

Tips on wheat grains harvesting for maximizing returns

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As soon as the wheat crop nears maturity the color into golden amber. Farmers will have to arrange for harvesting tools and machinery to avoid wheat grains and straw losses. Currently, three options are available namely

1. Combine harvesting following straw Combining
2. Manual harvesting followed by threshing with thresher
3. Reaper binder for harvesting followed by threshing.

This write up is designed for users to aware them of certain types of farm losses and safety issues that could cause losses to the farmers in economic terms. All the machinery mentioned above are available for harvesting on rental rates which vary depending upon economic fundamental of demand and supply.

Various factors involved with usage of Combine harvesting are asbelow:

- I. Pre-harvest grains losses- once the crop is ready for harvesting and if there is delay in arranging the tools and machinery that delay risks in yield losses either due to weather conditions like rain, wind or high temperatures. Such losses reflect in terms of shriveled grains, crop lodging and shattering.
- II. Post- harvest grains losses- due to improper adjustments of machine parameters like cylinder speed, concave clearance and blower speed their operating features could result in grains losses and cracked grains.

These losses squarely dependent upon crop variety and moisture content at the time of harvesting and can be assessed by inspection of the field after completing the trial run. For example, harvesting losses may be computed by measuring the grains losses of one square meter plot by counting the number of grains recovered as threshed grains from 3 to 5 sampling site during the trial run. As a thumbnail 100 grains per square meters amounts to 40



kilograms grains losses per hectare. Similarly losses in the threshed grains could be assessed by taking a sample from threshed grains. It is quite important to inform that recovery of wheat straw after Combine harvesting compared with thresher is almost 33 percent lower as also in terms of quantity and also quality.

However, it is also important and pertinent that users must ensure that they will be able to manage the operating field losses to minimum to ensure their success to maximize their productivity and profitability. Further, it is important to note that wheat straw is another important by-product of this crop residue. Wheat straw is used as dry fodder for animals (mainly cows and buffaloes). It is important to note that the quality of wheat straw resulting from wheat straw, Combining is relatively low quality in comparison to conventional threshing machines like Harambha thresher. It has been reported that animals fed with (wheat straw) of straw Combining could have stomach issues as reported by the experts of Animal Clinic of Guru Angad Dev Veterinary and Animal Sciences University (GADVASU) Ludhiana. But it can be cleaned using simple cleaning tools like cylindrical cleaners or by conventional canned tokra.