



PRADAN promoted SRI with poor communities in rain-fed condition

(As such those states with low irrigation coverage)

State	Irrigation coverage (%)
West Bengal	25.9
Bihar (includes Jharkhand)	40.4
Orissa	36.2
Madhya Pradesh (including Chhattisgarh)	23.6

PRADAN got interested in SRI

Primary reasons are:

- **Lower seed rate** : A potential tool to motivate farmers to go for new nurseries in case of delayed monsoon
- **Reduced duration in nursery**: This might help farmers to go for nurseries as late as middle of August / until monsoon arrive
- **Extra root growth** : To exploit deeper soil moisture in case of dry spells
- **Higher productivity**: That might help marginal farm-families (with average 0.4ha of land available for rice) to attain food security

PRADAN's effort in SRI

- Started intervention in Rabi in the year 2002: major intervention points
 - Change in seed and seed rate, seed treatment with quality nursery
 - Timely transplanting – within 10-15 days
 - Number of seedlings per hill was brought down from 7-8 to 1.
 - Application of Potash as basal dose
 - Introducing green manure crop and vermicomposting

Results: yields increased up to 6 tons/ ha with modal value of 4 tons in low lands.

The journey so far.....

Year	Families	Area (ha)
2002	4	0.2
2003	-	-
2004	640	64
2005	1750	210
2006	6200	632
2007	10,616	1097
2008	23,303	2351.3
2009	17,000	2200

This year's Yield of SRI(so far)

- Ranging from 3-4 t/ha to 6-7 t/ha

Constraints & Strategy to overcome it

Constraints	Strategies
Community not believing that it is feasible	<ul style="list-style-type: none"> • Meeting to clarify details of calculation • Visual aid,campaigns • Exposure to early adopters field
Transplantation using rope is cumbersome	<ul style="list-style-type: none"> • Marker, still a struggle
Transplantation at right age	<ul style="list-style-type: none"> • Re-nursery • Delay it till Aug'20 • mobile and doorstep supply
Weeding	<ul style="list-style-type: none"> • Mandwa weeder/cono weeder
Water control	<ul style="list-style-type: none"> • Waterbody per plot
Maintaining Soil health	<ul style="list-style-type: none"> • Green manure • Taking up pulse after/before paddy • Applying Jibamrit, vermicompost etc.

Our Experience on scaling up of SRI in Gaya Project

- On 9th June 2007 We set up a base at Gaya on invitation from Bihar Rural Livelihood Project Society, Patna to pilot SRI
- Concept Seeding took place using audio visual aids
- Till 20 th June 2007 we had demonstration of SRI nursery both in Gaya and Nalanda
- Between 26th June to July1, 2007 demonstration on SRI transplantation done in all the four clusters of villages in Gaya and Nalanda both.

Facilitation through first demonstration

- After 15 days farmers started changing their views
- Poor and marginalized families were exposed
- They started owning it but had already sown away paddy seeds traditionally.
- Flag leaf was broad and the plant always looked more green than traditional plots.
- More tillering than traditional.
- More focus on audio-visuals and exposure and one to one contact with poor and marginalized communities.

Critical interventions

- Farmers meetings facilitated by experienced farmers, movie on SRI in local language
- Training to SHG leaders centrally
- Training to VRPs on relevant SRI package of practices
- Training of SHG members and their husbands on nursery raising and other operations at village

Critical Interventions

- Raising of central nursery to help transplant timely
- Ensuring follow-up of practices by skilled extension worker and PRADAN professionals.
- Systematic data collection and interpretation
- Every week days review meeting with VRPs in SRI cluster
- Involving KVK, District admn, ATMA and deptt at all stages
- Mobile nurseries to provide services at doorstep of poor
- Shifting of camp/field offices as per need(flood/draught)
- Weekly thematic interventions drive in SRI during crop period

Strategies of scaling up

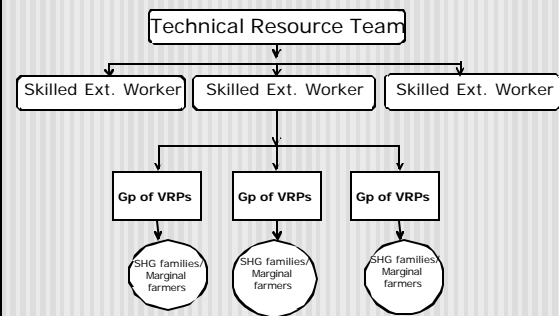
■ Local cadre development

- Identified Rural youths as VRP
- Hard core training- in house and field
- Applied standard scanning process to know their social, intellectual and emotional maturity. Giving priority to EQ than IQ
- Assigned responsibility for 30-100 families based on their capability
- Weekly review and planning meeting with VRPs in cluster head quarter and sublocation meetings with SEWs.
- Role of VOs and PRADAN in selection of VRP

Strategies of scaling up---

- **Awareness building in communities**
- Used audiovisuals and flex extension materials
- Campaigning in villages through experienced SRI farmers of last year using Fur and manuals extensively in April and May.
- Big meetings by SMS and SEWs in villages to create awareness and motivation
- Associating govt extension officers and KVKs at all levels.
- Organising workshops of various stakeholders
- Participating in kisan melas organised by govt depts.
- Better training and handholding honorariums to VRPs associating their selfs with landless SC families.
- Providing techno-managerial assistance in SRI promotion to NGOs associating with SCs and poorer families.

Scaling up structure



Growth of SRI

Year	No of families	Area(in ha)	Average Yield(ton/ha)	Existing yield(t/ha) Source: DRD, Patna
2007-08	128	30	8.9	1.550t/ha
2008-09	6106	832.3	7	
2009-10 (draught year)	7847	454	5-7	

SRI-Wheat

- Piloted with **278** families in Year 2008 in 12.5 ha after exposure to PSI projects
- Average yield 35 qtl/ha against 6-20qtl/ha
- This year already more than **11,000** families have sown through SRI methods

Village exposures to stakeholders

- Director DRD, MoA, GoI, Patna
- Director DRDA, Gaya
- JDA Magadh Divison, Gaya
- DAO Nalanda & Gaya
- Asst Director Plant protection
- Project Director, ATMA, Gaya & Nalanda
- The Commissioner Magadh Divison, Gaya
- ICAR scientists
- KVK scientists
- District Magistrates of Gaya and Nalanda
- Ex-Sr Ag consultant Planning Commission
- Other NGOs(16 districts of Bihar)
- CEO,BRLPS,Patna

Top state officials exposed



Camaign in villages



Campaign in haats/melas


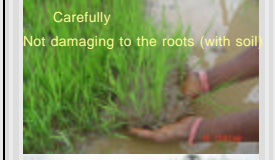
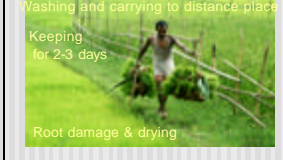



Comparison of Traditional & SRI method

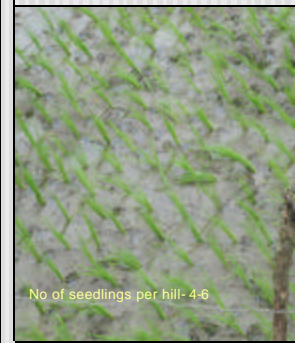


■ Nursery raising

 <p>No BWT done</p> <p>Nursery bed size is 4000sq ft per acre</p>	 <p>Brine water Test(BWT), seed treatment</p> <p>Nursery bed size is 400sq ft per acre</p>
 <p>Total mandays 4 days/acre</p> <p>Seed rate is 48 kg per acre</p>	 <p>Total Mandays 1/4 days</p> <p>Seed rate is 2 kg per acre</p>

Contd.. (Forceful uprooting)

■ Traditional	SRI
 <p>Forceful uprooting</p>	 <p>Carefully Not damaging to the roots (with soil)</p>
 <p>Washing and carrying to distance place</p> <p>Keeping for 2-3 days</p> <p>Root damage & drying</p>	 <p>Quality (45 min)</p> <p>Minimum trauma to the roots</p>

Contd.. (Transplantation)

■ Traditional	SRI
 <p>No of seedlings per hill- 4-6</p>	 <p>Drainage channel</p>  <p>No of seedlings per hill-1</p>



A vertical infographic detailing the SRI process. It includes sections for:

- Preparation of the field:** Shows leveling, creating drainage channels, and spacing.
- Seedling raising:** Illustrates the use of a nursery bed and the process of raising seedlings.
- Transplantation:** Shows the process of planting one seedling per hill.
- Field management:** Illustrates weeding, irrigation, and pest management.
- Harvesting and post-harvest:** Shows the final yield and processing.

 The infographic uses various images and text boxes to explain each step of the SRI method.

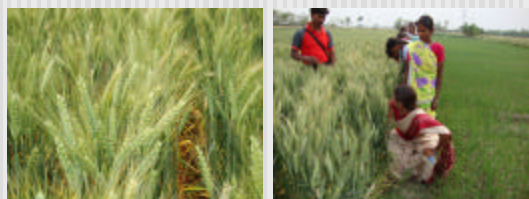
Mobile nursery accelerates adoption of SRI



Green manuring improves soil status to supplement SRI



SRI-Wheat



Matured SRI-Wheat

A farmer harvesting SRI crop of Wheat

Big patch under SRI -wheat



