

SRI-Rice  
Annual Report  
August 2010-June 2011

System of Rice Intensification International Network and Resources Center (SRI-Rice)



Cornell University

Cornell International Institute for Food, Agriculture and Development

## Message from the Director



*SRI farmers, village leaders and agricultural technicians from the Timbuktu region in Mali meet to discuss their experiences with SRI and plan for the following season.*

The SRI International Network and Resources Center (SRI-Rice) is based at Cornell University under the auspices of the Cornell International Institute for Food, Agriculture and Development (CIIFAD). Established in 2010 with a gift from Jim Carrey's Better U Foundation (BUF), SRI-Rice was created in response to the increasing importance of the System of Rice Intensification (SRI). SRI is an environmentally-friendly, climate-smart methodology that increases crop yields with fewer seeds, less water, decreased purchased inputs and often, less labor. To date, significant productivity improvements from use of SRI techniques have been validated in more than 40 countries.

Utilization of SRI methods and adaptations of SRI practices to local conditions and to new crops and cropping systems are quickly spreading among farmers in Asia, Africa and Latin America. This rapid and mainly informal dissemination has largely outpaced the collection of knowledge and formal reporting. This has created a gap between farmers' field experience and the awareness and knowledge of researchers, extension specialists, program developers, donors and policy makers. SRI-Rice has developed an improved framework for tracking, accumulating and summarizing SRI experience — bringing together the research and adoption from around the world, and synthesizing SRI knowledge to promote synergies and accelerate learning. By helping to guide the global SRI research agenda and provide opportunities for researchers to collaborate, SRI-Rice complements outreach efforts pioneered by CIIFAD over the past decade.

**OUR MISSION** is to advance and share knowledge about the System of Rice Intensification, its derived practices and principles, and to support networking among interested organizations and individuals around the globe.

**OUR VISION** is to improve the productivity of rice and other crops based on environmentally-friendly practices that can help farmers better withstand changing climate conditions, improve food security, and lead to reduced hunger and poverty.

Dr. Erika Styger, Director of Programs

# SRI-Rice Annual Report

## CONTENTS

Overview	4
I. Managing and Sharing Knowledge	5
II. Generating and Advancing Knowledge	14
III. Supporting and Developing Networks	18
Publications	21
Presentations	22
Presentations and Media	24
Education and Field Visits	25
Research and Support	26
Web Resources	27



*More than 300 women farmers meet with SRI-Rice to talk about their own experiences with the System of Wheat Intensification (SWI). Gaya District, Bihar State, India, February 2011.*

## SRI-Rice

### Staff

Erika Styger:	Director of Programs
Lucy Fisher:	Communications Director
Norman Uphoff:	Senior Advisor
Olivia Vent:	Special Projects

### Student Support

Carrie Young:	Communications
Lorraine Perricone-Dazzo:	Research Database
Amy Nichols:	Website Support
Samar Alam:	Website Support

# Overview

SRI-Rice activities are grouped into three focus areas, which serve to advance our mission and vision:

- I. MANAGING AND SHARING KNOWLEDGE**
- II. GENERATING AND ADVANCING KNOWLEDGE**
- III. SUPPORTING AND DEVELOPING NETWORKS**

SRI-Rice contributes to CIIFAD's mission to make significant contributions to sustainable global development, as well as to Cornell University's mission to discover, preserve, and disseminate knowledge; produce creative work; promote a culture of broad inquiry throughout and beyond the Cornell community; and to enhance the lives and livelihoods of people around the world. The following report highlights SRI-Rice activities from August 15, 2010 to June 30, 2011.



*Py Phal, SRI farmer from Prasat village, Takeo Province, Cambodia, happily presents organically-grown SRI specialty Jasmine rice, which she is able to sell for a higher price to a specialty market, November 2010.*

# Managing and Sharing Knowledge

## I. MANAGING AND SHARING KNOWLEDGE

SRI-Rice collects, organizes, stores, analyzes and shares knowledge every day. We share knowledge through our website and social media such as Facebook and Twitter, through publications, and in-person through presentations to specialist audiences, interviews with media outlets, and teaching at Cornell University.

### E-KNOWLEDGE SHARING

On our website, SRI-Rice maintains the most current and comprehensive collection of SRI information assembled anywhere in the world and made freely available worldwide. Documents and multimedia are easily accessible and provide general information about SRI, technical information for practitioners and researchers, and up-to-date reporting on use of SRI practices in over 40 countries in Asia, Africa and the Americas. Visit the SRI website at: <http://sri.ciifad.cornell.edu/>

### Reporting on SRI, Country by Country

SRI-Rice communicates daily with a significant number of stakeholders, totaling several thousand email exchanges over the past year. Many people who evaluate and use SRI methods throughout the world do not have their own web presence, and therefore rely on us to publish their project documents, research reports, manuals, videos and photographs on the SRI-Rice website. SRI-Rice gives a voice to individuals, organizations and companies in some 50 countries (list on page four) who would otherwise be unable to share their SRI experience with the world or exchange with others who face similar challenges in adapting SRI practices to their local conditions.



*Publications from SRI partners across the globe made available on the SRI-Rice website.*

# Managing and Sharing Knowledge

## Launch of Re-designed SRI Website

In order to accommodate the ever-growing volume of information about SRI, we launched a redesigned SRI-Rice website in September 2010. In addition, we improved SRI-Rice outreach through our News Blog and media-sharing sites (YouTube, Picasa, and Slideshare), and by creating three social networking sites (Facebook, LinkedIn, and Twitter). Web addresses can be found on page six, as well as in the Web Resources section at the back of the Report.

<b>East Asia / Pacific Islands</b>	<b>South Asia</b>	<b>Southeast Asia</b>	<b>West Asia/ North Africa</b>	<b>Sub-Saharan Africa</b>	<b>Latin America/ Caribbean</b>
China	Bangladesh	Cambodia	Afghanistan	Benin	Mozambique
DPR.Korea	Bhutan	Indonesia	Egypt	Burkina Faso	Nigeria
Japan	India	Laos	Iran	Ethiopia	Rwanda
Solomon Islands	Nepal	Malaysia	Iraq	The Gambia	Senegal
	Pakistan	Myanmar	Morocco	Ghana	Sierra Leone
	Sri Lanka	Philippines		Guinea	Zambia
		Thailand		Kenya	
		Timor Leste		Madagascar	
		Vietnam		Mali	
					Brazil
					Colombia
					Costa Rica
					Cuba
					Ecuador
					Guyana
					Haiti
					Panama
					Peru
					Dominican Republic

*SRI-Rice maintains up-to-date progress reports on SRI from 48 countries:*



*Farmers proudly show off wheat grown using System of Wheat Intensification (SWI) methods during an evening stroll through the fields. SWI produced a much thicker stand of wheat with longer panicles than wheat grown using conventional practices. Village of Chandrapura, Khagaria District, State of Bihar, India, February 2011.*

# Managing and Sharing Knowledge

## Connection to Existing Networks

The SRI-Rice website provides updates on all online national and regional SRI networks worldwide, including SRI-India (India), Ina-SRI (Indonesia), SRI-Nepal, SRI-Pilipinas (Philippines), SICA America Latina (Latin America), J-SRI (Japan), Groupement SRI Madagascar, and several other groups found on social media sites. SRI-Rice tracks discussions within these networks and links users so that they can share information specific to their needs.

## Practical Information

As a repository for more than 50 manuals and partner extension material (print and video) posted in 12 languages, the SRI-Rice website provides concrete guidelines on implementing SRI and adapting SRI to local conditions. Upon request, SRI-Rice provides more detailed technical assistance and links users to national networks, experts, and internet resources.

## Research Database and Analytical Papers

In addition to maintaining the internet's largest searchable database on SRI research (to date: 175 research articles, 19 theses, and about 50 links to conference proceedings), we also publish analytical background information providing succinct overviews of the latest developments on dozens of relevant topics.

## Multimedia Collection and News

SRI-Rice holds a large multimedia collection on three interactive web services: our own YouTube channel (with 12 playlists, and links to over 100 SRI videos), Picasa (950 pictures in 52 albums), and Slideshare (over 300 PowerPoint presentations available). Additionally, we post daily incoming news from all over the world and alert the SRI community to upcoming events of interest.



*The SRI-Rice online photo collection includes an album specifically created to share innovative implements, often farmer-designed, weeders, transplanters and markers.*

# Managing and Sharing Knowledge


## Online Social Media Platforms Developed This Year

- Facebook: [www.facebook.com/SRIRice](http://www.facebook.com/SRIRice) (April)
- Twitter: <http://twitter.com/SRIRice> (April)
- LinkedIn: [www.linkedin.com/groups/SRI-International-Network-Resources-Center-3928316](http://www.linkedin.com/groups/SRI-International-Network-Resources-Center-3928316)


## Sites Expanded This Year


- Main SRI site: <http://sri.ciifad.cornell.edu>
- SRI News and Views blog: <http://srinewsandviews.blogspot.com>
- SRI Cornell YouTube: [www.youtube.com/sricornell](http://www.youtube.com/sricornell)
- SRI Slideshare: [www.slideshare.net/sri.cornell](http://www.slideshare.net/sri.cornell)
- SRI Picasa: <https://picasaweb.google.com/sri.cornell>


Tracking statistics indicate that the SRI-Rice website serves a global audience, with over 2,000 unique visitors on average of 100 countries per month. The diversification of social media platforms has substantially broadened our audience base. Our Facebook page views were up to nearly 6,000 by June 2011, only two months after the page was first set up.





[Home](#) | [About Us](#) | [SRI Blog](#) | [News](#) | [Contact Us](#)

<b>About SRI</b>	<p><b>THE SYSTEM OF RICE INTENSIFICATION</b> known as SRI -- <i>le Système de Riziculture Intensive</i> in French and <i>la Sistema Intensivo de Cultivo Arrocerero</i> (SICA) in Spanish -- is a methodology for increasing the productivity of irrigated rice by changing the <a href="#">management of plants, soil, water and nutrients</a>. SRI, which <a href="#">originated in Madagascar</a>, leads to healthier soil and plants supported by greater root growth and the nurturing of soil microbial abundance and diversity.</p> <p>In simplest terms, SRI involves:</p> <ul style="list-style-type: none"><li>■ careful planting of young seedlings (8-12 days old) singly and with a wide spacing (25 cm or more)</li><li>■ keeping the soil moist but well-drained and well-aerated</li><li>■ adding compost or other organic material to the soil as much as possible [...<a href="#">more</a>]</li></ul> <p>The benefits of SRI, which have been demonstrated in over 40 countries (see <a href="#">map</a>), include: increased yield (50-100% or more), a reduction in seed requirements (up to 90%) and water savings (50% or more). Many SRI users also report a reduction in pests, diseases, grain shattering, unfilled grains and lodging. As a climate-smart agricultural methodology, additional environmental benefits stem from the reduction of agricultural chemicals, water use and methane emissions that contribute to global warming.</p>	<b>FEATURED SRI ITEMS</b>
<a href="#">Methodology</a>		 <p>New SRI publication by Africare, Oxfam, and WWF: <a href="#">More Rice for People - More Water for the Planet</a> (see WorldWatch Institute's <a href="#">review</a>)</p>
<a href="#">FAQs</a>		
<a href="#">Origin of SRI</a>		
<a href="#">Other Crops</a>		
<b>Countries and Regions</b>		
<a href="#">Asia / Africa / Americas</a>		
<b>Information Resources</b>		
<a href="#">SRI Websites / Groups</a>		
<a href="#">Publications</a>		
<a href="#">Research</a>		
<a href="#">Practical Information</a>		
<a href="#">Multimedia</a>		
<a href="#">Marketing</a>		
<b>News and Events</b>		

 Follow us on Twitter

 Check updates on our SRI Blog

 "Like" SRI-Rice on FaceBook

 Join SRI-Rice on LinkedIn

# Managing and Sharing Knowledge



*Visitors from Germany, Japan, Vietnam, India, Nepal, USA and Switzerland return from the SRI Field day in Ha Noi Province, Vietnam, during the International Rice Congress, Hanoi, November 2010.*

## OUTREACH

Our outreach includes personal contacts, publications and internet communication (covered under 1.1.). Personal contacts include giving presentations at Cornell and elsewhere, participating in meetings outside the U.S., interviews with the news media, visiting SRI farmers and researchers in the field, and teaching occasional classes at Cornell University.

Personal outreach gives the SRI-Rice team opportunities to engage directly with researchers, donors, development professionals, journalists, farmers, and students. Because information is directly tailored to the audience, the exchange of ideas leads to mutual learning and better understanding. Maintaining daily contact with SRI practitioners and researchers from around the world, SRI-Rice is the main institution keeping the world of SRI connected.

## Presentations and Participation in Meetings: Outside Cornell

Over the past year, the SRI-Rice team has given 25 presentations outside of Cornell: nine presentations to research audiences in the US, Vietnam, India and the Netherlands; and 16 presentations to development practitioners, development program managers and policy makers in the US, India, the Dominican Republic, Haiti, Burkina Faso, France, Germany, and Vietnam. Highlights include: i) the opening panel presentation at the 3rd International Rice Congress, ii) the SRI-Day event in Hanoi with research presentations from China, India, Japan, Mali, Thailand, and Vietnam, and iii) presentation of first-year Haiti SRI results during a National Colloquium for SRI in Haiti. Details are available on pages 20-21.



*India National SRI Steering Committee meeting participants in New Delhi at the Indian Agricultural Research Institute, March 2011.*

# Managing and Sharing Knowledge

## SRI Farmers from India, Vietnam and Mali Visit the US

SRI-Rice co-organized a visit to the US by three SRI farmers from India, Vietnam and Mali in October 2010. These three farmers represented their communities, which carried out SRI programs with assistance from three NGOs: Oxfam America, World Wildlife Fund (WWF), and Africare. They first told their stories at the World Food Prize Symposium in Des Moines, Iowa on October 13. A few days later, the farmers met in Washington DC with decision makers from the World Bank, USAID, the relevant US Congress House and Senate committees, and the International Food Policy Research Institute (IFPRI). Before returning home, they recounted their own experiences with SRI to a large audience of development professionals at the launch of the publication ***More Rice for People – More Water for the Planet: The System of Rice Intensification*** (Africare/Oxfam America/WWF 2010) on October 20th at the Reagan Building in Washington, DC. The link to the full text can be found on page nine, as well as in the Web Resources section at the back of the Report.



*Three SRI farmers visited the US in October 2010: Ms Sugunawwa from Andhra Pradesh (top left photo in the middle, lower right photo to the right), Mr. Le Ngoc Thach from Vietnam (lower photo in the middle- black suit), and Mr. Moussa Ag Demba from Timbuktu, Mali (bottom left). (Top and bottom left) World Food Prize Ceremony in the State Capitol of Iowa. (Lower right) In front of the Capitol in Washington, DC.*

# Managing and Sharing Knowledge

## Overseas Meetings

Overseas meetings were held with a wide variety of NGOs, consulting firms, multilateral and bilateral donors, government officials, and private sector business people in Burkina Faso, Cambodia, Dominican Republic, Haiti, India, Indonesia, and Vietnam.

## Engaging with Media

On several occasions, SRI-Rice staff were interviewed or provided information to media outlets, including the Cornell Chronicle, Voice of America, the ONE Campaign (UK), the Worldwatch Institute, and National Public Radio. The Worldwatch Institute featured the System of Wheat Intensification (SWI) as an “Innovation of the Week” on its *Nourishing the Planet* blog:

<http://blogs.worldwatch.org/nourishingtheplanet/tag/system-of-wheat-intensification/>

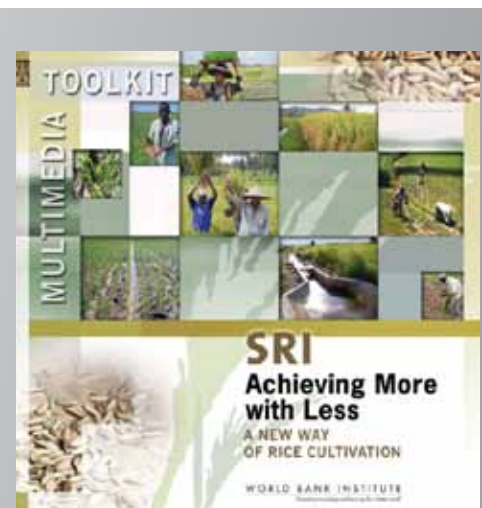
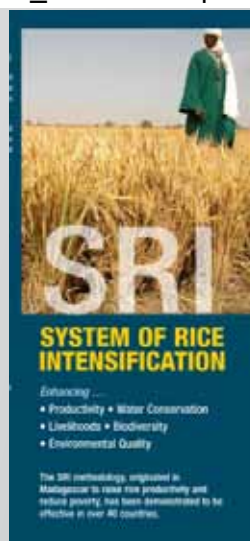
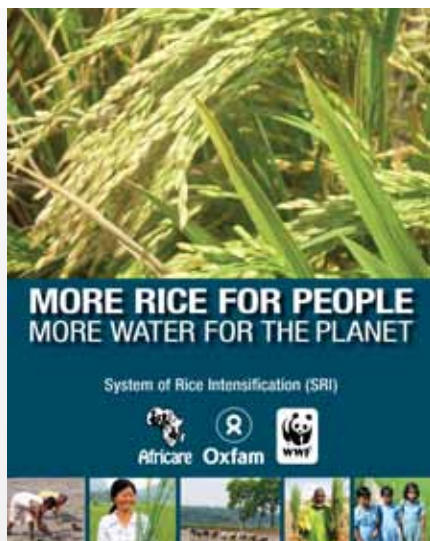
## Publications

SRI-Rice worked with Africare, Oxfam America, and World Wildlife Fund for Nature (WWF) to create the publication ***More Rice for People – More Water for the Planet: The System of Rice Intensification*** (Africare/Oxfam America/WWF 2010). This publication, written for policy makers and development professionals, introduces SRI methodology and benefits, with an emphasis on the contributions that SRI can make to dealing with climate change. Detailed case studies of the three NGOs’ respective programs in India, Vietnam and Mali demonstrated the real-world impact of SRI. The publication can be found at:

[http://www.sri-india.net/documents/More\\_Water\\_For\\_The\\_Planet.pdf](http://www.sri-india.net/documents/More_Water_For_The_Planet.pdf).

SRI-Rice collaborated with the World Bank Institute (WBI) to produce and distribute a multi-media informational “toolkit” about SRI: ***Achieving More with Less – A New Way of Rice Cultivation***, available in English and French, and soon in Spanish (to be published by WBI in October 2011). The toolkit can be accessed online at: <http://vle.worldbank.org/moodle/course/view.php?id=336> Further, we produced a brochure with an overview of both SRI and SRI-Rice, explaining who we are, what we do, and how to contact us. The brochure is distributed during conferences, given out at talks, and to visitors to SRI-Rice at Cornell University.

[http://sri.ciifad.cornell.edu/aboutsri/aboutus/SRI\\_brochure11.pdf](http://sri.ciifad.cornell.edu/aboutsri/aboutus/SRI_brochure11.pdf)



# Managing and Sharing Knowledge

## SRI Field Visits

SRI-Rice staff traveled during the past year to Cambodia, the Dominican Republic, Haiti, Indonesia, Vietnam, and the States of Bihar, Orissa, Tamil Nadu and West Bengal in India to exchange technical expertise with practitioners, scientists and officials and to meet with farmers. Field visits enable SRI-Rice to integrate knowledge and experiences from other countries, while collecting new information and insights about SRI adaptations and practices that inform future research and outreach.

## Teaching and Student Interaction at Cornell:

### SMART Program

SRI-Rice staff led a student team under CIIFAD's *Student Multidisciplinary Applied Research Team (SMART)* program in the fall semester 2010 and spring semester 2011, including a two-week field trip to Indonesia in January. Four students with diverse academic backgrounds (City and Regional Planning, International Agriculture, Applied Economics and Management, and Public Affairs) were selected to study opportunities in the Indonesian domestic market for organic SRI rice. Under supervision from Lucy Fisher, students developed a marketing strategy for BloomAgro, an Indonesian agribusiness startup company that works with farmers to produce and market organic SRI rice. Back at Cornell, the student team prepared a case study entitled: ***Succeeding in the Organic Rice Market in Indonesia: The Case of BloomAgro*** and presented a poster about the project at the 2nd Annual CIIFAD symposium on April 21, 2011, in Ithaca, New York.



## Managing and Sharing Knowledge



*(Left) SMART student trip in Indonesia: from left to right: Iwan Kurniawan, Ben Koffel, Emily Sutanto, Maryse Holly, an Indonesian official from the Bureau of Logistics (BULOG), Lucy Fisher and Hadi Fathallah. (Right) Marise Holly tries out a cono-weeder in an SRI field in Indonesia.*

SRI-Rice helped guide the student-led course “Farmer-Centered Research and Extension” (IARD 7830/ EDUC 7830) during spring semester 2011 and presented one of the class lectures: “Broad-based partnerships in development.”

### **SRI Group Seminars**

SRI-Rice organized four public seminars at Cornell University to share updates on project activities and for visitors to present their work.

- “Introduction to SRI-Rice.” November 16, 2011.
- “Marketing Organic SRI Rice in Indonesia” — a roundtable discussion. February 1, 2011.
- “Growing Success with Exporting SRI Organic Rice from Indonesia.” With invited speaker Emily Sutanto, founder and CEO of BloomAgro, Jakarta, Indonesia. April 12, 2011.
- “Mercury Cycling in Rice Paddies: Biochemistry and Human Health.” With invited speaker Dr. Sarah Rothenberg, NYU and Chinese Academy of Science, Guiyang, China. April 27, 2011.

Presentations made by SRI-Rice at Cornell University included: i) World Food Prize Youth Institute, New York State Meeting (September 2010), ii) Southeast Asia Program brown bag seminar series on “Rice in South East Asia,” iii) Prof. McCouch’s rice lab in the Plant Breeding Department, iv) South Asia Program conference on Water in South Asia.

In addition to its work with the SMART program, SRI-Rice helped set up a summer internship in Cuba for a student in International Agriculture at the College of Agriculture and Life Sciences, and provided opportunities for four students to work directly with SRI information management initiatives during 2010-2011.

## Generating and Advancing Knowledge



*Rice harvest measurements of an SRI plot in Timbuktu. From left to right: 1) Staking out 1m<sup>2</sup> from which a crop cut will be taken. 2) 16 SRI plants harvested from 1m<sup>2</sup> – number of tillers and number of panicles will be counted. 3) 1 m<sup>2</sup> harvested area is threshed on location, weighed with a precision scale, and the grain moisture measured with a grain moisture meter.*

## II. GENERATING AND ADVANCING KNOWLEDGE

SRI-Rice advances knowledge through our own analysis, research and publishing; and also advises and works with others in research and extension. Because we access information about SRI research and extension around the world, SRI-Rice is well-placed to contribute to analysis and synthesis of information from a broad range of resources. We take part in research whenever opportunities arise. We advance SRI knowledge by reporting on current trends in SRI research and practice, authoring scientific articles, and drawing up technical guidelines for practitioners. We advise researchers and students who wish to carry out SRI-associated research and provide technical assistance to development and research programs upon request. SRI-Rice assisted Inter-American Institute for Cooperative Agriculture (IICA) in the Dominican Republic to design a new rice program, called ‘competitive rice production’ – where approaches of SRI, Conservation Agriculture and Organic Agriculture were integrated into one project.

### Research

Building on Styger’s multi-year data collection in Mali (West Africa), SRI-Rice worked with the NGO Africare to monitor SRI cropping practices in the Timbuktu and Gao regions. In Timbuktu, we monitored 152 SRI farmers during the entire cropping season and randomly selected 71 SRI plots to measure yields at harvest. In Gao, we monitored 96 SRI farmers, and measured yields in 57 plots at harvest. This is the second year of rigorous on-farm data collection for SRI in Gao, and the third year for Timbuktu, which leads to a better understanding of rice yield performance across several years, especially in response to variations in rainfall during the annual rainy season, when rice is grown. SRI-Rice also collaborated with Africare on continued farmer innovation on the System of Wheat Intensification (SWI), monitoring change in cropping practices for 21 farmers. This is the third year of SWI innovation development and data collection in Mali.

# Generating and Advancing Knowledge

## Conference Organization

SRI-Rice co-organized three events during the past year: i) SRI Day in Hanoi (see below), ii) the visit of three SRI farmers from Vietnam, India and Mali to the USA (see page 8), and iii) the first National Conference on SRI in Haiti (see page 17)

In Hanoi, Vietnam, 70 people attended SRI Day, co-sponsored by the Vietnam Ministry of Agriculture and Rural Development, Oxfam America, and SRI-Rice. Held just before the International Rice Congress (IRC) opened, SRI Day brought together some 20 international scientists who had come to Hanoi from seven countries to present their SRI research – eight oral presentations and 20 posters – at the IRC. (<http://sri.ciifad.cornell.edu/conferences/IRC2010/index.html>). During SRI Day, scientists from China, India, Japan, Thailand, and Vietnam shared their research findings on adaptation to climate change and plant physiological responses under SRI management. SRI-Rice presented findings from Mali and gave an overview of global usage of SRI techniques.

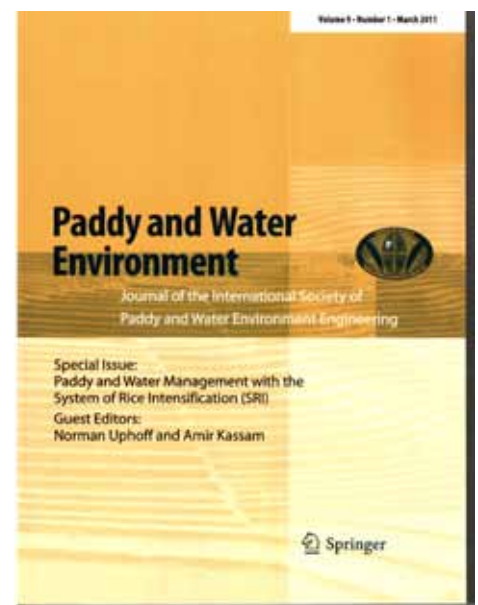
## Presentations to Research Audiences

The SRI-Rice team gave nine presentations to researchers at five international events: i) the 3rd International Rice Congress in Hanoi, Vietnam; ii) International Conference on “System Intensification towards Food and Environmental Security” at the agricultural university for West Bengal (Bidhan Chandra Krishi Viswavidyalaya, BCKV), Kalyani, Kolkata, India; iii) at Tamil Nadu Agricultural University in India; and iv) special colloquium on SRI at Wageningen University, the Netherlands. (see details on pages 20-21).

## Publications

Six peer-reviewed journal articles were published by the SRI-Rice team in the journals ***Paddy and Water Environment*** and ***International Journal for Agricultural Sustainability*** in addition to a book chapter in *Sustaining Soil Productivity in Response to Climate Change* (Wiley-Blackwell, 2011), and a technical paper for the State Agricultural Technologists Service Association, Kolkata, India. One scientific poster was presented at the 3rd International Rice Congress in Hanoi. These publications are listed on page 19.

Uphoff was invited to serve as guest editor, with Dr. Amir Kassam, for a special issue of ***Paddy and Water Environment***, entitled “Paddy and Water Management with the System of Rice Intensification,” (Vol. 9, No. 1, March 2011). This included six scientific papers from India, China, Thailand, Indonesia and Madagascar, and country SRI evaluations from Afghanistan, The Gambia, Kenya, Iraq, India, Indonesia, Mali, Pakistan, and Panama. The final chapter provides an overview of adaptation of SRI practices and emerging research issues. (<http://www.springerlink.com/content/g1772154446g>).



## Paddy and Water Environment

Volume 9 · Number 1 · March 2011

### EDITORIAL

Greetings from the Editor-in-Chief of "Paddy and Water Environment"

Y. Nakano 1

### SPECIAL ISSUE: PADDY AND WATER MANAGEMENT WITH THE SYSTEM OF RICE INTENSIFICATION (SRI)

SRI as a methodology for raising crop and water productivity: productive adaptations in rice agronomy and irrigation water management

N. Uphoff · A. Kassam · R. Harwood 3

### RESEARCH FINDINGS ON GROWING RICE WITH REDUCED WATER APPLICATIONS

Effects on rice plant morphology and physiology of water and associated management practices of the system of rice intensification and their implications for crop performance

A.K. Thakur · S. Rath · D.U. Patil · A. Kumar 13

Nutrient uptake and water use efficiency as affected by modified rice cultivation methods with reduced irrigation

L. Zhao · L. Wu · M. Wu · Y. Li 25

Effects of water management and organic fertilization with SRI crop practices on hybrid rice performance and rhizosphere dynamics

X. Lin · D. Zhu · X. Lin 33

Rice root growth and physiological responses to SRI water management and implications for crop productivity

A. Mishra · V.M. Salokhe 41

A review of studies on SRI effects on beneficial organisms in rice soil rhizospheres

I. Anas · O.P. Rupela · T.M. Thiyagarajan · N. Uphoff 53

Rice yield and its relation to root growth and nutrient-use efficiency under SRI and conventional cultivation: an evaluation in Madagascar

J. Barison · N. Uphoff 65

### COUNTRY EXPERIENCES AND EVALUATIONS OF SRI MANAGEMENT PRACTICES

Strategies and engineering adaptations to disseminate SRI methods in large-scale irrigation systems in Eastern Indonesia

S. Sato · E. Yamaji · T. Kuroda 79

Potential of the system of rice intensification for systemic improvement in rice production and water use: the case of Andhra Pradesh, India

R. Adusumilli · S. Bhagya Laxmi 89

Erratum 99

SRI contributions to rice production dealing with water management constraints in northeastern Afghanistan

V. Thomas · A.M. Ramzi 101

Technical adaptations for mechanized SRI production to achieve water saving and increased profitability in Punjab, Pakistan

A. Sharif 111

Irrigation water reduction using System of Rice Intensification compared with conventional cultivation methods in Iraq

K.A. Hameed · A.-K.J. Mosa · F.A. Jaber 121

An opportunity for increasing factor productivity for rice cultivation in The Gambia through SRI

M. Ceessay 129

Application of system of rice intensification practices in the arid environment of the Timbuktu region in Mali

E. Styger · M.A. Attaher · H. Guindo · H. Ibrahim · M. Diaty · I. Abba · M. Traore 137

Introduction of the System of Rice Intensification in Kenya: experiences from Mwea Irrigation Scheme

B.M. Mati · R. Wanjogu · B. Odongo · P.G. Home 145

On-farm evaluation of a low-input rice production system in Panama

M.-S. Turmel · J. Espinosa · L. Franco · C. Pérez · H. Hernández · E. González · G. Fernández · C. Rojas · D. Sánchez · N. Fernández · M. Barrios · J.K. Whalen · B.L. Turner 155

Review of SRI modifications in rice crop and water management and research issues for making further improvements in agricultural and water productivity

A. Kassam · W. Stoop · N. Uphoff 163

### SHORT COMMUNICATION

PAWEES 2011 International Conference on "Capacity Building for Participatory Irrigation and Environmental Management": 1st Announcement

F.-J. Chang 181

Further articles can be found at [www.springerlink.com](http://www.springerlink.com)

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Instructions for Authors for *Paddy and Water Environment* are available at [www.springer.com/10333](http://www.springer.com/10333)

# Generating and Advancing Knowledge

## Research Database

We have developed a searchable research database to regroup publications about aspects of SRI from around the world, accessed through the main SRI website. In addition, we collect theses and conference proceedings, in electronic form and/or in hard copy. Further, we are in the process of inventorying a hard copy library, including rare paper-only copies of SRI publications, located at the SRI-Rice office.

## Development of the SRI Research Network

During the past decade, the amount of research literature on SRI has increased from a handful of studies to more than 200 articles in journals, proceedings and books (available in our research database). In order to advance the SRI research agenda, researchers need an efficient web-based network: to locate colleagues, exchange research methods, collaborate on studies, learn about grant opportunities, and access the most recent research findings.

During 2011, SRI-Rice developed an initial concept paper for an international SRI Research Network, which should become fully operational in 2012. The research network will become an open, transparent platform that can be accessed through an interactive website by anybody interested in SRI research. It will permit researchers to easily exchange with each other, collaborate, and learn about advances and new scientific insights. The network will be managed by a core group of scientists from different disciplines and from different parts of the world.



*An award-winning SRI farmer, Mrs. Vijayalakshmi from the village of Vikravandi, Tamil Nadu, India shows off a SRI plant to the African delegation visiting her fields. To the right of Mrs. Vijayalakshmi are Ms. Faith Livingstone and Prof. Bancy Mati, both from Kenya.*

## Supporting and Developing Networks



*Tribal village meeting in Orissa State, India, where all farmers in the village have adopted organic SRI production methods, March 2011.*

### III. SUPPORTING AND DEVELOPING NETWORKS

SRI-Rice endeavors to strengthen SRI networks around the world for efficient information exchange, and for both regional and national extension and research. We also encourage new initiatives within networks, help to set up new networks, and support networks to become more autonomous and professional.

In this first year we worked to develop a national network for Haiti; laid the groundwork for a SRI West Africa Initiative; began preparing for the first-ever international SRI workshop for Latin America (to be held in October 2011); and did the initial development for a SRI research network (see section II above).

#### Supporting National Networks

National SRI networks have been established in many countries, including Madagascar, Bangladesh, Cambodia, India, Indonesia, Laos, Philippines, Nepal, Sri Lanka, Thailand, Vietnam, and soon in Cuba. Network members commonly share information and coordinate their SRI efforts. SRI-Rice interacts with these national networks and facilitates sharing of experiences across national and language boundaries in order to better adapt SRI methods to varied agro-ecological and socioeconomic environments. SRI-Rice catalyzes cross-network learning by re-posting or linking information from national networks' discussion with other national or regional networks and with the SRI international website.

# Supporting and Developing Networks

## National Network Development in Haiti

Following the 2010 earthquake in Haiti, two initiatives to introduce SRI to Haiti - one by SRI-Rice, the other by the USAID-funded project called the Watershed Initiative for National Natural Environmental Resources (WINNER) were begun in parallel. With funding from the Better U Foundation, SRI-Rice and a number of NGOs working in Haiti trained farmers and put into place the first SRI evaluation plots in the South, the Centre and the North East of the country. Concurrently, the WINNER-trained farmers set up demonstration plots in three other sites elsewhere in the country. Technical and senior staff of the two programs worked closely together, as several of them had worked together previously under CII-FAD and Chemonics in Madagascar.

Erika Styger made three trips to Haiti for training of farmers and technicians in the three regions. She provided technical oversight of SRI plot installation; did technical follow-up visits to SRI plots in all six sites in the country; and co-organized and managed the first national SRI conference for Haiti in March 2011. Over 120 participants attended the conference, at which a large number of rice growers, extension personnel, businesspeople from the private sector, government researchers, NGOs, and staff from bilateral and multilaterally-funded programs came together to look at the first SRI field results from six sites across the country, and to develop recommendations for a national SRI program for Haiti.



*Wilsonne Supre, a SRI farmer in Les Cayes, Southern Haiti, shows SRI seedlings at the time of planting (Sept 2010). (Bottom left) Technicians from the USAID-funded WINNER project discuss performance of SRI test plots in Gonaives, Central Haiti (Sept 2010). (Bottom right) From left to right: John Jolliffe from the Better U Foundation, Erika Styger, and Jim Carrey on a field visit during the 1st National Conference on SRI in Haiti in March 2011.*

# Supporting and Developing Networks

## Building a West Africa Initiative

Erika Styger made a plenary presentation at the first Educational Concerns For Hunger Organization (ECHO) West Africa Networking Forum held in Ouagadougou, Burkina Faso, in September 2010, attended by NGO staff and development professionals from 18 countries in West and Central Africa. Following her presentation on SRI experience in Mali, nearly half of the people in the audience signed up to receive further information. This has allowed us to create a list of 160 interested people in West Africa who now receive technical information via an informal listserv.

Building on this initial effort, SRI-Rice has designed a web-based networking platform for West Africa that will allow users to directly exchange experiences, questions, research, reports, photos, and videos relating to SRI, and thus to begin creating a West Africa SRI community. Launch of the website is planned for October 2011.



*Portraits of the Pioneer SRI farmers from Timbuktu, Mali*

## Building a Latin America Initiative

Since SRI experience has been increasing in a number of Latin American countries, SRI-Rice has joined with Earth University in Costa Rica and the Better U Foundation to organize a Latin America SRI Workshop to be held in October 2011. For the first time, SRI practitioners from Bolivia, Brazil, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Panama and Peru will come together and share their experiences and, at the same time, discuss how to further develop the use of SRI concepts and methods in the region, which should help to set up an operational network similar to those established elsewhere. SRI-Rice stands ready to backstop the network if one is agreed on and will help connect it to others through the SRI global network.

## Publications

- Anas, Iswandi, O.P. Rupela, T.M. Thiyagarajan and Norman Uphoff. "A review of studies on SRI effects on beneficial organisms in rice soil rhizospheres." *Paddy and Water Environment*, 9:1, 53-64. 2011.
- Barison, Joeli and Norman Uphoff. "Rice yield and its relation to root growth and nutrient-use efficiency under SRI and conventional cultivation: An evaluation in Madagascar." *Paddy and Water Environment*, 9:1, 65-78. 2011.
- Kassam, Amir, William Stoop and Norman Uphoff. "Review of SRI modifications in rice crop and water management and research issues for making further improvements in agricultural and water productivity." *Paddy and Water Environment*, 9:1, 163-180. 2011.
- Mishra, Abha and Norman Uphoff. "System of rice intensification: 'less can be more' with climate-friendly technology." *SATSA Mukhapatra - Annual Technical Issue*, 15, 28-39. 2011.
- Styger, Erika, Goumar Aboubacrine, Malick Ag Attaher and Norman Uphoff. "The System of Rice Intensification (SRI) as a sustainable agricultural innovation: Introducing, adapting and scaling up SRI practices in the Timbuktu Region of Mali." *International Journal for Agricultural Sustainability*, 9:1, 67-75. 2011.
- Styger, Erika, Malick Ag Attaher, Hamidou Guindo, Harouna Ibrahim, Mahamane Diaty, Ibrahima Abba and Mohamed Traore. "Application of system of rice intensification practices in the arid environment of the Timbuktu region in Mali." *Paddy and Water Environment*, 9:1, 137-144.
- Uphoff, Norman. "Agroecological approaches to help 'climate-proof' agriculture while raising productivity in the 21st century." *Sustaining Soil Productivity in Response to Climate Change*. eds. T. Sauer, J. Norman and K. Sivakumar. Wiley-Blackwell. 2011.
- Uphoff, Norman, Amir Kassam and Richard Harwood. "SRI as a methodology for raising crop and water productivity: Productive adaptations in rice agronomy and irrigation water management." *Paddy and Water Environment*, 9:1, 3-11. 2011.
- Uphoff, Norman and Amir Kassam, guest editors. Special Issue on System of Rice Intensification: *Paddy and Water Environment*, 9:1, 2011.
- Uphoff, Norman. "The System of Rice Intensification: An alternate civil society innovation." *Technology Assessment – Theory and Practice*, special issue on 'Feeding the World.' 2:20, 45-52. 2011.
- WWF, ICRISAT, Africare and Oxfam America. *More Rice for People, More Water for the Planet*. Erika Styger and Norman Uphoff, contributors. Olivia Vent, publication coordinator. 2010.

# Presentations

## *Outside of Cornell*

- September 19-25     **ECHO: 1st West Africa Networking Forum.** Ouagadougou, Burkina Faso. “System of Rice Intensification (SRI): Producing more rice with less inputs — 3 years of experience from Mali,” plenary presentation by Erika Styger.
- October 13     **World Food Prize Symposium: SRI Farmer Forum** organized by Oxfam America, Africare and WWF. Des Moines, IA. Introduction, Norman Uphoff; farmer facilitation/translation, Erika Styger; publicity materials, Olivia Vent.
- October 18     **International Food Policy Research Institute (IFPRI).** Washington, DC. Noon staff seminar by Norman Uphoff, Erika Styger, Lucy Fisher and SRI farmers.
- November 8     **SRI-Day in Hanoi: Pre-Congress event for 3rd International Rice Congress,** organized by Ministry of Agriculture and Rural Development, Government of Vietnam, and Oxfam America. Hanoi, Vietnam. Presentations on “Overview of the System of Rice Intensification,” by Norman Uphoff. “System of Rice Intensification (SRI) -- 3 Years of Experience from Mali and Introducing SRI to Haiti,” presentation by Erika Styger.
- November 8-12     **3rd International Rice Congress.** Hanoi, Vietnam. Plenary panel keynote presentation and panel presentation on “Alternative Management Methods and Impacts with the System of Rice Intensification (SRI) in Responding to Climate Change Effects,” by Norman Uphoff; and poster on “Impact of System of Rice Intensification (SRI) practices on cropping system resilience to fluctuating climate conditions in Timbuktu Region, Northern Mali, West Africa,” by Erika Styger.
- November 22     **Harvard University: Weatherford Center for International Affairs** Cambridge, MA. Faculty seminar series on “Sustainability of the World’s Food and Farming System.” Presentation by Norman Uphoff.
- November 22     **Oxfam America.** Boston, MA. Staff seminar presentation by Norman Uphoff.
- December 8-9     **ECHO 13th Annual Agriculture Conference.** Fort Myers, FL. Plenary presentation on “The System of Rice Intensification: An Application of Agroecology,” by Norman Uphoff.
- December 21-22     **National India Workshop on SRI.** ICRIAT, Hyderabad, India. “A Decade in India - Lessons, Experiences and Future Directions in the Context of Food Security and Climate Change,” introductory remarks by Norman Uphoff.
- February 25     **International Symposium on System Intensification towards Food & Environmental Security** organized by Crop and Weed Science Society (CWSS) and West Bengal State Agricultural University (BCKV). Kalyani, India. Keynote speech by Norman Uphoff; and panel presentation by Erika Styger.
- February 26     **Banglar-SRI:** State-wide meeting of multi-institutional platform for SRI in West Bengal State. Kolkata, India. Presentations on “System Intensification for Food and Environmental Security,” by Norman Uphoff, and on “System of Rice Intensification (SRI) in Africa — 4 years of experience in Mali,” by Erika Styger.

# Presentations

- March 2            **Bihar Department of Rural Development: National Colloquium on System of Crop Intensification.** Patna, India. Plenary presentations on “System of Crop Intensification,” by Norman Uphoff, and on “System of Wheat Intensification (SWI) in Mali, West Africa,” by Erika Styger.
- March 9            **Tamil Nadu Agricultural University (TNAU): Water Technology Center and Directorate of Crop Management.** Coimbatore, Tamil Nadu, India. “System of Rice Intensification (SRI): The SRI-Rice Center at Cornell University,” presentation by Erika Styger.
- May 19-20        **College de France: International Symposium to Abolish Hunger.** Paris, France. Presentation for panel on “Promoting Successful Action,” by Norman Uphoff.
- May 25            **Wageningen University: Farming Systems Department Colloquium on SRI.** Wageningen, Netherlands. Presentation by Norman Uphoff.
- May 28            **Bieberstein Forum: Colloquium on International Development Social Policy and Practice.** Schloss Bieberstein, Reinsberg, Germany. Presentation by Norman Uphoff.
- June 1-2          **USAID-ATAI: Evidence Summit on Agricultural Technology Adoption and Food Security in Africa.** Washington, DC. Panel presentation by Norman Uphoff.
- June 14-16       **Instituto Interamericano de Cooperación para la Agricultura (IICA).** Santo Domingo, San Juan and La Vega, Dominican Republic. “System of Rice Intensification (SRI) — A global overview,” presentation to members of government, donors and development programs by Erika Styger.
- At Cornell***
- September 23    **World Food Prize Youth Institute: New York State meeting.** Ithaca, NY. Presentation by Norman Uphoff.
- October 21       **Southeast Asia Program: Brownbag seminar series: on “Rice, Cornell and South East Asia.”** Presentation by Norman Uphoff.
- April 8            **South Asia Programs of Cornell and Syracuse University: Colloquium on Water in South Asia** Presentation on “Irrigation and Agricultural Water Use: Water-Saving Opportunities with Expanded Grain Production in South Asia,” by Norman Uphoff.

## Presentations and Media

- April 21      **2nd Annual CIIFAD Symposium.** Poster presentation on the Indonesia group SMART findings on SRI rice marketing strategy by PT Bloomagro, Maryse Holly, Hadi Fathallah, Ben Koffel and Iwan Kurniawan.
- April 26      **Farmer-Centered Research and Extension (IARD 7830):** “Broad-based partnerships in development,” presentation by Erika Styger.

### MEDIA

- August 29      **Cornell Chronicle:** Information on SRI in Pakistan, Erika Styger.
- September 21-23      **Clinton Global Initiative: Annual Meeting,** New York City. Backstopping of presentations by Ken Lee and Jim Carrey, by Norman Uphoff and Olivia Vent.
- October 27      **Voice of America:** Interview with Erika Styger.
- January      **ONE Campaign:** Interview with Erika Styger.
- April      **Worldwatch Institute: Nourishing the Planet:** Interview with Norman Uphoff and Erika Styger.



# Education and Field Visits

## EDUCATION

### *SRI-Rice Sponsored Seminars at Cornell*

- November 16                      **Introduction to SRI-Rice.** Presentation by Erika Styger.
- February 11                      **Marketing Organic SRI Rice in Indonesia.** Presentation by Hadi Fathallah, Marise Holly, Iwan Kurniawan and Ben Koffel
- April 12                              **Growing Success with Exporting SRI Organic Rice from Indonesia.** Presentation by Emily Sutanto, Founder and CEO of BloomAgro.
- April 27                              **Mercury Cycling in Rice Paddies: Biochemistry and Human Health.** Presentation by Sarah Rothenberg, NYU and Chinese Academy of Science, Guiyang, China.

## FIELD VISITS

- August 30- September 10      **Haiti** (6 sites). Erika Styger.
- November 12-15                      **Vietnam** (Ha Noi and Thay Nguyen Provinces). Erika Styger.
- November 16-22                      **Cambodia** (Siem Reap and Takeo Provinces). Erika Styger.
- January 13-15                      **Indonesia** (Tasikmalaya and Subang, West Java). Lucy Fisher.
- January 27-28                      **Indonesia** (Gianyar, Bali). Lucy Fisher.
- February 20-28                      **India** (Bihar State). System of Wheat Intensification (SWI), and intensification of mustard and eggplant. Erika Styger and Norman Uphoff.
- February 27                              **India** (West Bengal State). SRI and intensification of mustard. Erika Styger and Norman Uphoff.
- March 5-8                              **India** (Orissa State). SRI field visit to tribal areas. Erika Styger.
- March 9-12                              **India** (Tamil Nadu State). SRI field visit in commercial farming area, System of Sugarcane Intensification (SSI) with drip irrigation at TNAU. Erika Styger.
- March 29-30                              **Haiti** (Montruis). Erika Styger
- June 13-June 17                      **Dominican Republic** (Provinces of San Juan and La Vega) with IICA (Inter-American Institute for Cooperation on Agriculture). Erika Styger.

# Research and Support

## RESEARCH AND COLLABORATION

December-June **Mali:** Organized data collection of SRI farms in Timbuktu; Data management of SWI trials in Timbuktu for 2010-2011, Erika Styger.

## TECHNICAL SUPPORT

September **Haiti:** Technical assistance to WINNER project in Haiti about rice harvesting procedures, Erika Styger.

September-October **Solomon Islands:** Training on SRI methods for farmers and extension personnel, in cooperation with Nagrak Organic SRI Centre (NOSC), Indonesia, Honiara. Miyatty Jannah, farmer-consultant.

June **Dominican Republic:** Technical assistance to Inter-American Institute for Cooperation on Agriculture (IICA) for the development of a SRI program for the Dominican Republic, Erika Styger.

## INTERNATIONAL NETWORK SUPPORT

September **West Africa:** ECHO Conference, Ouagadougou, Burkina Faso. Discussed and obtained contacts for the establishment of SRI West Africa Initiative. Erika Styger.

April-June **Haiti:** Discussion among SRI partners in Haiti for the establishment of a National SRI network. Erika Styger.

September-June **Global:** Establishment of global contact database to serve as a network platform. Erika Styger and Carrie Young.

March **India:** Meeting with National SRI Committee, at Indian Agricultural Research Institute, New Delhi. Erika Styger and Norman Uphoff

April-June **West Africa:** Development of online network for West Africa. Erika Styger, Lucy Fisher and Carrie Young.

April-June **Latin America:** Communication and planning for a SRI workshop in collaboration with Earth University and Better U Foundation to be held in October 2011 at Earth University, Costa Rica. Erika Styger and Lucy Fisher.

May 18-19 **Global:** 16th Annual AgNIC Partners Meeting at National Agricultural Library, Beltsville, Maryland. Collaboration on AgNIC Conservation Agriculture and Rice websites (Univ. of Arkansas, Agriculture Network And Information Center/National Agricultural Library). Lucy Fisher.

March 29-30 **Haiti:** First International Colloquium on SRI in Haiti, Co-organized with The WINNER project: 120 participants from a large number of NGOs, Donors and farmer organizations exchanged about the first SRI experiences and developed a roadmap for the future. Erika Styger.

# Web Resources

## SELECT WEB RESOURCES

- September 2010      **SRI System of Rice Intensification.** <http://sri.ciifad.cornell.edu/>
- April 2011            **SRI International Network and Resources Center (SRI-Rice).** Facebook. [www.facebook.com/SRIRice](http://www.facebook.com/SRIRice)
- SRI-Rice.** Twitter. <http://twitter.com/SRIRice>
- June 2011            **SRI International Network and Resources Center (SRI-Rice).** LinkedIn. [www.linkedin.com/groups/SRI-International-Network-Resources-Center-3928316](http://www.linkedin.com/groups/SRI-International-Network-Resources-Center-3928316)
- Global News and Views: System of Rice Intensification (SRI) News and Updates about the System of Rice Intensification** — blog posted by Outreach Unit of the SRI International Network and Resources Center (SRI-Rice) in Ithaca, New York. <http://srinewsandviews.blogspot.com/>
- SRI's Video Gallery.** Cornell's Channel: You Tube. [www.youtube.com/sricornell](http://www.youtube.com/sricornell)  
**SRI's PowerPoint Gallery.** Slideshare. <https://picasaweb.google.com/sri.cornell/>  
**SRI's Photo Gallery.** Picasa. <https://picasaweb.google.com/sri.cornell/>
- November 2010      **SRI-Day in Hanoi.** International Conference to Exchange Experiences in Adoption and Adaptation of the System of Rice Intensification. [http://sri.ciifad.cornell.edu/conferences/IRC2010/IRC2010\\_SRI\\_Day\\_Presentations.html](http://sri.ciifad.cornell.edu/conferences/IRC2010/IRC2010_SRI_Day_Presentations.html)
- June 2010            **More Rice for People – More Water for the Planet.** [www.sri-india.net/documents/More\\_Water\\_For\\_The\\_Planet.pdf](http://www.sri-india.net/documents/More_Water_For_The_Planet.pdf)
- Managing Agricultural Water.** “Producing More Crops per Drop - An Innovative Way of Rice Cultivation (SRI).” World Bank Institute Toolkit. <http://vle.worldbank.org/moodle/course/view.php?id=336>
- March 2011          **Paddy and Water Management with the System of Rice Intensification (SRI):** Special issue of Paddy and Water Environment (Vol. 9). [www.springerlink.com/content/g1772154446g](http://www.springerlink.com/content/g1772154446g)
- May 2011            **Nourishing the Planet:** “Innovation of the Week: Researchers Find Farmers Applying Rice Innovations to Their Wheat Crops,” by Matt Styslinger. WorldWatch Institute. <http://blogs.worldwatch.org/nourishingtheplanet/tag/system-of-wheat-intensification/>

*Cover page: Farmer in Horogoungou Village, Timbuktu, Mali, shows an SRI plant from his field (December 2010). Last page: Field visit during the 1st National Conference on SRI in Haiti in March 2011; participants from USAID Haiti, the USAID funded WINNER project, Better U Foundation and SRI-Rice.*

*PHOTO CREDITS: Cover: by Harouna Ibrahim; Page 11: by Lucy Fisher; Page 15: courtesy of Bancy Mati; Page 16: photo with Jim Carrey by Sonia Malebranche; Last Page: by Sonia Malebranche. All other photos by or courtesy of Erika Styger.*

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The Better U Foundation supports sustainable innovations which transform people's daily lives.

Founded in 2005 by actor Jim Carrey, the Better U Foundation (BUF) addresses global food security by supporting the System of Rice Intensification (SRI).

[www.betterufoundation.org](http://www.betterufoundation.org)

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

or <http://sririce.org>



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System of Rice Intensification International Network and Resources Center (SRI-Rice)



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