

Women's Contributions to Climate Resilience through MGNREGS in Manipur

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Abstract: *Climate change poses significant challenges to rural India, particularly for vulnerable populations. This study examines the Mahatma Gandhi National Rural Employment Guarantee Scheme (MNREGS) in Manipur, highlighting its dual role in providing livelihoods and fostering climate resilience. Drawing on secondary data, the paper underscores women's substantial contributions to environmental projects like water conservation and afforestation, alongside their economic empowerment. While MNREGS enhances rural sustainability, challenges such as gender disparities and limited policy integration persist. The findings suggest that strengthening women's participation and aligning MNREGS with climate strategies could amplify its impact.*

Keywords: MNREGS, women, climate resilience, Manipur, rural development

1. Introduction

India is a country whose soul lies in its villages. With a population of around 83 million, there are over 6, 40, 867 villages, making up 68.84% of the total population. Agriculture is the main source of income for those living in rural areas. Indian villages as a whole are submerged in severe poverty, which is reflected in the high rate of unemployment, low income, and poor quality of life. Thus, the core of the nation's general socioeconomic development is the growth of agriculture. As Mahatma Gandhi once said, the real progress of India does not mean simply the growth and expansion of industrial urban centres but mainly the development of the villages. [6]

MGNREGS (2005) is also one of the schemes for poverty eradication through employment generation. The primary objectives of NREGS are to provide wage employment opportunities and to create a sustainable rural livelihood through regeneration of the natural resource base, i. e., augmenting production and supporting creation of durable assets (GoI, 2005).

Programmes targeted at rural employment generation typically provide unskilled manual workers with short term employment in public works such as irrigation, infrastructure and road construction. Mahatma Gandhi National Rural Employment Guarantee Act, 2005 is perhaps the largest and most ambitious social security and public works programs in the world.

1.1 MNREGS in Manipur

MNREGS was launched in Manipur in 2008, and since then it has been continuing to play a significant role in giving livelihood options to rural people, particularly women. The programme offers paid employment for 100 days to any household willing to perform physical labour that is not trained. In addition to reducing poverty, it has also

encouraged social and economic empowerment, with a particular emphasis on women's involvement.

Manipur is a land of Agriculture and is one of the eight northeast States of India. Agriculture being the main occupation of the people of Manipur, it has an important place in the economy by contributing a major share to the total State domestic product and provides employment to about 52.19 percent of the total workers in Manipur (National Informatics Centre, 2012). [7]

Approximately 800, 000 educated youth out of 2.17 million people are unemployed. The unemployment rate is generally higher than half of the population. This pyramid of unemployment is the origin of all problems. Population below poverty line is 28.54% in Manipur against the officially recorded all India average of 26.10% [8]. The implementation of MGNREGS in the State was extremely important since it gave 2.30276 lakhs households jobs. On September 5, 2005, the President of India gave his approval to the Act. When the Act was originally put into effect on February 2, 2006, it included 200 districts. In 2007–2008, it was expanded to include 330 more districts. The first phase of NREGS encompassed the Tamenglong area in Manipur. Notifications have been sent to all remaining rural regions as of April 1, 2008.

2. Aims of the study

To study upon the changes brought by women in climate change through the scheme of MNREGS in Manipur.

3. Methods

To assess the role of women in climate change mitigation and adaptation through MNREGS in Manipur, secondary data is gathered from numerous publications, news channels, and articles published by various researchers and data from government reports and academic literatures. Secondary data

was chosen to synthesize existing evidence and identify gaps in a resource - constrained context.

4. Result and Discussion

The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) provides 'sustainable livelihoods' or 'green jobs' to workers engaged in restoring the rural ecology while contributing to 'sustainable rural development'. The works constructed under NREGS possess tremendous potential to improve environmental indicators—rise in water levels, carbon dioxide sequestration, improvement in soil quality etc.

In collaboration with state governments, the Ministry of Rural Development (MRD) of the Government of India is overseeing the whole execution of this programme and the purpose of this legislation was to increase the purchasing power of the rural people in India, especially those who were living below the poverty line and could do semi - skilled or unskilled labour. It makes an effort to bridge both the rich and poor gaps in the nation. At least one - third of the workforce is mandated to be women.

Key Facts

- MGNREGS focuses on the economic and social empowerment of women.
- It provides "Green" and "Decent" work.
- Social audits of the projects are required, which promotes accountability and transparency.
- MGNREGS works address the climate change vulnerability and protect the farmers from such risks and conserve natural resources.

Implementation Status

In April 2008 NREGS expand to entire rural area of the country covering 34 States and Union Territories, 614 Districts, 6, 096 Blocks and 2.65 lakhs Gram Panchayat.

The scheme now covers 648 Districts, 6, 849 Blocks and 2, 50, 441 Gram Panchayats in the financial year 2015 - 16.

Activities Covered Under MGNREGA

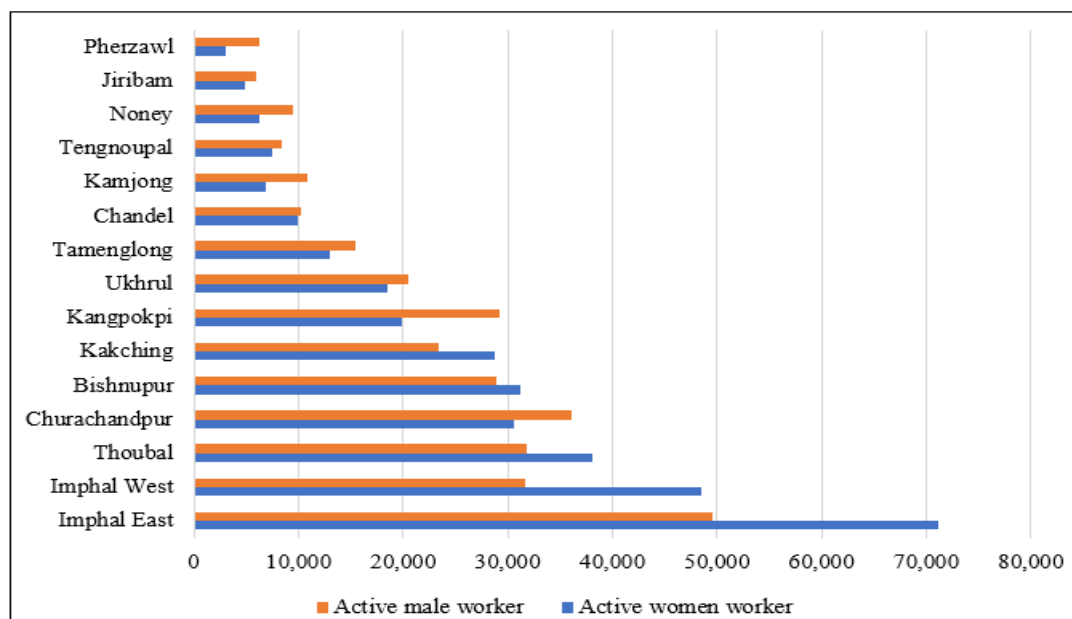
Bulks of works which are connected to agricultural and allied activities, as well as works that would significantly help rural sanitation initiatives such as watershed, Irrigation and Flood control works, Agricultural and Livestock associated works, Fisheries and coastal works, and Rural Drinking Water and Sanitation related activities are among the ten major categories.

The Rural Development Department further stated that the 30 new activities added to Schedule 1 will benefit rural sanitation projects, since toilet building, soak pits and solid and liquid waste management are now covered under MGNREGS for the first time.

As per the Chief Minister's Dashboard, Government of Manipur, there are **6, 97, 141** Total Active Workers, **626** Total Amount Spent (Cr) and **100** District Coverage (%) as on 22 October 2023. [9]

Given are the number of men and women who are actively benefiting under the scheme in the year of 2022 - 23. Senapati district were not given in the list as it has not been shown in the dashboard for the said year.

District	Active women worker	Active male worker	Active total worker
Imphal East	71, 187	49, 647	1, 20, 834
Imphal West	48, 482	31, 732	80, 214
Thoubal	38, 054	31, 887	69, 941
Churachandpur	30, 658	36, 097	66, 755
Bishnupur	31, 177	28, 949	60, 126
Kakching	28, 790	23, 402	52, 192
Kangpokpi	19, 922	29, 163	49, 085
Ukhrul	18, 511	20, 519	39, 030
Tamenglong	12, 949	15, 433	28, 382
Chandel	9, 959	10, 304	20, 263
Kamjong	6, 860	10, 913	17, 773
Tengnoupal	7, 543	8, 361	15, 904
Noney	6, 218	9, 526	15, 744
Jiribam	4, 884	6, 018	10, 902
Pherzawl	3, 060	6, 305	9, 365
Senapati	-	-	-



The chart above shows that the number of women workers exceeds that of men in only five districts such as Imphal east, Imphal west, Thoubal, Bishnupur and Kakching even though it has been mentioned that one - third of the stipulated work force must be women and the schemes focuses on the economic and social empowerment of women.

MNREGS and climate change

Climate - Resilient Activities MNREGS projects in Manipur have implemented various climate - resilient activities, such as afforestation, construction of check dams, and water conservation. Women have played pivotal roles in these initiatives, bringing their traditional knowledge of local ecosystems to the table (UNDP India, 2019).

Overall, MGNREGS is climate - smart, contributing to both mitigation and adaptation. Its coping measures reduce the hazards presented by the climate issue while providing required resources by poor households.

In 2020 - 21, 711 districts and 268, 524 gramme panchayats went through huge degree of work. Approximately two -

thirds of the total spending of 110, 900 crore was spent on natural resource management (NRM) projects. The massive magnitude of the NRM component in MGNREGS contributes significantly to increasing the productive potential of land, water, and forest resources. This reduces sensitivity to climate risk by increasing groundwater availability, improving soil fertility, increasing tree cover, and implementing drought - and flood - proofing measures.

Under the 2015 Paris Agreement, India's Nationally Determined Contribution (NDC) refers to the country's goal to produce an extra carbon sink of 2.5 - 3.0 billion tonnes of CO₂ equivalent by 2030. According to current trends, meeting this target will be an enormous challenge. MGNREGS's contribution to trapping carbon was estimated at 62 million tonnes of CO₂ equivalent in 2017 - 18 from cumulative works undertaken in the Union government's Third Biennial Update Report (BUR) submitted to the United Nations Framework Convention on Climate Change in February. This performance should be improved. [11]

Table 1: MGNREGA Activities with their Contribution in Adapting for Different Projected Impacts of Climate Change

issues activities	Food security	Water scarcity	Ecological sustainability	Health hazard	Extreme weather events
Well and pond	Increase in total crop area, crop diversity and crop yield	Enhanced provision of water for Irrigation, livestock, domestic purposes, surface water storage and ground water recharge	Efficient water use	Safe water	Drought proofing
Plantation on individual, community and degraded forest land	Edible produce	Ground water recharge, reduced evaporation from soil, surface runoff	Soil and biodiversity conservation, and increase in green cover and carbon sequestration	Improved micro - climate	Drought proofing, flood protection
Watershed management	Enhanced agriculture due to better soil and water management	Better soil moisture regime, surface water storage, Reduced surface runoff	Improving the resilience of ecosystem		Drought proofing, flood protection
Well for potable water		Potable water availability		Sanitation, safe water, prevention of water - borne diseases and contamination.	Drought proofing.
Road construction	Faster supply and distribution of food grains during emergencies			Sanitation, increased facilities in health emergency	Coping for risk and disaster mgt.,

It may be noted that although the above categorization has been done, the issues addressed by MGNREGA activities pertaining to climate change adaptation and mitigation are largely overlapping, in such sense that each activity addresses a number of issues and also multiple activities may address one particular issue. However, it is important that most activities, address these issues in one or more ways. [10]

5. Challenges and Recommendations

Gender Disparities

Despite their significant contributions, women in Manipur continue to face gender disparities, such as wage gaps and limited participation in decision - making. Addressing these

disparities is crucial for ensuring the full potential of women in MNREGS.

Training and Capacity Building

Continuous training and capacity - building programs should be implemented to enhance women's skills and knowledge in climate - resilient practices and disaster management.

Integration with Climate Change Policies

There is a need for better integration between MNREGS and climate change policies at the state and national levels. This can be achieved through coordinated efforts and policy coherence.

Awareness and Education

Efforts should be made to raise awareness about the link between MNREGS projects and climate change, emphasizing the positive impact of women's contributions. This can encourage their active involvement.

Strengthening MNREGS requires the following steps: Provide for full funding to make it truly demand - driven; deepen the scope of convergence by proactively linking farm assets with climate - smart agriculture technologies and practices; develop robust methodologies for measurement and accounting of environmental services; commission more independent studies and surveys that can quantify the scheme's adaptation and mitigation capacity to climate risks; and factor into the feedback proformas not just the numerical count of works being undertaken but also the environmental services provided. It is time to acknowledge MGNREGS as a climate - smart green employment generation programme. In a world that will continue to warm, the rural poor will suffer its worst consequences. As a public intervention, Climate - smart MGNREGS appears to be our best bet.

6. Conclusion

This study highlights MNREGS as a vital tool for environmental restoration and women's empowerment in Manipur. While its projects enhance climate resilience through water conservation and afforestation, challenges like gender disparities and non - environmental works call for a balanced approach. Integrating ecological sensitivity into MNREGS planning could amplify its impact, positioning it as a model for climate - smart rural development

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