

## REPORT ON PARTICIPATION IN 2007 BIOVISION FORUM, LYON, FRANCE

March 11-14, 2007 – Norman Uphoff, CIIFAD

I was able to participate in this 5<sup>th</sup> World Life Sciences Forum held in Lyon -- thanks to an invitation from **Philippe Desmarestaux**, chairman of the BioVision Executive Committee and chair of the program committee for this forum. This provided opportunity to make a number of contacts on behalf of SRI and to get some key people more interested in the potentials that SRI offers for a more productive and more sustainable agriculture. M. Desmarestaux's interest in SRI stems from discussions with Nicolas Duriez, a friend of SRI living in Lille, France who maintains ongoing connections with Association Tefy Saina in Madagascar. As seen below, sometimes it seems that the 'S' in SRI should stand for 'serendipity.'

As the theme of the Forum was "The Contribution of Life Sciences to the Millennium Development Goals," **Dr. Jeffrey Sachs**, director of the Earth Institute at Columbia University and of the U.N.'s Millennium Project, played a prominent role in launching the Forum. The U.N. Millennium Project is promoting a set of *Millennium Development Goals* (MDGs) that aim to dramatically reduce hunger, poverty, and illness by 2015 and achieve positive improvements at the same time (<http://www.un.org/millenniumgoals/>).

By coincidence, on the first morning of the Forum, Jeff Sachs and I sat near each other on the bus that took participants from the hotel to the Lyon International Convention Center. This enabled me to resume a conversation about SRI that I had started with him in 2000, when he invited me to a conference at the Center for International Development at Harvard on tropical underdevelopment. At that time, he expressed some interest in SRI potentials, but I heard nothing further. Last year after Jeff spoke at Cornell, I sent him some updated materials on SRI, but none of these were as conclusive as what I could report to him at this time.

Shuichi Sato, technical assistance team leader for Nippon Koei on the Decentralized Irrigation System Management Project (DISIMP) in Eastern Indonesia, has provided a summary of results from >12,000 on-farm comparison trials conducted over 9 seasons on a total of 9,429 hectares. Average SRI yield advantage for this huge area and large number of trials was 3.3 t/ha, a 78% increase achieved with 40% less water, 50% less fertilizer, and 25% lower costs of production (<http://ciifad.cornell.edu/sri/countries/indonesia/indodsimpdata06.xls>). Such numbers command attention, especially coming from a private-sector source, having no prior stake in SRI. Jeff said that he would invite me to the Earth Institute in New York City to discuss SRI with the staff and others. We think SRI can contribute more quickly and cheaply to the MDGs than any initiative.

At the first evening reception, I talked with **Dr. Prabhu Pingali**, formerly agricultural economist with IRRI and then CIMMYT, and now director for FAO's agricultural and development economics division in Rome. I have also tried to keep Prabhu well-informed about SRI because he was one of the first economists to document the slowing of the Green Revolution. His interest in SRI is now greater because, he reported, when he recently visited his home village in Andhra Pradesh, India, his father told him about a new system of rice production that the family is using with good results – SRI. Dr. Masaru Iwanaga, director-general of CIMMYT, was part of this conversation, so we talked a bit about the relevance of SRI concepts for wheat production as well.

At the first morning plenary session, both Jeff Sachs and Ray Offenheiser, president of Oxfam America, challenged business leaders from the private sector to provide leadership in achieving the MDGs. Fortuitously, when Jeff had to leave the session before it ended to catch a plane, he walked right past where I was sitting -- which gave me a chance to give him an offprint of the article on SRI and water-saving that Satyanarayana, Thiyagarajan and I recently published in *Irrigation Science* as 'airplane reading.' He said he would look at it. If SRI can become linked with MDG efforts, this could be very beneficial all around.

After the session ended, I spoke with **Michael Pragnell**, CEO of Syngenta, who had made some thoughtful comments about how his company can contribute to more sustainable development. He pointed out to me **Andrew Bennett**, executive director of the Syngenta Foundation for Sustainable Agriculture, based in Basel, to talk to about SRI. Andrew happens to be currently the president of the Tropical Agriculture Association, which sponsors the Hugh Bunting Memorial Lecture Series at Reading University. Before we started talking about SRI, he thanked me for agreeing to give the Bunting lecture this year in June. Andrew said that the Syngenta Foundation is already working with SRI in India, and it is finding SRI methods very popular with farmers there. He compared the ease of getting adoption with 'water running downhill.' He indicated no reservations concerning SRI. We will have more time to discuss possible collaboration on SRI when we meet again at the end of March in Newcastle at a workshop on soil system management organized by our SRI colleague Amir Kassam on TAA's behalf.

During the morning break, I happened to meet **Dr. Ruth Oniang'o**, professor at Jomo Kenya University of Agriculture and Technology in Kenya, a member of the Kenyan Parliament, and currently a member of the IRRI Board of Directors. We had met previously at a different meeting. She was interested to be updated on SRI, and said that she would try to get some discussion of SRI onto the agenda of the next Board meeting. I hope this will be possible.

At the end of the second plenary session of the morning, before lunch, I was able to talk with **Ray Offenheiser** of Oxfam America. Since our last communication about SRI, Ray has visited Cambodia and had been taken to see SRI fields and talk with SRI farmers by Dr. Koma Yang Saing of CEDAC, which is an Oxfam partner in Cambodia. Ray is now fully satisfied about SRI's potentials to counter hunger and poverty, so his question was: what can Oxfam America do through its various country programs to improve farmer knowledge and practice not just in rice production but in better soil and farm management. We agreed that he will visit Cornell or I will visit Boston to have more in-depth conversations than we could have at the Forum.

At the afternoon session on Agriculture and Food: Integrated Approaches to Eliminate Hunger, after the three formal presentations, and several comments by special guests, I was able to make a five-minute presentation on SRI from the floor. The Indonesian data provided by Nippon Koei were sufficient to make the point that SRI deserves serious consideration for eliminating hunger. During the break, I updated **Margaret Catley-Carlson**, current chair of the Global Water Partnership and former president of the Canadian aid agency CIDA as well as former deputy director of UNICEF. She has been a strong proponent of SRI since learning about it as a member of CIIFAD's advisory committee. During the Forum, she talked about SRI with a number of participants.

While we were speaking, **Dr. Ismail Serageldin**, currently director of the Library of Alexandria in Egypt, joined us. (Margaret is on the board of the Library.) I first spoke with Ismail about SRI in 1998 when he invited me to a workshop at the World Bank on social capital -- while he was the Bank's vice-president for sustainable development, and chair of the Consultative Group for International Agricultural Research (CGIAR). While he was interested in SRI possibilities, he did not see how the Bank could become involved.

This time, when I shared with Ismail the pictures and data that Sato-san has provided from Indonesia, there was more evident interest, and he asked whether I would be willing to come to his Library in Alexandria, which is dedicated to sustainable development. I said that I would like to combine such a visit with one also to the national Rice Research and Training Center in Sakha. Ismail said this should be easy to arrange. So this may become another good opportunity for SRI.

At the agricultural session the next morning, focused on "Food for the Future: North and South," I talked with **Dr. Johan Rockström**, Executive Director of the Stockholm Environment Institute. Johan had been moderator for the debate dinner the previous evening, on 'Global Change and the Food Supply.' He said he liked the comments I had made on 'green water,' i.e., water absorbed and retained in the soil for crop use *in situ*, made possible by better soil management and biological enrichment of the soil. This is an alternative to relying on 'blue water,' acquired from water bodies or subsurface water stocks. It must be transported to crops, usually at high cost and with many losses and inefficiencies. Johan was also interested in SRI for its environmental merits and introduced me to **Dr. Malin Falkenmark**, professor at the Stockholm International Water Institute. She is responsible for introducing the distinction between 'blue' and 'green' water, a significant contribution to our thinking and practice for better water utilization.

One of the morning speakers was the **Hon. Salif Diallo**, Minister of Agriculture for Burkina Faso. After he finished his presentation, I spoke with him privately and made a powerpoint presentation on the first trials/demonstrations of SRI in Burkina Faso, using pictures provided by Tim Krupnik, PhD candidate in agroecology at the University of California, Santa Cruz, who got half a dozen farmers in that country to try out SRI methods last year. Only one farmer (Bourema) used the methods fully and well, but his results were very impressive, and the Minister was pleased to see something so positive and promising from his own country while attending a meeting in France. He said that he would follow up with us on further SRI work.

Lunchtime was spent with **Sebastien Dekeister** and **Delphine Lompret**, recent graduates of the Agriculture, Food Industry and Environment University (ISA) in Lille, France, who together did their theses in Madagascar on SRI, working with Association Tefy Saina. We had been in email communication previously, but had not met until the Sunday evening reception, when they introduced themselves. It was wonderful to get first-hand reports on Tefy Saina work in the field.

The afternoon agriculture session focused on "agriculture in drought and saline areas." An impressive presentation was made on soil management, including the role of roots and soil biota, by **René Billaz**, chairman of the board of Agronomists and Veterinarians Without Borders (*sans Frontiers*), an NGO that provides volunteer assistant in agriculture. I spoke with him during the break and learned that he has worked in Madagascar with SRI and with Tefy Saina. I gave him a copy of our book on *Biological Approaches to Sustainable Soil Systems* for the NGO.

Also, I spoke with **Dr. Adel El-Beltagy**, Director of the Global Forum on Agricultural Research (GFAR) and former director of the ICARDA, the international agricultural research center for dry areas. He is a plant stress physiologist by training, and he said he understood the reasons why SRI makes such dramatic improvements in plant health and productivity. His interest and support for SRI can be very helpful.

During the break, I spoke also with **Pat Mooney**, from ETC Group, a Canadian NGO formerly known as RAFI, after he asked a very pointed question to the panel. Why was so much optimism being expressed about the contribution that biotechnology will make to increased food production when neither the Rockefeller nor Gates Foundations is expecting any significant contribution from biotech for the next 10 years? Instead, they are looking to other, simpler technologies to improve the world food situation, especially in areas of greatest hunger and vulnerability. Pat already knew a lot about SRI and considers it suitable for reducing hunger.

There were many other conversations, but the above enumeration gives a good idea of the range of persons whom it was possible to engage in discussions of SRI and what it can offer toward furthering the Millennium Developments and sustainable agriculture more generally. At the end of the closing session of the Forum, I was able to meet Philippe Desmarescaux, formerly CEO of the large corporation Rhône-Poulenc, thanking him for his invitation and for supporting my attendance in Lyon as this had been a very good opportunity for ‘networking.’

One of the main things that I took away from the event was that a growing number of private-sector leaders are taking seriously the need to ensure that the earth’s resources are used in ways that are not only more sustainable as well as more productive, but that also actually reduce poverty and hunger and respond to the challenges of climate change. ‘Business as usual’ is not likely to help the world deal successfully with these objectives and challenges.

Top executives for Syngenta, Novo Nordisk, Hewlett Packard, Danone Group, DSM, and other corporations who spoke at the Forum expressed concern that present practices and policies guiding global resource-use are heading the world in wrong directions. As governments and international organizations are now often bogged down by the immensity and complexity of the challenges we face, it becomes important to do more ‘coalition-building’ with the private sector.

In Bangladesh, Syngenta Bangladesh Ltd. has been a good partner in the SRI national steering committee since 2002. Even more important, the boost given to SRI by a Nippon Koei professional in Indonesia is becoming helpful around the world. So, SRI colleagues should look for like-minded partners in the private sector wherever they might be found. SRI has been a civil-society innovation from the start, and this means enlisting all sectors – including like-minded persons in both the private and public sectors – to join in our efforts.