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Short Communication

STUDY OF THE INCOME FROM SORGHUM (JOWAR) UNDER DIFFERENT FARM SIZE GROUPS

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Abstract

To judge the income level of the sorghum was the main objective of the present study which has been taken on the farmer's field during 2011-2012 in Ghazipur district of Uttar Pradesh at different from levels in comparison with local checks. It was formed the yield and net income was higher in demo. groups in Comparison to local checks, because all the advance package of practices has been applied properly and timely while local checks are only based on traditional practices, by virtue of lacking the knowledge local checks are suffered. The study has finely been concluded that there should be a wide range in future to increase their productivity and income by applying more and more advance technologies of cultivating the crop.

Key words: Farmers, yield, increasing trends, size groups.

Introduction

Sorghum, popularly known as Jowar. It grain is primarily as human food in various farms, such as Roti or is cooked like rice. Sorghums are also malted, popped and several local preparations are made. Green and dried fodder is the most important roughage for feeding cattle throughout the country. The utilization of grain sorghum as a cattle not very significant, although considerable scope exists. *Rabi* sorghums are wholly confined to black cotton soils, the *Kharif* Sorghums are grown on light soils also on a limited scale. Medium and deep black soils are predominantly suitable for this crop.

Sorghums are grown during in *Kharif* last week of June to July. The differed spread of high yielding varieties tends to enhance the attack of shoot fly on in this verities and the increased midge incidence on the locals, particularly during the *Kharif* Season. Wheat crop yield formed significantly higher after *Kharif* Sorghum, cowpea grain etc. Yield of wheat will be go down only after sorghum by using not a proper dose of organic fertilizer and cost of other sources of factors of production on higher side Sinsinwar (1994). Cultivation of cereal forages along with legumes makes an increased quantity and nutrition's fodder resulted a greater improvement in soil quality. Green forage and dry matter yields formed significantly higher where maize and cow pea has been taken in consequent lines. The increase in the yield of green and dry matters in the intercropping system might be owing to the nutrient sparing effect of leguminous fodder, Tripathy *et al.* (1997). Nutrients requirement of the crop increasing day by day due intensive cropping system etc.

Materials and Methods

The present study has been taken on the field through farmers-scientist collaborations during the year 2011-12 in randomly selected village Nasirpur, Block Devkali of Ghazipur District of Uttar Pradesh Two farmers from each-groups ranging small, medium and large sizes has been randomly selected. The sorghum (Jowar) has been taken on the farmers field during last week of June to first week of July. Suggested the variety C.S.B.-15, Seed rate 15 Kg./ha. along with for better yield NPK application was put into the soil @ 40:20:20 Kg. per hectare. All the recommended package of practices has been applied to the crop during at the time of their needs for better yield and income. A comparative study has also been made through local check from same groups

by their own traditional practice of Sorghum Cultivations. The atmospheric Nitrogen fixed by bacteria in the root nodules of leguminous fodder import nitrogen resulting the increasing the yield of forage Gill and Verma (1983). Hence efforts are to be made to increase the productively and quality of the crops. All the information's has been collected through Survey method and tabular analysis was being used. Family schedule has been used to collect the data regarding family-size, area of the crop and data's regarding economic analysis of the crop etc.

Results and Discussion

Table-1 shows that the yield (grain) Qt./ha in demonstrated groups was 22qt, 25qt and 30qt. While it was Qt/ha in local check 18 qt., 20 qt., and 22 qt. in small, medium and in large size groups showing increasing trends ranging smaller to larger ones. The straw yield Qt./ha. in demo. was found 43qt., 45qt and 48qt. and in local check it was 30qt, 32qt, 34qt. also shows increasing trends from small to large groups in both fashions. Percentage increase in grain yield was 22.22%, 25% and 36 % shows increasing trends where percentage increase in straw yield was 43.33%, 40.63% and 41.18% exhibits no specific trends. The farmers of demo. groups in all sizes has been got higher yield in comparison to local ones because the farmers of demo. groups has been applied all the advance package of practices thoroughly and timely at the time of crop requirements. This was the main difference in those who were not applied all the operation seriously due to lack of knowledge. The study conveyed that the farmers of any size groups will increase their agro and socio economic conditions by adopting advance package of practices. Table-2 shows income and expenditure of the crop where in demo. Total cost of the crop Rs./ha. was Rs. 18,150, Rs. 18,970, Rs. 19,500 and Total income Rs/ha was Rs. 37,780, Rs. 38,285, Rs. 41,630 while in local check the total cost Rs./ha was Rs. 15,300, Rs. 16,180, Rs. 16,985 along with total income Rs./ha was Rs. 28,450, Rs. 30,876, Rs. 31,645 exhibits increasing trends ranging small forms to large farms in demo. as well as in local checks. The net income Rs./ha. was Rs. 19,630, Rs. 19,315, Rs. 22,130 in demo. While it was in local check Rs./ha. was Rs. 13,150, Rs. 14,196, Rs. 14,660 shows no specific trends in demo. as well as in local check. Benefit cost ratio was in demo. was 2.08, 2.02, 2.13 while in local check it was 1.86, 1.91, 1.86 shows no specific trends. The income level in all form size groups formed higher in comparisons to local ones be who were far away from the advance technology. Finally, the study concludes that in future in all size groups of the farmers has been increase their yield by managing proper advance package practices and technologies timely to ensure this production by low cost with maximum production.

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Table 1: Yield (Qt/ha.) of Sorghum at different farm size groups during 2011–12

Size of Farms	No. of Farms	Area of Farms	Seed Rate (Kg./ ha.)	Inorganic Fertilizer (Kg./ha.)			Duration of Crop Days	Yield (Qt./ ha.)				Percentage increase in yield	
								Demo		Local			
				N	P	K		Grain	Straw	Grain	Straw	Grain	Straw
Small	2	1	15.00	40	20	20	105-110	22.00	43.00	18.00	30.00	22.22	43.33
Medium	2	1	15.00	40	20	20	105-110	25.00	45.00	20.00	32.00	25.00	40.63
Large	2	1	15.00	40	20	20	105-110	30.00	48.00	22.00	34.00	36.00	41.18

Table 2 : Economic Analysis of Sorghum under different farm size during 2011 – 12

Farms Size of Groups	No. of Farms	Economics of Demo. (Rs./ha.)			Economics of Local Check (Rs./ha.)			Benefit Cost Ratio	
		Gross Cost	Gross Income	Net Income	Gross Cost	Gross Income	Net Income	Demo.	Local
Small	2	18,150	37,780	19,630	15,300	28,450	13,150	2.08	1.86
Medium	2	18,970	38,285	19,315	16,180	30,876	14,696	2.02	1.91
Large	2	19,500	41,630	22,130	16,985	31,645	14,660	2.13	1.86