

Economic and Social Concerns

No agricultural innovation can be understood or promoted independently of the socio-economic context in which it is introduced or made available. The discussion group on economic and social aspects of SRI focused on four areas of concern. Rather than just identify problems, it tried to make suggestions that could be useful or at least tried out with SRI.

Gender and Household Considerations

Most agricultural innovations affect the **gender division of labor** within households. We do not know whether or how much SRI affects this, so this should be evaluated as a matter of some priority. Since SRI requires more labor per hectare, at least initially, there was concern that this could increase the labor burden on women, who usually do the transplanting. Labor savings in terms of time spent on nursery construction and management with SRI would accrue usually to men.

Conversations with women doing SRI transplanting in Sri Lanka have indicated that they found SRI methods easier and quicker after the first year, once they became comfortable with handling tiny seedlings. Because many fewer seedlings need to be transplanted, they reported that SRI transplanting has become quicker for them, and they find the technique more comfortable (“no backache,” they said).

In Madagascar, there are still complaints about the method taking extra time and effort, but there transplanting is still being done with ropes stretched across fields, rather than a simple wooden rake to score the surface of the fields with lines. With increased yield, women’s burden at harvest time is probably increased, though a larger harvest helps maintain household food security, which is a major responsibility and burden for women, so complaints are not likely to be many.

Some suggestions were that:

- Women might have some **comparative advantage** for SRI transplanting because the smaller seedlings require more delicate and deft handling. Also, with less irrigation water required for SRI, small treadle pumps that women can operate become more feasible to use.
- **Training programs** for SRI, including Farmer Field Schools where they become involved with SRI, need to be adjusted to the time and other needs of women.
- To the extent that local farming systems can become more productive with better opportunities for earning income locally, this can **reduce male migration** to cities, which creates burdens for women.

Cultural Considerations

There are likely to be differing responses to SRI opportunities according to national or local cultures. In Madagascar, most rural households are strongly attached to “the ways of the ancestors.” This reverence has been an inhibition against adoption of (or continuing with) SRI methods, as these can be seen as derogating the practices followed for generations. An opposite situation was reported in Cuba, where rice culture has become so “modern” that seed sowing is done in some places from airplanes. “Going back” to transplanting, rather than “forward” to it, presents another kind of cultural inhibition. Because of a strong attachment to animal traction in Cuba, the spacing of plants should probably be adjusted to widths that lend themselves to this mode for planting and weeding.

Some suggestions were:

- SRI should be linked in people’s minds with **sustainable development** and the **conservation of biodiversity**, two values that are “modern” but that also resonate with “traditional values.” This is a legitimate dual identification.

- Especially because young people are finding many reasons to exit from agriculture, SRI should be presented as an opportunity for **agricultural entrepreneurship**, giving personal recognition for innovative achievements. SRI practices that are indeed soundly based on biological science should be presented and characterized as “advanced,” though at the same time they build on past experience.

Economic Considerations

These incentives are pretty strong and clear. That the productivity of land, labor, water and capital can all be increased, with reductions in the cost of production and thus an increase in profitability, means that economic factors are — or should be — very favorable to SRI’s spread.

Some specific ideas suggested that add to its merit included:

- The possibility of **ratooning**, which can give substantial saving of labor saving from a second crop that does not require any additional labor for land preparation or transplanting. This should be evaluated under a variety of conditions to know where and how widely it can be economic.
- **Seed saving** is a small but very visible incentive, particularly important for poor households who see a tradeoff between using rice for seed or for food. Seed requirements with SRI can be reduced by 80 to 90%, depending on initial sowing rate.
- The possibilities for greatly increasing **seed multiplication** with SRI are attractive. A Laotian farmer who only got a 20% increase in yield with SRI commented favorably upon a five-fold increase in his seed:harvest ratio. Seed multiplication of 1,000 to 2,000 times has been achieved with SRI methods. This would be particularly important for production of high-quality seed paddy.

Social Considerations

Broader benefits were also noted by the group in its discussion of social impacts:

- There is potential for **improved health** resulting from more food production and from production of food containing fewer toxic chemicals.
- There should be an increase in **employment opportunities** locally, noted above with regard to gender and family considerations, but broadly important for social stability and the preservation of rural communities.
- That SRI is more **skill-intensive** can be seen as a societal benefit, not just an individual cost, because it helps to upgrade the productivity of the farming community more generally.
- One impact of SRI observed in several countries is that once farmers become involved with SRI, their interest and enthusiasm for **agricultural innovation** in general grow. They like the experience of doing experimentation and evaluation and like being “farmer-scientists,” as SRI farmers at one meeting in Bangladesh described themselves.
- SRI has been described as much a methodology for **human resource development** as for increased rice production. Both are legitimate objectives, and SRI proponents should seek to keep both outcomes in mind as they plan and support programs to extend this methodology.