



# System of Rice Intensification Training Series Report-July 2013 Peace Corps Senegal

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Fatick and Kaffrine Regions – Senegal, West Africa

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## **Introduction**

From May to July 2013 four training events on the System of Rice Intensification (SRI) were held in different villages throughout the Kaffrine and Fatick regions of Senegal, West Africa. SRI is a set of six rice growing principles that when implemented together have a synergistic effect, and can greatly improve rice yields while also reducing seed, water and chemical fertilizer use. These six principles include: enriching the soil with organic matter; transplanting rice seedlings at a very young age; using a wide spacing between rows (25cm, or greater) and planting in a grid pattern; transplanting only one plant per-hill; allowing the soil to dry between watering during the vegetative growth phase; and mechanical weeding, often with the use of a rotary weeder to aerate the soil at the same time.

The Peace Corps-run training events brought together a wide range of community members, including Master Farmers, demonstration pilot farmers, community educators and local rice farmers. The events were managed logistically by area Peace Corps Volunteers (PCVs), and the trainings were designed and delivered by Peace Corps staff, government extension workers, and Master Farmers. Prior to the Kaffrine and Fatick trainings, PCV Lorraine Perricone-Dazzo, Program Training Assistants (PTAs) Youssoupha Boye and Arfang Sadio, and Master Farmers Samba Ly and Ibou Sarr all attended one of a series of three-day hands on SRI trainings-of-trainers in Benin that were held in 2012 and 2013. Designed to build Peace Corps' regional capacity to increase food security through more efficient rice production, these trainings-of-trainers were organized through a collaboration between Peace Corps' USAID-financed West Africa Food Security Partnership, the SRI International Network and Resource Center at Cornell University (SRI-Rice), and the Consultative Council of Rice Producers' Organizations of West Africa.

## **Kaffrine Region Events**

### **Taïba Village: May 30th, 2013**

The first of the training events was held on May 30th in the village of Taïba, approximately 23 kilometers south of the city of Kaffrine. Rice was farmed here in the past in a seasonal river valley, but had fallen out of practice until 5 years ago. In 2008 the Senegalese government extension agency, ANCAR, began providing subsidized seed and promoting rice cropping here and in the surrounding villages. Now, Taïba alone, with a population of 500, has 150 rice farmers. In early 2013 PCV Lorraine Perricone-Dazzo surveyed 40 rice farmers from four villages in this area (Taïba, Keur Demba, Mouille, Ndiayecounda) to ascertain local rice cropping practices and willingness to try and/or adopt the SRI technique. From this process, 10 demo farmers were chosen who will adapt and test the technique during the rainy season in 2013. The Peace Corps-run training event on May 30th aimed to introduce these 10 farmers to SRI practice and principles, and to teach them how and why to setup a visible demonstration. The

discussion, led by PTA Youssoupha Boye, began with an explanation of and reasoning behind SRI, including the history and anecdotal results. Using visual aids he explained the six principles of SRI and how they can be executed in the context of the flooded river fields of Taïba. Following this, the local ANCAR agent Abdoulaye Seck explained how an SRI demo is created and how to use them to test the technique and educate other farmers. Many other farmers from the four test villages were present to hear the discussion and learned how they could support the demo farmers and be involved in community education action. Questions regarding both local rice farming and some gardening techniques were fielded by Youssoupha Boye Abdoulaye Seck and Lorraine Perricone-Dazzo. After the discussion Lorraine met with the 10 demo farmers to create a schedule for surveying demo areas and a planting schedule for the season.

The discussion went well and the farmers were able to gain a deeper understanding of the method. Originally the invitee list was limited to the 10 demo farmers, and although the content of the discussion was designed exclusively for demonstration pilot farmers working with the PCV, it was important for other community members to understand the project and their presence was a welcome addition. A total of 33 additional farmers attended, and for them this was their first exposure to SRI. All of them were encouraged to attend the hands on training event at the Katakél Master Farm a month later.

### **Katakél Master Farm of Fatou Willane: July 1st, 2013**

A training of 40 rice farmers from five villages was held in the village of Katakél at the Master Farm of Fatou Willane on July 1st, 2013. The Master Farm project is a Peace Corps/Senegal initiative that connects motivated and innovative farmers with nearby PCVs to create demo spaces for community education purposes. The discussion at the SRI training was led by Arfang Sadio and demonstrations and practice areas were created by Fatou Willane, Lorraine Perricone-Dazzo, PCV Sarah Ferguson and PCV Jessie Maier. Using visual aids, the farmers were taught the SRI principles and practices. Farmers saw pre-prepared improved nurseries with and without plastic lining. Arfang demonstrated how to create an SRI nursery using the correct amount of seed and trainees participated in transplanting 11 day old



Image 1: Demonstrating SRI Spacing with a Pre-measured String

seedlings at a spacing of 25cm x 25cm. The trainers demonstrated using premeasured rakes and a planting string to create SRI grid spacing, two common SRI methods. The day wrapped up with a question and answer session and lunch was served.

The event was valuable for the demonstration farmers who had attended the Taïba training as it helped reinforce their understanding of the system through discussion and practice before starting their own demonstrations. All 10 demonstrations were prepared and seeded within 2 weeks of attending this training. Other area farmers were given the knowledge and practice to develop SRI in their fields as well. Attendance was much lower than expected since the previous night was one of the first large rain events in the area and many farmers could not give up the opportunity to seed their fields.

## **Fatick Region Events**

### **Karang Master Farm of Samba Ly: May 31st, 2013**

Master Farmer Samba Ly boasts one of the best Master Farm sites in the program. He was trained in SRI through the West Africa Food Security Partnership training-of-trainers in Benin in September 2012. On May 30th-31st two trainings were held at his Master Farm in Karang,

89km south of the city of Kaolack. Day 1 was dedicated to improved rainy season gardening techniques while day 2 was dedicated to SRI and conservation agriculture. The 56 participants on the SRI training day included 10 Master Farmers from the Kaolack and Fatick areas as well as many local rice farmers.



Image 2: Demonstrating SRI Spacing with a Pre-Measured Rake

The training began with the whole group in a discussion forum led by Arfang Sadio on SRI principles and adaptations using visual aids. The two Master Farmers, Samba Ly and Ibou Sarr, and Lorraine Perricone-Dazzo were able to add comments and support to the discussion. The participants were then split into 4 groups and rotated between training stations: rice seed selection and soaking, nursery creation, direct seeding and transplanting, and -conservation farming. The seed treatment station was taught

by Ibou Sarr and Lorraine, nursery creation by Samba Ly, transplanting by Arfang Sadio, and conservation agriculture by Associate Peace Corps Director in charge of the Agriculture sector Famara Massaly. These all took place in the field with demonstrations of the practices executed by the trainers. After all groups attended the stations lunch was served. The participants

reconvened as a group for a discussion after lunch to reiterate SRI practices and questions were fielded.

Despite such a large number of trainees, ample PC leadership, volunteers, and Master Farmers made it possible to convey the material adequately. Splitting up the group into a 4 station rotation made it possible to give more targeted attention to participants and the subject matter being taught. All but one station was exclusively on SRI practices, which may have caused some confusion and pre- and post-station large group discussion made the subjects more clear. Participants were attentive and interested in both SRI and conservation agriculture.

### **Ndiomdy Master Farm of Ibou Sarr: June 30th, 2013**

Dynamic and fun Master Farmer Ibou Sarr held an SRI training at his farm on July 1st, 2013 with the help of Arfang Sadio, Lorraine, and neighboring PCVs. After attending the SRI training-of-trainers Ibou began an SRI demo in March 2013 for community members to learn from before the rainy season. The residues from this demonstration could be seen on the field as stubble in the SRI grid pattern. This formal training was a good follow-up to his demonstration efforts. The attendees at the PC training were mostly women from 11 surrounding villages, as women are primarily responsible for rice farming in the area's flooded delta plains.



Image 3: Crop Residues from a Demo which show grid pattern, spacing and tillering of Rice under SRI

After breakfast, sitting in the shade of two huge mango trees, Arfang Sadio and Ibou Sarr described SRI principles and practices in a group discussion using visual aids. After the discussion, the trainers demonstrated how to prepare a saltwater solution to select healthier seeds for use with SRI. The group then headed to the Master Farm to view the completed demonstration, pre-planted nurseries, and newly transplanted SRI beds. Proper nursery creation was explained and demonstrated.

Creating a grid pattern with both rakes and a planting string were practiced, and participants learned both transplanting and direct seeded into prepared beds. The discussion resumed as a group back at the mango trees with a review and question and answer period. Lunch was served and participants returned home afterwards.

Despite the heat, participants were highly enthusiastic and attentive to the subject matter. Ibou Sarr and Arfang Sadio made a good team in terms of engaging the group and making the information interesting.

### **Further Action and Follow-Up**

All three Master Farmers—Ibou Sarr, Samba Ly, and Fatou Willane—plus the other seven who were trained in Karang, will be implementing SRI demonstrations during the July-November growing season. They will also be providing technical assistance to any community members interested in using the technique. The 10 demonstrations in the Taïba area will be used for community education throughout each step of the SRI implementation process, and community members have been invited to view and assist with these 10 sites. PTAs Youssoupha Boye and Arfang Sadio will continue to teach Peace Corps-run trainings on SRI to both Senegalese farmers and new PCVs. PCV Lorraine Perricone-Dazzo remains a resource to other PCVs and their farmers who are experimenting with the technique in the area via phone and site visits during the 2013 growing season. Reporting of demonstration outcomes and training events by Peace Corps staff and volunteers will support future SRI extension in the Fatick and Kaffrine regions of Senegal.

## **Further Resources**

To assist with follow-up, communication and resource sharing amongst PCVs, Peace Corps staff and counterparts on a regional level, two Facebook groups were created earlier in 2013:

**Peace Corps SRI West Africa -**

<https://www.facebook.com/groups/peace.corps.sri/>

**SRI en Afrique de l'Ouest –**

<https://www.facebook.com/groups/sri.afrique.occidentale/>

For more information on SRI in Senegal, see the SRI-Rice Senegal page at:

**SRI-Rice Senegal page –**

<http://sri.ciifad.cornell.edu/countries/senegal/index.html>

For more information on SRI in general, and to access training resources, guides and academic research on SRI, visit the SRI-Rice home page: [sri.ciifad.cornell.edu](http://sri.ciifad.cornell.edu)