Food Security Open Data Challenge: An Overview

"To support an open source development approach, our Agency must serve as a platform that connects world's biggest development challenges to development problems solvers – all around the world. We recognize that talent is everywhere, but opportunity is not."
- USAID Administrator Raj Shah, August 1, 2012

The Food Security Open Data Challenge is a U.S. Agency for International Development (USAID) led effort to convene food security experts, data scientists, technologists, and other development professionals to utilize public data sets to build innovative solutions in the field of food security and agriculture. There is not a prescribed problem for these individuals to tackle, rather the community is brought together to first identify where interventions might be possible and useful, and then work together to utilize data and technology to develop effective and scalable products to fill these gaps.

Background
The Food Security Open Data Challenge (the Challenge) was announced on May 18th at USAID's G8 side event, hosted by the Chicago Council on Global Affairs, and occurred in direct response to White House Senior Advisor Gayle Smith's request for greater innovation in the program. On May 23rd, U.S. Chief Technology Officer Todd Park announced the Presidential Innovation Fellows program and the government-wide Open Data Initiative, which the Challenge is now directly linked to and participating in.

Relevance to G8 New Alliance for Food and Nutrition Security and Feed the Future
The Challenge has no direct connection to G8 deliverables, nor to Feed the Future. However, the results of the Challenge can inform and potentially help advance efforts of both initiatives. Specifically, the G8 Open Data Initiative could particularly benefit from Challenge work in the areas of making plant and other agricultural genomics/genetics data more accessible and available to practitioners, and Feed the Future could particularly benefit from work on core statistical data at the country-level, and the connection of smallholder farmers to global, national, and regional/local datasets via extension or other community knowledge workers.

Purpose
The goals of the Challenge are to:
- Develop new applications that utilize data to address a gap in the field of global food security and agriculture;
- Demonstrate that government agencies, data technologists, social innovators and entrepreneurs can work together to bring creative solutions to development problems; and
- Build a community of actors and organizations to engage with USAID and our partners on government and open data for development.

Organization
The Challenge is housed in the Office of Innovation & Development Alliances (IDEA) in close coordination with USAID's Bureau for Food Security, the Office of Science & Technology, and Legislative & Public Affairs, as well as the White House Office of Science & Technology Policy and the U.S. Department of Agriculture to ensure efforts of this challenge are beneficial across offices and agencies.

Process
The Challenge follows a model developed by U.S. Chief Technology Officer Todd Park that was first implemented at the Department of Health and Human Services. USAID has adapted the model to fit our very specific community, but the key actions remain consistent. They are:

1. Ideation Jam: A brainstorming session to bring together technologists, technical experts and stakeholders to identify key innovation opportunities in the overlap of food security and available data sets;
2. Codeathon: A weekend-long gathering of data technologists, issue area experts, and software developers to devise solutions to problems identified at the Ideation Jam. Groups work with self-identified teams to create products for potential investment;
3. Datapalooza: An opportunity to announce challenge winners and showcase some of the best ideas for data-related solutions to food security. If the event is high-profile enough, a featured role for a product at the event may act as the prize for the challenge.

Participation
Volunteers can create teams to define their own question, or join existing teams within the following tracks:
• Farmer to Farmer engagement
• Bridging the gap between food security stakeholders and supply side
• Putting USAID food security data to work
• Informing standards and platforms for global food security data

After the Challenge
Following the Challenge, USAID will continue its commitment to the Open Data Initiative as part of the Open Government Policy and will continue engagement with a community of skilled volunteers. USAID will continue coordinating with other federal government agencies engaged in the Open Data Initiative and build coordination and collaboration on its own open data policies. The Challenge model may be iterated in conjunction with USAID's Office of Science & Technology and with the Department of State's Office of e-Diplomacy and its TechCamp program. There may also be synergies between the results of this challenge and the G8's commitments on global food security through the New Alliance for Food and Nutrition Security.

Key Dates and Events Related to the Food Security Open Data Challenge (FSODC)

CORE ACTIVITIES:

May 18th – FSODC Announcement (Completed)
At USAID's G8 side event, the Chicago Council's Symposium on Global Agriculture and Food Security, USAID Chief Innovation Officer Dr. Maura O'Neill announced that USAID would be hosting an open agriculture data competition.

June 26th – FSODC Ideation Jam #1 (Completed)
Civil Society members including data specialists, Food Security experts, development startups, development experts, and representatives from Bureau for Food Security, U.S. Department of Agriculture, and the White House convened to discuss the broad outline of the Food Security Open Data Challenge. The conclusion of the Ideation Jam outlined five major tracks for teams to form around and judges to assess vying participants. A number of attendees of the Ideation Jam followed-up with specific teams they are leading for the challenge.

July 13, 2012 – FSODC Ideation Jam #2 with Tech@State and Wikimania (Completed)
Tech@State are State Department events convening of technologists, government representatives, academics, industry experts, enterpreneurs, and other representatives. Wikimania is an annual conference convening technologists and advocates of open information using wikis as well as the Wikipedia platform. Tech@State totals 200 representatives, and Wikimania convenes 400 representatives. Following Tech@State and during the Friday lunch break of Wikimania, FSODC convened registered participants and made available to new participants information and discussed the scope of the FSODC. Feedback included recognition of the cross-cutting nature of the tracks and included additional volunteers to lead and participate in teams.

August 30, 2012 – FSODC Brown Bag (USG) (Completed)
A USG-centered Brown Bag that seeks to generate greater understanding of the intention and scope of the FSODC, and to recruit team member participants, team leads, expert advisors, judges, and possible networks of others to engage.

September 14-16 – FSODC Hackathon
The Hackathon is a core component of the Open Data Challenge. Team leads, technologists, food security specialists and stakeholders, expert advisors, and any interested participants are welcome to join us in person and virtually for the weekend. The event will begin Friday afternoon with an opening keynote. Team leads will then present their ideas and their progress thus far, for others to participate. Other attendees may propose their own ideas for teams. Attendees then form groups (all facilitated by a moderator) and begin to brainstorm their projects. The evening ends with light meal and cocktails. Beginning 9 a.m. on Saturday teams

convene virtually to build their products. Sunday begins again at 9 a.m. to build products. Around 12 p.m. judges will begin to review the team's work, at 2 p.m. teams will present their work, and at the end of presentations judges will determine winners overall and/or for each category. The winning teams should receive a prize of partnering with an incubator to get their proposal robust for presentation at the Datapalooza.

October 16-19 TBC – FSODC Datapalooza
Location and date TBD. Tentative hold for the week of October 15th per World Food Day and the World Food Prize in Des Moines, Iowa. The purpose of the Datapalooza is to showcase the successes of the Food Security Open Data Challenge, highlight participants, and award "prizes". Prizes may be monetary; however prizes that include networks, mentors, incubation, and other forms of increased access to build out the challenge applications into market-sustained food security solutions are preferable.