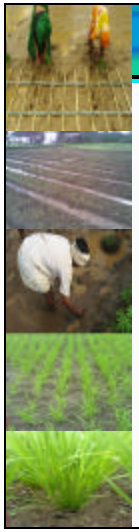

SRI with Tribal in Eastern Madhya Pradesh

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Madhya Pradesh

Rural Livelihoods Project

Understanding the constraints.....

Present status of a poor farmer

- Land resources
  - Undulated Topography.
  - Less soil depth.
  - Poor productivity.
  - Less / No fertilizer application.
- Irrigation
  - Completely rainfed.
  - No irrigation infrastructure available.
  - Presence of seasonal water bodies.
  - No water lifting devices used at present.
- Agriculture
  - Traditional seeds.
  - Primitive agronomic practices.
  - Absence of nutrient management.
  - Poor access to government sponsored schemes.
- Others
  - Low awareness.
  - Less capital in hand.
  - High intensity of migration.

MPRLP

Paddy in Madhya Pradesh

Total Agriculture Land 2000-01	163.72 Lac Hect.
Total Area under Paddy (2007)	15-59
Total production of Paddy (2007)	14-62 Lac Ton
Production (2007)	1054 Kg/Hec
Main season	Kharif
Paddy area in %	4%
Contribution in country's overall production	2%
Ranking	14

Issues of Paddy production in MP

- Use of poor quality seed
- Traditional methods are followed by farmers
- Limited information about new variety, methods and good quality seeds
- High seed rates
- Availability of funds
- Dependency on rains
- Land preparation
- Unavailability of labour
- Per hectare production is very less

Interventions planned under Up scaling of SRI Program

- Land resources
  - Improving land productivity through SWC measures
  - Creating low cost run off management structures
- Irrigation
  - In situ moisture conservation through SWC measures & farm pond.
  - Creating low cost irrigation infrastructure
  - Providing one irrigation well for one hectare land.
  - Providing water lifting devices such as low lift/diesel pump, in groups/individuals.
  - Promoting river bed cultivation.
- Agriculture inputs
  - Introducing good quality seed as well as package of practices/Agronomic.
  - Promoting horticulture crops as recommended by scientists
  - Converging agriculture/ horticulture deptt. schemes to IADP villages on priority.
- Others
  - Training & exposure.
  - Regular monitoring & technical support by point person of the village.
  - Appropriately converging the fund available under various schemes such as MPRLP, NREGS, BRGF, SGSY etc.

Why SRI

- In Project area, More than 90% of farmers/HH Major source of Livelihoods is Agriculture.
- Rice is one of the major food of the population.
- Potential to address the food security and livelihood needs of small and marginal farmers.
- Higher stalk volume means more fodder for the cattle.
- More farmyard manure and possibly increased soil fertility of land.

Steps to promote SRI

- Selection of farmer in Gram Sabha
- General orientation of selected farmers on SRI methods at village level
- Finalisation of crop variety as per farmers need
- Field training on each steps of SRI
- Nursery raising for selected variety
- Land preparation under supervision of trained progressive farmer and PFT member in new villages where SRI was not taken last year
- Transplantation of saplings

Steps to promote SRI

- Follow up training and exposure visit to neighbouring villages where SRI was taken last year
- Procurement of inputs
- Demonstration of application of inputs as per PoP for SRI
- Organising field day cum field training
- Supervision and record keeping
- Harvesting
- Post harvesting support
- Cost benefit ratio analysis on sample basis

Coverage of SRI compare to conventional method

Process	No of district	No of blocks	No of villages	No of households	No of women headed households	Area (in acre)
Conventional	04	25	1505	189594	8540	1633329.67
SRI	04	25	641	10181	900	8924

Growth of SRI in MPRLP

Year	Blocks	Villages	Farmers	Area (in Hec)
2006	2	5	50	37.05
2007	5	38	400	345.8
2008	23	225	1720	1792.232
2009	25	641	10181	3612

In SRI– Benefits & Constraints

- **A. BENEFITS**
- Less seed requirement
- Saving in water
- Decreased workload
- Less disease occurrence
- Less lodging
- Early maturity
- High grain yields
- High grain quality
- Increased biomass
- Improves soil fertility

- **B. CONSTRAINTS**
- Time bound operations
- Labour intensive, in the beginning
- Limited availability of quality weeders and markers
- Inadequate compost material
- More effort required in operating Tauchi Gurma for weeding
- Rainfall aberrations
- Lack of timely training & field support
- Difficulty in changing mindset

SRI and Food Security

Food Deficiency (Before/After Implementation)					
Name of the district	Indicators for food intake across the year	No of families Before		No of families After	
		BPL	APL	BPL	APL
Dindori	Less than one square meal per day for major part of the year	216	1944	181	1633
	Normally, One square meal per day, but less than one square meal for major part of the year	864	7776	726	6532
	One Square meal per day throughout the year	810	7290	680	6124
	Two square meals per day, with occasional shortage	2430	21870	2041	18371
	Enough food throughout the year	1080	9720	907	8165

Farmer Assessments of Labor Requirements with SRI

Labor input	Increase		No Change		Decrease	
	No of response	Percent	No of response	Percent	No of response	Percent
	536	7	536	22		71

Indicators of Success

Parameters	Current status
Average productivity (qlt. per Hect.)	10.73
Rural-urban migration	10% of total HH
food availability	In project villages, nearly 70% HH receiving 2 times meal per day throughout year
fodder availability	4-6 months availability in 25% HH
Rural poverty ratio (% of rural BPL families)	Nearly 15000 HH
Trainings	350 (in house and outhouse)
Household income	10000/annum (from agriculture)

Capacity Building of Farmers

- Orientation Workshops, focusing on
  - Procedures of SRI.
  - Demonstrations on equipment use.
  - Dos and Don'ts
- Field support & trouble shooting
  - Nursery raising
  - Field preparation
  - Transplanting
  - Intercultural operations/Weeding
- Exposure visits
- Experience sharing workshops
- Cost benefit analysis for SRI and Conventional farming
- Program Monitoring

Learning

- Spreading fast
- Team efforts
- More focus on farmers' knowledge building
- Still we need to work on capacity building of team and farmers
- Seed requirement reduced
- Time for transplantation of saplings reduced drastically
- Weeding became easy
- Duration and cost of weeding also reduced
- Disease attack reduced
- Production increased almost by 20 times in general
- Quality of grain was good compared to traditional methods

Limitations

- Village label agriculture plan are not approved for SRI technology by SPMU in same manner as submitted by DPSU.
- Involvement and responsibility of staffs in other works other than project works mainly assign by district administration leads to have insufficient performance of project staffs.
- Election has become part and parcel, thus strategies to deal with this situation needed to be taken care so that valuable time could be utilized properly. Phase wise Staff trainings or staff exposure visits can be organized during that period.
- Lethargic attitude of other line department official on issue of convergence of resources.
- After taking field measurement and analyzing staff's performance, the capacity of staffs would require further enhancement through series of capacity building programme.
- On the line of best practices and DFID priorities, benchmark must be established under SRI technology.
- A village level perspective plan or vision development must be prepared through community participation on practicing SRI technology.

Approach for Upscaling

- Selection of villages and farmers
- Capacity building of Agriculture Point persons , farmers & Livelihood Promoters
- Information dissemination through print and electronic media
- Research on other crops and equipments
- Networking
- Program Monitoring
- Policy Advocacy

SWI – Ek Jhalak

Thank you