

System of Pigeon Pea Intensification

KVKs: Umaria, Shahdol, Balaghat, Baitul, Chhatarpur, Narsinghpur, Panna, Seoni, Sidhi, Rewa, Mandla, Sagar

Description of technology adopted:

SPI is agroecological innovation for improving agricultural production, food security and resilient to climate change based on following principal.

- Early, quick & healthy plant establishment
- Reduce plant density
- Improved soil condition, enrich with organic matter
- Better utilization of moisture through development of deep root system

Nursery Raised in Poly bag during IV week of May+ Transplanted 30 Days old Plant at 150x90 cm + IDM/IPM as per need + Nipping at 20and 40 DAT + Fertilizer at STV with vermicompost @ 2.5 ton/ ha.

Suitability of technology:

- Small and marginal farmers
- Huge availability of family labours
- Assured irrigation

Varieties: TJT-501, Rajeev Lochan

Promising characteristics of technology

S. No	Characteristics	Observation
1	Low seed rate (kg)	1.5 -2
2	Wider spacing(cm)	150 X 90
3	No of Branch/ Plant	18-20
4	No. of Pod /Plant	2150-3111
5	Yield/ plant (g)	400-600
6	Yield (q / ha)	25-30

Horizontal spread of technology

Nos. of KVK	No. of village covered	No. of farmers	Area in ha
12	1826	18416	14203

Name of schemes supported by Central/State Govt. in large scale dissemination under convergence

S. No.	Agency	Type of Contributions
1	Suraj Dhara	Seed
2	NFSM (Pulses)	Seed, Fertilizers, Plant Protection Chemicals
3	ATMA	Training and Demonstration

Economics of SPI technology:

Cost (Rs./ha)	Gross Return(Rs./ha)	Net Return(Rs./ha)	B:C Ratio
33000.0	150000.0	117000.0	4.54

Impact of adopted technology in economic terms

S. No.	Particulars	% Saving of Inputs/ additional yield over conventional practise	Rs. of Cost of Total Inputs(Rs. in Cr./ year)
01	Saving of seed	90 .0	1.91
02	Additional yield	233.0	141.5
03	Root Development	60 % more than the conventional	-

Impact of adopted technology in social terms

S.No.	Particulars	Before Adoption of SPI	After Adoption of SPI
01	Transportation	Bicycle	Motor Cycle
02	Children Education	State Govt. Hindi medium School	English Medium Convent School
03	Employment Generation	-	40 man days/ Ha

SPI in Pigeon pea



Development of root nodules / plant (at 120 DAS)

Component	SPI	Conventional
No. of root nodules/ plant	522-798	50-128
Wt. of root nodules/plant (gm)	15.68	1.15

Glimpses of activities



Sowing of seed in polybags



Ready to transplant plants



Transplanting

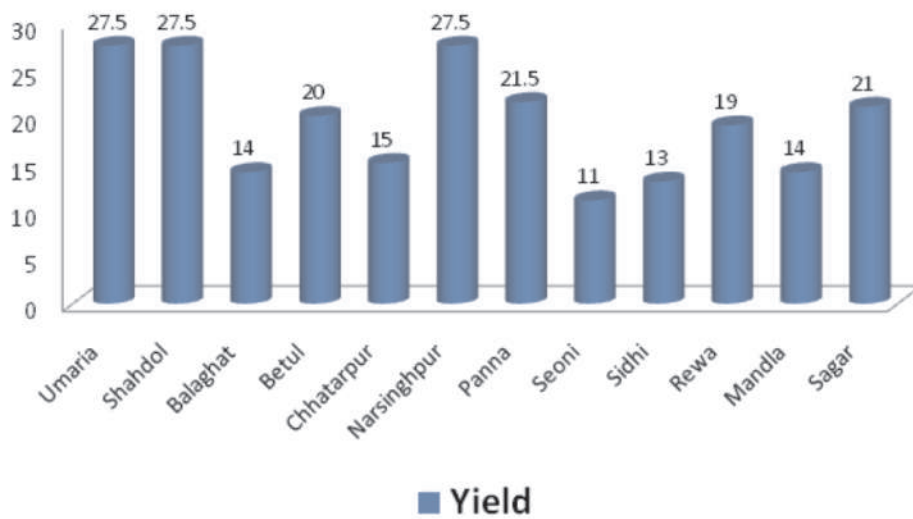
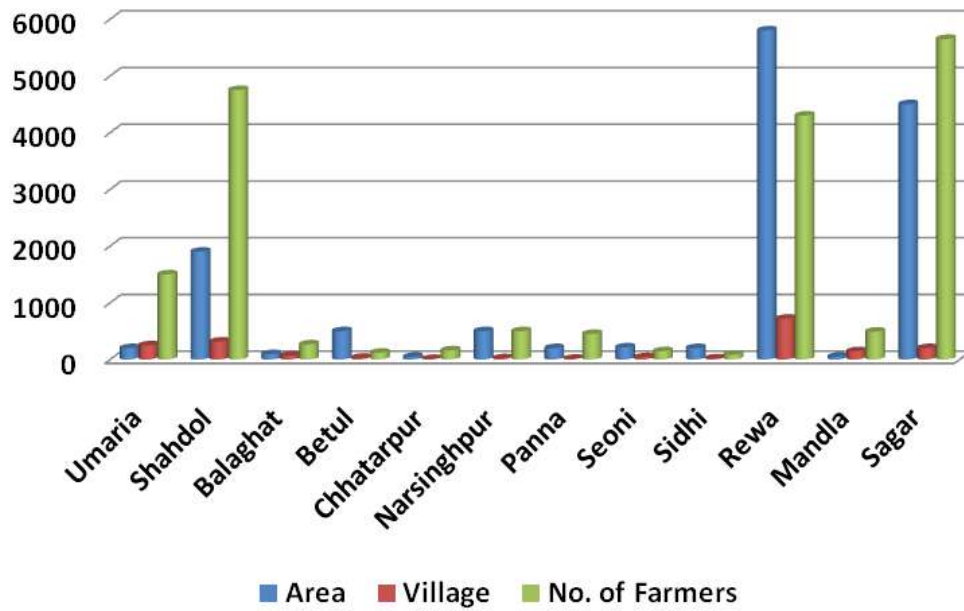


Plant protection measures

District wise detail of S.P.I. area, crop rotation, variety and yield potential

S. No	Agro climatic zone	Name of KVK	Area (ha)	Village	No. of farmers	Crop rotation		Variety	Yield (q/ha)
						Kharif	Rabi		
1.	Northern Hillli Region Chhattisgarh	Umaria	200	250	1500	Pigeon pea	Fellow/ Wheat (L/S)	TJT 501	25-30 (rainfed) 35-44 (irrigated)
2.	Northern Hillli Region Chhattisgarh	Shahdol	1900	315	4750	Pigoen pea	Fellow/ wheat (L/S)/ chickpea	TJT501/ Rajeaw Lochan	25-30 (rainfed) 32-34 (irrigated)
3.	Chhatisgrah Plains	Balaghat	95	65	265	Pigoen pea	Fellow	TJT 501	12-16
4.	Satpura Plateau	Betul	500	30	120	Pigoen pea	Fellow	TJT 501	18-22
5.	Bundel khand	Chhatarpur	46	09	160	Pigoen pea	Fellow	TJT 501	14-16
6.	Central Narmada Vally	Narsinghpur	500	22	500	Pigoen pea	Fellow	TJT 501	25-30
7.	Kymore Plateau and satpura hills	Panna	200	12	450	Pigoen pea	Fellow	TJT 501	20-23
8.	Kymore Plateau and satpura hills	Seoni	214	39	146	Pigoen pea	Fellow	TJT 501	10-12
9.	Kymore Plateau and satpura hills	Sidhi	200	20	85	Pigoen pea	Fellow	TJT501/ Rajeaw Lochan	12-14
10.	Kymore Plateau and satpura hills	Rewa	5800	719	4300	Pigoen pea	Fellow	TJT501	18-20
11.	Northern Hillli Region Chhattisgarh	Mandla	48	145	490	Pigoen pea	Fellow	TJT501	12-16
12.	Vindhya Plateau	Sagar	4500	200	5650	Pigoen pea	Fellow	TJT 501	20-22

District wise SPI area, villages & farmers coverage



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