

EXPERIENCES FROM MOUNTAIN FARMS OF UTTARAKHAND



Rikeshwar Prasad
Tehri Garhwal, Uttarakhand

Personal Details

Name: Shri Rikeshwar Prasad

Age: 42 Years

Education qualification: B.A. Pass.

Name of village: Andarthi

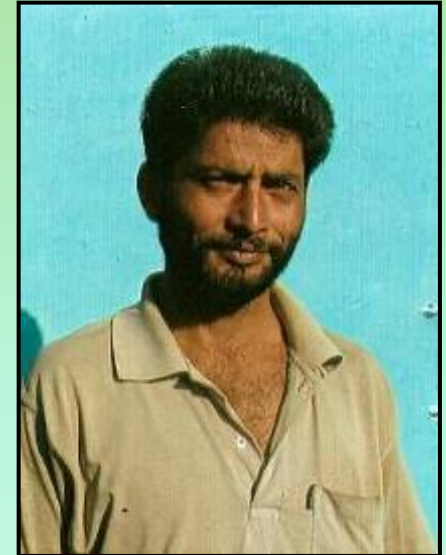
Name of district: Tehri Garhwal

Name of state: Uttarakhand

Number of family members: 4

Primary occupation: Agriculture, animal husbandry

Number of years in farming: Since childhood



Paddy Cultivation

Total agriculture land: 0.1 ha (5 nali)

Extent of paddy land: 0.1 ha (5 nali)

Livestock: Two buffaloes

Water source: Stream (*gadhera*)

Inputs used: Plow, vermi-compost, and spade

Yields obtained in flooding method: 15 Q/ha (30 kg/nali)

Source of information for SRI : Peoples' Science

Institute, Dehradun

SRI Adoption - Variations

S. No.	Practices	Conventional Technique	SRI Technique
1	Nursery	Seed-2kg/ nali	Seed - 250 gm/nali
2	Preparation of field	Marker not used	Marker used
3	Transplantation	No fixed spacing	10'' x 10'' (10-days-old seedlings transplanted)
4	Weeding	Manual	Weeder used 3 times
5	Management of water	6'' water applied throughout	Application of 1'' inch water, rest drained
6	Fertilizers/ manure	Vermi Compost	Panchgavya, Vermi-compost, vermi-wash

Nursery Raising



SRI Operations



Upscaling SRI

	Year 2006	Year 2007	Year 2008
Area under S.R.I.	0.5 Nali (0.01 ha)	2.0 Nali (0.04 ha)	4 Nali (0.08 ha)
Seasons	Kharif	Kharif	Kharif
Variety	Pant- 11	China- 04	China- 04
Inputs used	Vermi-compost, vermi-wash & panchgavya	Vermi-compost, Vermi-wash & panchgavya	Vermi-compost, Vermi-wash & panchgavya
Practices followed	Weeder used 3 times	Weeder used 3 times	Weeder used 3 times
Implements used - their availability and usage	Weeder and marker, provided by PSI	Weeder and marker, provided by MVDA	Weeder and marker, provided by MVDA
Plant protection- pests & diseases found, and how controlled	-	-	-
Grain yields	50 kg/nali (25 Q/ha)	75 kg/nali (37.5Q/ha)	62.5 kg/nali (31.25 Q/ha)

Perceived Benefits

- Less seed, i.e. 250 g/nali
- Less water (0.5” - 1.0”) required in this method.
- Less time required
- Needs less labour work
- Grain production double that conventional method
- Green fodder production 2- 2.5 times more



Comparative Results

Parameter	Conventional Technique	SRI Technique
Total number of tillers	10	58
Average plant height (cm)	145	174
Productive tillers	6	41
Average panicle length (cm)	20	24
Average number of grains/panicle	130	254
Total output - grain	30 kg/nali (15.00 Q/ha)	62.5 kg/ nali (31.25 Q/ha)
Total output - straw	40 kg/nali (20.00 Q/ha)	88.5. kg/nali (44.25 Q/ha)
Total cost of cultivation (Rs.)	Rs. 435/nali (Rs. 21,750/ha)	Rs. 250/nali (Rs. 12,500/ha)
Net profit earned	- Rs. 2,750/ha	Rs. 27,600/ ha

Experience Sharing



Innovations with Wheat



SRI- Constraints & Lessons

A. CONSTRAINTS

- **Difficult to use marker and weeder for the first time, especially by women**
- **Difficult to use weeder and marker in small and irregular terraces**
- **Difficulty in transportation of 10-day-old seedlings**
- **Uncertain availability of water under rainfed conditions, especially after milking stage**

B. LESSONS

- **Nursery raising and transplanting should be done on time**
- **More weeding results in higher yields**
- **Design modifications required in Mandava weeder for small terraces**
- **Proper water management is required in terraced fields**

Suggestions

- More awareness and capacity-building of farmers is required for promoting SRI.
- Timely availability of quality markers and weeders is required.
- Subsidy for manure and equipment from government.

Thank You