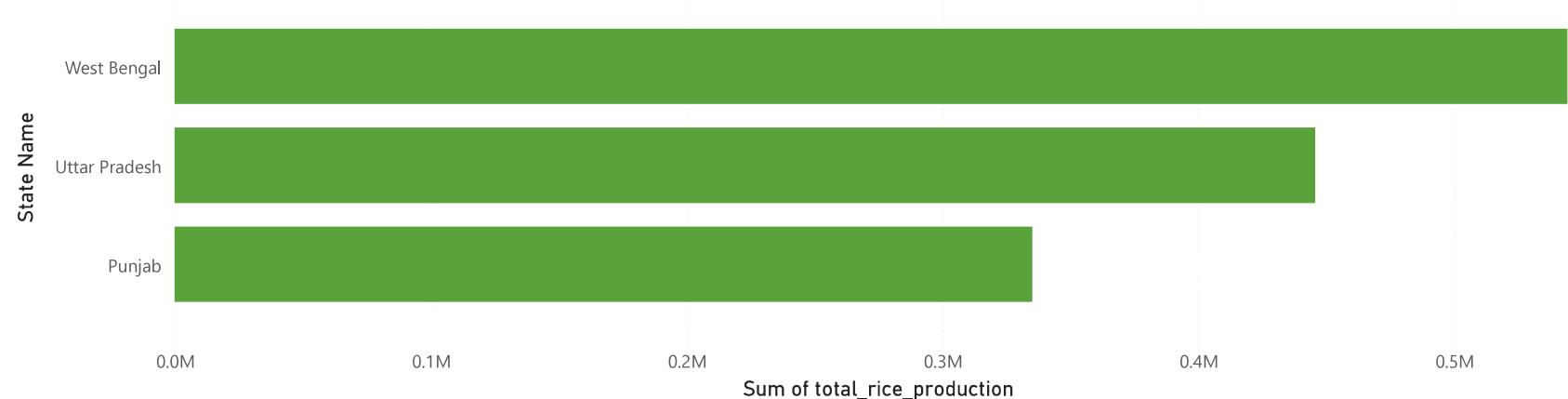


### **Year-wise Trend of Rice Production Across States (Top 3)**



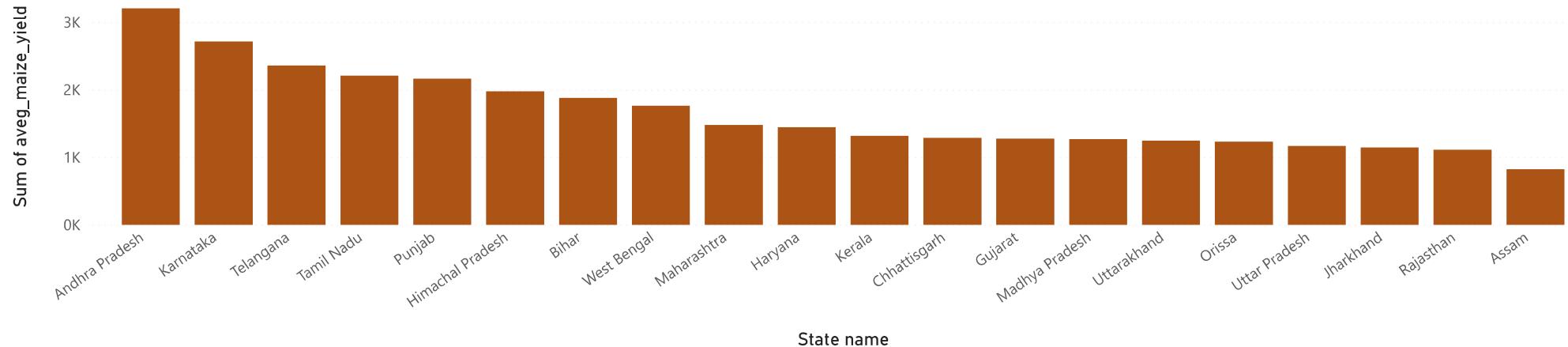
**At 5,44,232.26, West Bengal had the highest Sum of total\_rice\_production and was 62.44% higher than Punjab, which had the lowest Sum of total\_rice\_production at 3,35,040.10.**

**West Bengal had the highest Sum of total\_rice\_production at 5,44,232.26, followed by Uttar Pradesh at 4,45,597.62 and Punjab at 3,35,040.10.**

**West Bengal accounted for 41.08% of Sum of total\_rice\_production.**

**West Bengal had 5,44,232.26 Sum of total\_rice\_production, Uttar Pradesh had 4,45,597.62, and Punjab had 3,35,040.10.**

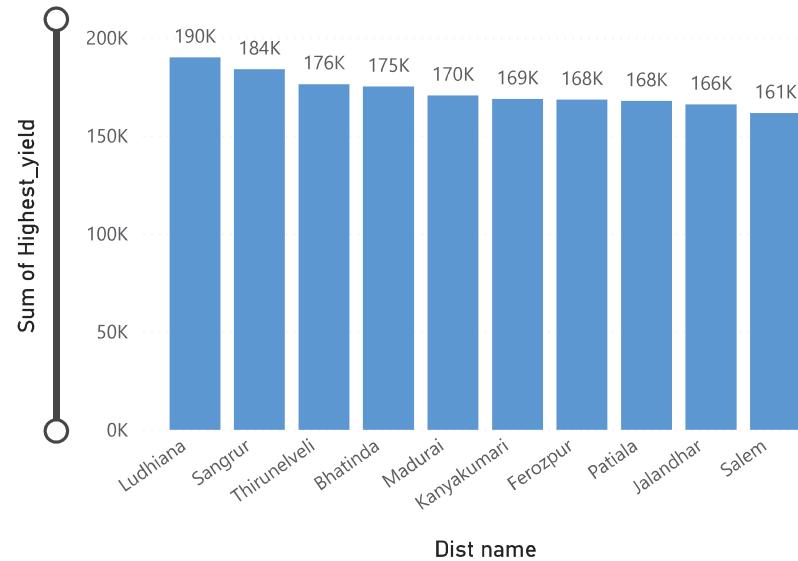
## Annual Average Maize Yield Across All States



At 3,199.90, Andhra Pradesh had the highest Sum of aveg\_maize\_yield and was 291.60% higher than Assam, which had the lowest Sum of aveg\_maize\_yield at 817.14. Andhra Pradesh accounted for 9.70% of Sum of aveg\_maize\_yield.

Across all 20 State name, Sum of aveg\_maize\_yield ranged from 817.14 to 3,199.90.

## Top 10 Districts with the Highest Rice Yield

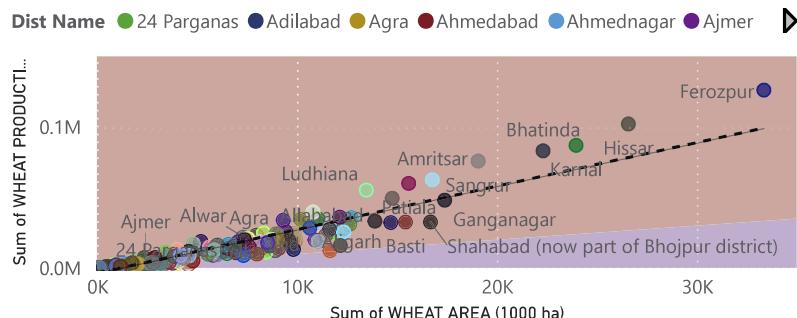


At 1,89,822.57, Ludhiana had the highest Sum of Highest\_yield and was 17.66% higher than Salem, which had the lowest Sum of Highest\_yield at 1,61,334.34.

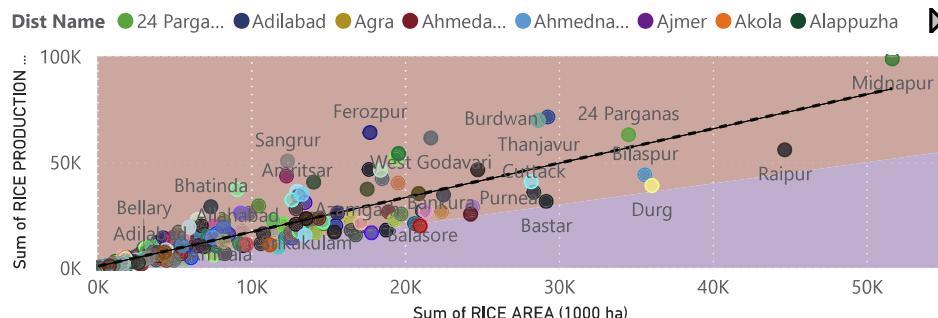
Ludhiana accounted for 11.00% of Sum of Highest\_yield.

Across all 10 Dist name, Sum of Highest\_yield ranged from 1,61,334.34 to 1,89,822.57.

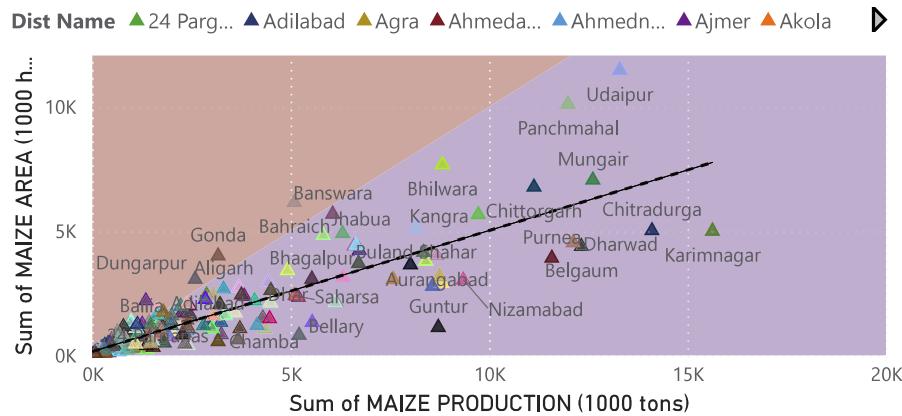
## **WHEAT - district wise correlation**



## **RICE-district wise correlation**



## **MAIZE- district wise correlation**



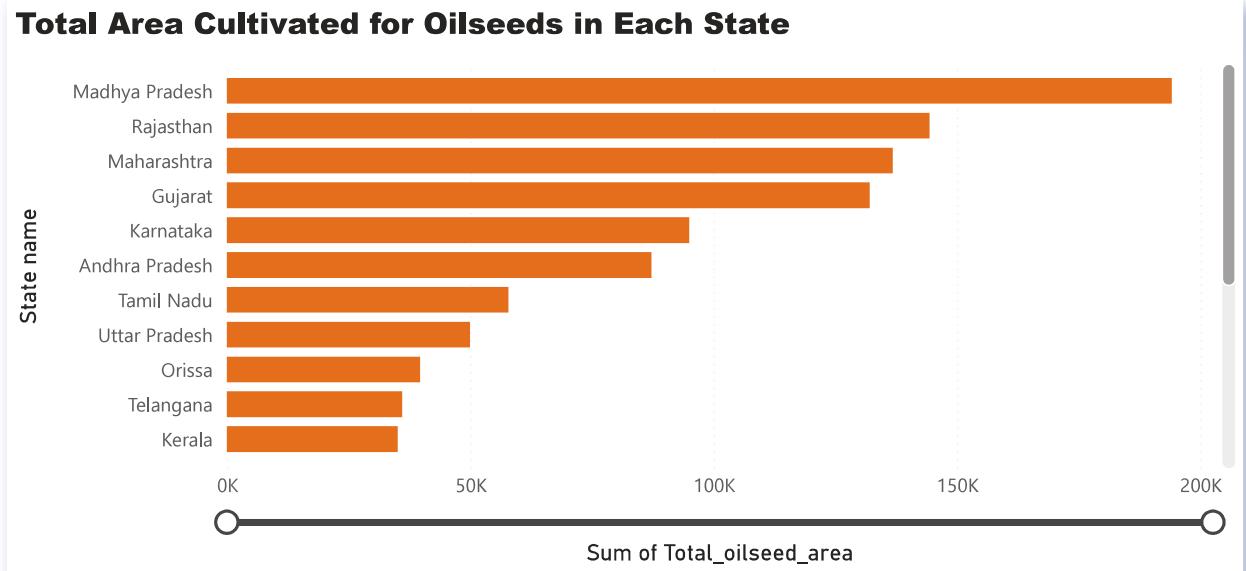
**Strong correlation districts (e.g., Rajkot, Ludhiana, amritsar) are high-efficiency zones across multiple crops.**

- **Weak correlation districts (e.g., guntur, bastar, durg) need closer evaluation — area expansion alone won't guarantee higher yields.**
  - This insight helps evaluators quickly spot where land use is effective and where interventions are needed.

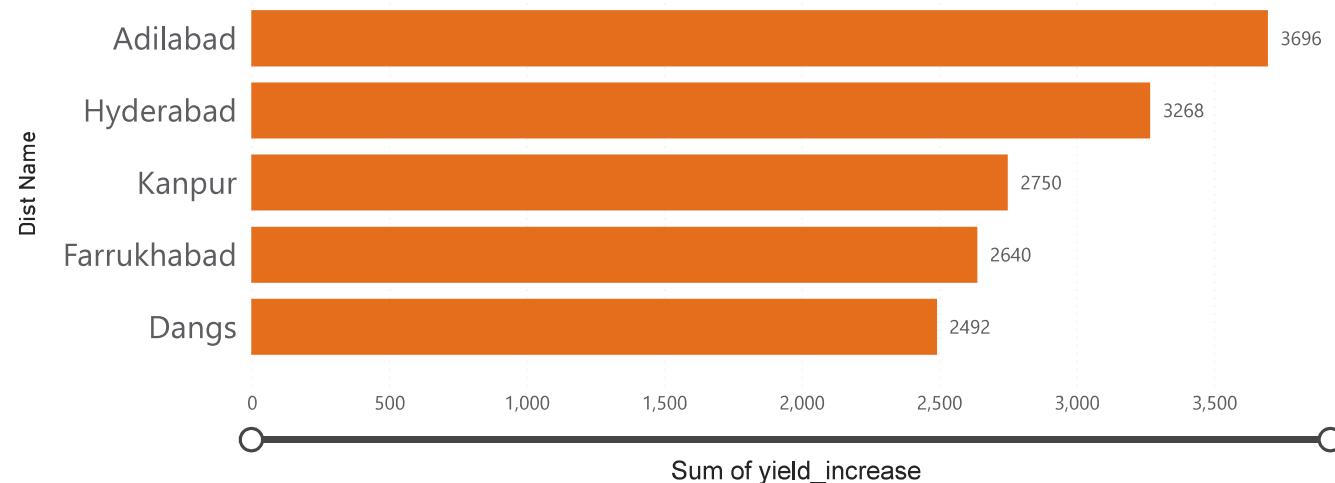
**At 1,94,106.20, Madhya Pradesh had the highest Sum of Total\_oilseed\_area and was 4,270.10% higher than Uttarakhand, which had the lowest Sum of Total\_oilseed\_area at 4,441.69.**

**Madhya Pradesh accounted for 17.29% of Sum of Total\_oilseed\_area.**

**Across all 20 State name, Sum of Total\_oilseed\_area ranged from 4,441.69 to 1,94,106.20.**



### **Top 5 Districts by Wheat Yield Increase Over the Last 5 Years**

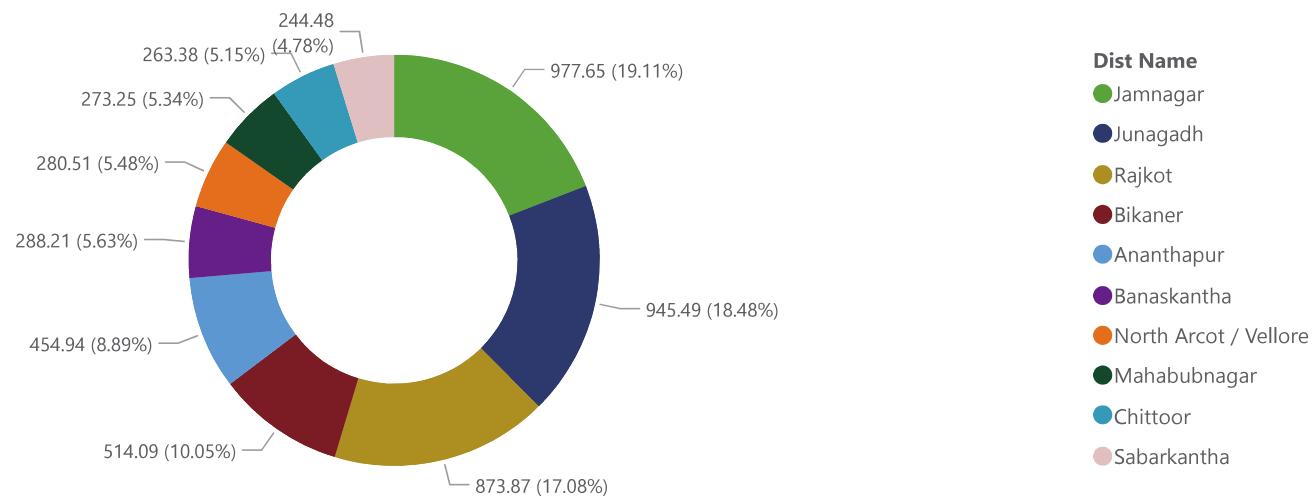


**At 3,696.11, Adilabad had the highest Sum of yield\_increase and was 48.30% higher than Dangs, which had the lowest Sum of yield\_increase at 2,492.38.**

**Adilabad accounted for 24.89% of Sum of yield\_increase.**

**Across all 5 Dist Name, Sum of yield\_increase ranged from 2,492.38 to 3,696.11.**

## Districts with the Highest Groundnut Production in 2017



### Top 3 Districts by Production

- Jamnagar: 377.05
- Junagadh: 354.68
- Rajkot: 334.07

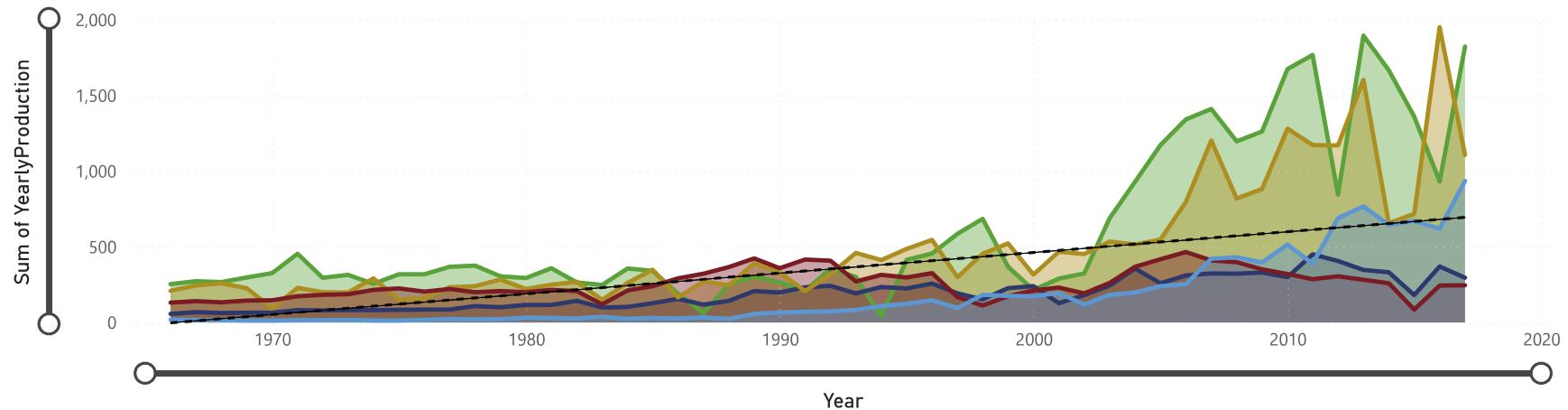
Production is concentrated in western Gujarat, with Jamnagar–Junagadh–Rajkot dominating,

Lowest Producing District: Sabarkantha

Production:  $244.48 \times 1000$  tonnes

## Yearly Production Growth of Cotton in Top 5 Cotton Producing States

State Name ● Gujarat ● Haryana ● Maharashtra ● Punjab ● Telangana



### Long-Term Growth Leaders

- Gujarat shows the most dramatic growth, rising from 456.28 in 1996 to over 1600+ by 2010, and continuing upward — driven by cotton adoption, irrigation expansion, and policy support.
- Maharashtra also shows strong growth, increasing from 545 in 1996 to 1281 by 2010, despite monsoon dependency.

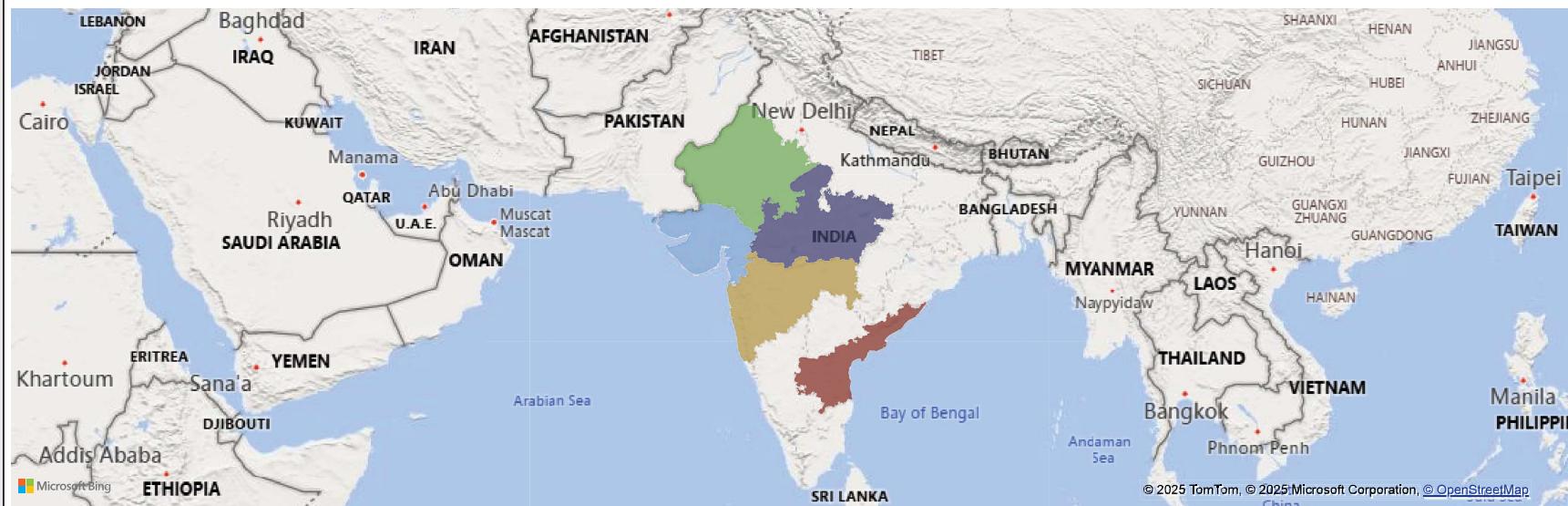
### Emerging Producer

- Telangana starts low (2.64 in 1996) but accelerates post-2000, reaching 515.62 by 2010, likely due to irrigation projects and state-level agri reforms after its formation in 2014.

📈 Low and Stable Producers

## States with the Highest Growth in Oilseed Production (5-Year Growth Rate)

growth ● 609.9 ● 832.98 ● 1045.3 ● 1123.85 ● 1712.4



Gujarat leads with a massive 1712.4 growth, likely driven by expanded groundnut and castor cultivation, improved irrigation, and hybrid seed adoption.

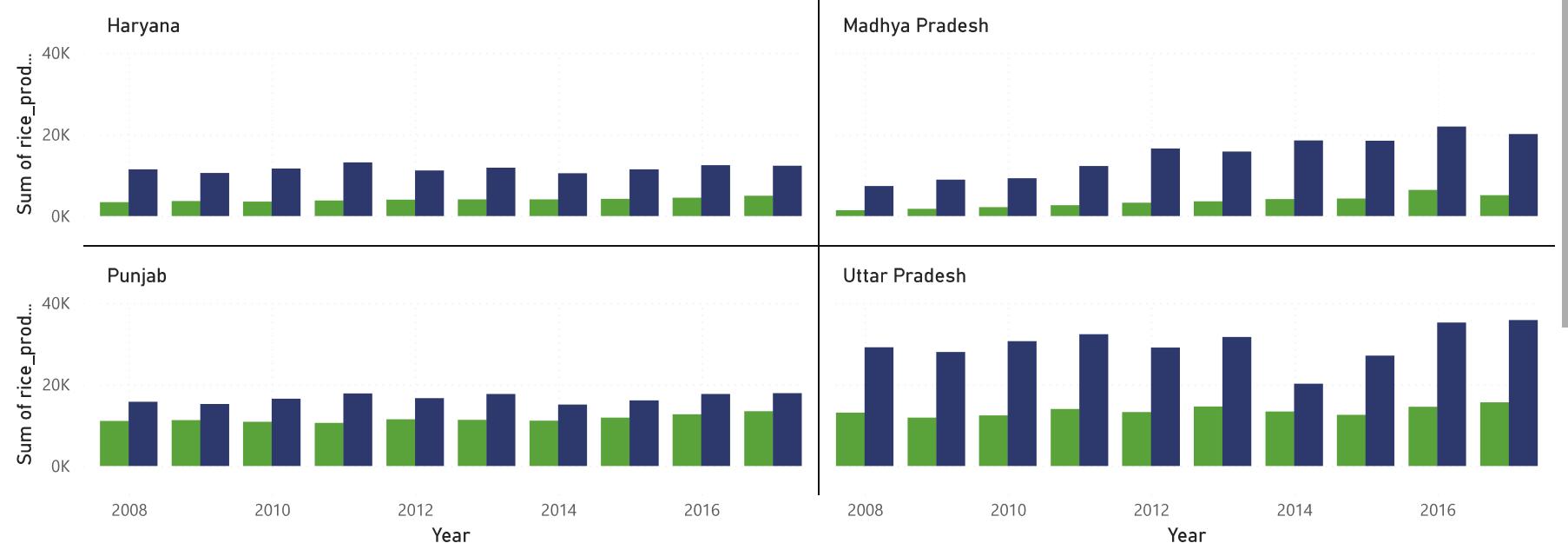
Andhra Pradesh and Maharashtra show strong gains, reflecting diversification into sunflower and soybean, supported by state-level agri schemes.

Madhya Pradesh and Rajasthan round out the top 5, benefiting from increased mustard and soybean acreage.

The data highlights a west-central and southern dominance in oilseed growth, with Gujarat and Andhra Pradesh as standout performers.

## Production of Wheat and Rice for the Top 5 States Over 10 Years

● Sum of rice\_production ● Sum of wheat\_production



### Key Insights by State

#### ● Uttar Pradesh

- Consistently highest producer of both rice and wheat.
- Wheat peaked at ~35,798.6 in 2017; rice at ~15,551.39.
- Shows steady growth in wheat, especially post-2010.

#### ● Punjab

- Strong wheat output, peaking at ~17,830 in 2017.
- Rice production fluctuates but remains high (~13,382 in 2017).