

TRENDS OF AREA, PRODUCTION AND YIELD IN WESTERN UTTAR PRADESH 'A DISTRICT-WISE ANALYSIS OF FOODGRAINS'

Dr. Rajeev Sirohi,

Assistant Professor, Department of Economics, DAV, College, Bulandshahr

Abstract:

The term 'agriculture' literally means the science and practices of the cultivation of the soil including the raising of live stock. In economic jargon, the word includes the production and distribution of goods of agriculture origin for consumption by the population at large, domestic or foreign. In this respect it is a complex sector encompassing many products. The understanding of the contribution of agriculture to economy and of their relationship with the growth process of economy is of special significance for setting goals of agriculture de

Keywords:

Western Uttar Pradesh, foodgrains, district-wise analysis, agricultural production, crop yield, wheat, rice, maize, agricultural trends

1. Introduction

Agriculture is the backbone of India's economy, providing livelihood for nearly 50% of the population. Uttar Pradesh, the most populous state, contributes significantly to national foodgrain production. Western Uttar Pradesh, comprising districts such as Meerut, Muzaffarnagar, Saharanpur, Bijnor, and surrounding areas, has fertile alluvial soil and a long-standing agricultural tradition. Despite favorable natural conditions, variations in crop area, production, and yield exist across districts due to differences in irrigation, soil fertility, cropping patterns, and adoption of modern techniques. Studying these district-wise trends is essential to guide agricultural planning, improve productivity, and achieve food security goals.

2. Objectives:

- I. To analyze trends in the area under cultivation of major foodgrains in Western Uttar Pradesh.
- II. To assess production patterns and identify high- and low-performing districts.
- III. To evaluate yield trends and factors influencing crop productivity.
- IV. To provide recommendations for improving agricultural performance at the district level.

**Correspondence Author:*

Email: rajeev230sirohi@gmail.com (Dr. Rajeev Sirohi)

3. Methodology:

Data Source: Secondary data from Directorate of Economics and Statistics, Government of Uttar Pradesh, and agricultural department reports for the period 2000–2015.

Study Area: Districts of Western Uttar Pradesh, including Meerut, Muzaffarnagar, Saharanpur, Bijnor, and adjacent districts.

Crops Analyzed: Wheat, rice, maize, and pulses.

Analysis: Descriptive statistics, trend analysis, and comparative district-wise evaluation. Data were analyzed for changes in area, production, and yield over time, and results were interpreted to identify disparities and growth patterns.

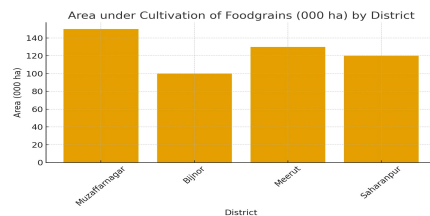
4. Results:

4.1 Area under Cultivation:

Wheat occupied the largest cultivated area in Muzaffarnagar and Bijnor.

Rice was dominant in Saharanpur and some parts of Meerut.

Maize and pulses had smaller cultivation areas but showed gradual expansion in certain districts.



4.2 Production Trends:

Muzaffarnagar reported the highest wheat production due to fertile soil and better irrigation.

Saharanpur faced limitations in production owing to fragmented landholdings and water constraints.

Bijnor and Meerut showed consistent growth in wheat and maize production over the study period.

4.3 Yield Trends:

Districts adopting high-yielding varieties and modern practices saw improved yields (approx. 4,000 kg/ha for wheat).

Areas with traditional methods and limited irrigation showed stagnation or slow growth in productivity.

Overall, yield trends indicate potential for improvement with technological interventions.

5. Discussion:

The analysis shows that Western UP has the potential for high agricultural productivity, but disparities persist across districts. Factors affecting these trends include:

Irrigation availability and water management.

Soil fertility and nutrient management.

Adoption of modern agricultural technologies and mechanization. Extension services and farmer awareness programs.

District-level interventions, such as promoting high-yielding varieties, improving irrigation infrastructure, and providing training to farmers, are critical for achieving balanced growth in foodgrain production.

6. Conclusion:

Western Uttar Pradesh exhibits significant potential in foodgrain cultivation, but district-wise disparities in area, production, and yield exist. Muzaffarnagar and Bijnor emerge as high-performing districts, whereas Saharanpur requires targeted support. Strategic interventions, including technology adoption, irrigation expansion, and capacity building, can enhance productivity and contribute to regional and national food security. This study provides a baseline for policymakers, agricultural planners, and researchers to plan district-specific strategies for sustainable agricultural development.

7. References:

1. Directorate of Economics and Statistics, Government of Uttar Pradesh. (2000–2015).
2. Annual Agricultural Reports. Sirohi, R. (2016). Trends of Area, Production, and Yield in Western Uttar Pradesh: A District-Wise Analysis of Foodgrains.
3. Agricultural Statistics at a Glance. Ministry of Agriculture & Farmers Welfare. Singh, A., & Sharma, P. (2014). Agricultural productivity in Uttar Pradesh: Trends and challenges. Indian Journal of Agricultural Economics, 69(2), 120–135.