



Crop Yield Performance Analysis

4.65

Average of Yield_tons_per_h...

549.98

Average of Rainfall_mm

1000000

Count of Region

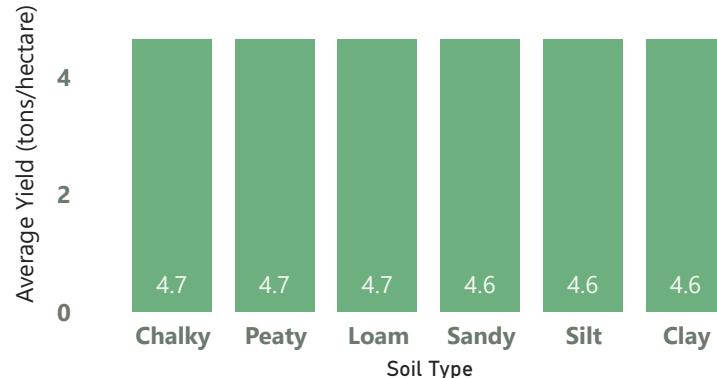
49.95%

Irrigation Rate1

1. High-Level Performance

Static factors show minimal impact (<1% difference)

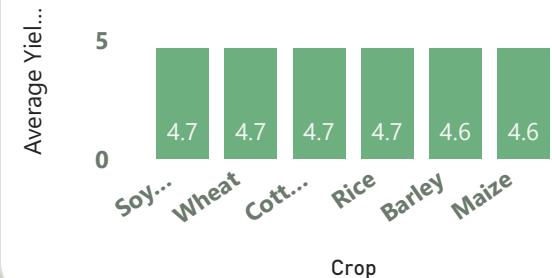
Which Soil Type Grows the Most?



Does Location Really Matter?



Which Crops Lead the Race?



Filters

Crop

All

Region

All

Soil_Type

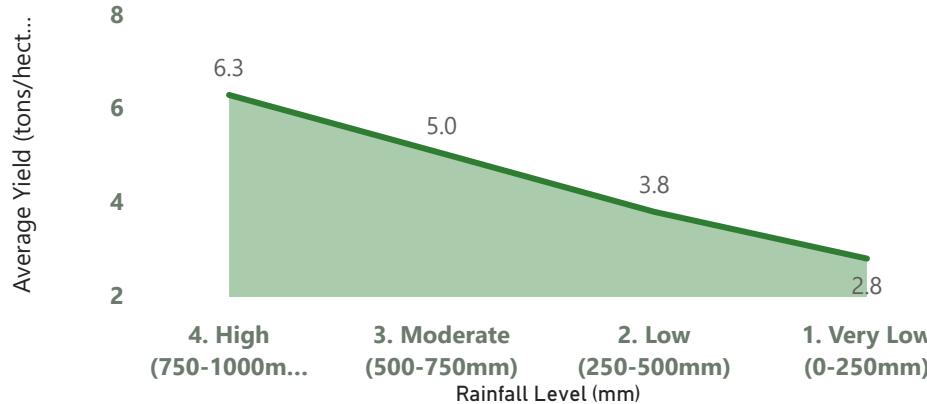
All

💡 Insight:

Static factors like soil, crop, and region matter less than you think—**differences are under 1%**.

2. Environmental Impact Analysis

More Rain, More Gain: The Impact of Precipitation



Region

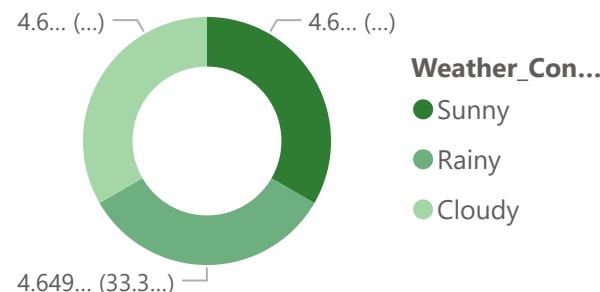
East

North

South

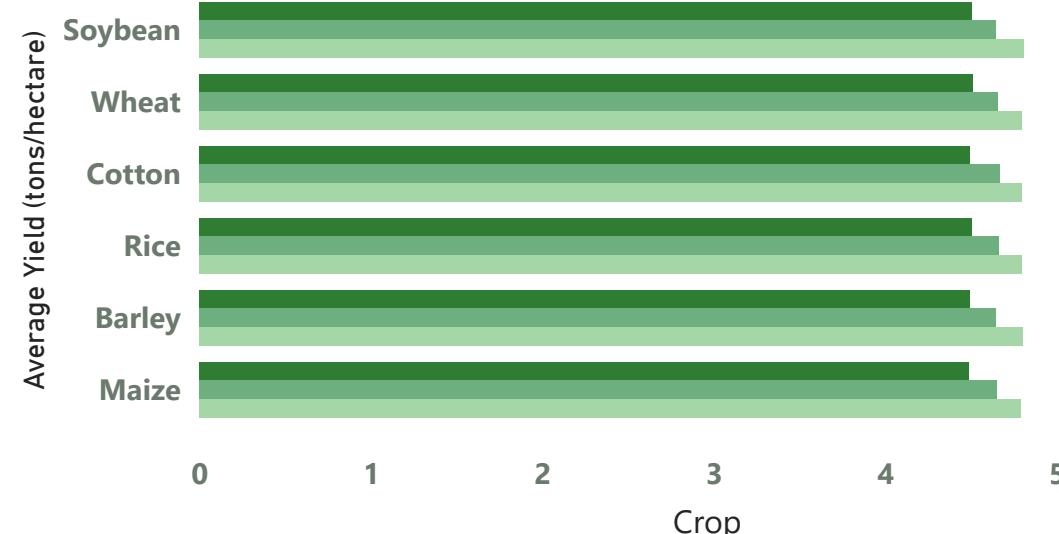
West

Sunny Days, Slight Edge: Does Daily Weather Matter?



Feeling the Heat: How Temperature Affects Each Crop

Temperature Bracket ● 2. Mild (15-25C) ● 3. Warm (25-30C) ● 4. Hot (>30C)



💡 Insight:

Long-term climate patterns (**Rainfall & Temperature**) are major drivers of crop yield, far outweighing daily weather conditions.

3. Farming Practices Deep Dive

Yield with Irrigation

5.25

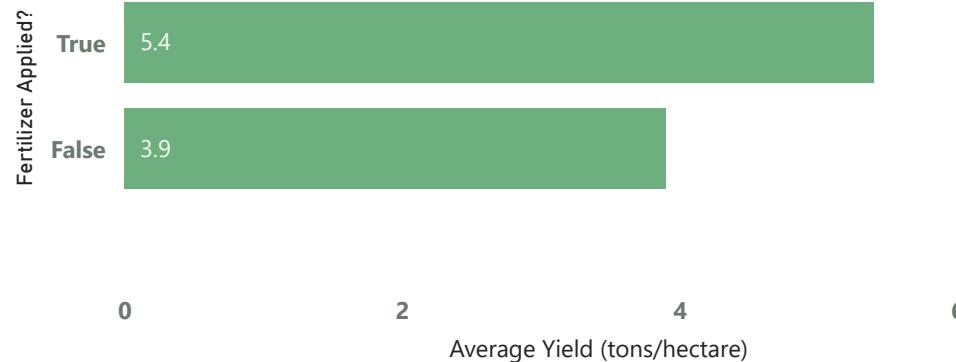


30% Increase

Yield without Irrigation

4.05

Sunny Days, Slight Edge: Does Daily Weather Matter?



Longer Isn't Always Better: Yield by Harvest Duration



Crop

Barley

Cotton

Maize

Rice

✓ Insight:

Irrigation provides a massive 30% boost to crop yield, making it the most effective management practice in this dataset.

Fertilizer_Used

False

True