

## SRI Wet Season 2021 Training Outline & Learning Points.

### Training of Trainers

In June 2021, 27 lead farmers and 9 field coordinators attended a two-day training session to learn about the SRI methodology. Based on the training received, the farmers agreed to organise and run 6 step-down training events throughout the season focusing on the key steps in a successful SRI approach. It was planned that each Lead Farmer invite at least 50 local rice farmers (male and female) to attend the events which focused on practical demonstration of each key step in the SRI methodology followed by a question-and-answer session. The training was delivered by approved experienced trainers supported by LINKS staff. An outline of the content and learning points of each demo session is contained in the pages below:

	Key learnings
<b>1 – Nursery Practices</b>	<ol style="list-style-type: none"> <li>1. Use of clean viable seed – For optimum germination</li> <li>2. Pre-germination practice – for quick healthy crop establishment.</li> <li>3. Seed bed preparation and sowing – site should be as close to the permanent site as possible, or even in a section of the field, as seedlings are ideally transplanted within 15-30 minutes after leaving the nursery to minimize transplanting shock. Have a reliable source of water close by for frequent watering (1-2 times/day). Keep the nursery safe from predators (rats, birds, ants, etc.). Nets can help. Nurseries are 1% the size of the field to be transplanted. Beds are ideally 1m wide. This width: <ol style="list-style-type: none"> <li>a) Allows easy access to the nursery bed from both sides</li> <li>b) Prevents the need to step on the nursery bed</li> <li>c) The bed length depends on how large your nursery needs to be. 1mx10m, or two beds each 1mx5m.</li> <li>d) Rake surface soil to make it smooth and flat.</li> <li>e) Pre-water the nursery 1-3 days ahead of sowing to create</li> <li>f) a consistent seed bed &amp; improve</li> <li>g) germination and seedling development</li> <li>h) Create Raised nursery bed in Wet season and Sunken seed bed in dry season.</li> </ol> </li> </ol>
<b>Training in Action</b>	



### Key Learnings

#### 2 – Land Preparation and Organic Matter Application

Ideal soil for rice:

- Clay, clay loam and loamy soils are the most ideal
- Soil with high water retention capacity
- Free from flood and erosion
- Must be free from shade
- Should be flat or gentle slope
- Soil with high organic matter content.
- Incorporate organic manure before ploughing or harrowing or **else broadcast in the basins and incorporate thoroughly**
- Ensure Good field leveling and bunding (basin construction)
- Proper land preparation is necessary for rice production to minimize competition with weeds and better environment for seed and seedling growth (aeration, moisture penetration and retention)
- Double harrowing provides enough tilth for rice growth
- On a flat field construct large basin otherwise field of 5m by 5m is ideal
- Smaller size basins is discouraged – it's a waste of land.
- Create drainage (outlet) to control flood where applicable.
- Ensure all basins are well leveled (poorly leveled fields will be difficult to maintain a good depth of water)

- While constructing the basins, it should be done in such a way that watering distribution canals is designed for easy irrigation.

#### Training in Action



#### Key Learnings

### 3 – Transplanting

- Fertilize with organic matter, and **add chemical fertilizer only as needed**. This is applied at land preparation.
- For reduced plant population, use precise grid for plant spacing of 30cm X 30cm – to ensure each plant has plenty of space and that mechanical weeding is fast and efficient.
- Water the nursery bed thoroughly 6-12 hours before lifting the seedlings for transplanting.
- **Transplant early, at the 2-leaf stage (about 8-12 days after germination)**
- **Plant only one seedling per hill**
- **Adopt wide spacing (30cm x 30cm)**
- Transplant in a square grid – Use Rake or graduated Rope to create appropriate spacing.

#### Training in Action



#### Key Learnings

#### 4 – Weed Management

- Training on importance of weed management to avert competition with the rice crop for nutrients, moisture and space.
- **Use of mechanical weeder.**
- Application of chemical herbicide is completely not part of SRI practices. Therefore, farmers should not apply any chemical herbicide of whatever type.
- UREA Super granules applied at
- 3-4 weeks after transplanting. To boost vegetative growth and panicle initiation

Training in Action



weeding event and training on use of motorized weeder



### Key Learnings

#### 5 – Water Management

- Water as needed, about every 7 to 10 days (or according to soil conditions and weather)
- Water enough just to saturate the field, but not more
- Both irrigation intensity (the amount of water given and the duration of each watering) and irrigation frequency (how often watering occur) are important

Training in Action



		
Draining excess water after rainfall	Conventional flooding	
	Key Learnings	
6 – Harvesting	<ul style="list-style-type: none"><li>● Rice field is ready for harvest when 80 to 85% of the panicles are yellow or brown. About 13 to 16 weeks after transplanting.</li><li>● Cut the rice stems with a rice reaper or a sickle 20cm above the ground.</li><li>● Bundle the rice stems and put them together in piles such that the panicles are at the top for drying on a tarpaulin.</li><li>● Make sure the panicles do not touch the ground and the drying should start within 24 hours after harvest.</li><li>● Use a moisture meter (if available) or follow common practice of measuring by grain’s sound/texture when cracked between the teeth to ascertain grains are within 13 – 15% moisture content before threshing, bagging and storage.</li><li>● If available, use machines (such as a combine harvester or motorized thresher), cleaning of machine is necessary, and settings must be adjusted to avoid mix of varieties.</li><li>● Dry the rice properly for about 5 days after harvesting before storage.</li></ul>	
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