

This Case Story was submitted to the 2016 CLA Case Competition. The competition was open to individuals and organizations affiliated with USAID and gave participants an opportunity to promote their work and contribute to good practice that advances our understanding of collaborating, learning, and adapting in action.

Maximizing Collaboration, Learning and Adaptation to Create and Expand Peace Corps' Master Farmer Program throughout West Africa

Peace Corps Food Security Program



PC/Senegal Master Farmer Evaluation Poster. Credit: Peace Corps.

What is the general context in which the story takes place?

Food insecurity has been a pressing concern for decades throughout the world, particularly in Africa. However, with the global food crisis in 2008, food security came to the forefront of development concerns.

Most African countries have relatively weak agriculture extension systems, and yet the majority of their populations rely on agriculture for their livelihoods. Peace Corps Volunteers (PCVs) have provided extension services at the grassroots level for several decades in many African countries.

The Master Farmer Program is a key component of Peace Corps Senegal's Food Security program, which was developed through the Feed the Future Initiative.

The Program Managers of PC/Senegal's four sectors (Agriculture, Agroforestry, Health and Community Economic Development) worked together to develop the Master Farmer Program, and

to date, PC/Senegal's version of the Master Farmer Program has been adopted by two other Peace Corps Posts in West Africa, The Gambia and Benin, with other Posts giving it considerations.

What was the main challenge or opportunity you were addressing with this CLA approach or activity?

In 1995, with support from USAID/Senegal's Natural Resource Management Program, Peace Corps/Senegal developed Community Training Centers (CTCs) throughout Senegal. The CTCs were owned by the government and operated and managed by PCVs. Knowledge sharing between and capacity building among local farmers through demonstrations and trainings were the main objectives of the CTC program.

While many farmers were trained through the CTCs, USAID funding ended in 2000 and PC/Senegal was unable to continue managing the centers. The centers were transferred back to the government. An external evaluation of PC/Senegal's use of the CTCs showed that the trainings and Open Field Days were very successful, but having a PCV manage the center rather than a local community member meant there was constant turnover, limited institutional memory and in some cases limited access by community members resulting in limited sustainability.

Based on this experience, PC/Senegal adapted the CTC model and developed the Master Farmer Program, by identifying local lead farmers who are trained by Peace Corps in improved agriculture technologies. Master Farmers devote one hectare of their land to demonstrating and teaching these same technologies to other farmers in surrounding communities. Master Farms serve as local demonstration and training sites as well as sources of improved seeds, seedlings and cuttings, while Master Farmers serve as sources of knowledge – local extension agents.

The Master Farmer Programs initiated by the other PC Posts in West Africa are implemented in similar contexts to Senegal, widespread food insecurity, heavy reliance on agriculture, and limited government agriculture extension services. There are slight differences, however, and each PC Post has adapted the program accordingly. For example, certain aspects of the program in Senegal were developed in direct response to some of the environmental conditions specific to Senegal. The dry season in Senegal lasts for approximately nine months, making the production of annual crops impossible without a water source nearby. In addition, livestock are allowed to graze freely in Senegal during the dry season. This means a fence is required to grow crops during the dry season. Thus, a fence is constructed and a well or water spigot is installed in each Master Farm in Senegal, if one does not already exist. If such problems do not exist elsewhere in West Africa, the other PC posts may not require a fence or water source.

Describe the CLA approach or activity, explaining how the activity integrated collaborating, learning, adapting culture, processes, and/or resources as applicable.



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The Master Farmer Program in Senegal was initially developed building on previous agriculture extension activities that Peace Corps/Senegal had implemented in the late 1990s, specifically the Community Training Centers (CTCs), as well as the joint ISRA (Senegalese Institute for Agricultural Research)/Peace Corps seed initiative. However, collaboration, learning and adaptation did not end there.

From the inception of this program, the strategy was to use a multi-disciplinary approach in the design and implementation. Therefore, PC/Senegal involved PCVs from each of the four programmatic sectors, Agriculture, Agroforestry, Health Education and Community Economic Development, in supporting the Master Farmers.

At the end of the first year of the program, a Master Farmer Annual Conference was held with all of the Master Farmers, the PCVs who worked with the Master Farmers, and relevant PC/Senegal staff. The purpose of the conference was to share lessons learned and best practices and to troubleshoot issues collectively as a group. As the program progressed, best practices evolved around, for example, how to develop common demonstrations, how to host an Open Field Day, how to effectively work with a Master Farmer, and how to maintain proper farm records (with often illiterate Master Farmers). These practices were, then shared with new Master Farmers and PCVs joining the program.

Results of this program were shared with other Peace Corps Posts in various ways since its inception.

- Representatives from The Gambia, including Peace Corps staff, NGO partners, and farmers visited Senegal to learn more about the Master Farmer Program. The visit involved presentations about the goals, objectives and strategies of the program, the various technologies being promoted, and visits to three Master Farms.
- PC/Senegal hosted a Master Farmer Program workshop for staff and PCV representatives from Benin, Guinea, Ghana, and Togo, to offer a first-hand look at the program.
- Staff from PC/The Gambia completed a second visit where they spent four days visiting Master Farmers in two regions of Senegal.
- At a Global Food Security Training of Trainers Workshop in early 2015, PC/Senegal staff shared Master Farmer training resources, including session plans for technical training sessions related to gardening, field crops and agroforestry, and held meetings with individual participants from other Posts to discuss the Master Farmer Program and brainstorm ways to adapt it to their respective contexts.
- A process evaluation of the Master Farmer program was conducted by PC/ Washington Evaluation Specialists along with a team of local data collectors in early 2014. The results of the evaluation are represented below. The complete report for this evaluation can be found on USAID's Development Experience Clearinghouse (DEC) [here](#). PC/Senegal staff were very receptive to the evaluation findings, and they have implemented the recommendations to improve the program. The evaluation findings were also shared with the larger PC community and discussed at a global food security workshop in July 2014.

Throughout this time, the participants who had visited Senegal in 2012 began slowly implementing their own Master Farmer Programs. PC/The Gambia started its Master Farmer Program in 2014. They currently have four Master Farms. In March 2015, PC/Benin hosted a small workshop with PC



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staff, PCVs and local farmers to discuss PC/Senegal's Master Farmer Program and how they could adapt it to Benin.

During the annual West Africa Food Security Partnership Conferences in March 2015 and May 2016, participating Posts with Master Farmer programs had a chance to share their experiences and exchange best practices.

Were there any special considerations during implementation (e.g., necessary resources, implementation challenges or obstacles, and enabling factors)?

There are currently 42 Master Farmers in Senegal. Peace Corps/Senegal implemented their Master Farmer Program with financial support from USAID through their Feed the Future agreement. Because of the need to install wire fencing and an irrigation source at each Master Farm, as well as provide basic tools, seeds, seedlings and cuttings, PC/Senegal spent approximately \$5,000USD per Master Farm to establish the demonstration and training site.

Other Peace Corps Posts in West Africa do not have the same access to USAID funding, so they have had to adjust their Master Farmer programs accordingly. They often work with farmers who already have access to a fence and/or water source, or they work with farmers in settings where a fence is not as necessary.

Each year, PC/Senegal organizes a Master Farmer Conference. Additionally, most Master Farmers host at least one Open Field Day or other training event each year. These expenses represent approximately 3.2 percent of Peace Corps/Senegal's total annual budget received from USAID/Feed the Future.

During the implementation of PC/Senegal's program and the adaptation of the program in other countries, it was imperative that Peace Corps have access to technical specialists familiar with the agriculture systems in each country. These specialists needed to not only understand the environmental conditions, but also the state of the current agriculture extension systems, how other development organizations are working in the agriculture sector and the opportunities for agricultural growth. Peace Corps employs such specialists as their programming and training staff at each post, so they were able to provide this expertise.

With your initial challenge/opportunity in mind, what have been the most significant outcomes, results, or impacts of the activity or approach to date?

Peace Corps Volunteers regularly report their activities into a global data base for their program manager to review. Once the Master Farmer Program was initiated in PC/Senegal, PCVs began reporting on activities associated with Master Farmers. This included both qualitative and quantitative information on types of demonstrations developed at the Master Farms, descriptions of the training events hosted at Master Farms, including disaggregated data on the beneficiaries who



attended these trainings, and follow-up support provided to those beneficiaries, including how many of them began implementing an improved technology as a result of training and support. PCVs at every post where there is a Master Farmer Program submit similar data.

As mentioned above, an evaluation of the Senegal Master Farmer Program Senegal was conducted in 2014. The results of the evaluation showed that the program was achieving success in building the capacity of the Master Farmers as local extension agents, developing Master Farms as local demonstration and training sites, and sourcing seeds, seedlings and cuttings. It also showed that MFs, in collaboration with PCVs, were able to train and support farmers in applying improved agriculture technologies. Of the 192 (non-MF) farmers interviewed for the evaluation, 137 (71%) are applying at least one technology and 97 (51%) are applying more than one technology as a result of the training they received from a Master Farmer. There was a slightly higher application rate for women compared to men, despite the fact that most of the MFs are men (due to land ownership constraints for women in Senegal).

Some areas for improving the program identified during the evaluation were decentralizing program management, encouraging continuous Master Farmer knowledge and skill development, better coordination among Master Farmers and PCVs, and hosting smaller, hands-on trainings. The complete evaluation report can be found on USAID's DEC [here](#).

What were the most important lessons learned?

Building collaboration, learning and adaptation into program design is important and can lead to effective and efficient programs. And, these qualities need to be explicitly detailed in the program design, throughout the project cycle. For example, PC/Senegal found it useful to host annual conferences with the PC staff, PCVs, and Master Farmers to connect and spend time reviewing the previous year's successes and challenges, setting goals and objectives in a participatory manner, and making changes as necessary.

Additionally, the selection of participating farmers in this program is an important determinant of the success. The selection process should be such that it guarantees the recruitment of farmers that are trustworthy, respected in their communities, innovative, willing to share knowledge and resources, good communicators, and volunteer-oriented.

The process evaluation of PC/Senegal's Master Farmer Program provided external validation of the successes of the program and additional recommendations to improve the program. It was effective for PC/Senegal to hold a special workshop to share more about the Master Farmer Program with other PC posts in West Africa. This afforded the staff and PCVs who attended the opportunity to focus specifically on the program and spend significant time learning about it and brainstorming ways that their Post could adapt the program.

In the course of the implementation of the program, it was learned that Master Farmers are not learning at the same pace resulting in different performance groups. As a result, a decision was made



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to develop an “a la carte” coaching and training program for individual Master Farmers in order to address their specific needs.

In addition to the annual conference, PC/Senegal has started organizing regional trainings of Master Farmers. According to Master Farmers, because of the small group size (5-9 Master farmers) and a focus on technologies that are region specific, these trainings have been invaluable, in gaining technical skills and knowledge and by allowing master farmers to visit other Master farms to assess and compare each other’s progress. Furthermore, they create a healthy competition amongst Master farmers of the same region.

Any other critical information you’d like to share?

The PC/Senegal Master Farmer Program has seen great success. This program has shared both their successes and challenges with other Peace Corps programs. With the launch of online Peace Corps’ online knowledge management hub, PC Live, PC/Senegal, along with other posts, are able to share resources, disseminate information, and host lively conversations around master farms and other programming priorities. This website, coupled with quarterly webinars and Community of Practice calls, are allowing Peace Corps to collaborate, learn and adapt in every corner of the globe.

The CLA Case Competition is managed by USAID LEARN, a Bureau for Policy, Planning and Learning (PPL) mechanism implemented by Dexis Consulting Group and its partner, Engility Corporation.



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