Comparative Performance of MGNREGA in Eastern and Western Uttar Pradesh

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Abstract*: The eastern and western parts of the Uttar Pradesh plains have always shown different patterns and levels of development throughout the post-independence period, whether it was the adoption of new technology, public investment, irrigation, or cropping patterns. In fact, such regional differences in these two regions existed even during the colonial period. In this historical context, the present study evaluates MGNREGA performance in Ballia and Meerut districts of eastern and western Uttar Pradesh. It highlights the similarities and contrasts in the performance of the programme in terms of outreach, demand patterns, employment provision, person-days generated, and social inclusion of disadvantaged groups such as women and scheduled caste/scheduled tribe. Official MGNREGA data were used for the comparative analyses of the two districts. The data were analysed by computing the triennium averages for the three-year period (2022-23, 2023-24 and 2024-25). The study finds that in Ballia, MGNREGA is an integral part of the livelihood strategies of the labour households and functions as a core stabilising institution. On the other hand, in West Uttar Pradesh districts such as Meerut, which are more diversified in terms of employment, the programme generally operates as a supplementary and residual safety net to which the labour households resort in adverse times. In both districts, the monthly pattern of demand is synchronised with the rhythms of the agricultural production cycle.*

Keywords: East Uttar Pradesh, Labour market, MGNREGA, Social inclusion, West Uttar Pradesh.

INTRODUCTION

The eastern and western parts of Uttar Pradesh (UP) have always shown different patterns and levels of development throughout the post-independence period, whether it was the adoption of new technology, public investment, irrigation, or cropping patterns. Such regional differences existed even during the colonial period. As Eric Stokes (1978, 1982) and Ian Stone (1984) have argued, the development of irrigation systems in Western UP through the Ganges Canal was crucially responsible for the transformation of this region in terms of increased production of wheat and cash crops like sugarcane. This region has also witnessed certain innovations in sugarcane technology. The canal system also stimulated trade by reducing the cost of transportation. The construction of railways in the 1850s coincided with the expansion of the agricultural frontier, and together they resulted in the emergence of this region as a commercial and trade centre (Etienne, 1968, p 294: Stokes, 1978).

In addition, the sharp differences between the land revenue systems in Eastern and Western UP during the colonial period also influenced the nature of development in both regions. The permanent settlement in Eastern UP and the Mahalwari and Bhaichara systems in the West led to structural divergences which continued even in the post-Independence period, even through the period of the Green Revolution in the 1960s (Stokes, 1978; Bhaduri, 1985).

Such divergence between East and West UP can provide a historical background as well as an important framework to study the present-day situation concerning rural employment under the Mahatma Gandhi National Rural Employment Guarantee Act of 2005 (MGNREGA) which guarantees employment for at least 100 days to every willing rural household. Gram panchayats are obligated to provide employment within a fortnight of a household raising a demand; otherwise, they have to provide an unemployment allowance. Although this employment scheme is implemented under a uniform statutory framework across the country, local agrarian structures, labour market diversification, and income levels play an important role in determining its direction. Here, we analytically compare the districts of Ballia (Eastern UP) and Meerut (Western UP) to assess whether the inherited historical structural differences continue to shape public employment outcomes.

LITERATURE REVIEW

Scholars have explained regional and local differences within UP by focusing on ecological and institutional factors.According to Stokes (1978, 1982), varying land revenue settlements played an important role in deciding different agrarian relations. He also argued that

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people's responses to commercialisation and investment choices were shaped by institutional arrangements. Ian Stone (1984) emphasises the role of canal irrigation as crucial to agrarian relations and technological innovations which tended to stimulate crop diversification with reduced risk in West UP.

Abhijit Banerjee and Lakshmi Iyer (2005) add another dimension to it by strongly emphasising the role of colonial institutions as determining factors even in post-colonial situation. They sharply differentiate between the landlord (zamindari) and non-landlord (ryotwari/ mahalwari) districts in British India and argue that zamindari areas were marked by deficient agricultural investment and weaker public goods provision compared to non-landlord areas, resulting in lower long-run development outcomes. They argue that even several decades after independence, continuing elite control and exploitative institutions in erstwhile landlord-dominated areas jeopardised broad-based rural development. Thus, in their view, the reason for the persistent divergence between East and West UP is neither ecological nor technological difference but rather the institutional hangover which was responsible for different agrarian relations, labour market organisation, and the capability of the state to intervene.

These institutional and structural factors, which emerged during the colonial period, continued into the post-independence period when the western districts responded more positively to the Green Revolution in the 1960s and quickly adopted the high-yielding varieties (HYVs) of wheat, supported by higher irrigation intensity, better credit infrastructure, and market integration (Bhaduri, 1985). In contrast, the eastern districts showed a slow response to crop innovation because of weaker institutional support and fragmented landholdings. This led to a slower and lower productivity increase in East UP compared to the West.

With respect to MGNREGA, existing research broadly identifies three determinants of programme performance: (i) economic need and social inclusion, (ii) administrative capacity, and (iii) wage competitiveness vis-à-vis agricultural labour markets. Evidence suggests that labour-surplus and agriculturally stagnant regions show higher participation, while relatively developed regions treat the program as a supplementary safety net. However, there are limited studies on intra-state regional comparisons of the same. This study brings together a long-run historical comparative framework of eastern and western UP to understand the contemporary district-level MGNREGA performance.

METHODOLOGY AND DATA

This is a quantitative study which relies primarily on district-level administrative data from the official MGNREGA Management Information System (MIS) for the period 2021–22 to 2024–25. To stabilise short-term fluctuations, indicators are computed as Triennium Ending (TE) 2025 averages.

To contextualise MGNREGA outcomes within broader agrarian and labour market conditions, the analysis also draws on data from the Census of India, Agricultural Census, Ministry of Agriculture, and Farmer Welfare Directorate of Economics, Statistics and Evaluation Division, and UPDES. These sources are used to construct a basic socioeconomic profile of the two districts and to compare MGNREGA wages with the prevailing agricultural wage rates.

Ballia and Meerut are selected to represent contrasting agrarian and labour market structures within the same state, thereby holding constant the broad policy and institutional framework of MGNREGA implementation. According to official statistics (UPDES, 2024), Meerut is number 5 (top five districts) in terms of Per Capita net domestic product, whereas Ballia is 73 position and is among the bottom five districts.

These districts are structurally contrasting in agrarian characteristics, such as the proportion of agricultural labourers, average size of land holdings, percentage of area under irrigation, and larger area under food crops (Table 1), allowing the identification of structural determinants of MGNREGA participation.

The analysis adopts a descriptive and comparative framework across five main dimensions: (i) participation and demand, (ii) employment intensity, (iii) seasonal volatility using the Coefficient of Variation (CV) and Seasonal Dependence Ratio (SDR), (iv) social inclusion, and (v) labour market linkages and administrative efficiency. The SDR is calculated as the proportion of annual employment demand concentrated in the peak agricultural transition months (June, July, November, and December).

$$SDR = \frac{Demand\ (June + July + November + December)}{Total\ Annual\ demand}$$

Statistical ratios and percentages were used for comparative analyses.

This intra-state comparison allows the study to isolate how regional economic structure and labour market conditions shape the demand for and outcomes of MGNREGA with uniform policy implementation across the state.

Table 1: Socio-Economic and Agrarian Profile of Study Districts

Indicator	Ballia	Meerut	UP
Total population (2011)	3240000	3444000	199812000
% of Rural population	90.61	48.92	77.73
% of Urban Population	9.39	51.08	22.27
% of SC+ST population	18.67	18.22	21.27
Females per 'ooo (2011)	937	886	912
Average landholding (ha)	0.61	0.99	0.73
% of Gross Irrigated area2022-23	78.96	99.42	80.86
Cropping Intensity (2022-23)	185.77	168.93	176.05
Dominant crops	Wheat, Rice	Wheat, Sugarcane	Wheat,Rice ,MaizeSugarcane
% of main agricultural Labourers to total main workers	28.30	12.60	21.84
Annual Per capita NDP at current price (22-23)	42152	129751	83636

Source: GOI, Census (2011), Government of Uttar Pradesh (2024)

DISCUSSION

Participation and Demand: Ballia and Meerut show sharp contrasts in terms of outreach and participation (Table 2). 74 per cent of rural households (HHs) in Ballia have job cards, whereas in Meerut, only 19 percent have job cards.

Approximately 64 percent of UP as a whole possess job cards. This highlights the contrasting penetration of public work programs in Ballia and Meerut.

However, active participation was significantly lower in both districts. 43 percent in Ballia and only 10 percent in Meerut compared to 46 percent in UP as a whole. More importantly, out of the total job card holders 59 percent and 53 percent, respectively, are active in Ballia and Meerut compared to 68 percent at the state level (Table 2, row 4). Thus, both districts show that roughly 40 to 47 percent of job cards remain inactive and act as safety valves.

Analysing the demand for work shows that 26 and 7 percent of HH in Ballia and Meerut, respectively, demanded work. This indicates that in Meerut, most rural HHs have low reliance on MGNREGA work due to the greater availability of non-farm employment or allied activities.

Table 2: Coverage of MGNREGA: Job-Cards and Households

Districts/ State	Ballia	Meerut	UP
% of HH issued job cards to Rural HH	0.74	0.19	0.64
% of active job-cards to Toral Rural HH	0.43	0.1	0.46
% of HH demanded work to Rural HH	0.26	0.07	0.29
% job card active out of all Job card issued	59	53	68

Source: MGNREGA reports. (2022-23-2024-25). All figures are for TE 2025.

Demand for Work and Employment Provision (Table 3): Further insights are provided when we analyse job card holders. *Among these, 36 percent in Ballia and 37 percent in Meerut demanded work.The same percentage was 44 for the state. This shows that, on average, approximately one-third of the Jocard holders demand work in both districts. Although in Meerut, the number of job card holders is significantly lower than in Ballia.*

The most promising highlight is the state's capacity to fulfil demand. It was found that 91 percent of HHs in Ballia and 90 percent in Meerut who demanded work were provided employment (91 percent for UP). This indicates that the state is equally efficient and responsive in both districts in providing employment against demand. The basic difference arise from variations in demand and not from State response.

Table 3: Demand for Work and Employment Provision

District/ State	Ballia	Meerut	Total UP
% of job card holder HH demanded work	36%	37%	44%
% of HH availed work to demanded work	91%	90%	91%

Source: MGNREGA reports. (2022-23-2024-25). All figures are for TE 2025.

The generated person-days were 4.72 million and 0.87 million in Ballia and Meerut, respectively (Table 4). *The ratio of person-days in Ballia to that in Meerut is approximately 100:18, which clearly shows the contrast in demand patterns in the two districts.*

However, those who were provided employment were employed for an average of 46 and 51 days in Ballia and Meerut, respectively, which is close to the state average of 49 days. This indicates that in Meerut, participation is limited, but the duration of employment is marginally longer.

The number of households that completed 100 days of work is very low in both districts and the state as a whole. It is only 5, 6 and 8 percent in Ballia, Meerut, and UP respectively. This suggests that MGNREGA issued a supplementary source of income and employment in the entire state.

General appraisal shows different patterns for the study districts, where relatively backward and less diversified Ballia demonstrates a high rate of participation, higher demand, and employment generation, signifying greater dependence on MGNREGA. Meerut,on the other hand, exhibits significantly lower participation, lower person-days generated, but marginally higher intensity of employment for participating persons.

Table 4:Employment Intensity in MGNREGA

District/ State	Ballia	Meerut	UP
Total persondays Generated	4722276	870106	330932513
Average days perHH	46.34	51.22	48.71
% of HH completed 100 days to HH employed	5%	6%	8%
Ratio of persondays generated in Ballia to Meerut	100/18		

Source: MGNREGA reports. (2022-23-2024-25). All figures are for TE 2025.

Seasonal Volatility and Seasonal Dependence

To assess intra-year labour dynamics and demand patterns more comprehensively, the Coefficient of Variation (CV) and Seasonal Dependence Ratio (SDR) were calculated. The CV measures the degree of monthly variation from the annual mean, whereas the SDR measures the proportion of annual employment concentrated in off-peak agricultural months, taken as June-July (post-Rabi harvest and before Kharif sowing period) and November-December (post-harvest transition period) based on the agrarian crop cycle in Uttar Pradesh.

The SDR is 0.43 for Ballia and 0.39 for Meerut in TE 2024-25. This indicates that approximately 40-43 percent of the annual work demand in both districts is generated in the four off-peak agricultural months, making the MGNREGA program the fall-back option in both eastern and western districts of UP. It also confirms that the work demanded by rural households fluctuates according to the rhythms of the agricultural production cycle. The month-to-month fluctuations in labour demand are not random and move up and down with agricultural activity. The SDR values confirmed this observation.

The CV for Ballia and Meerut are also comparable, with values of 0.40 and 0.45 in TE 2024-25. This indicates similar levels of volatility across months in both districts. This similarity shows that seasonality and volatility are important features of rural labour markets in less and more developed regions. Higher irrigation intensity and economic diversification have not been able to reduce seasonality but have affected the scale of the programme.

In sum, both measures show that the monthly demand patterns are similar across both districts, but the

intensity of participation differs due to structural and institutional differences.

Social Inclusion and Gender under MGNREGA: (Table 5)

Three key indicators are examined in this section: (i) job card activation rates among women, (ii) women's participation among active workers, and (iii) the share of Scheduled Caste (SC) and Scheduled Tribe (ST) workers among active workers.

Gender Participation: Intensity and outreach*: 46 and 37 percent of all active workers in Ballia and Meerut, respectively, are women, which is significantly higher than the statutory requirement of 33 percent. Active female participation relative to rural households stands at 20 percent in Ballia but only 3 percent in Meerut.*

This distinction shows that in Ballia, MGNREGA has been very inclusive for women and has become a part of their livelihood strategies, successfully complementing agricultural labour markets in an economy with higher landlessness, lower irrigation intensity, less diversification, and limited non-farm opportunities. The response of women to the employment guarantee programme has been encoraging.

In contrast, female participation in Meerut remains limited. Western districts of UP, such as Meerut, have a low female count but also have a more diversified economic structure and supplementary livelihood options(Table 1). Dairying is an important supplementary source of self-employment in Meerut, where women contribute substantially to livestock-related activities (Rajni, 2007). Gainful employment within the home is one of the important reasons for the lower participation of women in public work programs.

This gender participation gap in Ballia (20 percent) and Meerut (3 percent) shows that the response of women to the public employment programme is different in regions with different agrarian structures. In structurally vulnerable districts, women's labour supply responds more actively to employment guarantee programmes, while in relatively diversified western districts, alternative opportunities and social norms have resulted in limited response.

Social Inclusion: SC/ST Participation: For TE 2025, SC/ST job card holders out of the total job card holders are 25 and 4 percent in Ballia and Meerut respectively, compared to 32 percent for UP as a whole. Although Meerut shows greater inclusivity of SC/ST HHs in proportional terms, it must be interpreted by looking at the programme's outreach and demographic composition.

As far as the social base is concerned, both districts have approximately 18 percent of the population belonging to the SC/ST category (Table 1). However, if we analyse social inclusion in terms of participation relative to total rural households, the pattern is reversed. The percentage of active SC/ST workers to total rural HHs is 11 percent in Ballia and only 4 percent in Meerut, whereas the state average is15 percent. This implies that although SC/ST workers constitute a higher proportion of active workers in Meerut, in terms of absolute numbers, the participation of these households in the programme is very limited.

In contrast, Ballia exhibits deeper programme outreach across rural households. Even though only 25 percent of SC/ST workers hold job cards, the overall participation rate is much higher which ensures greater diffusion of the programme among the disadvantaged sections. In absolute terms, a larger group of SC/ST households in Ballia is able to access employment under MGNREGA than in Meerut.

Table 5: Gender and Social Inclusion under MGNREGA

District/ State	Ballia	Meerut	UP
% of active SC/ST to Total Rural HH	11	4	15
% of SC/ST HHs issued Job-card to all Job-card HH	25	41	32
% of SC/ST HH provided employment out to all HHs provided employment	24	45	32
% of active women to Total Rural HH	20	3	19
% of women provided employment to all persons provided employment	46	37	40

Source: MGNREGA reports.(2022-23-2024-25). All figures are for TE 2025.

Labour market linkages: Participation patterns are further clarified when we analyse agricultural and MGNREGA wages. A comparison of paid MGNREGA wages with prevailing agricultural wages for field labourers reveals that market agricultural wages exceed programme wages in both Ballia and Meerut for both genders (Table 6). The wage ratios (agricultural wage divided by MGNREGA wage) are 1.64 for men and 1.53 for women in Meerut, compared to 1.39 for both men and women in Balliafor the TE 2024

This implies that agricultural wages in Meerut are 53-64 percent higher, whereas the same wage differential is 39 percent in Ballia.The larger wage differential in Meerut explains the low demand for MGNREGA employment whenever other work is available. On the other hand, in Ballia, the smaller wage differential narrows the opportunity cost of participating in public works, thereby explaining higher participation in the programme.

Another important feature of wage comparison is gender. MGNREGA mandates equal wages for men and women, and in Ballia, the agricultural wage data show parity between male and female field wages, whereas in Meerut, the gender wage gap is persistent.

This pattern shows that the uniform wages across gender under MGNREGA reinforce similar wage parity in the agricultural labour market because of its deeper reach in a relatively lessdiversified lower-wage markets such as Ballia. In more developed agricultural regions, such as Meerut, gender segmentation continues, and the program is ineffective in influencing the wage structure.

Table 6: MGNREGA and Agricultural Wages

Wage	State/ District	Male	Female
MGNREGA Wage (₹)	UP	216	216
Average Daily Agricultural Wages for field labour (₹)	Meerut	353	331
	Ballia	300	300
Wage Ratio (Agri./ MGNREGA)	Meerut	1.64	1.53
	Ballia	1.39	1.39

Source: AWI and MGNREGA reports.(2021-22 to 2023-24). All figures are for TE 2024.

Table 7: Administrative Performance Indicators

Indicator	Ballia	Meerut	UP
% payments delayed >15 days	0.32	8.94	0.81
% of Work completion rate since inception	90.61	88.7	90.36
Fund utilisation (%)	100.89	100.59	100.18

Source: MGNREGA reports. (2022-23-2024-25). All figures are for TE 2025.

Administrative performance (Table 7) shows that the proportion of delayed payments beyond 15 days is only 0.3 percent in Ballia compared to 8.94 percent in Meerut. The work completion rates and fund utilisation were similar in both districts. Overall, the results indicate that the structural agrarian conditions and labour market diversification are the primary reasons for the inter-district variation in MGNREGA performance and not the administrative capacity of the district. The historical institutional divergence identified by Stokes (1978, 1982) and Stone (1984) continues to influence contemporary welfare engagement.

CONCLUSION

In this study, we showed that despite its uniform statutory provisions, the implementation of MGNREGA varies significantly across different regions in UP, depending on specific local institutional structures and agrarian relations. In East UP districts such as Ballia, which is a labour-surplus area, the MGNREGA is an integral part of the livelihood strategies of the labour households and functions as a core stabilising institution. In contrast, in West UP districts such as Meerut, which is more diversified in terms of employment, the programme generally operates as a supplementary and residual safety net to which the labour households' resort in adverse times.

However, in both regions, there is a similar seasonal dependence on this programme among the labour households which underlines the perseverance of agrarian labour cycles. However, both regions exhibit different patterns in terms of social inclusion, gender participation, and program coverage owing to structural and institutional differences and wage competitiveness. These results clearly show that the historical legacy of divergence and different agrarian relations determine the course of subsequent development and make even a uniform programme yield differential outcomes across regions.

In this situation, it becomes imperative that to further improve the outreach of the programme, state policies should be framed in such a way that they enhance parity in wages, reduce delays in payments, and help in asset creation according to local labour market conditions.

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