SUCCESS STORY OF MR. SULTAN BHATTI (A PROGRESSIVE FARMER)

Sultan Bhatti is a progressive farmer and very passionate to adopt and adapt new innovations. He is resident of village Sukhakee, Tehsil Pindi Bhattian, District Hafizabad, Punjab, Pakistan. He owns 100 acres of agricultural land, out of which wheat has been sown on 15 acres.

ZTBL Team headed by Mr. Farhat Karim Hashmi, Group Head (LMD, ATD, P&RD) and Mr. Muhammad Ikram Ul Haq (Senior Vice President, ATD) along with four subject specialists visited Sultan Bhatii Farm near Sukkhee where the progressive grower/owner Mr. Sultan Bhatti briefed the team about managing sowing of 4Kg and 10Kg The grower owns 100 acres land out of which wheat has been sown on 15 acres. 10 acres land has been sown by using 10 kg wheat seed per acres, while 5 acres land sown by using only 4 kg seed/acre. The owner claimed that previously by the same method he obtained yield about 52monds/acre. The main reason of obtaining yields above average is that more heads were produced (tillers).

Methodology:

The team observed that 4kg seed/acre has been used via Raised Bed Technology with an aim to reduce the input cost. The Raised Bed having a width of 45 inch containing 5 lines of wheat were sown by planter having

line to line distance 9 inches. The seed was planted with the help of modified planter in which 2-3 seed were sown on the same place. The wheat tillage was practically counted with simple random sampling technique i.e. 70-80 tillers/2-3 Seeds. Two trolleys of FYM were used at the time of sowing. Up till now foliar application of fertilizer and half bag of DAP (25 kg) Urea (25 kg) was used/acre.

The most important aspect is the methodology used can save production cost by using minimum input cost. In Pakistan mostly 40 kg seed is required for on acre land but Sultan Bhatti Farm used only 4 -10 kg seed for one acre land with minimum use of fertilizer and having maximum tillers. Variety of wheat being grown by him is Faisalabad 2008. Foliar application of 17 kg DAP and almost half bag of Urea was applied up till for good crop production of wheat and for moisture conservation, soil structure and texture as compared to normal Cultivation where more fertilizer is used.

In another plot Mr. Sultan Bhatti cultivate the wheat crop in rice field in which rice straw increased the organic matter of soil. This wheat crop has many missing patches but grower said he has obtained his purpose to increase the organic matter and this will help in next year cultivation.

Wheat was cultivated on 1 acre using zero tillage technology. On ridges the holes are made at 9-10 inches for maize sowing. Rather than direct sowing the grower raised maize nursery and applied effective Micro Organism (Bacteria) to activate soil microorganism which consist Lactic acid Bacteria, Phototrophic Bacteria and yeast. These Bacteria make soil more soft, increase plant resistant, control PH of soil and make better use of fertilizer to plants.

Findings:

Research scientists and extension Departments recommends 40-50 Kg seed/acre but Mr. Sultan is practicing only 4 kg seed/acre and claimed 52 monds/acre of yield.

The management practices include things such as timely sowing and good soil fertility (especially nitrogen and phosphorus), early nitrogen applications can promote more tillering.

Raised Bed Technology reduced the input cost of irrigation and fertilizer. It also reduced the damage of crop from wind lodging. It was also seen that almost 70-80 tillers were produced in centre rows while 40-50 tillers were seen in rows near to furrows.

It was also found that in 2017 almost 25000-28000 PKR was cost of one acre of wheat and 50,000 PKR return was received by farmer ultimately generating 15,000-20,000 PKR Profit for one acre but in Raised Bed Technology almost 60 to 70 % cost is saved and approximately 10,000-150000 PKR is used for one acre with maximum tiller and ultimately better yield.

The Grower also used peas crop on sides of beds for increasing the soil fertility. Legumes crops can fix the nitrogen in the soil from their roots called nodules that increase soil fertility and minimize the cost of Nitrogen fertilizer ultimately leads to precision agriculture.