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MGNREGA AND WOMEN'S EMPOWERMENT: A CASE STUDY FROM WEST BENGAL

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ABSTRACT

This study analyses the impact of MGNREGA on women's empowerment in West Bengal by constructing a Gender Empowerment Index (GEI). Using primary data from 20 villages across five districts of West Bengal, the analysis reveals substantial disparities in empowerment at district and village levels. SPSS software was used to construct the women empowerment index (WEI) using PCA. While districts like Hooghly exhibit higher GEI scores at 0.66, suggesting progress in gender equity, areas such as Bankura score only 0.63. Village-level variations further underscore localised challenges and successes, with Antara (0.69) and Bhingole (0.67) showcasing notable progress. The findings highlight MGNREGA's potential to enhance women's economic participation, decision-making, and access to resources. However, targeted interventions are required in low-GEI areas, such as Gangnadia (0.60) and Sahapur (0.59), to address structural barriers and improve access to education, healthcare, and livelihood opportunities. Policy recommendations include promoting skill-based employment, gender-specific quotas, and community-driven approaches to ensure inclusive development.

Keywords: Gender Empowerment Index, MGNREGA, Sustainable Development, Women's Empowerment

1. INTRODUCTION

The relationship between inclusive development and women's empowerment is integral in the context of sustainable growth, poverty alleviation, and social equity (Verdier-Chouchane, 2016). Inclusive development seeks to ensure that all individuals, regardless of their gender, socioeconomic background, or geographical location, have access to opportunities and resources that enhance their quality of life (Bharti & Verma, 2023). Women's empowerment is a multifaceted process that enhances women's self-worth, decision-making abilities, and capacity to influence change (Sen et al., 2023). The synergy between inclusive development and women's empowerment is critical because women's participation in economic, social, and political spheres can significantly drive societal progress (Verdier-Chouchane, 2016).Inclusive development, as a framework, prioritises the inclusion of marginalised and disadvantaged groups, such as women, ethnic minorities, and rural populations, in the developmental process (Gupta et al., 2015). A central tenet of inclusive development is ensuring equal access to economic opportunities (employment, income generation) and social services (education, healthcare) for all members of society (Rauniyar & Kanbur, 2010; Baduel et al., 2021). For women, achieving inclusive development means overcoming barriers like unequal access to education, limited participation in the labour market, and restricted social and political involvement (Verdier-Chouchane, 2016). Traditional gender norms, cultural

biases, and discriminatory practices often compound these barriers, hindering women's potential. Women's empowerment is a key driver of inclusive development because it directly addresses these barriers by promoting women's autonomy, decision-making power, and economic independence (Kumari, 2020). Empowered women are more likely to contribute to their communities and economies, which in turn leads to broader development outcomes. Moreover, empowering women can lead to significant improvements in family health, education, and economic well- being, as women tend to reinvest their earnings in their families and communities (Sen et al., 2023).

The relationship between women's empowerment and inclusive development is cyclical. While women's empowerment accelerates inclusive development, policies create environments where women can thrive and exercise their rights (Verdier-Chouchane, 2016). Initiatives like MGNREGA (Mahatma Gandhi National Rural Employment Guarantee Act) play a pivotal role in empowering women economically by providing employment opportunities, equal wages, and financial independence (Naikoo et al., 2018). These opportunities increase women's participation in household decision- making and broader social and economic activities, reducing gender disparities (El-Turkey, 2021). The key components of women's empowerment that contribute to inclusive development include economic independence, educational access, participation in political decisionmaking, and social security (Gurusamy & Manochithra, 2013). Economic independence is particularly crucial, as it enables women to make decisions without relying on male relatives or partners (Abhiat, 2023). Studies have shown that when women earn their own income, they have better control over household spending, leading to improved outcomes for children and families (Opata et al., 2020). Similarly, gender parity in employment is a critical aspect of inclusive development that supports women's economic empowerment (Mishra et al., 2020). Social participation is another domain of women's empowerment, where women's involvement in decision-making in both household and public spheres leads to greater gender equality (Misra et al., 2021). For instance, women's participation in community governance helps break patriarchal norms and enables women to advocate for policies that address their needs (Milazzo & Goldstein, 2019). Legal rights and protection against violence are also key to ensuring women's equal participation in development processes, as women who are safe from violence are more likely to pursue education, work, and engage in their communities (Cook, 1995).

Empirical research has shown that initiatives aimed at promoting women's empowerment also result in positive impacts on inclusive development (Hamid et al., 2023). For instance, studies have demonstrated that MGNREGA significantly enhances women's economic status by offering them stable employment, diminishing wage disparities, and fostering gender equality in labour force participation (Shah, 2021; Jain, 2013). Additionally, economic independence resulting from MGNREGA employment has enhanced women's decision-making power in households, promoting a more equitable distribution of resources (Tagat, 2020). Similarly, gender-inclusive policies in rural areas have been associated with improved living standards for women, thereby contributing to broader economic development (Eastin & Prakash, 2013). Despite the significant progress in understanding the connection between women's empowerment and inclusive development, limited research focuses on specific areas such as increased employment opportunities for women, reduction in gender disparities, and the impact of financial independence. Existing studies often overlook the long-term implications of women's employment for their autonomy and contributions to inclusive development. Despite the frequent discussion of gender disparity reduction, the analysis of how employment opportunities address disparities in wages, leadership roles, and resource access is insufficient. Similarly, the growing participation of women in household and community decision-making remains underexplored, particularly in terms of its influence on power dynamics in rural or marginalised communities. Furthermore, the broader implications of financial independence—such as women's control over earnings and access to bank accounts—on family welfare and community-level economic activities require further investigation. Addressing these gaps will provide a more comprehensive understanding of how to integrate women's empowerment into sustainable development strategies.

2. OBJECTIVES

- (i) To construct a gender empowerment index that captures the multidimensional aspects of women's empowerment, with a focus on their economic, social, and decision-making roles.
- (ii) To propose policy recommendations for enhancing women's empowerment by integrating findings from the Gender Empowerment Index into sustainable development strategies of the study.

3.DATA AND METHODOLOGY

This research primarily relies on primary data, supplemented by secondary data. The dataset for the study was sourced from the official NREGA website (http://nrega.nic.in). Primary data were collected directly through structured

interviews conducted across five selected districts in West Bengal. These districts were chosen based on their performance during 2018–19 to 2021–22, categorised into high, moderate, and low performers based on the percentage of expenditure on Natural Resource Management (NRM). The high-performing districts included Hooghly and Bankura; the low-performing districts were North 24 Parganas and Nadia; and one moderate-performing district was also selected. Within each district, one block was identified, followed by the selection of two gram panchayats per block and two villages in each gram panchayat. We surveyed a total of 20 villages, each with 25 beneficiaries. The sample included 60% individual asset beneficiaries and 40% community asset beneficiaries. The study employed normalised data for variables such as employment opportunities, wage disparity, participation in household and community decisions, and financial independence using the min-max normalisation method, consistent with the approach used in the UNDP's Human Development Index. SPSS software was used to construct the women empowerment index (WEI) using PCA.

4. IMPACT OF MGNREGA ON WOMEN: HOUSEHOLD PERSPECTIVES

Table 1 highlights the impact of MGNREGA on various aspects of women's empowerment, such as employment opportunities, wage equality, decision-making roles, and financial independence, across different districts.

Table 1: Comparison of Women-Centric Benefits of MGNREGA across Districts

District	Increased women employment opportunities (in %)	Reduced wage gap between men and women (in %)	Increased women's role household and community decision (in %)	Increased wome's financial independency (in %)
Malda	76	66	77	83
North 24 Parganas	87	69	54	84
Bankura	85	74	67	94
Nadia	78	66	82	80
Hooghly	78	68	73	89

Source: Authors calculations from primary data

The survey indicates that majorities of the households in the selected five districts of West Bengal believe that MGNREGA has improved women's employment opportunities significantly, reduced the wage gap between men and women, enhanced participation in household and community decision-making, and increased financial independence compared to the pre-MGNREGA period. Over 75% of respondents believe MGNREGA has boosted women's employment opportunities. More than 65% feel it has reduced wage disparity, over 53% acknowledge improved participation in household and community decision-making, and over 79% agree it has enhanced women's financial independence. Among the districts, the highest percentage of respondents believe that MGNREGA has significantly contributed to increasing women's employment, reducing the wage gap between men and women, and promoting women's financial independence. However, in Nadia, while these aspects are ranked the lowest among the districts, it ranks highest in terms of improvements in household and community decision-making.

5. CONSTRUCTION OF GENDER EMPOWERMENT INDEX

The Gender Empowerment Index is constructed by normalising key indicators related to women's empowerment, such as employment opportunities, gender equality in leadership and decision-making, participation in household and community decisions, and financial independence. Indicators of this index are normalised using the min-max method, where the values for each indicator are rescaled to a range between 0 and 1 (Mazumdar, 2003). $I_i = \frac{X_i = (\min)X_i}{(\max)X_i - (\min)X_i} \cdot$

$$I_{i} = \frac{X_{i} - (\min)X_{i}}{(\max)X_{i} - (\min)X_{i}} \cdot$$

Where I_i=normalised value of the ith observation.

 X_i = original value of the ith observation.

 $(max)X_i$ =maximum value of the indicator across all observations.

 $(min)X_i$ = minimum value of the indicator across all observations.

The normalised values are then weighted according to their importance. PCA has been employed with the SPSS software for constructing the SEI. Generally, PCA reduces a large number of variables into a much smaller set in a manner that retains most information from the large set. The correlated variables transform easily into uncorrelated orthogonal variables using the principal component analysis method. We select principal components based on Kaiser's criterion and eigenvalues. A principal component is selected if its eigenvalue exceeds one. The first principal component explains the majority of the variance, a second principal component explaining a lesser portion, and so on (Abdi & Williams, 2010).

PCA generates loadings for variables to obtain weights for an index. In this research, extraction values from the communality matrix were used as loadings, summing squared loadings across principal components. The KMO statistic of 0.6 confirms the appropriateness of the data for PCA (Wiesen, 2019). The WEI is computed as the sum of normalised values, weighted by their factors, and then divided by the sum weight. The GEI represents the degree of gender empowerment.

$$GEI_{h} = \frac{\sum_{j=1}^{4} W_{j} \cdot G_{j,h}}{\sum_{j=1}^{4} W_{j}}.$$

Where GEI_h is the Gender Empowerment Index for household h

 $G_{i,h}$ are the normalized values for household h.

 W_j are the corresponding weights. $\sum_{j=1}^4 W_j$ is the sum of weights and $\sum_{j=1}^4 W_j = 1$.

6. RESULTS AND DISCUSSIONS

The data of GEI provides pertinent insight into the gender equity status across districts and villages of West Bengal. At the district level (Table 2), Hooghly has topped with the maximum score on GEI at 0.66, indicating relatively better opportunities for women's empowerment vis-à-vis economic participation, decision-making, and resource access. Malda, North 24 Parganas, and Nadia run neck to neck at 0.64, representing moderate gender empowerment. Bankura stands at the bottom among districts at a GEI of 0.63.

Table 2: Gender Empowerment Index across selected districts of West Bengal

District	Gender Empowerment Index	
Malda	0.64	
Bankura	0.63	
Hooghly	0.66	
North 24 Parganas	0.64	
Nadia	0.64	

Source: Authors calculations from primary data

At the village level (Table 3), the data reveals notable disparities, emphasising the localised nature of gender empowerment. In Malda, the GEI ranges from 0.60 to 0.67. This variation suggests that while some villages, such as Bhingole, have made significant progress, others, like Gangnadia, require targeted interventions to address persistent gaps. Similarly, in Bankura, the village of Antara achieves the highest GEI of 0.69, reflecting commendable progress in gender equity, while Jamsuli and Bogdahara have slightly lower scores of 0.64 and 0.65, respectively. These differences indicate that specific villages benefit from more effective programs or favourable socio-economic conditions, whereas others may face structural or systemic barriers.

Table 3: Gender Empowerment Index across selected villages of West Bengal

District	Village	Gender Empowerment Index
	Mahendrapur	0.61
	Gangnadia	0.6
Malda	Bhingole	0.67
	Konar	0.66
	Jamsuli	0.64
	Bogdahara	0.65
Bankura	Ajodhya	0.67
	Antara	0.69
	Alipur	0.61
II 11	Dudhkalmi	0.63
Hooghly	Krishnarampur	0.65
	Jangalpara	0.66
	Barajpur	0.64
	Chapatala	0.62
North 24 Parganas	Bhurkunda	0.63
	Sulkani	0.63
N. 1.	Adampur	0.66
Nadia	Nowda Chutipur	0.66

Sahapur	0.59
Manikdighi	0.64

Source: Authors calculations from primary data

In Hooghly, the village-level GEI ranges from 0.61 in Alipur to 0.66 in Jangalpara. The relatively consistent scores suggest that gender empowerment efforts are being implemented evenly across the district, though areas like Alipur and Dudhkalmi may still need additional focus. In North 24 Parganas, the scores remain fairly consistent, with values between 0.62 and 0.64 across villages such as Barajpur (0.64) and Chapatala (0.62). While this reflects stability, it also points to a lack of significant advancements in gender equity in these villages. Conversely, Nadia presents a wider range of GEI scores, from 0.59 in Sahapur, highlighting substantial challenges, to 0.66 in Adampur and Nowda Chutipur, which showcase notable progress in empowering women.

This analysis underscores the importance of focusing on localised interventions to address gender empowerment. District-level averages provide a general picture, but village-level variations reveal critical gaps that need targeted action. Villages like Antara and Ajodhya in Bankura and Bhingole in Malda are examples of progress, potentially driven by effective programs, community participation, and better socio-economic conditions. However, lower-scoring villages, such as Gangnadia in Malda and Sahapur in Nadia, highlight the need for focused policies to improve access to education, healthcare, and economic opportunities. Overall, the data suggests that while certain areas are making strides in gender equity, sustained and localised efforts are essential to bridge disparities and ensure empowerment for all.

7. CONCLUSION AND POLICY SUGGESTIONS

Inclusive development and women's empowerment are mutually reinforcing processes essential for achieving sustainable development. To increase women's empowerment through MGNREGA, specific policies for low-GEI villages like Gangnadia (Malda) and Sahapur (Nadia) need to be formulated. Increased efforts in these areas should be focused on the involvement of women in MGNREGA, equal wages received, creating awareness of entitlements, and childcare facilities at the worksites. Models for replicating community-driven approaches could be taken from the high GEI villages of Antara (Bankura). MGNREGA projects must focus on skill-building, asset-creating activities that improve women's livelihood opportunities like water harvesting, organic farming, and rural asset development. As these districts have low GEI, special provisions must be made for them, such as different monitoring systems that can track the participation of women and income generation. Community participation is essential in planning, decision-making, and leadership opportunities within MGNREGA committees. Regular social audits should review the program's impact on women's empowerment and see where gaps exist. By prioritising gender equity and fostering empowerment, inclusive development becomes a transformative framework, enabling women to contribute fully to societal advancement while improving overall well-being and economic growth.

CONFLICT OF INTERESTS

None.

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