



Research Technical Assistance Center

USAID DRIVE Convening

“On Expansion or Replication of Evidence-Based Practices (a question of scale)”

Tuesday, September 14, 2021

11:00AM-12:30PM

Moderator: Dr. Joe Amick, Senior Learning and Evaluation Adviser, USAID/PPL

Panelists:

- Dr. Revi Sterling, Director, USAID WomenConnect Challenge
- Dr. Ku McMahan, Team Lead, USAID Securing Water for Food (SWFF)
- Dr. Laura Hosman, Associate Professor, ASU School for the Future of Innovation in Society and Co-Founder and Director of SolarSPELL

Agenda Outline

- Welcome & Introductions
- Panelist Discussion
- Q&A
- Wrap Up

Panelist Discussion

Dr. Revi Sterling, Director, USAID WomenConnect Challenge

- Working at the intersection of gender, technology and development has been painful because the same projects keep coming up and trying the same thing and hitting the same challenges.
- In many communities and countries, there are laws, rules, and more that keep women offline. This is shocking considering that the internet is so empowering. The map (displayed in the presentation slides) shows where WomenConnect works and worked.
- Proven strategies around engaging women in technology really haven't changed much since the late 1990s. At that time, the gender tech divide was foreshadowed already. It is just one sector of development, but it does come with its own set of challenges (e.g.,

harassment, bad company online). Some work involves creating new social norms around technology and that takes time and requires an anthropological approach.

- In Nigeria, clerics are being brought on TV to talk about technology and women. WC is trying to figure out what the spaces are and where these authorities endorse women using technology and smartphones (e.g., religious studies) and then move slowly and mindfully to expand that space. By the end of the project, all clerics agreed there was a rationale for women to use technology in at least a few contexts.
- In Bangladesh, for example, the work involved working with mobile lending, access to phones, digital literacy, and livelihoods support. This package provided a quick onramp for women and involved people across multiple spaces. There are costs to ownership and the program worked to reduce those (such as storing things locally, using solar power to power devices, and lowering rental fees for devices).
- Women's confidence is also a key element. Many women say they can't use the phone or are worried about looking after it or looking bad among the community. In Tanzania and India, the project had pre-technology training to explain how to be safe, what they can do, etc. so they understand the benefits.
- Working with Mali Health, a health-only NGO that has many tech needs and works across slums in Bamako, the project rolled out applications to phones. Challenges include illiteracy, using Bambara, etc. The app created thus only uses voice messages, pictures and videos to convey health information. There were very few barriers to access as a result and men also thought it was great. It's now being used by women and men to design their own content (e.g., what's for sale today, weather and agricultural info).
- Developing community support is also a huge issue, especially when tech is not viewed as a female domain. As such, in Senegal and Guatemala, the project had the women roll out their own ISP, which men loved because they had internet access and women gained status and showed they could implement a solid and highly valuable project.
- Any community can benefit, as long as we understand what keeps women down and develop tailored approaches.

Dr. Ku McMahan, Team Lead, USAID Securing Water for Food (SWFF)

- How do we use research and lessons learned to scale and move from one project stage to another?
- Powering Agriculture: An Energy Grand Challenge (PAEGC) was a 7-year initiative focused on the nexus of ag and energy. Brought together USAID, SIDA, Duke Energy, OPIC. Securing Water for Food (SWFF) was also 7 years long and focused on water efficiency, storage, and saltwater intrusion.
- The programs supported 80 innovators, and not everything worked. One lesson was that connections within networks in the regions were weak and dampened widespread

adoption of new technologies. Another is that milestone-based funding and acceleration support were very important. This led to the creation of the regional innovation model.

- Other lessons include the importance of including gender perspective and youth employment, which was addressed by having customized tech assistance for companies.
- To do this requires a bunch of different partners from different sectors. Co-creation was quite useful to bring what's happening on the ground to the policy and project planning level. Private sector has a big role to play and so does local policy and shaping it through local partners.
- Hydroponics using reverse osmosis to enable use of salty/brackish water is one example of the project's work. It embodies the various issues-energy, water, technology introduction and adoption, agriculture use.

Dr. Laura Hosman, Associate Professor, ASU School for the Future of Innovation in Society and Co-Founder and Director of SolarSPELL

- Laura's learning came from some failures. One such failure was in Micronesia, which has very hard to reach populations. Laura wanted to improve the education opportunities of these students, which are some of the hardest to reach in the world. Her team brainstormed a system that's solar powered and has laptops all in a single crate and with a network built in. This idea was tested but had several issues. The box arrived by air cargo on the last day her team was there. Laura wasn't there and the teachers were not there. A year later, the system had never been used. The internet connection only lasted 1 week as the local partner moved offices and the point to point Wi-Fi service was interrupted. The lesson here is that to deploy and depart is never good, but sometimes you don't have control over everything.
- Showing a video about how laws pass in Micronesia to a teacher, Laura realized that training was going to be quite convoluted and long. Teachers didn't know how to use a mousepad or a computer. The lesson here is that there needs to be sustained training and support.
- A bit later, a Peace Corps volunteer stationed nearby the first school asked if she could have a project crate. Their role is to introduce technology and work with locals over their 2-year deployment.
 - We need to recognize and incorporate the need to develop capabilities like tech literacy, explaining the value proposition of tech, and more.
- The team then used a Raspberry Pi (which is very power-efficient and cheap) as the core of the system, to serve files offline via the Wi-Fi.
- The team was solicited more by Peace Corps staff and did training of trainers with a mix of volunteers and local staff. In July 2020, a global partnership was signed with the Peace Corps, 1 of 15 in its entire history and the first rising from the field.

- The challenge remains the same. It's not about cool technology that scales well, but about skill-building that empower users. Information literacy is one of, if not the most important such challenge. It's a capability that is relevant to every member of every society. Unfortunately, there is no magic bullet to develop it.
- Laura's idea is that offline, relevant and curated content is just as relevant as online. She does in-field impact evaluations of her projects, and that's 1 leg of the stool, along with curated content and local capacity building.
- ASU students are involved in all levels - writing code, curating content, assembling hardware. Partners are critical as well. Beyond the Peace Corps, she works with Voice of America for "Let's Learn English" and is working on a partnership for United Nations refugee camps. The libraries built are not just for primary and secondary education, but also nursing and midwifery, biomedical tech, and agricultural practices.

Questions Asked To All Panelists

Q: How do you measure your success on these innovations, and at what point do you say it's working and should be replicated and scaled?

- **Dr. Ku McMahan:** There are indicators tracked, but looking at the local level and how SMEs and their metrics look is very important (such as metrics of profit, revenue, penetration, etc.) Looking at smallholders also for how their yields change, etc. Every year, each project is examined for progress and success and a determination is made to keep funding or not. Shocks like COVID required a bit of flexibility however.
- **Dr. Revi Sterling:** Ku's points are all valid. For her, it's whether the most ardent naysayers are changing their mind and allowing more use of technology by women. Once they are persuaded or see the results of women using technology (e.g., better health), it's a great sign. Indicators track these things locally. It's not always easy to track and the timeline is variable. Getting requests from funders and potential partners is also a big endorsement.
- **Dr. Laura Hosman:** Agreed. Measuring the impact of libraries is pretty tricky. Their impact is largely intangible and difficult to separate from the ecosystem in which they are located. Talking to a Peace Corps volunteer, test scores went up due to the library, and the whole community was happy but expectations for younger students also rose. Measuring community-wide changes like this can be difficult.

Q: Do you have IP on the technologies, and do you plan to and how would you go about doing it?

- **Dr. Ku McMahan:** It's donor money but we reserve the right to have IP on this work. However, we don't currently see the need to do this. That right is reserved but largely

unused right now, but local innovators might choose to do this later on with the approval of the project.

- **Dr. Laura Hosman:** I want to be a champion of open source, so how to build a SolarSPELL is detailed online for everyone to use. A couple of high schools around the US have built them but the library-building part is trickier. The commercial version of the system is a bit more developed and requires supply chain development. Some IP might be required along the way.
- **Dr. Revi Sterling:** Our projects are very small and localized, so they are open source. However, some IP had to be captured as per USAID. Currently, we're still too far from having the IP conversation but this is something to look into in the future.

Q: From a research standpoint (or market research standpoint), how important is generating evidence on new contexts before trying to expand a product or practice? How is that typically done?

- **Dr. Laura Hosman:** Working with the Peace Corps goes a long way as they have a local presence in many countries. The content in the library needs to be localized everywhere, and that's known, as is the fact that the process must involve local partners. Knowing the context is important.
- **Dr. Revi Sterling:** This project is fairly applied at this point, but it's important to write in the request for proposal (RFP) that partners are self-selecting and suitable. Many proposals that come in are not very thoughtful and responsive, but there are 20% or so that come from people who really know the local context and have a solid approach to capture, document and convey it. It involves a lot of trust-building later but starts with how the RFP and the proposals are put together.
- **Dr. Ku McMahan:** SMEs sometimes try to move across regions or countries, and they need to do market research, consumer studies, etc. That might require training or hiring someone who knows how to do it. But it's very important and can make or break a push. The solution needs to be tailored to a specific problem people face locally.

Questions Asked to Dr. Ku McMahan

Q: How can financial literacy be linked with other technical topics as part of information literacy efforts?

- **Dr. Ku McMahan:** There is need and interest, but the ability to pay is often the problem. There is so much money out there that's not being connected to the right spaces. Financial literacy is important so that people can make good use and informed decisions about their money and money they might have access to. Local partners are key here, as they need to make it context-relevant.

Q: I like the identification of various partners: Donor, Investment, Policy and Ecosystem/Value Chain. Why is Ecosystem limited to the Value Chain? When is it appropriate to incorporate the other partners in the “ecosystem”?

- **Dr. Ku McMahan:** The donor mandate was to apply and build on lessons learned from previous project rounds. This meant to focus on a specific space and avoid being duplicative of other efforts. So it’s taking what he’s skilled at and doing what others don’t have time to do. In many cases, the policy and regulatory environment is challenging for new technology, like solar power. As such, making it clear that these policies have implications is important.

Questions Asked to Dr. Revi Sterling

Q: How do you manage the line between bringing the digital divide for women so that they can benefit from it, but not at the same time inadvertently reinstating their restricted movement outside home by relying more on communications technology - say to a clinic.

- **Dr. Revi Sterling:** In some communities, women said they could never leave their home due to the fear of violence. These women benefit even more from tech. In Mali, women knowing when to go to the clinic and what’s offered that day was very helpful and can help them make good and safer decisions. They can also communicate with each other, which is empowering and improves safety.

Q: Do you do up-front assessments to identify specific areas where women lack confidence?

- **Dr. Revi Sterling:** My hypothesis was that if all training could be done via IVR on agriculture, health, etc. we could teach tech literacy as well. She does surveys and interviews with women about their confidence, and it’s tricky to get them to explain why they have low confidence. Tools on self-efficacy can help but this is an area where much work needs to be done. Pep talks are not replicable and scalable but are quite effective.

Questions Asked to Dr. Laura Hosman

Q: Can you share an example for creating space for co-creation in communities when information literacy is such a challenge?

- **Laura Hosman:** A library is never finished, and her team improves it regularly. Training of trainers approach allows for identifying new content for next iteration, in addition to sustainability. Co-creation is tricky though. For example, in Ethiopia, government leaders wanted teachers to create their own lesson plans, but teachers didn't know how. So the team started with creation of some that can be tweaked and improved. Working with partners to identify information needs locally is very important.

Q: Do you have curricular modules on information literacy that can be shared and incorporated into other projects?

- **Laura Hosman:** Yes, we do! We found that no matter what the library topic is, information literacy needs to be baked in there. Financial literacy should probably be next, based on today's discussions. Gender-related and sustainability content is already baked into every library. The beauty of this approach is that it can contain targeted yet general information.