



System of Rice Intensification-Pilot Project



National Bank for Agriculture and Rural Development

Jharkhand Regional Office

NABARD Initiatives

NABARD along with leading CSOs, Sir Dorabji Tata Trust (SDTT), Watershed Support Services and Activities Network (WASSAN), Professional Assistance for Developmental Action (PRADAN) worked out a model for coverage of large number of farmers under SRI in every state in the country in 2010.

NABARD, Jharkhand RO, launched a program with 52 projects, to cover 30000 farmers during 2010-2012, with the support of 5 Resource Agencies (RAs) and 49 Project Implementing Agencies (PIAs), spread across 23 of the 24 districts of the state

It adopted a model covering 600 farmers by each PIA, with an area of about 150 acre @ 0.25 ac per farmer and 25 farmers per village over two years

The salient features of the project

Mainstreaming technology adoption.

Awareness creation & capacity building of PIAs and the farmers through conduct of appropriate programs & supply of training kits, publicity materials etc

In-situ pilot demonstrations

Provision of critical inputs & implements (weeder and sprayer)

Five experienced and technically qualified NGOs to act as 'Resource' Agencies

The salient features of the project

RAs to guide, sensitize, provide technical support and coordinate the implementation of the program of the PIAs associated with it

Under the pilot project, each implementing agency, supported with grant assistance from NABARD to promote SRI paddy cultivation, amongst 600 farmers in 24 villages over a period of 2 years, covering 25 decimal paddy land per farmer

While NGOs can cover more number of villages, the number of farmers per village will be restricted to maximum of 25 only

The salient features of the project

The RAs to train the implementing NGOs regarding operational aspects of the scheme, SRI techniques in detail, provide promotional material in print form, flip charts, audio visuals, etc.

Implementing NGOs required to adhere to a uniform code of implementation including farmer wise monitoring system and MIS reporting

As per the model project, the grant assistance for coverage of 200 farmers/PIA in year I was Rs.3.45 lakhs and for year II it was Rs.6.51 lakhs to cover 400 farmers

Project Components

Implementing NGOs were required to form Farmers Clubs in each village where the scheme was being implemented for which the NGOs were supported under NABARD scheme for Farmers Club

Implementing NGOs were also required to form Joint Liability Groups (JLGs) of farmers for availing crop loans (KCC) from banks. NGOs are eligible for grant assistance from NABARD for formation of JLGs.

Grant Support

1. Cost of training and exposure of farmers
2. Input cost to cover supply of mechanical weeder one each for group of 5 farmers and sprayer one each for a group of 8-10 farmers
3. Publicity and Extension (tools and materials)
4. Dissemination of knowledge and learning through training program/ exposure visits
5. Assessment of Impact and Documentation
6. Capacity building training and exposure of PIA staff
7. MIS and reporting system
8. Extension support and field support

Project Targets

Project Period: 2010-2011

No of Farmers to be covered: 33000

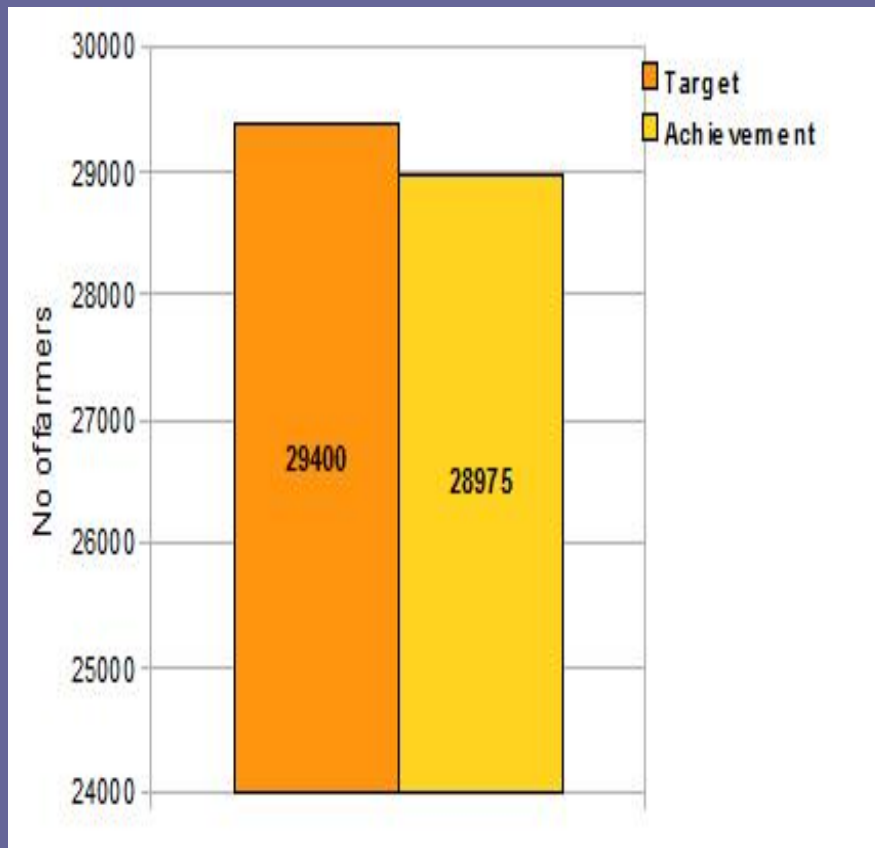
Area coverage: 8250 acre

Coverage of Districts: 23

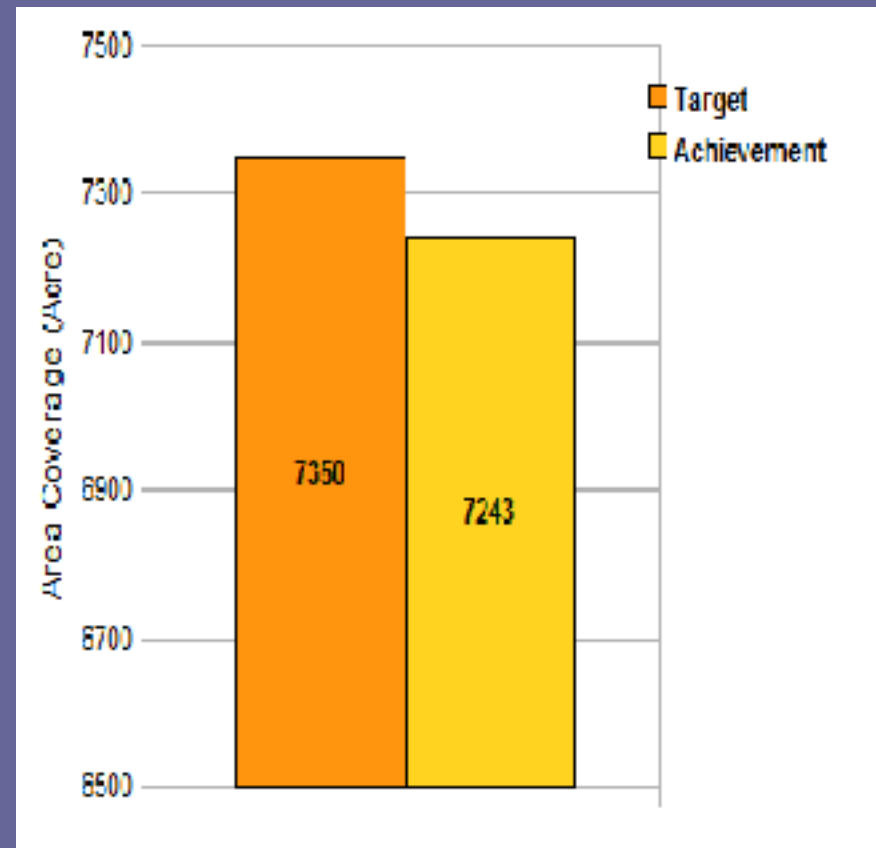
Resource Agencies

1. Professional Assistance for Development Assistance (PRADAN), Ranchi
2. Society of Promotion of Wastelands Development, Ranchi
3. Gene Campaign, Ranchi
4. Net work for Enterprise Enhancement and Development Support (NEEDS), Deoghar
5. Collectives for integrated Livelihood Initiatives (CiNi), Jamshedpur, East Singhbhum

Coverage of Farmers & Area

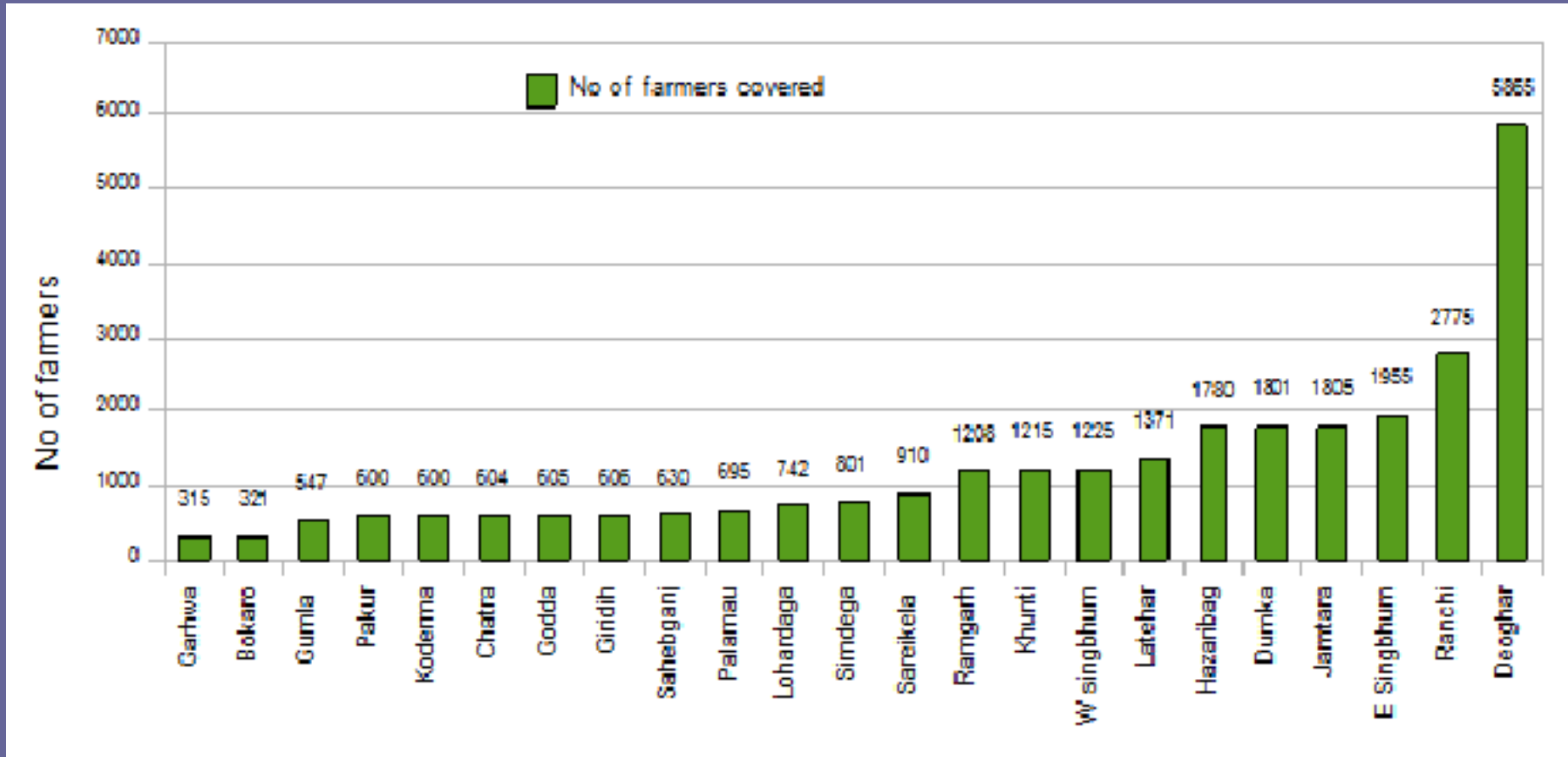


2010: 5195 farmers
2011: 28975 farmers
Total: 34170 farmers



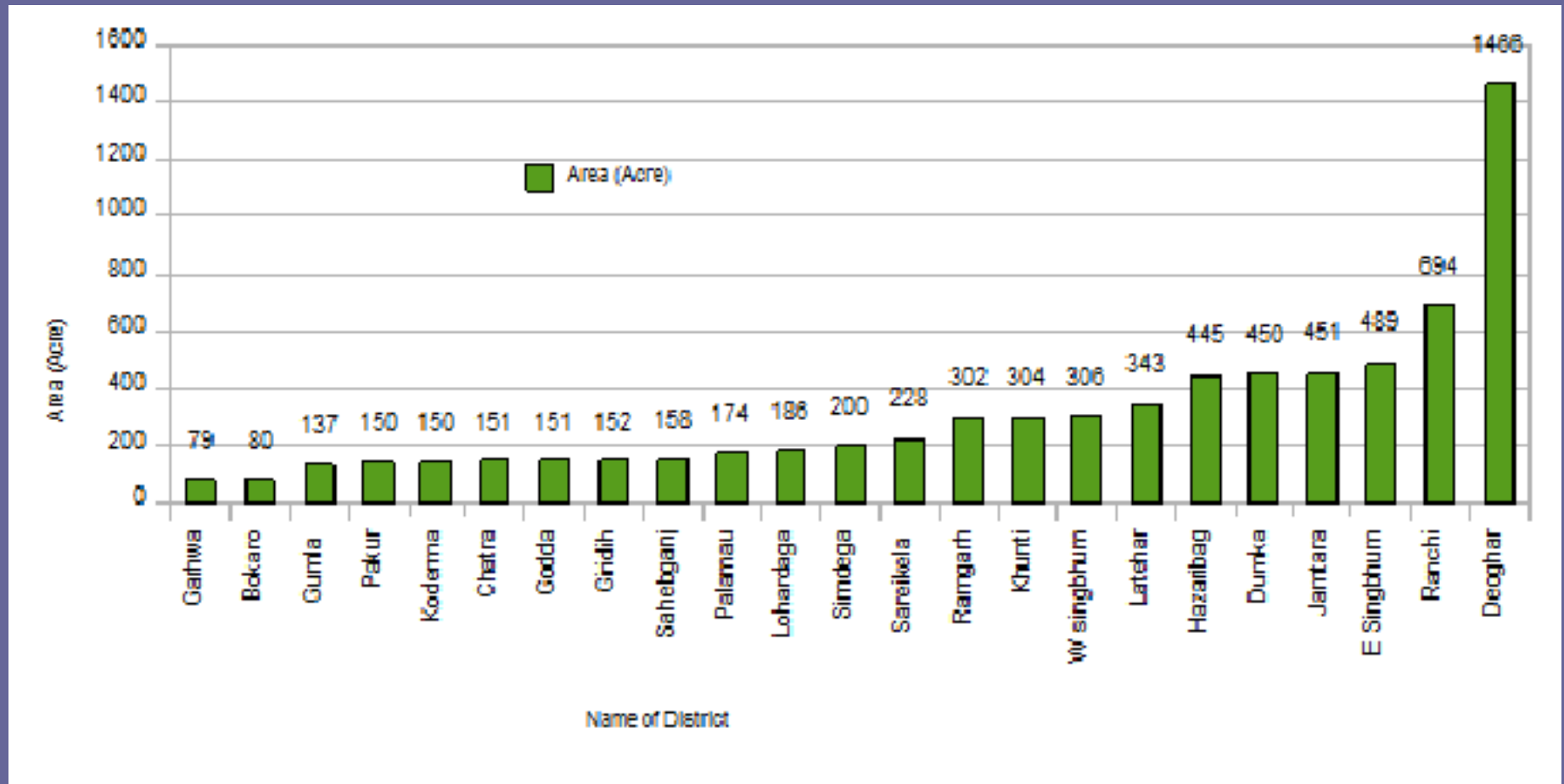
2010: 7243 acre
2011: 1184 acre
Total: 8427 acre

District-wise coverage of farmers



Highest: Deoghar (5865)
Second Highest: Ranchi (2775)

District-wise area coverage

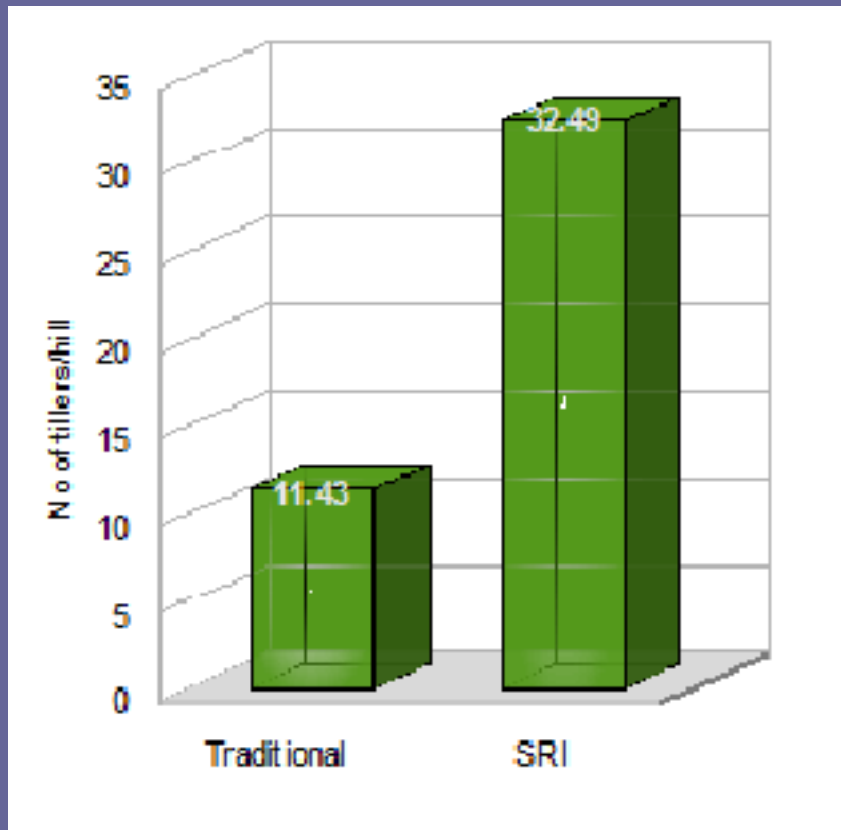


Highest: Deoghar (1466 Acres)
Second Highest: Ranchi (694 Acres)

Yield Attributes

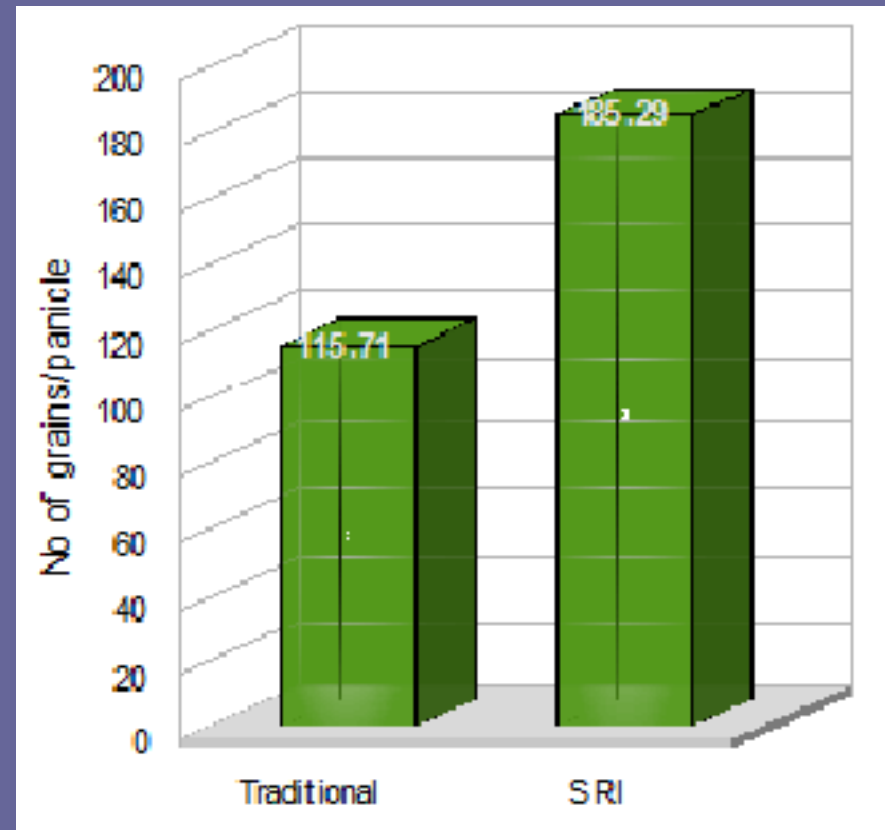
Effective Tillers

T: 11; SRI: 32 (Nos./Hill)



Grains / Panicle

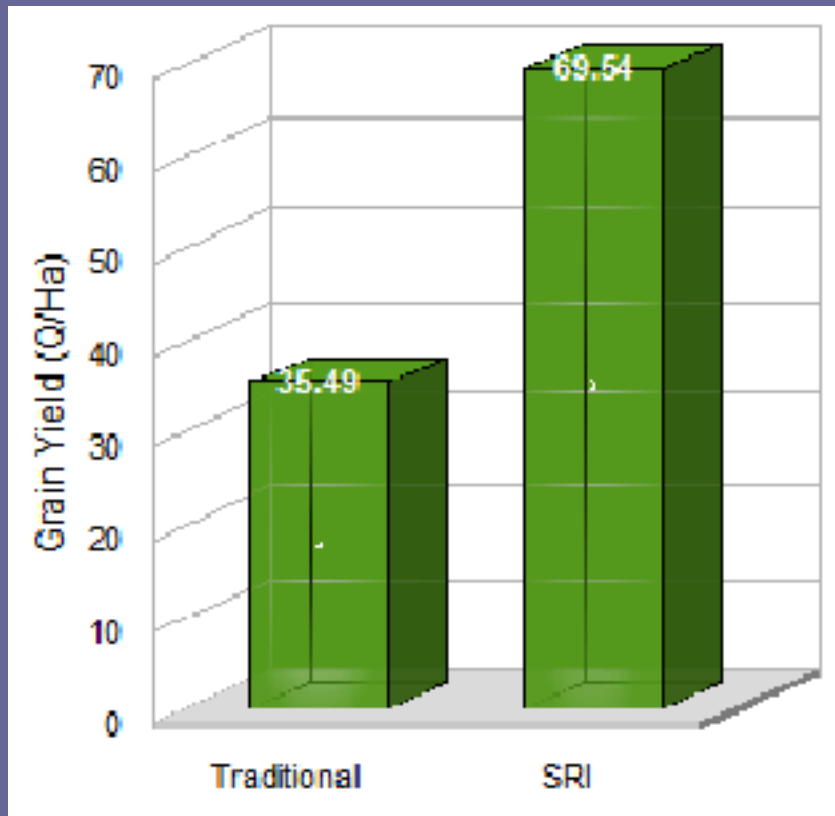
T: 115; SRI: 185 (Nos./Panicle)



Yield Attributes

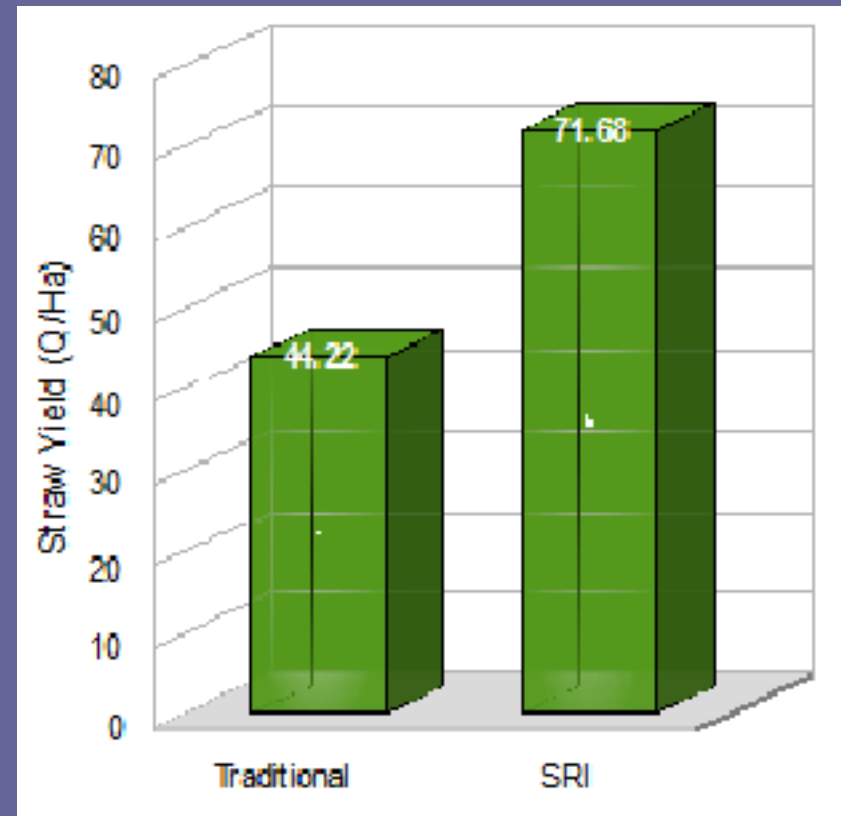
Grain Yield

T: 35.49; SRI: 69.54 (Q/Ha)



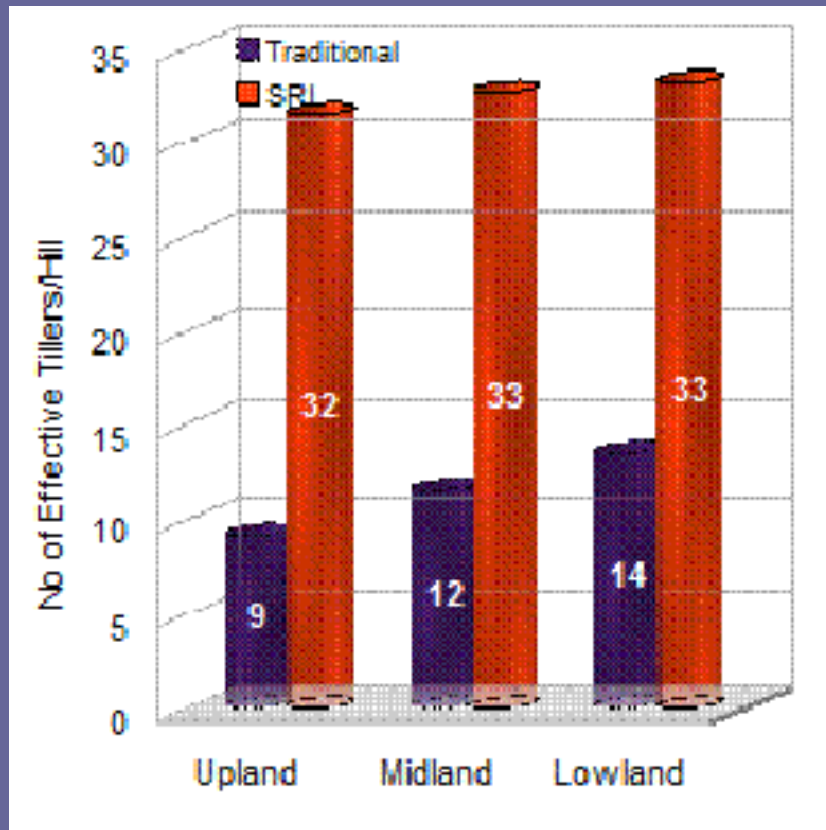
Straw Yield

T: 44.22; SRI: 71.68 (Q/Ha)

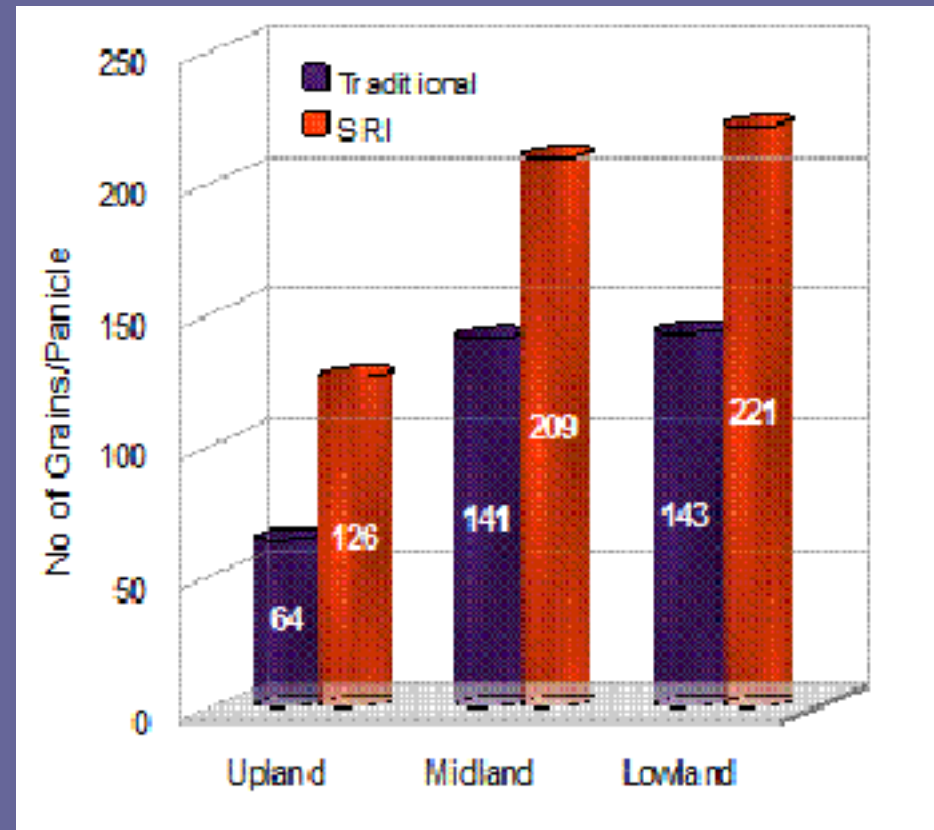


Land type-wise yield attributes

Effective Tillers

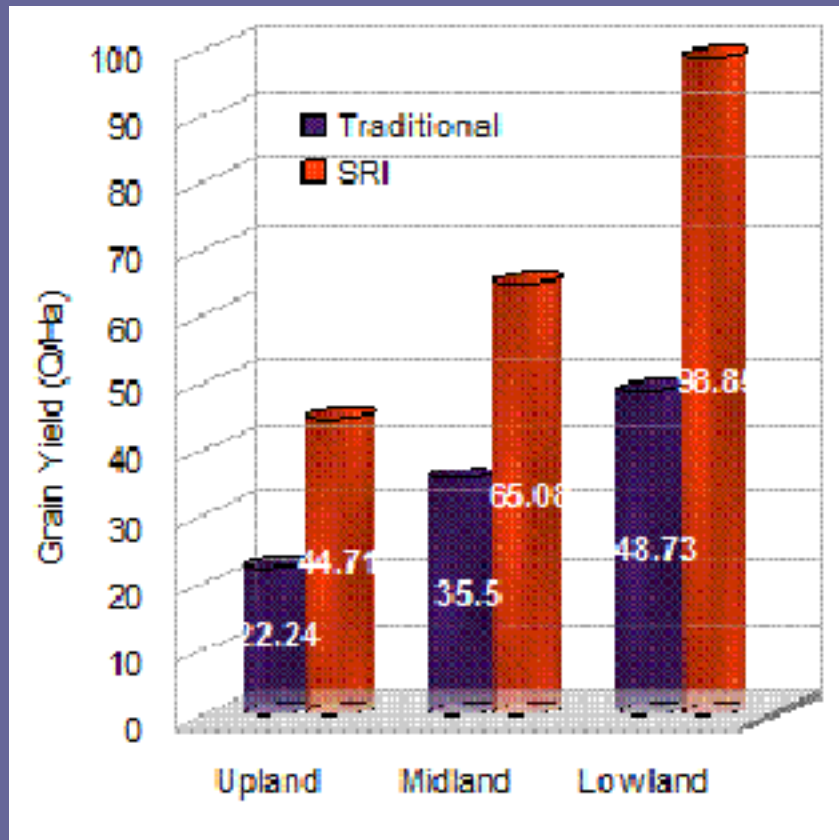


Grains / Panicle

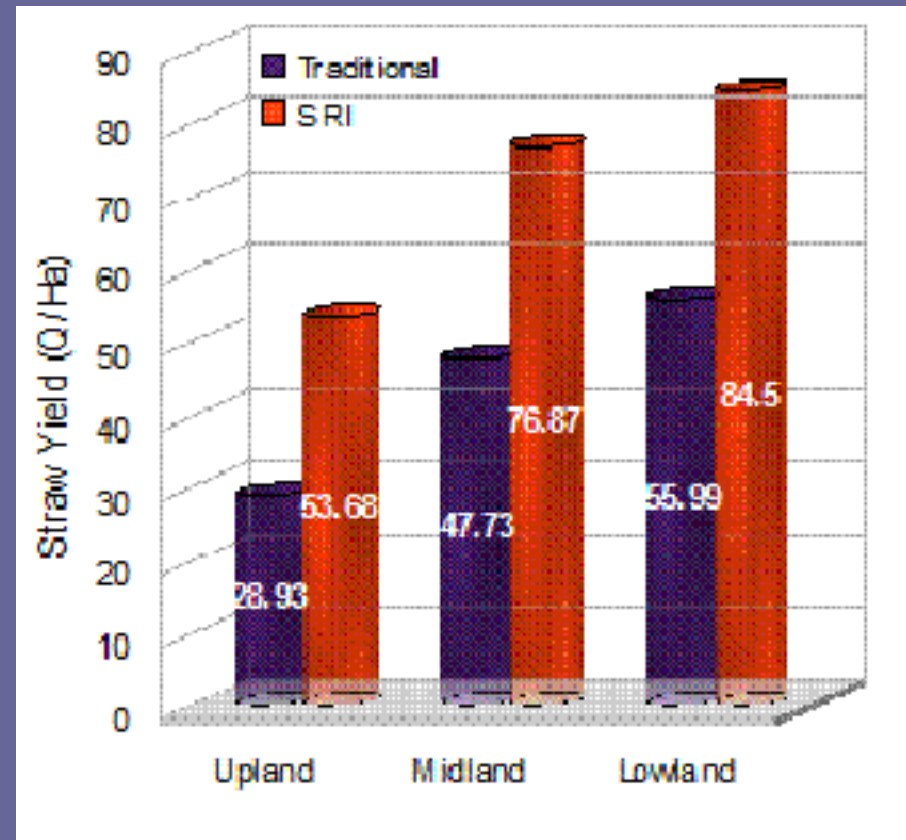


Land type-wise yield attributes

Grain Yield

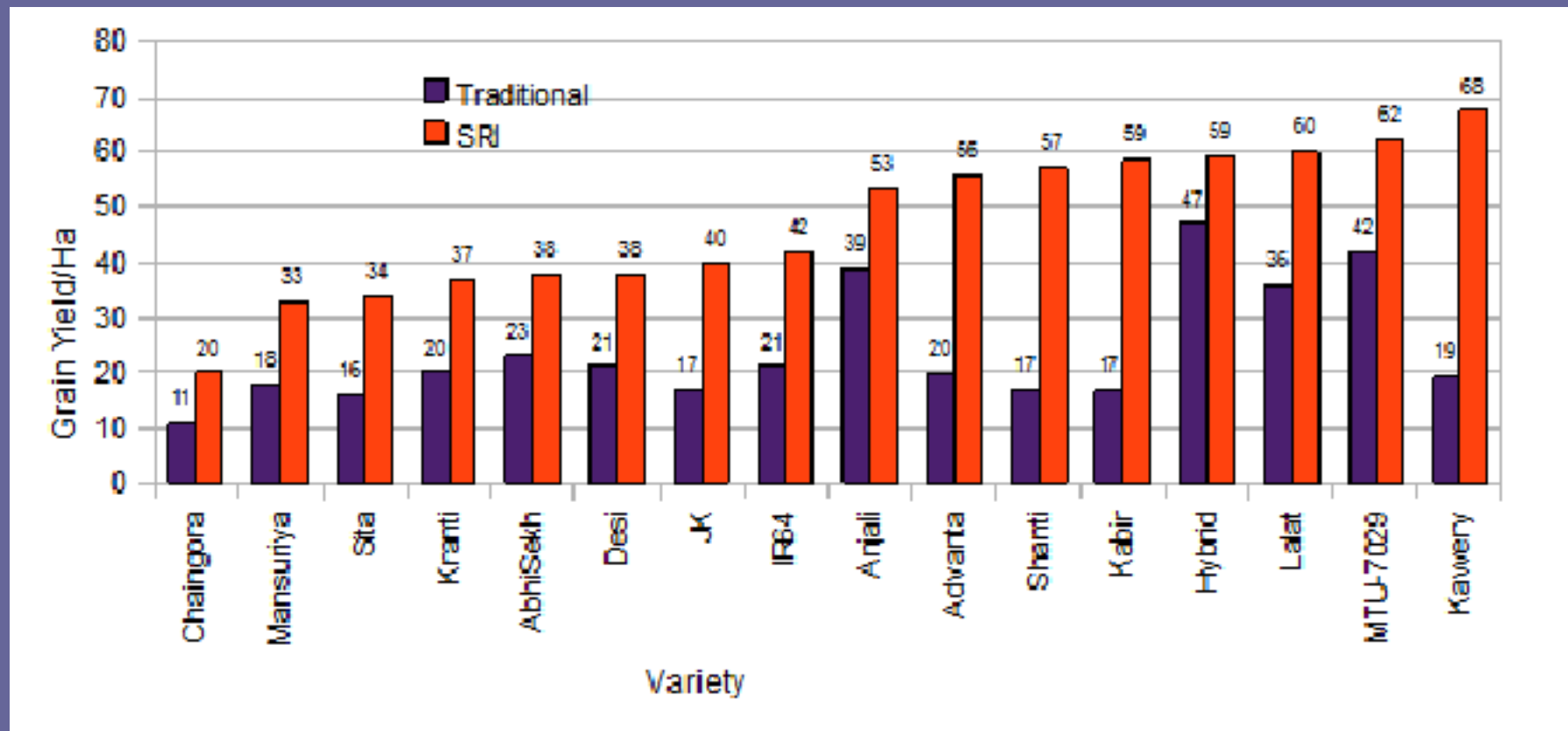


Straw Yield



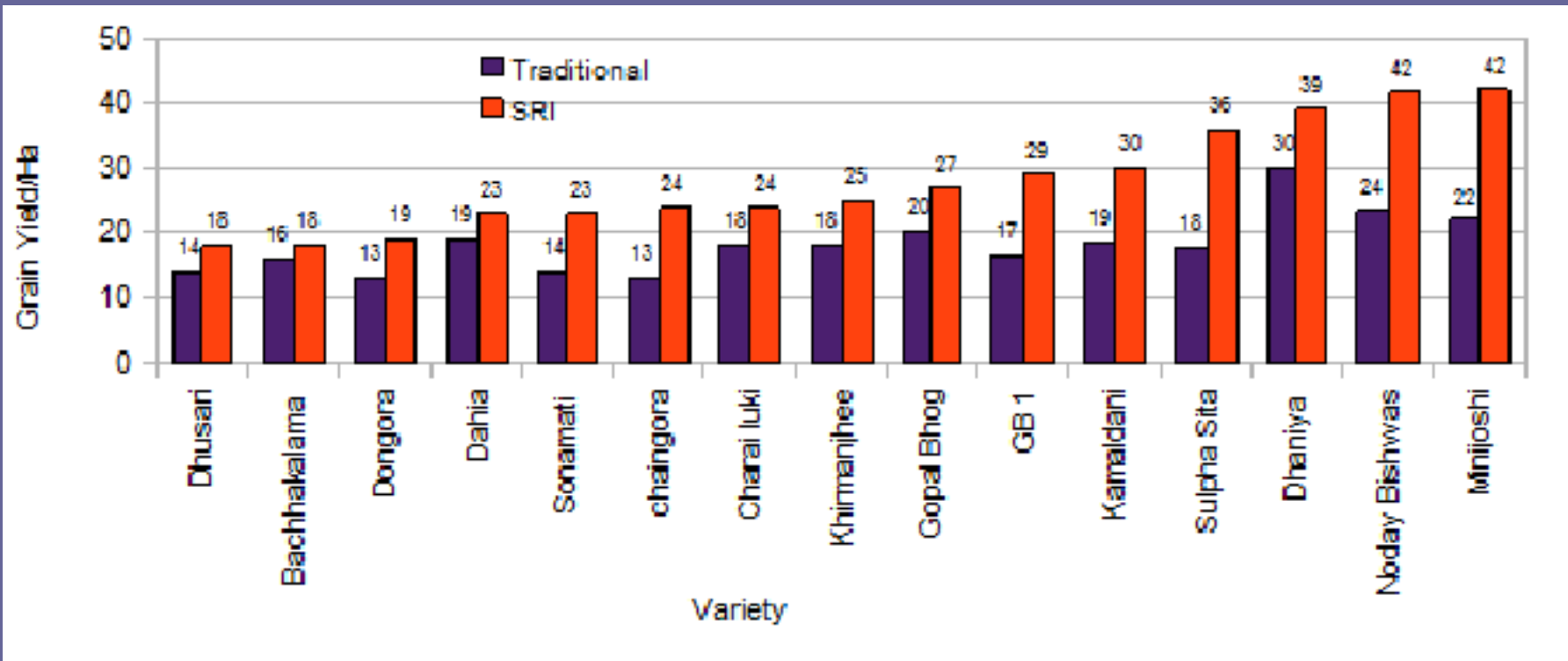
Variety-wise grain yield in Upland

Yield in Q/Ha



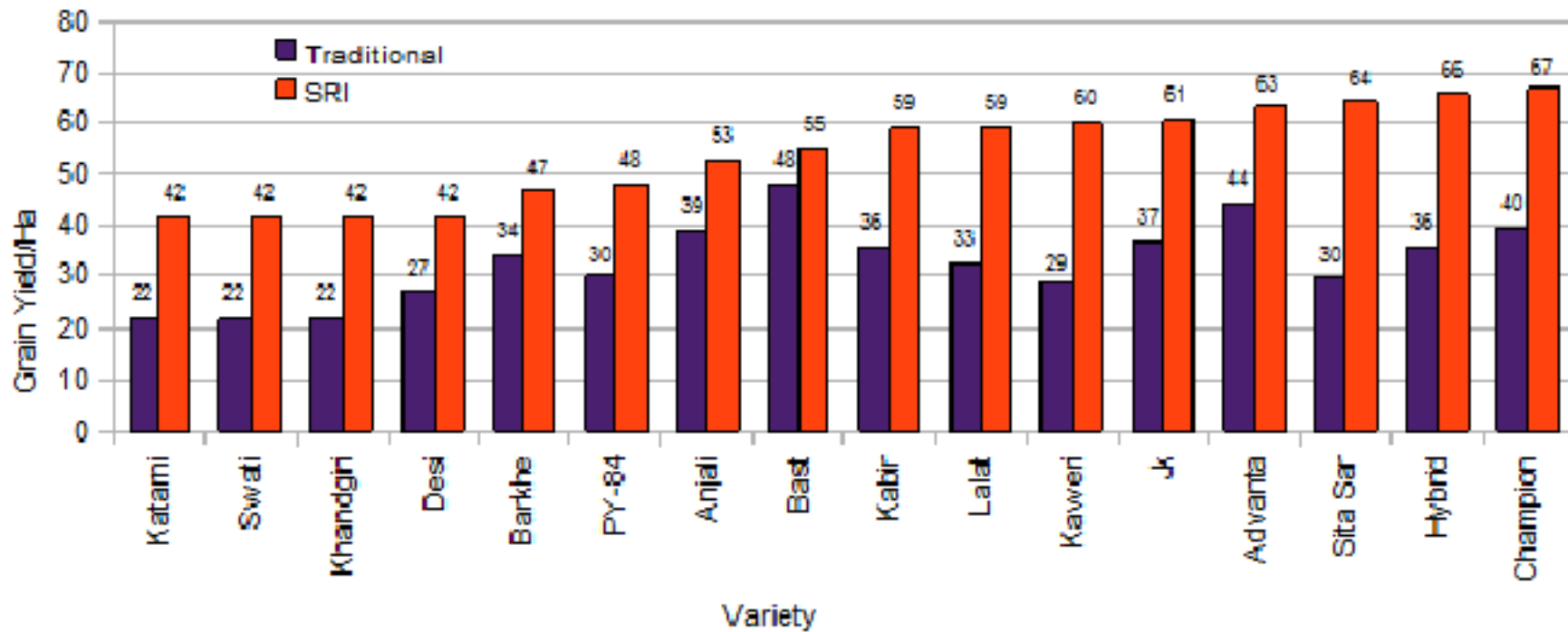
Variety-wise grain yield in Midland

Yield in Q/Ha



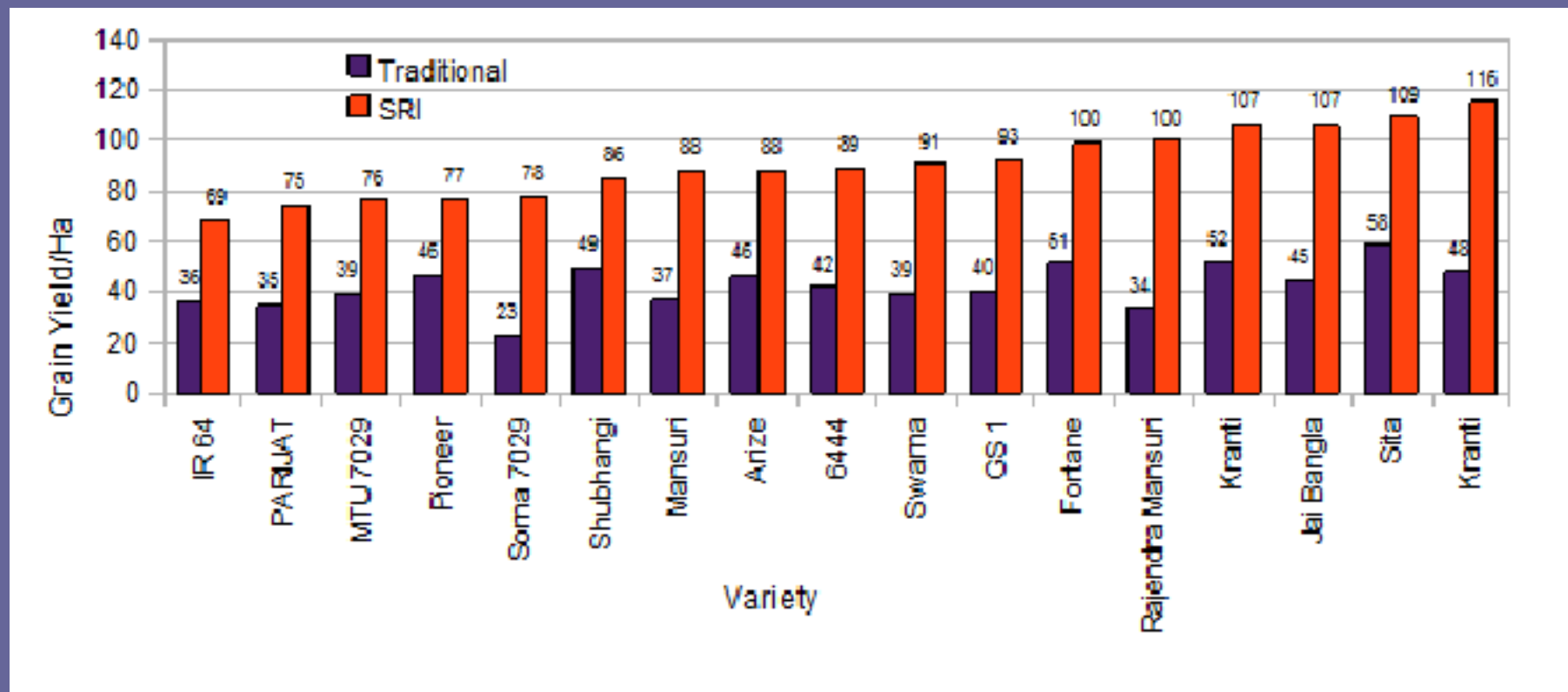
Variety-wise grain yield in Midland

Yield in Q/Ha



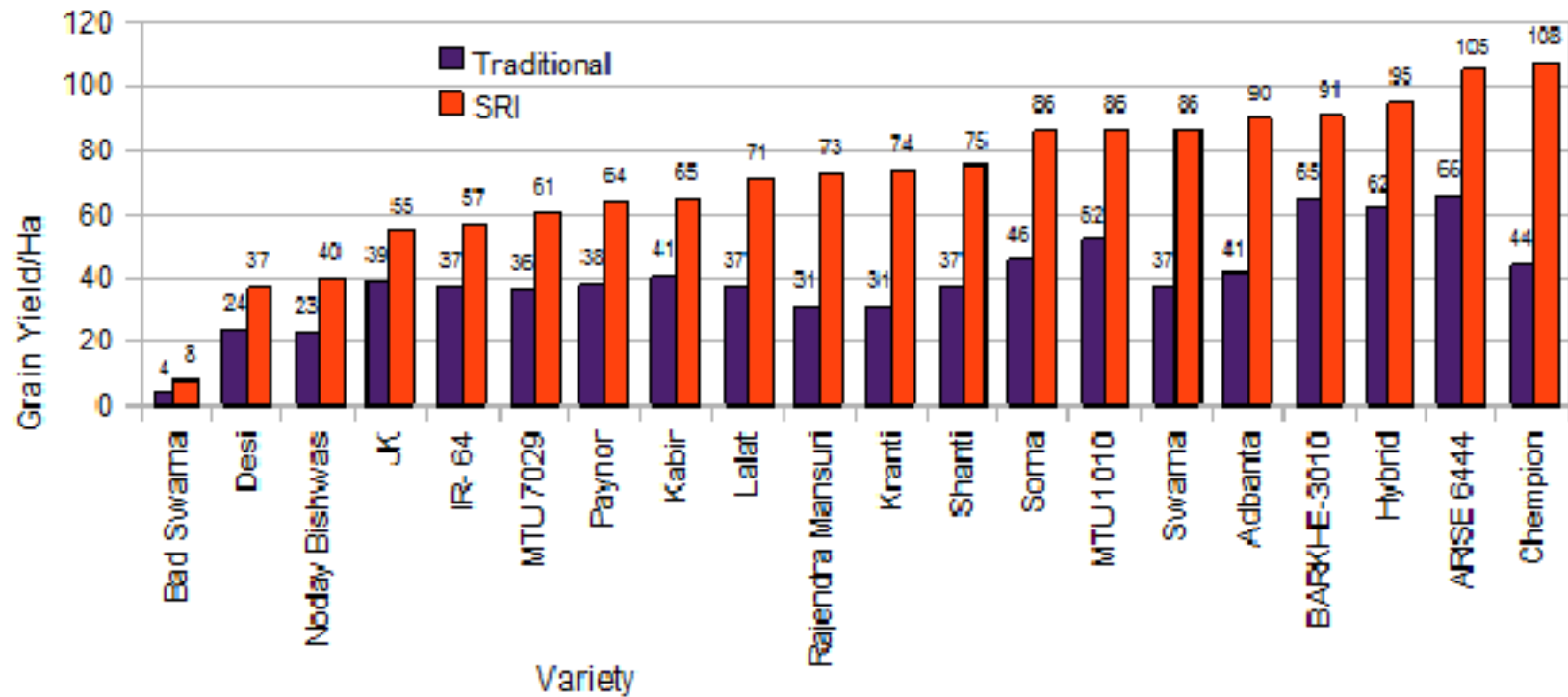
Variety-wise grain yield in Midland

Yield in Q/Ha



Variety-wise grain yield in Lowland

Yield in Q/Ha



Results

Land Holding (Acre)	Average Holding (Acre)	No of Days of food security		
		SRI	Traditional	Add. food security
0-1	0.66	323	168	155
1-2	1.79	894	348	546
> 2	3.73	1838	729	1109

Results

Table 19. Cost-Benefit Analysis	Lowland				
	Components	Rate/ kg	Traditional		SRI
Production in kg/acre			Income	Production in kg/acre	Income
Income from Grain (in kg)	10	1,385	13,846	2,652	26,518
Income from Straw (in kg)	3	1,704	5,113	3,502	10,506
Total Income			18,960		37,024
Cost of Cultivation			12,500		12,465
Benefit-Cost Ratio (Total income / total expenditure)			1.52		2.97

Results

Cost-Benefit Analysis	Midland					
	Components	Rate/kg	Traditional		SRI	
			Production in kg/acre	Income	Production in kg/acre	Income
Income from Grain (in kg)	10	1,182	11,822	2,377	23,765	
Income from Straw (in kg)	3	1,830	5,490	3,300	9,899	
Total Income			17,312		33,664	
Cost of Cultivation			12,500		12,465	
Benefit-Cost Ratio (Total income / total expenditure)			1.38		2.70	

Results

Cost-Benefit Analysis	Upland				
	Rate/ kg	Traditional		SRI	
		Producti on in kg/acre	Inco me	Producti on in kg/acre	Income
Income from Grain (in kg)	10	502	5,020	960	9,595
Income from Straw (in kg)	3	512	1,656	1,050	3,150
Total Income			6,676		12,745
Cost of Cultivation			5,800		8,435
Benefit-Cost Ratio (Total income / total expenditure)			1.15		1.51

Results

Cost of cultivation (traditional vs. SRI) In upland, midland and lowland					
Sr No.	Particulars	Cost of cultivation in midland & lowland (in Rs/acre)		Cost of cultivation in upland (in Rs/acre)	
		Traditional	SRI	Traditional	SRI
1	Inputs	3,120	4,405	2,260	3,405
2	Labour component				
a.	Human labour	6,680	5,600	2,640	3,920
b.	Animal resource	1,500	1,500	900	900
3	Machinery rental	1,200	960	0	210
4	Total expenditure on production (1+2+3)	12,500	12,465	5,800	8,435

Thank You