preferred way of doing business.

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The UNGC Food and Agriculture Business Practices (FABs) were developed following the Rio+20 Conference in 2012 and its call for “sustainable intensification” of food systems. The UNGC’s FABs at the “principle” level is a natural partner to the Standards Map developed by the International Trade Centre, a joint agency of the UN and World Trade Organization. Where the former establishes a commitment and intent, the latter provides a mechanism for measuring and evidencing progress. When these are combined with GS1 Global Location Numbers (GLNs) ascribed to actors across food systems, a powerful suite of functionality emerges.

“The FABs provide a core set of criteria covering good farm practices,” says Joe Wozniak, Manager of the Trade for Sustainable Development Programme with the ITC. “We’re putting in place the technology whereby smaller farmers, who were once perhaps an ‘invisible’ part of the supply chain, can now be recognised for their sustainable practices.”

Opening new markets

Supporting the FABs and Standards Map, GS1 is partnering with the UNGC and ITC by providing a global identification registration service so farms in every country will be able to register and receive a GLN—a unique identifier of the farm and its physical location.

"Just as products are assigned their own unique item identifiers, farms will now be able to be identified as the sources that make so many of these products possible," says Selvanathan.

Farmers can use their GLNs if they are reporting against any sustainability framework, such as the FABs at a high level, or more granular certification. By registering, the farm will also announce its willingness to receive capacity-building support from national stakeholders, governments and various UN agencies.

This is possible since the GLNs will be integrated into the global GS1 GLN Service, enabling farm sustainability information to be selectively shared with other stakeholders along the supply chain. This will stem from the farm’s GLNs and associated master data on its profile and location.

"With GLNs, all sizes of farms will have an opportunity to communicate the fact that they are using sustainable farming practices to possible buyers around the world—opening up and giving them access to international markets that they may have not had before,” says Wozniak.

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Food and Agriculture Business Practices principles include the following:

- Aim for food security, health and nutrition.
- Be environmentally responsible.
- Ensure economic viability and share value.
- Respect human rights, create decent work and help rural communities to thrive.
- Encourage good governance and accountability.
- Promote access and transfer of knowledge, skills and technology.

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"But with access to farm-level information, governments could make decisions that are precise and more effectively formulate solutions where problems exist—a kind of surgical intervention versus broad brush approach.”

Wozniak adds, “The value of collecting farm data is not only about connections between partners and tracing products to market, but also for governments to understand where their aid can be targeted and how issues differ across different products, geographies and producer size.”

Joe Wozniak, Manager of the Trade for Sustainable Development Programme, International Trade Centre

Wozniak continues to explain how GLNs can also help expand market opportunities for farms already certified sustainable in a particular market, under a specific certification system. “For example, a coffee producer may be certified based on a standard set of practices for the U.S. market. Having a GLN allows the producer to be able to conduct a self-assessment to see what other markets present opportunities for entry. They may recognise that, based on its products and level of sustainable production practices, it is also quite close to complying with certification standards in, for example, the U.K. market.”

Improving decision-making with Big Data

Governments are also expected to find significant value by having access to data associated with the numbers of farmers in particular locations and the method of production.

“Currently, information may be aggregated and connections across markets are not easily made,” says Selvanathan.

Farm-level traceability

Within the Standards Map, the ITC also created a self-assessment module for information provided by farmers. “It was logical to collect information and organisational data of the actors involved in producing, processing and handling food,” says Wozniak. “We needed a way to connect these various growers and players for farm-level traceability. That’s where GS1 came in.”
Farms registering on the system will receive a GLN for unique identification. Farmers then have the opportunity to provide whatever information as they wish on their profile.

“Critically, who owns the data and who has access to it?” asks Wozniak. “Imagine this is an ‘information cooperative.’ GLNs are UN-sponsored so no one is charged for a number and there is no commercial interest in selling the information. Farmers decide how much information they want to share. And we won’t export or share data without the express approval from the farmers themselves.”

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The power of data

GS1 Global Location Numbers will begin to be issued from September 2015, with registrations expected from over 10,000 farms in pilot countries including Colombia, Denmark, Malaysia, Netherlands, Turkey, and Vietnam.

Data gleaned from particular pilot countries over the next three to five years will also allow for important assumptions on food systems and their impacts to be rationalised. “For example, is deforestation actually reduced in Asia because European consumers avoid buying palm oil?” asks Selvanathan.

“When we consider the data, we may find that European consumption is so small a fraction of the global market that consumer choices in Europe have no impact on environmental outcomes for better or worse.

“To know how many farmers and trading partners are out there, and understand how they are farming and operating—to make them part of a global community—we needed a global registry for them to be visible and recognised. GLNs empower the people of this community to say, ‘I’m accountable for my part’ wherever they are on the planet.”

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Rather, it is consumers in Asia that make a real difference. With data, significant changes may be possible if targeted appropriately. This is the kind of understanding we hope to gain.”

GLNs will be offered globally to anyone wishing to have one, while farmers in pilot countries will also benefit from particular conditions and experiments to test assumptions of our food systems.

“With GLNs we are creating the foundation for traceability and discovering how improved sustainability performance is possible,” says Wozniak. “With our ITC platform, we could still collect the data, but it’s the unique identification and sharing of the data across the registries through the global GS1 GLN Service that will help us power decision-making and ultimately change.”

Selvanathan concludes, “To know how many farmers and trading partners are out there, and understand how they are farming and operating—to make them part of a global community—we needed a global registry for them to be visible and recognized. GLNs empower the people of this community to say, ‘I’m accountable for my part’ wherever they are on the planet.”

Interested in learning more about the UNGC Farm Registry?

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