

District Wise Analysis of Primary Agricultural Credit Societies in Eastern Uttar Pradesh

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ABSTRACT

Institutional finance plays a crucial role in the development of the agricultural sector by ensuring timely access to formal credit for farmers. In India, Primary Agricultural Credit Societies (PACS) constitute the grassroots institutions of the cooperative credit structure and act as a key source of short-term and medium-term agricultural finance, particularly for small and marginal farmers. This study examines the inter-district variation in the number of (PACS) per lakh of rural population across selected districts of Uttar Pradesh over the period 2000–01 to 2023–24. Using secondary data, the analysis focuses on temporal changes, regional disparities, and consistency in the distribution of (PACS). The findings reveal a gradual decline in the average number of (PACS) during the period of study., indicating a marginal contraction in institutional outreach relative to rural population. However, the declining trend in standard deviation and coefficient of variation during the same period indicates an improvement in regional uniformity over time. District-level analysis shows that Deoria consistently ranks among the top-performing districts in recent years, followed by Pratapgarh and Azamgarh, reflecting relatively better access to cooperative credit institutions. In contrast, Balrampur and Bahraich persistently appear among the bottom-ranked districts, indicating weaker penetration of (PACS). Further results highlight structural shifts, where traditionally high-performing districts like Gonda and Bahraich witnessed declines, while districts such as Amethi improved their rankings in later years. Overall, the study concludes that although disparities across districts have reduced, the declining average points to a need for policy intervention to strengthen the PACS network and enhance financial inclusion in rural areas.

Keywords: Agricultural Sector, Primary Agricultural Credit Societies (PACS), Agricultural Credit, Infrastructure and Stagnation.

INTRODUCTION

Institutional finance forms the backbone of agricultural development by ensuring that farmers have access to timely, affordable, and formal credit necessary for the purchase of inputs, investment in technology, and the management of agrarian risks. Primary Agricultural Credit Societies PACS provide agricultural credit and facilitate input distribution ^[1]. In the Indian context, where a large majority of rural households depend on agriculture for livelihood, formal financial institutions help reduce the over-dependence on informal moneylenders who often charge exorbitant interest rates and contribute to indebtedness among small and marginal farmers ^[2]. Among these institutional sources, (PACS) constitute the foundational layer of the rural cooperative credit structure, serving as the grassroots delivery mechanism for short-term and medium-term loans directly to farmers and rural borrowers ^[3]. They also offer other financial services, thereby enhancing financial inclusion and strengthening the agricultural economy at the village level ^[4]. Given their crucial role in the agricultural credit ecosystem, analysing the district-wise distribution and trends of PACS in Eastern Uttar Pradesh offers valuable insights into regional variations in institutional finance and highlights existing gaps in rural credit accessibility.

LITERATURE REVIEW

Reddy and Naidu (2024) studied cooperative credit reforms and concluded that strengthening PACS through policy support and regional planning can enhance rural credit delivery. The study highlighted PACS as a key pillar for inclusive agricultural finance.

Ministry of Cooperation (2023) documented recent reforms aimed at the computerisation and modernisation of PACS to improve transparency and efficiency. The report emphasised that digitisation could strengthen the role of PACS in institutional agricultural finance.

Sharma (2020) examined the operational efficiency of PACS and observed that poor governance, weak recovery performance, and lack of professional management hinder their effectiveness. The study suggested institutional reforms to strengthen cooperative credit delivery.

Mohanraj (2017) examined the role of institutional credit in Indian agriculture and found that formal financial institutions significantly contribute to agricultural productivity by reducing dependence on informal moneylenders. The study emphasised the importance of timely and adequate credit for farm investment and input use.

Keeping the above view in mind it is clear that study have been done in various aspects but district-level analysis of Primary Agricultural Credit Societies in Eastern Uttar Pradesh remains largely unexplored.

Objective of the Study:

- To analyse the trends of district wise Primary Agricultural Credit Societies per lakh of rural population in Eastern Uttar Pradesh
- To analyse state of stability of Primary Agricultural Credit Societies per lakh of rural population in Eastern Uttar Pradesh

METHODOLOGY:

Area of the study: Uttar Pradesh is divided into four regions: Eastern Region, Western Region, Central Region and Bundelkhand Region. This paper examines the industrial performance in Eastern Regions of Uttar Pradesh. Eastern Region has twenty-eight districts i.e. Pratapgarh, Kaushambi, Prayagraj, Ayodhya, Ambedkar Nagar, Sultanpur, Amethi, Bahraich, Shrawasti, Balrampur, Gonda, Siddharth Nagar, Basti, Sant Kabir Nagar, Mahrajganj, Gorakhpur, Kushinagar, Deoria, Azamgarh, Mau, Ballia, Jaunpur, Ghazipur, Chandauli, Varanasi, Bhadohi, Mirzapur and Sonbhadra.

Data Source: Data have been collected from various government sources such as District wise development Indicator

Period and Points of Time: This study utilizes secondary data to examine the Primary Agricultural Credit Societies during the period from 2000-01 to 2024.

Method of the Study: The present study adopts a descriptive and analytical research design to examine the district-wise trends in institutional credit to the Primary Agricultural Credit Societies per lakh of population in Eastern Uttar Pradesh.

To examine the trend behaviour, district-wise trend analysis has been carried out across the five reference years, enabling the identification of fluctuations in primary agricultural credit societies. Further, to assess the level and stability of credit flow, statistical measures such as average (mean) and coefficient of variation (CV) have been computed for (PACS).

Average represents the central tendency of number Primary Agricultural Credit Societies over the selected time periods.

$$\text{Mean} = \frac{\sum_{i=1}^n X_i}{n}$$

Where: X_i = No. of Primary Agriculture Credit Society i^{th} year

n = Number of points of time

\sum = Summation of observations

Coefficient of Variation (CV)

The Coefficient of Variation indicates the degree of variability or instability in agriculture to credit societies relative to the mean.

$$CV = \frac{SD}{Mean} \times 100$$

Where:

CV= Coefficient of Variation

SD= Standard Deviation

Analysis of the study:

District wise Trends of No. of PACS per lakh of rural population: Table 1 shows the district-wise trends in the number of PACS per lakh of rural population from 2000–01 to 2023–24. The table indicates that in most districts, the availability of PACS per lakh of rural population has either declined or remained stagnant over the study period. In the early years, particularly in 2000–01, several districts such as Gonda, Bahraich, Azamgarh and Deoria recorded relatively higher PACS density; however, over time these figures declined due to population growth, institutional consolidation, or limited creation of new societies. Many districts, including Basti, Mau, Mirzapur and Chandauli, show a stagnant trend with almost unchanged values across years, reflecting inadequate expansion of the cooperative credit infrastructure. A few districts such as Faizabad, Allahabad, Varanasi and Pratapgarh display marginal improvement in recent years, possibly due to revival measures, restructuring and digitisation of PACS. Overall, the trend suggests that although PACS continue to operate across rural areas, their growth has not kept pace with the increasing rural population, resulting in uneven and insufficient access to cooperative agricultural credit at the district level.

Table 2 highlights the top and bottom five districts in terms of the number of PACS per lakh of rural population across different years. Districts such as Deoria, Azamgarh, Pratapgarh and Gonda consistently appear among the top performers, indicating a relatively stronger cooperative credit presence. In contrast, Balrampur, Bahraich, Varanasi, Ravidas Nagar and Maharajganj frequently remain in the bottom group, reflecting persistent regional disparities and uneven access to cooperative agricultural credit over time.

Table- 1: District wise Trends of No. of Primary Agricultural Credit Societies per lakh of rural population in Eastern Uttar Pradesh

District	2000-01	2011-12	2014-15	2019-20	2022-23*	2023-24
Pratapgarh	6.38	6.07	6.07	5.74	5.74	6
Kaushambi	5.94	4.41	4.41	4.34	4.34	4.41
Allahabad	3.92	4.66	4.66	4.62	4.62	4.71
Faizabad	3.78	4.94	4.94	3.71	3.71	5.02
Ambedkar Nagar	5.23	5.72	5.72	5.01	5.01	5.01
Sultanpur	5.79	5.26	5.26	3.94	3.94	5.08
Amethi	5.48	5.48	5.53
Bahraich	6.5	3.45	3.48	3.43	3.43	3.46

Shrawasti	4.99	4.18	4.18	4.17	4.17	3.99
Balrampur	4	3.28	3.28	3.13	3.13	3.13
Gonda	8.2	5.18	5.18	5.17	5.17	5.02
Siddharth Nagar	6.22	5.31	5.31	5.29	5.29	5.17
Basti	5.22	4.99	4.99	4.99	4.99	4.99
Sant Kabir Nagar	5.82	5.23	5.36	5.23	5.23	5.23
Mahrajganj	4.43	3.79	3.79	3.76	3.76	3.76
Gorakhpur	5.04	5.3	5.3	5.3	5.3	5.22
Kushinagar	4.97	4.27	4.27	4.24	4.24	4.27
Deoria	6.81	6.65	6.65	6.68	6.68	6.57
Azamgarh	7.03	5.92	5.92	5.95	5.95	5.92
Mau	5.67	5.39	5.39	5.39	5.39	5.39
Ballia	5.99	5.65	5.65	5.62	5.62	5.45
Jaunpur	5.31	5.48	5.48	5.47	5.47	5.01
Ghazipur	5.96	5.43	5.43	5.44	5.44	5.44
Chandauli	5.06	4.86	4.86	4.85	4.85	4.85
Varanasi	2.98	4.51	4.51	4.52	4.52	4.47
Ravidas	3.84	3.92	3.92	3.85	3.85	3.85
Mirzapur	4.11	4	4	4	4	4
Sonbhadra	4.16	4	4	4.13	4.13	4

Source: District wise Development Indicator

Table- 2: Top five and Bottom Five District in Primary Agricultural Credit Societies per lakh of rural population in Eastern Uttar Pradesh

	Sr. NO	2000-01	2011-12	2014-15	2019-20	2022-23*	2023-24
Top- 5	1	Gonda	Deoria	Deoria	Deoria	Deoria	Deoria
	2	Azamgarh	Pratapgarh	Pratapgarh	Azamgarh	Azamgarh	Pratapgarh
	3	Deoria	Azamgarh	Azamgarh	Pratapgarh	Pratapgarh	Azamgarh
	4	Bahraich	Ambedkar Nagar	Ambedkar Nagar	Ballia	Ballia	Amethi
	5	Pratapgarh	Ballia	Ballia	Amethi	Amethi	Ballia
Bottom- 5	1	Varanasi	Balrampur	Balrampur	Balrampur	Balrampur	Balrampur
	2	Faizabad	Bahraich	Bahraich	Bahraich	Bahraich	Bahraich
	3	Ravidas	Mahrajganj	Mahrajganj	Faizabad	Faizabad	Mahrajganj
	4	Allahabad	Ravidas	Ravidas	Mahrajganj	Mahrajganj	Ravidas
	5	Balrampur	Mirzapur	Mirzapur	Ravidas	Ravidas	Shrawasti

Source: Table- 2 is based on Table- 1

State of Stability in availability of Primary Agricultural Credit Societies per lakh of rural population in Eastern Uttar Pradesh: Table 3 indicate a gradual decline in the average number of PACS per lakh of rural population over the study period. The mean value decreased from 5.309 in 2000–01 to 4.766 in 2019–20 and 2022–23, showing that the expansion of PACS has not kept pace with the growth of rural population. Although there is a slight improvement in 2023–24 (4.820), the average level remains below that of the initial period. The standard deviation declined from 1.182 to 0.802, indicating a reduction in inter-district variation in PACS availability. This is further supported by the coefficient of variation (CV), which fell from 22.27 per cent in 2000–01 to 16.65 per cent in 2023–24, suggesting that disparities across districts have narrowed over time. However, the decline in variability appears to be due more to an overall reduction and stagnation in PACS density rather than substantial improvement in lagging districts, highlighting the need for renewed policy focus on strengthening and expanding cooperative credit institutions in rural areas.

Table-3 Statistical Measure of Primary Agricultural Credit Societies per lakh of rural population in Eastern Uttar Pradesh

Statistical Measure	2000-01	2011-12	2014-15	2019-20	2022-23	2023-24
Average	5.309	4.883	4.889	4.766	4.766	4.820
SD	1.182	0.835	0.835	0.853	0.853	0.802
CV	22.266	17.094	17.083	17.897	17.897	16.649

Source: Calculated by author, Data Available on District wise Development Indicator

Figure- 1: Statistical Measure of Primary Agricultural Credit Societies per lakh of rural population in Eastern Uttar Pradesh

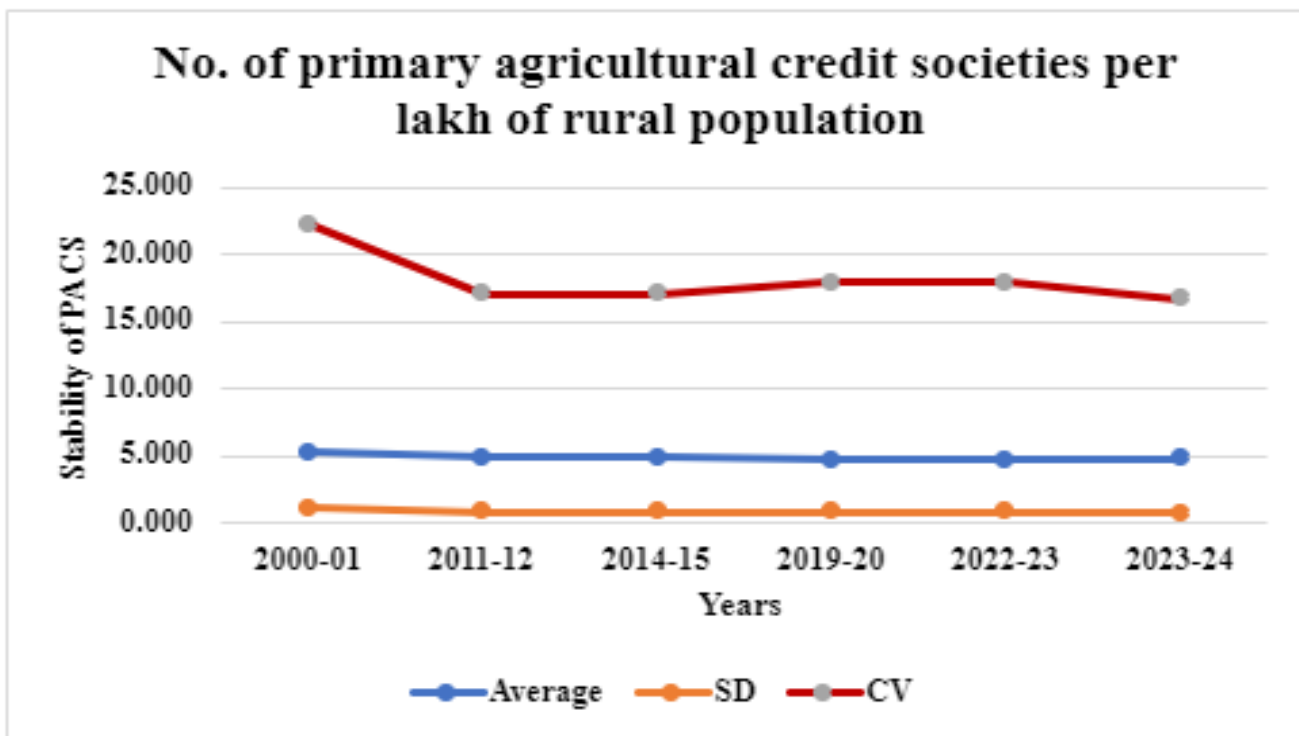


Figure- 1 is based on Table- 3

CONCLUSION

The present study examined the district-wise trends in the availability of PACS in Eastern Uttar Pradesh to understand their role in institutional agricultural finance. The analysis reveals that although PACS continue to serve as an important grassroots financial institution, their expansion has not kept pace with the growth of rural population. The declining or stagnant average number of PACS per lakh of rural population indicates structural limitations in strengthening the cooperative credit network across districts.

Significant inter-district variations were observed, with a few districts consistently performing better in terms of PACS availability, while several others remained persistently under-served. Although recent years show marginal improvement and reduced variability across districts, this convergence appears to be driven more by stagnation than by substantial institutional expansion. The findings suggest that mere presence of PACS is insufficient unless accompanied by effective functioning, governance reforms, and population-adjusted institutional planning.

The study underscores the need for targeted district-level strategies, including revitalisation, modernisation, and equitable distribution of PACS, to enhance institutional credit access in the agricultural sector of Eastern Uttar Pradesh. Strengthening PACS can play a crucial role in promoting financial inclusion, supporting agricultural productivity, and ensuring sustainable rural development in the region.

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