

Research Note

Impact assessment of front line demonstration in transfer of finger millet production technology

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SUMMARY : A study was conducted during 2012-13 under the jurisdiction of KVK, Valsad. The purpose was to analyze the impact assessment of front line demonstration in transfer of finger millet production technology. Results of demonstration have shown that under demonstration plots the finger millet yield was found to be substantially more than that under local check during both years. The yield performance of finger millet through demonstration ranged from 12.5 to 19.0 q/ha and average yield of 35 demonstration was 17.35 q/ha. However, the yield from local check was 11.95 q/ha. Thus, there was 45.15 per cent increase in demonstration yield over local check. There was a wide gap of 134.3 per cent at district in respect of demonstration yield. The farmers have incurred average higher net return Rs.13705 /ha. under the demonstration. The highlighted B:C ratio of 2.10 as against the local check which recorded 1.54. The increase in yield of demonstration plot over local check was the impact of improved production technology. The use of better input like improved seed, sowing method, balanced use of fertilizer and proper management of insect pest may result in higher productivity of finger millet.

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KEY WORDS :

Front line, demonstration, Finger millet, Tribals, Rainfed

Tribals in Valsad district particularly Kaparada and Dharampur block are generally pro-culture in nature. They are educationally and economically very backward. Agriculture is the main occupation of Kukana tribals and they follow the traditional method of finger millet cultivation, which obviously result in low crop production. Finger millet is the main food material of tribals and mainly cultivated in *Kharif* season, mostly on undulating and medium to poor quality soils. There is possibility to enhance finger millet productivity by adoption of improved production technology of finger millet cultivation, viz., improved seed, sowing method, use of balance fertilizer and plant protection measures. The efforts are underway with planning, execution and follow up of the finger millet cultivation technology in increasing the yield. The present study, therefore, was undertaken to ascertain the role of demonstration in exhibits the production technology of finger millet and thus increasing the yield.

Krishi Vigyan Kendra conducted front line demonstration on finger millet during 2011-12 and 2012-13. In all 35 demonstrations were conducted on farmers field in Kaparada Block of Valsad district. The demonstration conducted on various soils included improved seed, sowing method, balance use of fertilizer and plant protection measures under totally rainfed condition. During both the year the rainfall season remained normal. Crop variety Gujarat Finger millet -4 and application of cabofuran-3G was given to control stem borer. Crop was sown in the first fortnight of June and harvested in the first fortnight of November. Yield data were recorded from individual demonstration by harvesting 100 sq. m area. Similarly local yield was also recorded for comparison.

The data presented in Table 1 revealed that under demonstration plots the finger millet yield was found to be substantially more than that under local check during both years. The yield performance of finger millet through

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Table 1 : Yield performance of FLD on finger millet crop

Year	No. of demonstration	Average yield (q/ha)		% increase over local	Av. yield of district (q/ha)	Yield gap (%)
		Demonstration	Local practice			
2011-12	20	18.2	12.5	45.6	7.5	142.6
2012-13	15	16.5	11.4	44.7	7.3	126.0
Total/Av.	35	17.35	11.95	45.15	7.4	134.3

Table 2 : Economics of front line demonstration of finger millet

Year	Av. cost of cultivation (Rs./ha)		Av. gross return (Rs./ha)		Av. net return (Rs./ha)		B:C Ratio	
	Demo.	Local	Demo.	Local	Demo.	Local	Demo.	Local
2011-12	12190	11446	27300	18750	15110	7304	2.23	1.64
2012-13	12450	11770	24750	17100	12300	5330	1.98	1.45
Average	12320	11608	26025	17925	13705	6317	2.10	1.54

demonstration ranged from 12.5 to 19.0 q/ha and average yield of 35 demonstration was 17.35 q/ha. However, the yield from local check was 11.95 q/ha. Thus, there was 45.15 per cent increase in demonstration yield over local check during both the year. The increase in yield in demonstration over local check was the impact of improved production technology of finger millet adopted in demonstration. The yield levels under local check were considerably low because of variation in extent of knowledge and adoption of recommended farm practices. It is evident from Table 1 that there was a wide gap of 134.3 per cent at district in respect of demonstration yield. It indicates that the finger millet growers with low yield were identified by low knowledge of scientific technique of finger millet cultivation. It is point of concern for research and extension worker to disseminate improved finger millet production technology for raising the production finger millet. The farmers had incurred average higher net return Rs.13705 /ha. under the demonstration. The highlighted the cost benefit ratio of 2.10 as against the local check which recorded 1.54 (Table 2) Hence, there is a wide scope to increase the area and production of finger millet crop by providing need based training and demonstration on improved production technology to the farmers. Similarly Ambulkar *et al.* (2011) studied the impact assessment of FLD on production technology of niger in Dindori district of M.P.

Conclusion :

From the above discussion, it can be concluded that front line demonstration have shown that the use of better input like improved seed, sowing method balanced use of fertilizer and proper management of insect pest may result in higher productivity of finger millet. In demonstration plot improved

production technology of finger millet performs better than control plot. It improves the productivity by 45.15 per cent. The productivity gain under FLD over farmer's practices created awareness and motivated the other farmers to adopt improved production technology of finger millet in the district.

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