



# Help Evaluate Innovations for Securing Water for Food: A Grand Challenge for Development

**Would you like to be part of solving some of the world's greatest challenges for development? Now is your chance to contribute. USAID is recruiting Field Evaluators for Securing Water for Food: A Grand Challenge for Development Technical Assistance Facility.**

Securing Water for Food (SWFF) aims to enhance access to innovations that help agricultural producers grow more food with less water, enhance water storage, and improve the use of saline water and soils to grow or process food. SWFF is seeking **Field Evaluators** to conduct in-country, field research with a SWFF innovator using SWFF established guidelines and research questions.

**M&E Field Evaluators should be graduate students with a background in water, agriculture, technology innovation, sustainability studies, quantitative studies, or business (particularly those in an MBA program).** Field Evaluators will be expected to be (at a minimum) in the field 6-8 weeks during the Spring, Summer, or Fall season of 2019. Exact dates are dependent on farming cycles and innovator availability.

This opportunity will allow you to:

- Conduct in-country, field research in one of SWFF's 40 innovative water-ag organizations located in 35 countries around the world.
- Interview 50+ on-site farmers who use SWFF innovations.
- Serve as a "fact-checker" and validate and expand upon information that SWFF has received from innovators.
- Be part of one of the leading new mechanisms in international development for discovering breakthrough solutions to the world's most pressing problems.
- Complete fieldwork requirement that could serve as a basis for thesis, capstone or dissertation work.

## QUALIFICATIONS

The ideal candidate will be comfortable learning about and synthesizing data concerning innovators and innovation ecosystems, and will have experience organizing data for consumption by non-technical audiences.



We are seeking graduate students with a background in water, agriculture, technology innovation, quantitative studies, and/or business (particularly those in an MBA program) that possess a large majority of the following skills/characteristics:

- Highly independent and able to work with minimal supervision
- Quantitative research and/or social science research background
- Knowledge and experience using statistical software (SPSS, SAS, STATA, R) to analyze data sets
- Knowledge of local language of country conducting field study (highly preferred, but not required). Suggested languages include: Portuguese, French, Hindi, Nepali, Arabic, Amharic, and Bengali.
- Comfort operating in rural areas with limited access to technology, improved sanitation facilities, clean water, and/or other amenities
- Enthusiasm in engaging with data from water and agriculture innovators
- Interest in development and social impact
- Passion for excellence, quality and accuracy
- Attentiveness to detail
- An ability to manage and meet deadlines
- High level of professionalism
- An open mind and open heart. If you know you have preconceived biases and prejudice against those living/working in developing countries you need not apply.
- A commitment to show respect and courtesy towards local stakeholders
- If interested, read a [blog post](#) from the perspective of a previous field evaluator

## HOW TO APPLY

Send a cover letter, resume and a professional reference letter to [swffinterns@gmail.com](mailto:swffinterns@gmail.com) with the subject “**2019 M&E Field Intern**” by **Friday, March 15th**.

### **In your cover letter, please answer the following questions:**

1. How has your previous experience prepared you to be a SWFF M&E Field Evaluator?
2. What was your motivation to apply for this position? What are you expecting to gain out of this experience?
3. When can you start?
4. How much time can you devote to this internship? Can you meet the minimum time requirements (expected duration: 6-8 weeks) for the in-country research?

The interview process will include two phases: 1) 20 minute interview on the phone with SWFF team lead, M&E manager, and/or program coordinator to discuss your background and address questions on either side 2) mock field interview to preview a typical field evaluation experience and to determine a candidate’s fit for the work.



## SCOPE OF WORK

### Preparatory Work

Selected M&E Field Evaluators will be taken through the following:

- **Introductory Webinar** to explain SWFF M&E guidelines, survey tools and student fieldwork manual. (1 hour including Q&A).
- **Facilitated Introductory Meeting** with the assigned SWFF innovator organization.
- **In the Field:** Check in meetings every 3 weeks with your SWFF M&E Intern Coordinator, your primary point of contact during the internship. We expect that all interns will acquire an inexpensive local phone with enough credit to receive check-in phone calls.

### Potential Research Questions

1. To what extent are innovators reaching customers at or below the poverty line?
2. To what extent are innovators reaching female customers?
3. How does use of the innovation impact the lives/work of women?
4. What barriers exist to greater customer adoption among impoverished customers? ..among female customers?
5. What economic and development impacts does use of the innovation have on customers/households? (income, resilience, food security, time-savings, water savings)
6. What alternatives exist to use of the innovation? What are key factors influencing this choice?

### Deliverables

1. Attendance at all training/meeting sessions
2. A minimum of 50 completed farmer/end-user interviews
3. Mobile app data collection
4. Regular communication and check-ins with the team lead (no unexplained absences/circumstances)
5. Final Field Report. You will be required to submit draft versions during the field visit and a final version at the conclusion of the internship.

### Financial Policies & Logistics

- SWFF will cover the student's airfare that SWFF's travel agent will book and the SWFF Team Lead will approve prior to purchase. The airfare is separate from the stipend amount below.
- SWFF will issue a travel advance of **\$2,500** prior to the student's departure to the field. After submission of final deliverables (raw data from a minimum of 50 interviews with individuals {not groups} in separate households, along with voice recordings, the interview data in excel format, and final site visit report), SWFF will issue a remaining payment of **\$2,500**.
- If the student's expenses go above the total \$5,000 issued, SWFF will reimburse up to an additional \$3,500 (with backup documentation for expenses\*), pending approval of those expenditures by the SWFF Team Lead.



- Field Evaluators will be responsible for arranging their own accommodations and travel insurance in the host country. However, SWFF will make an effort to liaise with innovators to help facilitate this process.
- SWFF will provide each Field Evaluator with a student fieldwork manual and a template of the field report.

## Potential Opportunities with the Following Organizations:

### Aybar Engineering in Ethiopia

Aybar's Broad Bed and Furrow Maker (BBM) is used at planting time in order to drain excess water away from crops. The innovator is currently working primarily in Ethiopia, where only 25% of the land is cultivated due to waterlogging. The BBM has been developed using lighter-weight materials appropriate for Ethiopian farmer needs. The use of their BBM has improved wheat yields from 0.5 tons per hectare to 3.8 tons per hectare.

### Adaptive Symbiotic Technologies in India

Adaptive Symbiotic Technologies' has developed BioEnsure®, a fungal seed and plant treatment that, when sprayed onto seeds, helps plants to adapt to water-related stress. By applying BioEnsure®, crops can grow in suboptimal conditions and use 50% less water. BioEnsure is the only product on or soon to be on the market that can confer stress tolerance to crops.

### Green Heat in Uganda

Green Heat Uganda Ltd.'s innovative slurry-separation system greatly reduces water demand. The system creates an easily managed fertilizer product while increasing gas production. Utilizing a solar-powered sewage pump and innovative heating process, slurry is dewatered and converted into solid fertilizer that can be packaged, stored, or applied directly to the fields. Water by-products are separated during the process and re-used to mix with organic wastes later in the system. Green Heat Uganda increases the potential of success by enabling all farmers to enjoy the benefits of digesters, regardless of their water access.

### Lal Teer Seed in Bangladesh

Lal Teer Seed combines locally-developed saline-tolerant vegetable seeds with easily adoptable methods for cultivating in high saline areas of Southern Bangladesh, and includes micro-finance linkages, ICT support, and extension advisory services. Key aspects of the model for Bangladeshi germination rates and higher than average yields.

### MyRain in India

MyRain is a wholesaler of drip irrigation products. MyRain's Rainmaker (patent-pending) is a point-of-sale and design application that makes it easy for retailers to customize drip irrigation systems for small-plot farmers based on entering a few parameters. This intuitive app removes the barrier of



retailer engineering expertise and increases the ease and opportunity to advise, sell, and order drip irrigation components.

### **Meat Naturally in South Africa**

Meat Naturally uses an innovative business model to implement communal grazing systems that result in improved water and food availability. The business model is based on training herders and supporting market access in a way that improves livestock condition, croplands, rangeland ecosystems, and, by working at scale, ensures sustainability in formal private sector markets.

### **Practical Action in Bangladesh**

Practical Action's sandbar cropping technique enables landless families in Bangladesh to diversify their incomes by growing pumpkins and other crops on previously barren land. Farmers can overcome seasonal food shortages and reduce risks that threaten their livelihoods with sandbar cropping. Practical Action teaches farmers how to identify suitable sandbar cropping space, dig pits, fill them with compost, and add pumpkin seeds. Crops thrive and the pumpkins last for up to a year, enhancing food security and improving earning potential amongst extremely poor farmers.

### **Water Governance Institute in Uganda**

Water Governance Institute's Aquaponics system closes the loop between fish and horticultural crop farming to provide much needed nutritional supplements and alternative incomes to Ugandan citizens and farmers living in rural, urban or peri-urban household settings. The all-in-one system uses less water and allows for crop production and fish rearing at home.

## **SWFF OVERVIEW**

### **Who We Are**

USAID, Sweden through the Swedish International Development Cooperation Agency (Sida), the Government of South Africa, and the Ministry of Foreign Affairs of the Kingdom of the Netherlands have invested \$35 million and provided critical acceleration support to promote science and technology solutions that enable the production of more food with less water and/or make more water available for food production, processing, and distribution in developing and emerging countries. Through a competitive process, the program has pre-screened and selected only the highest potential water-for-food innovations and is providing grant funds and ongoing acceleration assistance to support their business development.

### **Growing More Food with Less Water**

Securing Water for Food's approach is as unique and innovative as the 40 solutions supported. Decision-making is driven by hard data and evidence. Once innovations reach pre-established milestones, the Securing Water for Food Technical Assistance Facility provides advisory and acceleration services, grants and financial management support, M&E guidance, and connections to a variety of partners and networks.



Approximately 70 percent of the world's freshwater supply is used for agriculture. As the world's population continues to rise, we'll need more water to grow enough food. Further compounding this issue is climate change, which affects the salinity of soils and water and changes the way farmers work.

Since 2013, SWFF has provided funding and acceleration support to 40 innovators. For every \$1,000 that has been spent by the SWFF program, SWFF innovators have impacted more than 240 customers/end users, grown more than 300 tons of produce, helped farmers reduce their water consumption by more than 1 million liters (compared to traditional practices), improved water management on 515 hectares of grazing lands and more than 225 hectares of farmland, and generated more than \$250 of sales.

In addition, since the program began, SWFF innovators have helped 6.17 million farmers and their families produce 6 million tons of food on nearly 4 million hectares of rangeland and cropland that are under improved practices due in part to SWFF innovations. Both of these numbers are well ahead of the program's expected 2018 targets. SWFF innovations have also helped reduce water consumption by more than 17 billion liters compared to traditional practices, quadruple the 4 billion liters expected in the 2018 program target.

## QUESTIONS?

Please e-mail [swffinterns@gmail.com](mailto:swffinterns@gmail.com) with questions.