

Technologies changed the scenario of tribal areas

with the interventions by KVK, Lakhimpur Kheri-I

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KVK, Lakhimpur Kheri-I conducted two technological intervention in the district viz. Effects of Sulphur on the yield of yellow sarson and kitchen gardening for nutritional security under TSP. Both intervention was found to be successful on technical, economic and socio-economic parameters and has a positive impact on the tribal farmer's perception.

Keywords: Kitchen garden, KVK-Lakhimpur Kheri-I, Sulphur, Yellow sarson,

Technology-1

Effect of sulphur on the yield of yellow sarson under TSP

KVK, Lakhimpur Kheri-I conducted demonstration on the farmer's field related to the application of sulphur as secondary nutrient on yellow sarson crop as there was an evident from the Department of Agriculture that the district suffers with deficiency of sulphur in the soil.

The demonstration was conducted on the 23 farmer's field (6 ha). Before carried out the programme, trainings were provided with full package of practices of yellow sarson cultivation. More emphasis was given on sulphur and balanced nutrition and also visual symptoms of sulphur deficiency shown to the farmers through pictures.

During the demonstration, sulphur was provided to each farmer

(@ 3 kg./acre 90% WDG cosavet). The data obtained during the course of crop clearly revealed that yield gap minimized 77.84% at District level, 64.24% at State level and 48.26% at potential level. The 1.85 B:C ratio obtained under demonstration as compared to farmer's existing plot i.e. 1.71. Employment generated 70 Mandays/ household in cultivation of yellow sarson (Table 1, Fig. 1).



Fig. 1. Trainings on the effect of sulphur on the yield of yellow sarson.

Table 1. Effect of sulphur on the yield of yellow sarson under TSP

A. Technical Parameters

Crop	Existing yield	Yield gap (q/ha)			Name of Tech.	No. of farmers (Area in ha)	Yield obtained (q/ha)			Yield gap minimized (%)		
		D	S	P			Max.	Min.	Av.	D	S	P
Yellow Sarson (Pila sona/Goldie)	6.25	9.3	11.27	15	Sulphur	23 (6)	7.5	6.9	7.24	77.84	64.24	48.26

B. Economic Parameters

Crop	Farmer's existing plot			B:C ratio	Demonstration plot			B:C	B:C ratio
	Gross cost (₹/ha)	Gross return (₹/ha)	Net return (₹/ha)		Gross cost (₹/ha)	Gross return (₹/ha)	Net return (Rs./ha)		
Yellow Sarson	15,000	25,625	10,625	1.71	15,975	29,684	13,709	1.85	3.16

C. Socio Economic impact parameters

Total Produce obtained (kg)	Produce sold (kg/household)	Selling rate (₹/ha)	Produce used for own sowing (kg)	Produce distributed to other farmers (kg)	Purpose for which income gained was utilized	Employment generation Mondays/household
724	0.92	41	3	15	Education and standard of living	70

D. Tribal farmer's perception

Suitability to their farming system	Linkings	Affordability	Any negative effect	Is technology acceptable to all in the group/village	Suggestions for change
Suitable	Positive	Easily	No	Yes	More awareness campaigns for balanced fertilizer

Technology-2

Kitchen Gardening for nutrition security under TSP

K.V.K., Lakhimpur Kheri-I has conducted demonstrations on farmer field in 0.82 ha with total farmers of 41. Before carried out the programme, trainings was provided to the farmers with objective such as systematic establishment of kitchen garden with full packages of practices for the cultivation of different vegetables during winter season. The data taken on different parameters presented in tabular form are given below in Table 2, Fig. 2.

Table 2. Kitchen gardening for nutritional security under TSP

A. Technical Parameter

Crop/enterprise	Existing variety/ breed name	Existing yield (q/ha)	Name of Variety/ Breed/Tech. demonstrated	Number of farmers (Area in ha)	Yield obtained (q/ha)		
					Max	Min	Av
Kitchen gardening	Cauliflower	205.00	Snow white-1	41 (0.82)	226.5 (1.13)	194.5 (0.97)	210.5 (1.05)
	Cabbage	210.5	Samarat		243.00 (1.22)	205.5 (1.03)	224.25 (1.12)
	Radish	170.5	Kalyanpur-1		185.5 (0.46)	165.5 (0.41)	175.5 (0.44)
	Soya	20.5	Local improved		23.25 (0.06)	20.50 (0.05)	21.87 (0.06)
	Methi	24.5	Kasui		28.5 (0.07)	24.5 (0.06)	26.5 (0.07)
	Spinach	25.0	All green		90.25 (0.23)	66.75 (0.17)	78.5 (0.19)



Fig. 2. Kitchen gardening for nutritional security.

B. Economic parameters

Crop (enterprise)	Farmer's Existing plot				Demonstration plot			
	Gross Cost (₹/ha)	Gross return (₹/ha)	Net Return (₹/ha)	B:C Ratio	Gross Cost (₹/ha)	Gross return (₹/ha)	Net Return (₹/ha)	B:C ratio
Kitchen gardening	32,300 (162)	85,075 (425)	52,775 (264)	2.63	19,500 (98)	87,350 (437)	67,850 (339)	4.47
	26,500 (133)	64,200 (321)	37,700 (189)	2.42	17,600 (88)	68,395 (342)	50,795 (254)	3.88
	18,750 (47)	55,400 (139)	36,650 (92)	2.95	14,250 (36)	57,025 (143)	42,775 (107)	4.00
	14,800 (37)	27,675 (69)	12,875 (32)	1.86	9,350 (23)	29,525 (74)	20,175 (50)	3.15
	16,700 (42)	33,075 (33)	16,375 (41)	1.98	10,800 (27)	35,775 (89)	24,975 (62)	3.31
	18,500 (46)	56,250 (141)	37,750 (94)	3.04	13,550 (34)	58,875 (147)	45,375 (113)	4.36

(figures in parenthesis are on the basis of actual area)

C. Socio economic impact parameters

Crop/enterprise demonstrated	Total Produce obtained (kg)	Produce sold (kg/household)	Selling rate (₹/kg)	Produce distributed to other farmers (kg)	Purpose for which income gained was utilized	Employment generation (Mondays/household)
Kitchen gardening	21,050 (105)	40	4.15	10	Standard of living	15
	22,425 (112)	46	3.50	8		
	17,750 (44)	28	3.25	3		
	2,187 (6)	-	13.50	-		
	2,650 (7)	-	13.50	-		
	7,850 (19)	5.50	7.50	2.25		

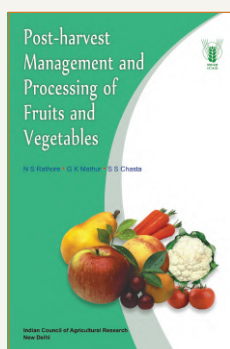
(figures in parenthesis are on the basis of actual area)

D. Tribal farmer's perception

Suitability to their farming system	Linkings (Preference)	Affordability	Any negative effect	Is technology acceptable to all in the group/village
Suitable	Positive	Easily	No	Yes

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