Improving and Scaling up the System of Rice Intensification (SRI) in West Africa

Jenkins, D1; Traoré, G2; Styger, E1; Bagayoko, M2.

West Africa is the rice basket of Sub-Saharan Africa, yet stagnating yields and a rapidly rising population threaten the region’s economic stability and food security. Conventional efforts to reverse this haven’t led to widespread productivity gains, meaning that a new approach may be needed. An innovative 13-country project using the System of Rice Intensification aims to change this.

SRI is an agroecological, knowledge-based rice growing methodology that helps farmers produce more rice using fewer resources:
- 80-95% less seed
- 30-50% less water (for irrigated rice)
- Reduction in agrochemical use
- 30% or higher increase in yield

Based off these four principles, some common practices include:
- Transplanting at the two-leaf stage
- Planting in a grid pattern, with 1 plant/hill (1-2 if direct seeded), and 25 cm spacing between plants in each direction
- Aerobic soil management during the vegetative growth stage
- Reduced tillage where possible
- Mechanical weeding or mulching to control weeds

Following four simple principles, farmers can adapt SRI to their local conditions – including irrigated, rainfed lowland, and rainfed upland production.

There’s space for you in this project – get involved!

Project Website
The project website has the latest information about project activities in each country, and dozens of resources for adapting SRI to local conditions:
www.sriwestafrica.org

Project Newsletter
Look for quarterly newsletters for updates on the latest stories from the field:
www.sriwestafrica.org/documents

Creating New Platforms
Agroecozones in West Africa cut narrow bands across multiple countries, creating both challenges and opportunities. For SRI to be successfully adapted to the diverse conditions found in the region, knowledge, ideas and innovations will need to be shared freely and quickly between countries.

To make this a reality, we are reimagining research and extension roles, and creating new data collection and communications tools that can connect farmers in real-time – turning them into full partners in the process of research and discovery. New mobile data collection and online mapping platforms are in development that could help transform agricultural research and extension in the region.

About the Project
The three-year first phase of ‘Improving and Scaling Up the System of Rice Intensification’ started in January 2014, as part of the World Bank-financed West Africa Agricultural Productivity Program (WAAPP).

In each of the 13 project countries, WAAPP staff work in collaboration with local partners, including NGOs, research institutes, extension services, and farmers’ organizations.

The regional coordination – led by Mali’s CNS-Riz with technical support from Cornell University’s SRI-Rice Center – supports and oversees international cooperation and exchange, facilitating an adaptation and scaling-up process that takes advantage of the regional nature of this project.

Innovative Project Design
The innovative nature of SRI is reflected in the project’s design. SRI has historically been a farmer-led innovation process. Building on this, the project uses an innovative structure to give farmers, field technicians and trainers the opportunity to play a prominent role as ‘SRI Champions.’

These SRI Champions help shape project activities and budgets, and form a vital link in a two-way decision making and implementation process. Acting alongside the SRI Champions and the WAAPP structures in each country, National Facilitators steer the process locally, engaging partner organizations to maximize collaboration and synergies.

Advancing Agriculture
This project is both improving rice production in the region, and adapting and improving SRI to respond to the diverse rice growing conditions found in West Africa: in Liberia farmers are pioneering dry season lowland rice farming using SRI; farmers across the region are adapting SRI to rainfed upland conditions; and mechanized tools are being adapted to make labor intensive tasks such as weeding and weeding faster and easier for farmers.