

Introduction

Policy makers increasingly emphasise the importance of setting up social protection systems and convergence between programmes to improve coherence and ensure coordination of intersectoral efforts. The Government of India defines convergence as the coordination of intersectoral efforts in development programmes to maximise the intended impact of these programmes (Ministry of Rural Development, 2009).

Emerging evidence indicates that convergence between the Deendayal Antyodaya Yojana—National Rural Livelihoods Mission (DAY-NRLM) and the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) may lead to increases in income from MGNREGS at the household level, while also reducing household dependence on the private sector for casual labour (Barooah and colleagues, 2022).

In this study, we examine whether self-help groups (SHGs) implemented under the Deendayal Antyodaya Yojana—National Rural Livelihoods Mission (DAY-NRLM) can serve as a vehicle to improve access to the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) in Bihar, India. The DAY-NRLM is the world's largest state-implemented financial inclusion and livelihoods programme for women. As of 2021, the DAY-NRLM has mobilised more than 70 million households into SHGs with the goal of providing them with access to financial services and sustainable livelihoods enhancements (Ministry of Rural Development, 2014). Starting in 2011–2012 with the launch of DAY-NRLM, the state government of Bihar expanded the SHG outreach under DAY-NRLM through the Bihar Rural Livelihoods Promotion Society or *Jeevika*. By 2021, the programme had mobilised more than 11 million households in the state of Bihar.

SHGs under the BRLP typically include 10 to 15 women who meet physically to contribute to savings and access programme services that include financial inclusion in the form of low-cost credit and access to formal banking, as well as basic literacy and livelihoods training (Hoffman et al., 2018). Further, SHGs under *Jeevika* follow a federated structure that is catalysed after the introduction of Village Organizations and Cluster-Level Federations (World Bank, 2017).

Key Takeaways

- This study contributes to the literature on social protection systems by examining convergence between large-scale self-help group and public works programming in Bihar, India.
- We find large and statistically significant effects indicating that an increase of 100 SHG members results in 26 additional MGNREGS job cards applied for, and 14 additional households that are provided employment under MGNREGS.
- We find larger impact estimates on access to job cards and employment for scheduled caste and scheduled tribe households, and evidence for similar effects for women and men.
- Despite the positive impact on employment, we do not find positive effects on community-level assets created under MGNREGS.

Enacted in 2005, the MGNREGS is the world's largest public employment scheme, guaranteeing up to 100 days of paid employment for a minimum wage to households in rural India. The programme started in 2006 and since then has offered employment to create "durable assets" such as those aiding in irrigation, land development, and rural connectivity (Imbert & Papp, 2015). MGNREGS covers all rural districts in the country, with women accounting for 47% of the total person-days generated. In Bihar, women accounted for 54.6% of total person-days generated in 2020–2021.

Methodology

Research Questions

This study seeks to answer three main research questions on convergence between DAY-NRLM through the Bihar Rural Livelihoods Promotion Society and MGNREGS – **RQ1:** What is the impact of the number of SHG members on access to MGNREGS job cards in Bihar? **RQ2:** What is the impact of the number of SHG members on employment under MGNREGS in Bihar? **RQ3:** How does caste moderate the impact of the number of SHG members on access to MGNREGS?

Methods and Data

To assess convergence between the DAY-NRLM and MGNREGS programmes, we leverage an existing cluster-randomised controlled trial (cluster-RCT) of the *Jeevika* programme in Bihar (Hoffmann et al., 2021; Kochar et al., 2020). The rollout of *Jeevika* included a cluster-RCT in which 180 Gram Panchayats (GPs) from within 16 blocks in seven districts of Bihar were randomly assigned to enrol under the *Jeevika* or a control group.¹ After 2014, *Jeevika* was also rolled out in the control group. Kochar and colleagues (2020) conducted a follow-up study with 67 treatment GPs and 69 control GPs to determine the longer-term effects of participation in SHGs relative to a control group where SHG participation happened for a shorter period of time.

We combined three data sources to determine the impact of the number of SHG members on access to MGNREGS. The first data source with information on SHGs comes from the DAY-NRLM MIS.² Second, we obtained data on MGNREGS-related outcomes from the MGNREGS MIS.³ Finally, we received the *Jeevika* implementation timing in 67 treatment Gram Panchayats (GPs) and 69 control GPs from the International Initiative for Impact Evaluation, which led the follow-up of the cluster-RCT of the *Jeevika* programme. We merged all the data sets described above to construct a longitudinal annual data set at the GP level spanning from 2013 to 2020. Our final data set includes 1,088 observations (8 years of data for 136 GPs).

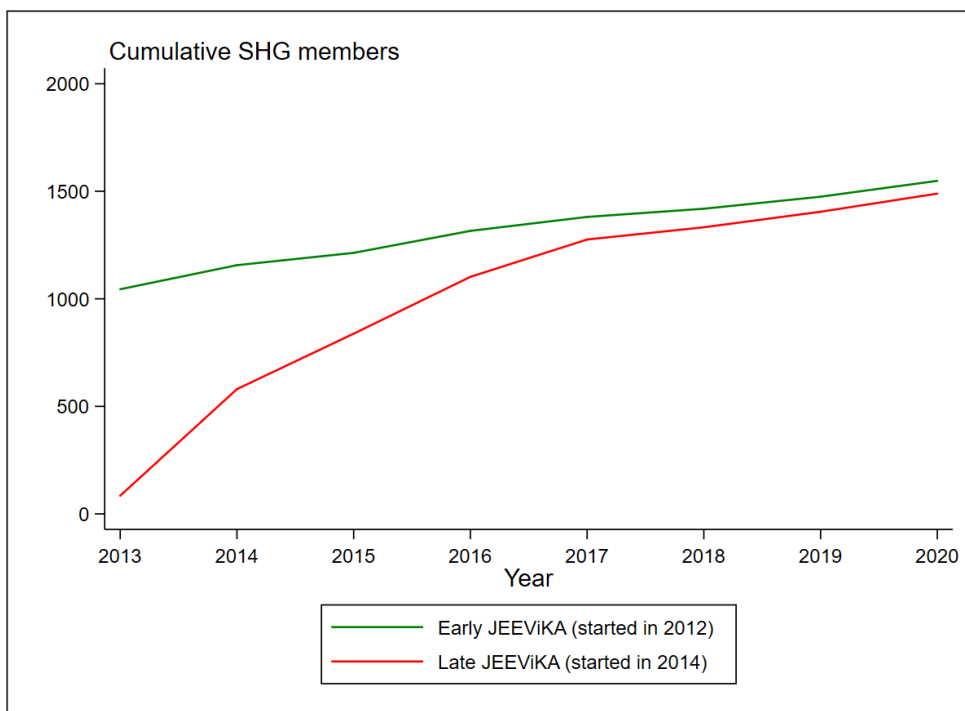
As shown in Figure 1, early rollout GPs had much higher levels of SHG membership in 2013 and 2014. SHG membership in late rollout GPs increased steeply after 2014 up to 2017 and reached almost similar levels as the early rollout GPs beyond 2017.

¹ The GP is a governing institute in Indian villages. It is a democratic structure, the functioning of which is in accordance with the guidelines provided by the Ministry of Panchayati Raj.

² <https://nrlm.gov.in/shgOuterReports.do?methodName=showShgreport>

³ <http://mnregaweb4.nic.in/netnrega/MISreport4.aspx>

Figure 1. Jeevika Rollout and Number of SHG Members



We conducted a longitudinal data analysis to estimate the impact of the number of SHG members on access to MGNREGS. Specifically, we employed an instrumental variable analysis, where we leverage the variation in the timing of *Jeevika* expansion across the GPs. The instrumental variable analysis uses two successive regressions, in which the first regression explains the number of SHG members, and the second regression estimates the impact of the number of SHG members on access to MGNREGS job cards and employment under MGNREGS. We provide more details on the methods in the working paper (de Hoop et al., 2022).

Study Findings

The findings indicate that SHGs can serve as a strong vehicle for access to social protection under MGNREGS. We found that the number of SHG members had positive and statistically significant effects on the number of MGNREGS job cards applied for and the number of issued job cards. Although the point estimates are smaller, the results also suggested that the number of SHG members had positive effects on employment demanded and employment provided under MGNREGS. “Employment demanded” refers to the formal application made by the job card holder demanding workdays while “employment provided” refers to the instances where these demands are met. Therefore, our findings suggest that SHG membership significantly increased employment generation under the MGNREGS. On average, the results indicated that an increase of 100 SHG members resulted in 26 additional MGNREGS job cards applied for, 23 additional MGNREGS job cards issued, 16 additional MGNREGS jobs demanded, and 14 additional MGNREGS jobs provided.

The results also provide some indication that increases in the number of SHG members from a specific caste category resulted in increases in the number of active MGNREGS workers from that caste category. Increases

in the number of scheduled caste and scheduled tribe SHG members seemed to only be associated with increases in MGNREGS workers from these caste categories. These results are consistent with the idea that SHG members can gain political empowerment and increase their political bargaining power at the village-level, especially because households gain access to MGNREGS job cards through their interaction with the Gram Panchayat (Ministry of Rural Development, 2017). This mechanism also aligns with the finding that the number of job cards increases more than linearly with the number of SHG members. The increase in MGNREGS outcomes with respect to SHG members is more prominent at higher levels of SHG membership. Importantly, however, the nonlinear effect may also be driven by the formation of village organizations and cluster-level federations. SHGs under *Jeevika* are federated into Village Organizations, which are further federated into Cluster-Level Federations at the block level (World Bank, 2017). Both Village Organizations and Cluster-Level Federations may enable SHG members to engage in collective action to obtain a larger number of MGNREGS job cards and employment.

Despite the positive impact on employment, we do not find positive effects on community-level assets created under MGNREGS.

Conclusion

This study contributes to the literature on convergence between different social protection programmes by examining the impact of the number of SHG members on access to MGNREGS job cards and jobs in Bihar, India. We found that an increase of 100 SHG members resulted in 26 MGNREGS job cards applied for and 14 new MGNREGS jobs. We also found some evidence that the positive effects are larger for scheduled caste and scheduled tribe households, indicating that convergence between the DAY-NRLM and MGNREGS is particularly important for marginalised populations. However, we did not find differential effects for men and women. We did not find impacts on community-level assets created through the MGNREGS programme.

The results show the importance of setting up social protection systems and stimulating convergence between programmes to improve coherence and ensure coordination of intersectoral efforts. For India in particular, the results show the potential to focus even more strongly on the convergence between DAY-NRLM and MGNREGS. Barooah and colleagues (2022) already show how the introduction of a convergence policy can strengthen the effects of DAY-NRLM and MGNREGS on income in the states of Jharkhand, Chhattisgarh, Maharashtra, and Rajasthan. This study contributes to this literature by demonstrating a causal relationship between the number of SHG members and access to MGNREGS job cards and jobs in the state of Bihar.

References

- Barooah, B., Jain, C., Kejriwal, K., Sengupta, P., Shah, P., Shah, R., & Jain, S. (2022). Improving delivery and impacts of pro-poor programmes. [3ie Working paper 47] International Initiative for Impact Evaluation (3ie).
- De Hoop, T., Siwach, G., Holla, C., & Mahapatra, B. (2022). Convergence of social protection programmes in India: The impact of self-help groups on access to and employment under the Mahatma Gandhi National Rural Employment Guarantee Scheme. [ECWG Working Paper 07]. Evidence Consortium on Women's Groups.

- Hoffman, V., Rao, V., Datta, U., Sanyal, P., Surendra, V., & Majumdar, S. (2018). *Poverty and empowerment impacts of the Bihar Rural Livelihoods Project in India* [3ie Impact Evaluation Report 71]. International Initiative for Impact Evaluation.
- Hoffmann, V., Rao, V., Surendra, V., & Datta, U. (2021). Relief from usury: Impact of a self-help group lending program in rural India. *Journal of Development Economics*, 148, 102567.
- Kochar, A., Barooah, B., Jain, C., Closepet, N., Narayanan, R., Sarkar, R., & Shah, R. (2020). *Impact evaluation of the National Rural Livelihoods Programme* [Impact Evaluation Report 128]. International Initiative for Impact Evaluation.
- Ministry of Rural Development. (2009). *Guidelines for Convergence of NREGA with Programmes of Ministry of Agriculture (MOA) for development of agriculture and allied sectors*.
https://nrega.nic.in/netnrega/writereaddata/Convergence/circulars/guideline_conver_MOA.pdf
- Ministry of Rural Development. (2017). *Indicative Framework for Mahatma Gandhi NREGA job cards—Reg.*
https://nrega.nic.in/netnrega/writereaddata/Circulars/2206Indicative_Framework.pdf
- World Bank. (2017). *A Decade of Rural Transformation: Lessons Learnt from the Bihar Rural Livelihoods Project – Jeevika*. <http://documents.worldbank.org/curated/en/298391515516507115/pdf/122548-WP-P090764-PUBLIC-India-BRLP-Booklet-p.pdf>

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