In September 2015, US pesticide safety educator Ples Spradley traveled to Senegal as an expert volunteer, to complete a Pesticide Safety Assessment for the USAID Farmer-to-Farmer (F2F) program. Because pesticides are commonly used in the agricultural sector and pose a high risk to the safety of farmers, F2F Senegal commissioned a volunteer-led Pesticide Safety Assessment to enable the program to gain a better understanding of key constraints and possible solutions to pesticide sources and use in-country. Mr. Spradley spent a month evaluating pesticide safety, regulation, training, education, and use in three regions across the country.

As a Pesticide Safety Education Specialist with the University of Arkansas Division Agriculture’s Research & Extension and an experienced fruit farmer, Mr. Spradley easily navigated between conducting interviews with Senegalese government officials, meeting with pesticide traders and dealers, and visiting farmers to evaluate all components of pesticide use. He shared that Senegal is “a country with a pesticide education program that has tremendous potential for improvement that could provide a dramatic improvement in pesticide safety for applicators, workers, families, and the environment.” Mr. Spradley noted that while the basic framework of pesticide regulation is in place for the country, underfunding means that this does not necessarily lead to adequate regulation or enforcement. Highly toxic and even banned pesticides were often repackaged and openly sold, unlabeled, in street markets and in some dealers’ shops across the country. Mr. Spradley’s final Pesticide Assessment included recommendations for farmer/applicator safety training, use of personal protective equipment, and also noted that farmer-oriented publications are needed for proper pesticide identification and application. Pesticide labels on smaller containers, favored by many farmers because of lower cost, are in a font so small that it is almost impossible to read.
In February 2017, Mr. Spradley returned to Senegal to develop a pesticide safety training program for staff of the National Agency for Insertion and Development of Agriculture (ANIDA). He noted: “I looked forward to having more of a hands-on assignment with the training aspect of the second assignment.”

Using the pesticide assessment and information he had collected in 2015, Mr. Spradley developed a basic syllabus for a pesticide safety education program adapted from the training programs he conducts for commercial pesticide applicators in the United States.

The training program for ANIDA was designed to promote appropriate pesticide safety practices; the use and care of personal protective equipment; pesticide application equipment and calibration; and cleanup and disposal of pesticide wastes. Another goal was to work with ANIDA to develop an outreach protocol to disseminate the program as widely as possible to reach the maximum number of farmers. Mr. Spradley used a participatory teaching approach that encouraged discussion and debate. He included field tests and outdoor activities to demonstrate some of the lessons he was teaching. Mr. Spradley used fluorescent dyes and blacklights to show the potential for pesticide exposure and the importance of personal protective equipment. Participants were especially engaged during his session on sprayers and calibration.

Over the past several months, ANIDA trainers have disseminated the pesticide training materials to agricultural technicians in five geographic areas in Senegal. These technicians are responsible for coaching and advising farmers in the field. ANIDA’s plant protection committee will also replicate the pesticide safety training to extension agents. Cheikh Ndiaye, ANIDA’s training coordinator, notes, “The training was important for us and allow coordinators and extensions agent to have materials to refer for advice and outreach for farmers on pesticide use safety.”

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—Cheikh Ndiaye, ANIDA Training Coordinator