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Heifer International and FruitPunch AI promotes Data access for women farmers in Nepal

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Global development organization Heifer International and FruitPunch AI, the global community educating and applying Artificial Intelligence (AI) for Good, launched theÂ *AI for Women Farmers Challenge*Â â?? a project to develop AI tools to help rural women farmers inÂ NepalÂ leverage data to improve their livelihoods.

The project aims to help women-run agricultural cooperatives extract and translate their own data on financial, business and other activities, which the co-op members can then use to improve their access to markets, financing, product traceability platforms and more.

The *AI for Women Farmers Challenge* will use FruitPunch AI's trailblazing method of recruiting highly skilled volunteers from the AI for Good community to solve a specific problem in support of the United Nations Sustainable Development Goals over the course of a focused 10-week technical collaboration.

In Heifer International's decadeslong work supporting women smallholders in Nepal, a key vehicle for economic and social empowerment is the organization of agricultural cooperatives, which provide technical, production and financial services to their member farmers. However, a digital divide prevents farmer cooperatives from easily using and benefiting from their own data as most information, such as sales, loan and production records, is stored on paper ledgers, out of reach of the digital ecosystem.

"This Challenge represents a significant milestone with immediate benefits for rural women entrepreneurs," saidÂ Antoinette Marie, director ofÂ Heifer Labs,Â a digital technology unit within Heifer International that collaborates with country programs to co-create technology interventions that deliver farmer value and accelerate Heifer's organizational goals. "By empowering them with digitized versions of their own data, we're boosting their market presence, optimizing their business processes, and strengthening their ability to secure essential growth capital."

The Challenge will use AI Optical Character Recognition (OCR) models to extract, digitize and translate Nepali handwritten and typeset text from photos and scans of existing paper records. Bridging the digital divide in this way will enable farmers to easily search, analyze and obtain insights from various types of existing records, such as financial, cooperative capacity, livestock breeding and agricultural production.

The Challenge will have two phases: The first will tackle Nepali data extraction and translation via AI OCR models, which will enable search and analysis of different types of paper records. A second follow-on Challenge will create data structures from these results, focused on a specific use case, such as financial data to stimulate formal lending to farmers.

FruitPunch AI volunteers involved in the Challenge will build on their existing programming, data and AI skills, while being mentored by experts to become a certified AI for Good Engineer. At the same time, they will deliver immediate impact to women smallholders in Nepal by helping them receive value from their own data.

"By joining forces with Heifer Labs, we will be able to educate AI engineers with sustainable AI skills while helping women-run farms reach the digital economy and grow their businesses," said Sako Arts, CTO and founder of FruitPunch AI.

Heifer International began operating in Nepal in 1997, working alongside local farmers to improve food security and reduce poverty by providing technical support to strengthen agricultural value chains, promoting environmentally friendly farming, and improving access to affordable inputs and services. To date, Heifer Nepal has supported over 400,000 families, organized into 277 agricultural cooperatives â?? all working under the Social Entrepreneur Women Alliance, an apex governing body led by progressive women farmers