

WHEAT FARMING



Area & Production

627 Million tonnes of wheat is produced every year in the world. And the total world area for wheat farming is 215 million hectares. China is the leading producer of wheat in the world. It produces around 91 Million tonnes of wheat every year.

Whereas land used for wheat cultivation in China is around 21,730,100 hectares. And in India 26,620,000 hectares of land is used for cultivation of wheat. Therefore, India is world leader in wheat acreage. India produces around 72 Million tonnes of wheat every year.

Apart from China and India, other major wheat producing countries are Russia, United States of America, Canada, Germany, Ukraine, Pakistan, Australia, Argentina, etc.

Soil Requirement

You can cultivate wheat in a wide range of soil. However, clay loam to loamy soil that is rich in organic matter and have moderate water holding capacity is fit for wheat farming. But, avoid growing wheat in sandy soil.

Water logged or soggy soil can damage roots of the wheat crop. That's why maintaining proper drainage facility is necessary. Irrigation frequency also varies according to the soil type. However, if the soil pH is in the range of 6.0 to 7.0 then it is good for growing wheat.

Treatment of soil is also necessary. You can treat the soil with Azatobacter (2.5 Kilograms) + Phophetica culture (2.5 Kilograms) + Trichoderma powder (2.5 Kilograms). Mix all these ingredients with 125 Kilograms of Farm Yard Manure. You can apply this at the last time of ploughing.

Climate and Temperature

You can grow wheat in wide variety of agro-climatic zones. From temperate regions to sub-tropical and tropical regions, is fit for cultivation of wheat. Wheat crop can even tolerate snow. It loves moist and cool weather during the growth stage.

For better seed germination temperature range of 20 to 25 degrees celsius is good. But, the seeds can also germinate within temperature range of 4 to 35 degrees celsius.

Avoid cultivation of wheat in regions having too high or too cold temperature range.

Seed Rate and Treatment

For Timely Sown Variety: 100 – 125 Kilograms per hectare

For Late Sown Variety: 125 -150 Kilograms per hectare

Before sowing treatment of seeds is very necessary. Untreated seeds are prone to many seed borne diseases. You can treat seeds with Vitabax or Thiram @3 grams per Kilogram of seed before sowing.

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Field Preparation

Field preparation is a necessary step for wheat farming. You can use mould board or disc plough to deep plough the soil. This can be followed by 2 to 3 harrowing with disc or tines. At last 2 to 3 planking is necessary.

You can add the first dose of fertilizers along with Farm Yard Manure at this time. You can also add **Jeevamrut** or **Waste Decomposer** to save your crop from pest and to improve soil fertility.

Sowing Time & Spacing

In tropical to subtropical regions the best sowing time for wheat is around November to December. While in temperate or hilly regions you can start sowing of seeds from April to May depending on variety of the seed and temperature.

You can sow the seeds in lines or by broadcasting. Sow the seeds at the depth of 6 centimetres in the soil. Maintain row to row distance of 15 to 20 centimetres and plant to plant distance of 5 centimetres.

Manures and Fertilizers

At the time of preparation of field add 5 to 10 tonnes of Farm Yard Manure or any organic compost per hectare. Although you will also need to add doses of inorganic fertilizers in the required amount to get high yield.

Fertilizer Doze (Per Hectare)

Fertilizer Name	Irrigated	Late Irrigated	Rainfed
Urea	150 Kg N	120 Kg N	60 Kg N
Super Phosphate	60 Kg P ₂ O ₅	40 Kg P ₂ O ₅	30 Kg P ₂ O ₅
Muriate of Potash	40 Kg K ₂ O	20 Kg K ₂ O	20 Kg K ₂ O

source: kvk.icar.gov.in

Although the best practice is to get the soil tested. Soil testing helps to plan the fertilizer doze efficiently. Add half doze of Urea and the complete doses of Phosphate and Potash at the time of sowing. You can add 50% of the left urea during first irrigation after sowing.

And add the rest quantity of urea during second irrigation by top dressing method. If you do not want to use any inorganic fertilizers then you can use waste decomposer weekly for best results.

Irrigation

Irrigation is an important step for cultivation of wheat. Hence you should definitely know application of water and timing.

Irrigation	Days after Sowing (DAS)	Stage
1st Irrigation	20 to 25 DAS	Crown root-initiation stage
2nd Irrigation	40 to 45 DAS	Tillering stage
3rd Irrigation	70 to 75 DAS	Late jointing stage
4th Irrigation	90 TO 95 DAS	Flowering stage
5th Irrigation	110 to 115 DAS	Dough stage

Irrigation Frequency for wheat farming

Pest and Disease

If you not care well then your wheat crop can get affected from pest and disease. Pest like aphids, mites, white ants, stem borer, rodents, grasshoppers etc. and diseases like loose smut, bunt, wheat rust, etc. can harm your crop.

Keep checking for any of these pests and diseases. For their control visit nearest agriculture centres. They can easily provide you best alternative for their control.

Disease and Management

Disease	Management
Loose smut and Bunt	Seed treatment with Thiram before sowing

Rust

Spray Dithane M-45/ Indofil M-45 @2Kg in 600 litres of water per hectare, or dusting with sulphur 25 Kg per hectare

wheat Disease and Management

Harvesting

When leaves and stem of the crop start turning yellow then you can start harvesting your crop. The other signal is the moisture content of the wheat, if it is 25 to 30% then you can harvest the crop. However, time of maturity reaches earlier in rainfed crop.