

# STUDY THE YIELD AND ECONOMICS OF HIGH YIELDING WHEAT IN COMPARISON WITH LOCAL ONES AT DIFFERENT FARMS LEVELS

## Ajit Verma<sup>1</sup>, S.P. Singh<sup>2</sup>, Sarita Srivastava<sup>3</sup>, Vinod Singh<sup>4</sup> and Avinash Kumar<sup>5</sup>

<sup>1</sup>Department of Farm Management, Krishi Gyan Kendra, Baribag, Ghazipur (U.P.), India. <sup>2</sup>Director Extension, Narendra Deva University of Agril. & Tech., Kumarganj, Faizabad (U.P.), India. <sup>3</sup>Department of Home Science, Krishi Gyan Kendra, Deoria (U.P.), India. <sup>4</sup>Department of Farm Management, Crop Research Station, Baribag, Ghazipur (U.P.), India. <sup>5</sup>Ph.D., Narendra Deva University of Agril. & Tech., Kumarganj, Faizabad (U.P.), India.

#### **Abstract**

The objective of present study was to work out yield and economics of high yielding wheat in compare with local cheque at different farm levels in randomly selected village Chariyon Khas of Deoria District, Uttar Pradesh during 2011-12. It was found that on demonstrated track by applying advance package of practices yield and net return was increased but, it was not in local cheques due to lack of technical knowledge's, lack of awareness etc. Benefit Cost ratio in both shows no specific trends. Finally it will confine that there should be a more chance to increase their yield and net returns with low cost by making to apply a good frame of advance package of practices, go through a good farm plan timely.

Key Words: Farmers, time, yield, increasing trends, package of practices.

## INTRODUCTION

The wheat crop requires a well-pulverized but compact seed bed for good and uniform germinations. There are four ploughings in the summer, repeated harrowing in the rainy season, followed by three or four cultivations and planking immediately before sowing produce a good, firm seed bed for the dry crop on alluvial soils. Timely Cultivation and conservation of moisture are essential. It is second important food crop being next to rice and contributes to the total food grain production to the extent of about 25 percent wheat straw is used for feeding the cattle. The Indo-Gangetic plains form the most important wheat area. The cool winters and the hot summers are very conducive to a good crop of wheat. Well drained loams and clayey loams are considered to be good for wheat. However, good crops of wheat are raised in sandy looms and the black soil also. Sowing with seed drills, whether tractor drawn or bullock drawn, will deposit the seed at a uniform depth, give a uniform stand and lead to the early emergence of vigorous seed lings. For better yield and quality it requires a balance dose of N.P.K. 30 ton per hectare FYM needed at the time of field preparation. In some soils, zinc is becoming

deficient, resulting in poor yields. In moderately deficient soils, 25 kg. of zinc sulphate per hectare is sufficient. In a cropping system involving the rice wheat rotation, it is advocated that all the potash needed under this system should be given to the rice crop and all the phosphorus to the wheat crop and nitrogen to both the crops. By addition zinc significant improvement in grain and straw yield has been observed because zinc enhances the cation exchange capacity of roots where nitrogen is responsible for higher protein content of wheat Said by Malakouti et al. (1998). Thus, application recommended doses of NPK along with zn to wheat resulted letter flowering and fruiting also obtaining higher productivity along with significant increase in net returns reported Sharma, P.K. et al. (2000). The seed used for sowing should have a good germination capacity and it should be healthy and freeform seed borne diseases and seed of wheats.

## **Materials and Methods**

This study has been conducted in randomly selected village Chariyonkhas of Gauri Bazar Block in Deoria district of Utter Pradesh during the year 2011-12. Eight farmers has been selected randomly from small, medium and large size groups by farmers-scientist collaborations.

1344 Ajit Verma et al.

Suggested HD 2967 variety of wheat. Recommended NPK @ 150:80:60 kg. per hectare crop has been taken on the field during second fort night November. Applied 1/3<sup>rd</sup> of nitrogen, whole phosphorus and potash at the time of sowing and rest of nitrogen remain put into the crop of two equal part, one at the time of first irrigation and last was at the time of flowering. Recommended five irrigations at the time of their needs. 30 tons per hectare of FYM has been mixed upto the field at the time of field preparation. All information has been collected through survey method and tabular analysis was used. Family schedule has been used to collect the data from the selected farmers regarding size of holding, size of family, area of the wheat production and net income etc. All other package of practices supplied time to time when crop required. Solutions of every problems has been given timely on their field. The economics of the crop was work out at current price rate.

#### **Results and Discussion**

Table-1 Clearly shows that the yield on demonstrated track per hectare was 30qt, 34qt and 41qt in small, medium and in large size groups while it was 25qt, 26.50qt

properties etc. said by Sharma, M.P *et al.* (2003). Table-1 shows increasing trends has been ranging from smaller to larger ones, it also clears that there is a chance to increase the yield in future by adopting some more precautions.

Gross cost ₹ per hectare 15,600/- ₹ 16,975/- and ₹20,425/- was found in small, medium and large size groups shows in table-2 ranges increasing trends, Net return Rs. per hectare was ₹13,950/- ₹14,705/- and ₹13,850/- shows no specific trends. In the same ways on local ones gross cost ₹ per hectare was 11,350/-₹ 12,490/- and ₹ 15,270/- shows increasing trends along with no specific trend was visible there in net return per hectare was ₹ 9,050/- ₹ 9,370/- and ₹ 8,880/-. Benefit cost ratio was 1.89, 1.87, and 1.68 an demonstrated track where 1.80, 1.75, 1.58 on local check found performs no specific trends. The farmers from local cheque are behind in every sectors due to non application on scientific and advance technologies. Finally the study concludes that in future farmers from all size groups has a chance to increase their yield and net rate return by applying to go with farm planning along with to use the advance package of practices thoroughly.

Table 1:	Wheat Yield	Qt/ha.	) at different farm levels during	2011–12.
----------	-------------	--------	-----------------------------------	----------

Level of	No. of	Seed Rate	FYM Ton/ ha.	]	Fertilize (Kg./ha.)		No. of Irrig-	Duration of Crop	Yic (Qt./		% increase
Farms	Farms	Kg./ha.		N	P	K	ations	Days	Demo	Local	in yield
Small	8	125	30	150	80	60	5	125-130	30.00	25.00	20.00
Medium	8	125	30	150	80	60	5	125-130	34.00	26.50	28.30
Large	8	125	30	150	80	60	5	125-130	41.00	30.90	32.69

**Table 2:** Gross Cost and Net Return (Rs./ha.) of wheat at different farm levels during 2011 – 12.

Level of Farms	No. of Farms	Expenditure and Returns of Demo ( ₹ /ha.)				nditure and l cal Check (₹	Benefit Cost Ratio		
	1 411113	Gross Gross		Net	Gross			Demo	Local
		Cost	Returns	Returns	Cost	Returns	Returns		
Small	8	15,600	29,550	13,950	11,350	20,400	9,050	1.89	1.80
Medium	8	16,975	31,680	14,705	12,490	21,860	9,370	1.87	1.75
Large	8	20,425	34,275	13,850	15,270	24,150	8,880	1.68	1.58

and 30.90qt. per hectare on local ones. comparatively it was found that there where increase in yield was 20%, 28.30% and 32.69 in respect of small, medium and large size groups of the farmers. This was only due to all package of practices applied by farmers nearly time to time along with recommended dose of fertilizers has been applied at the time of the crop requirements. The yield of local cheque was reduced only due to the non performance of package of practices and uneven distribution of chemical fertilizers also. Application of inadequate and unbalanced quantity of fertilizers to crop resulted low yield along with deteriorates the soil

#### References

Malakouti, M.J. (1998). Increasing grain yield and community's health through the use of Zincsulphate in wheat fields. *Soil and water Journal*, **12**: 34-43.

Sharma, P.K., G.L. Yadav, B.L. Sharma and S. Kumar (2000). Response of Wheat to Nitrogen and Zinc. *Indian Journal of Agronomy*, **45** (1):124-127.

Shama, M.P., P. Bali and J.P. Gupta (2003). Long term effected of Chemical fertilizers on rice-wheat productivity and fertility of an Incept sol. *Annals of Agricultural Research*, **24(1)**: 91-94.