

Success Story

**Enhancing production and productivity of wheat
by**

Proper placement of seed and fertilizer

Through

Line Sowing in Eastern Uttar Pradesh

Under

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Uttar Pradesh**

2. Enhancing production and productivity of wheat by proper placement of seed and fertilizer through line sowing in Eastern Uttar Pradesh

BACK GROUND

Uttar Pradesh is the major Wheat growing State in the country and stood first, at par with Punjab, under Wheat production, but still it has enough potential to increase the production, particularly, in Eastern districts of the State. The Eastern U.P., consists of 27 districts and 365 blocks. The average production of this area is only 22.57 q/ha, which is less by 5.42 Q. /ha as compared to state average and 9.32 Q/ha in comparison with western U.P.



There are many factors responsible for low productivity of wheat in eastern districts but major factors of low productivity are late sowing and broadcasting method of seed and fertilizer application. This is prevailing method of both important inputs i.e. seed and fertilizer, which increase the seed consumption and decreases fertilizer use efficiency drastically. In addition, delayed sowing in low land heavy soil area is also responsible for low productivity of wheat. The prevailing practice is mainly due to the fact that more than 91 percent of the farmers in the region belong to small and marginal category. Being resource poor, farmers prefer broadcasting method of sowing & fertilizer application, resulting in yield reduction mainly due to:

1. Less germination percentage leading to uneven crop canopy.
2. Very poor fertilizer use efficiency.
3. Light transmission to the lower leaves is adversely affected because of uneven plant geometry.
4. Broadcasting also hinders the intercultural Operations i.e. weeding, hoeing etc.

Keeping in view the above mentioned factors pertaining to sowing method and fertilizer use, it is important to tackle this aspect on project mode to enable the farmers to go for line sowing and proper placement of fertilizer and also use zero seed drill for low lying area for early sowing.

The Features of the Scheme where as under :-

1. Selection of compact area and beneficiaries in the villages.
2. Facilitate to farmers for procurement of Zero/Ferti seed drill at Block level.
3. Training of trainers regarding Seed drill calibration/operation.
4. Training of seed drill owning farmers for calibration of seed drill
5. Awareness and publicity about the use of ferti seed drill.
6. Development of literature for use of seed drill. (Leaflet/Folders).
7. Training of the selected farmers for its use.
8. Organize field day meeting in the seed drill sown field.
9. Identification of low land, late sown area for zero till sowing.



Implementation of the Scheme

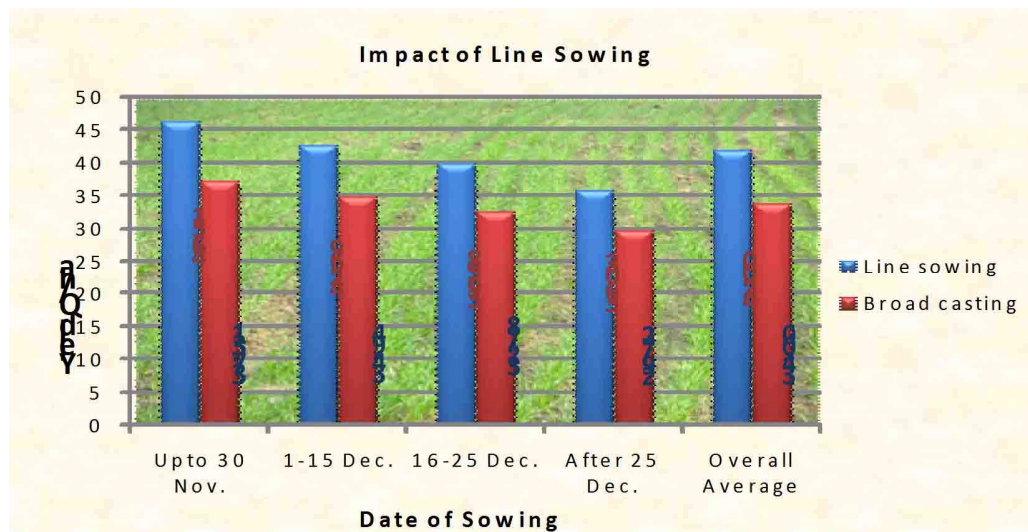
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|---|-----------------------------|
| i.) Project implemented: | 2010-11 to 2013-14 |
| No. of Districts: | 27 district of Eastern U.P. |
| Area covered: | Average 1.89 lac ha/ year |
| ii) Expenditure incurred: | 38.44 Crore |
| iii) Training organized: Seed drill calibration & Tractor operation | |
| Trainees trained: | 730 |
| iv) Field days organized: | 2500 nos. |
| v) Arrangement of ferti-seed drill: | 2615 |



Benefits of line Sowing

- Saving of seed and fertilizer due to calibration of ferti cum seed drill.
- Perfect germination thereby crop stand due to proper placement of seed.
- Even 1 month delay in line sowing with seed drill gave equal tonnage as compared to one month early sowing through broadcasting.

- It is easier to manage agronomic practices viz. irrigation and weeding in line sowing.



IMPACT OF THE SCHEME

- Additional production of 14.12 lacs quintals wheat was achieved by way of bringing and area of 1.89 lacs ha. under line sowing and 4725 tonnes seed was also saved per year.
- Overall yield increase by 8 Q/ha enabled the State to achieve the award of National Productivity in Wheat.
- Employment generated by creating 83,760.8 mandays which generated an income of Rs. 700.80 lacs to farmers/ ferti seed drill owner.
- Saving the cost of cultivation @ Rs. 2000/- per hectare by using zero till cum ferti seed drill.
- Large number of Small & marginal farmers benefited through custom hiring services.

