Scaling Convergence for Social and Economic Services & Programmes in Rural India:

Conceptual Framework & Evidence Review

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List of Acronyms

SHG	Self-Help Group
VO	Village Organisation
CLF	Cluster-Level Federation
CFT	Cluster Facilitation Team
CIF	Community Investment Fund
CRP	Community Resource Person
GJC/GRC	Gender Justice Centre/Gender Resource Centre
GP	Gram Panchayat (elected village council)
ICDS	Integrated Child Development System
NGO	Non-Governmental Organisation
NREGA/S	National Rural Employment Guarantee Act/ Scheme
NRLM/P	National Rural Livelihoods Mission/ Project
PDS	Public Distribution System
PRI	Panchayati Raj Institution
SAC	Social Action Committee (committee of the VO)

SC	Scheduled Castes
ST	Scheduled Tribes
TOC	Theory of Change

Executive Summary

Over the past two decades, two of the Government of India's flagship programmes to enable rural development have been the National Rural Livelihoods Mission and Project (NRLM/NRLP) and the Mahatma Gandhi National Rural Employment Guarantee Act and Scheme (NREGA/NREGS), both of which enable rural income generation through local institutional structures and interactions, and both of which have an emphasis on women's participation and outcomes. At their most basic level, NRLM enhances women's financial access through federated structures of Self-Help Groups (SHGs), and NREGS is the world's largest workfare programme that provides each rural household with a guarantee of one hundred days of employment per year at a pre-specified wage. This paper provides a critical review of the evidence to date on both programmes and a conceptual framework that can inform government efforts to better link the two programmes in different ways (a process referred to as "convergence"), specifically in the states of Bihar and Madhya Pradesh, in an attempt to enhance their combined value and their overall impact on rural households.

An analysis covering nine Indian states indicates that NRLM has lowered the cost of rural finance, increased household income by around 19 percent over 30 months (primarily through increased male private wage earnings) and has built a functioning institution operated by low-income and marginalized rural women with state support. However, it has not delivered significant impacts on household consumption or investment, on enterprise and self-employment outcomes, on women's earnings or women's agency, and on gender inequality. Women from historically marginalised communities (SC/ST) make up over half of NRLM participants. SHGs that are federated are associated with improved results on household asset accumulation and women's agency, though this could be due to selection. NRLM has had a total budget of 4-5 billion USD over its first ten years of operation.

NREGS has improved male and female wage earnings in rural India (through the provision of a minimum wage outside option) and consequently increased wage rates in the private sector by around 5 percent, even with the average enrolled household only receiving 52 of the 100 days of guaranteed employment through NREGS. In states with good implementation, there are significant improvements to household income. Women are significant participants claiming over half of NREGS persondays generated. The programme has increased aggregate output in richer rural districts but not in poorer ones. Its results on building sustainable infrastructure and productive public and private assets are unclear and it continues to suffer from poor governance, local elite capture, leakage and delays, and poor coverage among target beneficiary households in poorer districts. NREGS has an annual budget of 10-15 billion USD, and has been unable to fulfil demand at these funding levels.

A topline finding on both programmes is the considerable evidence across studies of heterogeneity in both NRLM and NREGS' impacts, across states, but also across districts within a state, with variation in initial conditions, implementation fidelity, institutional quality, scale, markets, political leadership, women's human capital, and other factors. The programmes deliver greater impacts in richer states compared to poorer states. A number of innovations have been tested to boost each of the programme's outcomes, often in specific states. In the case of NRLM, federating SHGs and institutionally strengthening federations, directly targeting gender consciousness and rights, and enabling group farm enterprises are among the interventions that have shown promising outcomes. In the case of NREGS, direct electronic payments to individual workers verified by biometric authentication, electronic monitoring of wage payment delivery by bureaucrats, and social audits have helped shift outcomes, though a number of subsequent open questions are currently being investigated.

While the analyses of mechanisms of impact are still ongoing, the evidence to date suggests that NRLM primarily increases welfare through reducing credit constraints and lowering poor households' high-cost debt burden, generating spillovers that reduce the overall cost of informal credit in private markets even for non-participant households and enterprises when implemented at scale. These general equilibrium shifts in local credit markets seem to lead to improved wage labour demand and labour market outcomes for the poor without any substantial change in their self-employment, enterprise or asset outcomes. NREGS primarily improves labour market outcomes by increasing the reservation wages of the poor and consequently driving up private market wage rates. The increased wage income in the hands of the poor in turn drives up the demand for local goods and services and consequently labour demand. In this sense, even without explicit attempts to 'converge' the two programmes and prior to more rigorous empirical evidence tracing these pathways and interactions, NRLM and NREGS conceptually appear to be complementary programmes that can be mutually reinforcing in an upward pro-poor spiral that improves credit markets, improves wage earnings, boosts consumption and local demand. This pathway does not necessarily indicate improvements or expansion in women's self-employment or women-owned enterprises.

In a few states where intentional convergence between the two programmes has been tested, convergence earlier in an SHG's lifecycle is associated with a higher share of NRLM households working in NREGS, driven specifically by women's increased participation in the programme, higher household consumption, and reduced multidimensional poverty. The introduction of dedicated NRLM staff to improve SHG women's ability to claim their entitlements from NREGS, such as through Cluster Facilitation Teams, have delivered important gains that are particularly strong in areas with a large number of SHGs at baseline, indicating shifts driven by increased political bargaining power. There is, however, limited implementation and evaluation of how SHGs (particularly more mature ones) engage with NREGS through additional channels, including through choice of projects and asset creation, improved implementation, project monitoring, and enhanced market linkages and productivity gains.

This paper outlines a set of intentional strategies and interventions that can enable greater synergies between the two programmes and boost programme delivery and impact for NREGS, enable meaningful power-sharing with large-scale networked institutions of poor women through NRLM, and ensure that the building blocks of representative electoral democracy within the Panchayati Raj Institutions attain new incentives to be more accountable and equitable on an everyday basis. Within this institutional transformation through convergence, the paper highlights the essential role played by market dynamics in leveraging such large government programmes to deliver augmented returns through spillovers, general equilibrium shifts in credit and labour markets, and broader rural structural transformation that can deliver disproportionate returns to low-income rural women. The paper also describes the tension between targets set by universal coverage and scale, which can work suitably to trigger secondary changes in markets and prices (when accompanied by simultaneous improvements in administrative capacity), but often fail in attaining the depth, intensity, or longevity of engagement and support required to transform entrenched patriarchal attitudes and norms among women and men, consequently failing to remedy unequal gender power dynamics.

Introduction

The structure and dynamics of rural development shape the expansion of well-being and reduction of deprivation among the rural poor, especially in poorer geographies. In contexts with historic social inequities, such programmes can also enable course correction towards greater equality. Many of the poorest areas in India now fall under the rubric of the "aspirational districts", a set of 112 districts across the country characterised by high poverty and thus selected for targeted investment by the state since 2018.

The position and change in women's status and measures of gender inequality are a core lens through which rural development is evaluated. This includes both the material well-being experienced by women and girls (gender gaps in participation, resources and welfare achievements), as well as measures of women's agency, voice, and power (Kabeer, 1999; Sen, 1999).

India has a rich history of collective mobilisation and action, including the movement for political independence from colonialism in the 19th and early 20th centuries, and contemporary struggles for self-determination, rights, and advancement within a constitutional democracy in the latter half of the 20th century. Civil society and non-governmental organisations have led numerous large-scale movements to facilitate social and economic reform processes, which—along the lines of Kurt Lewin's three-stage change process model—have often included an internal focus on critical thinking and consciousness among marginalised populations, and an external focus on creating an enabling environment and institutions. Several of these home-grown civil society mobilizations since the 1970s that attained scale in specific regions have laid the foundation for structured and institutionalized national programmes driven by state governments or the central government, often in consultation with expert non-governmental organisations.

Over the past two decades, two of the Government of India's flagship programmes to enable rural development have been the National Rural Livelihoods Mission and Project (NRLM/NRLP) and the Mahatma Gandhi National Rural Employment Guarantee Act and Scheme (NREGA/NREGS), both of which enable rural income generation through local institutional structures and interactions, and both of which have an emphasis on women's participation and outcomes. At their most basic level, NRLM enhances women's financial access through federated structures of Self-Help Groups, and NREGS is the world's largest workfare programme that provides each rural household with a guarantee of one hundred days of employment per year at a pre-specified wage.

While the government is increasingly keen on enabling synergies between these two and other rural development programmes (including through the Panchayati Raj Institutions (PRI) that constitute the smallest units of India's electoral democracy at the village level) to leverage complementarities and ensure efficiencies, these two programmes have more typically been implemented in parallel despite both being housed under the Ministry of Rural Development.

This review is motivated by the need to better understand current synergies and disconnects, both intentional and emergent, between these two large government poverty and inequality reduction programmes in India. The review also seeks to specifically inform government efforts to better link the two programmes in different ways (a process referred to as "convergence"), specifically in the states of Bihar and Madhya Pradesh, in an attempt to enhance their combined value and their overall impact on rural households. While NREGA lays out goals related to gender inclusion, there is little in the design of the programme that is gender-specific, which is quite distinct from NRLM's exclusive (though often instrumental) focus on rural women. The efforts to improve convergence between these two programmes additionally seek to explore potential institutional linkages via NRLM's Cluster Facilitation Teams (CLT), Cluster-Level Federations (CLF), Gender Resource Centers (GRC), and other institutional structures and components. As a result, the gendered dimensions of both programmes' functioning, institutional makeup, and related questions on rural womens' wage employment, self-employment, entrepreneurship, financial inclusion, agency and power are central to this paper.

This paper is a limited critical review, and does not use the methodologies associated with a systematic academic review or meta-analysis exercise. The review is primarily restricted to the academic literature, with some inclusion of verified policy and media reports where no equivalent academic source was available. Central to the paper are recent multi-state national empirical evaluations of the programmes in question, such as Kochar et al. (2020a) and Cook and Shah (2020). Prior review papers on either programme such as Sukhtankar (2017) are also used as key sources here. State-level evaluations and analyses were selected based on the emerging themes. Reviewers of the paper, several of whom have ongoing primary empirical research dedicated to one or the other of these programmes, suggested additional sources to close key gaps. More space is devoted here to NRLM compared to NREGS given that this review is motivated by an interest in driving convergence programming initiated by NRLM with NREGS, and also given that NREGS has been more intensively studied than NRLM. This selective and sequential inclusion process necessarily limits the analyses and conclusions presented here. Readers are encouraged to use these compiled insights as a starting point for further investigation and analysis, and not as the final word on these two critical programmes.

The paper is structured as follows. The two programmes (NRLM and NREGS, referred to as such throughout the paper) are presented in turn, describing programme components, theories of change (TOC), programme implementation, average impacts and impacts of added innovations, and key areas for improvement. We then discuss a conceptual framework to understand the interactions between the two programmes in section 3, followed in section 4 by a discussion of specific testable interventions (and pathways) through which the two programmes can be better linked to improve outcomes for marginalised rural women. While these bespoke programmes are the focus of the paper, their value lies in their ability to trigger a set of internal and external transformation processes towards rural prosperity and gender equality through improved capacities, resources, institutions, investments, bargaining, and norms. The lessons for rural development are, therefore, applicable beyond these two particular programmes and beyond India.

Section 1: The National Rural Livelihoods Mission (NRLM) and Project

1.1 NRLM components

Since the 1980s, various non-governmental, non-profit, and civil society organisations (including MYRADA, PRADAN, SEWA and others) in India have facilitated the formation of Self-Help Groups (SHG) of the poor, typically structured as Accumulating Savings and Credit Associations, to fight financial, economic and social marginalization. SHGs, as facilitated by the non-governmental sector, had a common core structure that was retained by subsequent government programmes (including NRLM) that aimed to replicate, enhance and scale these groups. Each SHG consists of 10-20 members (typically averaging 11 members), most often all adult women from low-income and often historically subjugated (Scheduled Caste (SC)/Scheduled Tribe(ST)) communities. The members meet at a regular frequency (typically weekly) and voluntarily contribute small bits of savings that are pooled to offer internal loans to members at a low interest rate (around two percent per month). This in-group interest rate is significantly lower than informal interest rates offered by moneylenders (that can reach as high as ten percent per month or more) but higher than formal bank or credit union lending rates.

The National Bank for Agriculture and Rural Development (NABARD), formed in 1982, ran a set of pilot programmes in 1992-93 to cost-effectively link SHGs to rural banks. Banking legislation was reformed to allow each unregistered SHG to own and operate a joint formal bank account with modified Know Your Customer (KYC) and ownership requirements. The SHGs could then apply for larger low-cost loans from the formal banking system for onward internal lending, which reduced the operational cost of servicing these small loans for the banking system. This was followed by the launch of the Swarnajayanthi Gram Swarozgar Yojana (SGSY) in 1999 under the Ministry of Rural Development aimed at using SHGs as a platform for broader self-employment and skill development/training goals, going beyond the initial financial inclusion mandate.

In select states, the SHG linkage and layering programme achieved significant expansion and measured impacts with support from the respective state government in the late 1990s and early 2000s, Kerala and Andhra Pradesh being the two frontrunners. In the former unified state of Andhra Pradesh (now Andhra Pradesh and Telangana), the Society for the Elimination of Rural Poverty (SERP) initiated the programme, which was then scaled up by the state government as the Indhira Kraanthi Patham (IKP) or District Poverty Initiative Programme (DPIP). As an illustration of early results, Deininger and Liu (2009, 2013a, 2013b) study the impacts of the first three years of the IKP programme rollout in Andhra Pradesh and find that participating households register an 11 percentage point increase in per capita consumption, 10 percentage point increase in per-capita energy intake, 16 percentage point increase in per capita protein intake, and 23 percentage point increase in investment in non-financial assets (Deininger and Liu, 2009).

Inspired by these promising results, the Government of India launched a national programme in 2011 part-funded by an IDA loan from the World Bank that would build and use local SHGs as the basic blocks of a federated structure and platform to support rural livelihoods across the country (NRLM; renamed Deendayal Antyodaya Yojana or DAY-NRLM in 2015). NRLM was designed to layer on programmes over time as each SHG matured. First the SHG formed and began internal saving and lending activities. Then after 6 months to a year of continuous operations, the SHG was linked to the banking system. Then health, access to markets, or other livelihood and training activities were layered on. The quality/health of an SHG is measured using a five-point assessment called the 'Panchsutras' that includes evaluating whether (1) regular group meetings are conducted, (2) regular savings are collected within the group, (3) the group internally lends group funds based on the demand of members, (4) there is timely repayment of loans and (5) there is maintenance of proper books of accounts.

The key institutional innovation of NRLM over the predecessor SGSY was an enabling institutional arrangement that ensured implementation and monitoring of layered programming with scale. 10-15 SHGs were aggregated into Village Organisations (VO) that typically developed investment plans, served as the conduit for providing Community Investment Funds (CIF) and linked the SHGs to banks. 25 VOs were then aggregated to form Cluster-Level Federations (CLF), which were responsible for coordination/convergence of planning activities with Gram Panchayats (GP) and the elected Panchayati Raj Institutional (PRI) structures, and simultaneously engage with Block-level support institutions such as the Block administration and Gender Resource Centres (Kochar et al., 2020a). A 'community cadre' of SHG members and non-members played the role of staff within this institutional structure, some of whom were contracted and paid to roll out the programme and enable scaled outreach (ibid). Paid positions, such as the book-keeper and the livelihoods community cadre earned a commission for services provided, thereby providing direct employment opportunities for rural women from marginalised communities. This included positions of Bank Sakhis and business correspondents who were focused on linkages to formal finance and usage of these accounts. Yet, not all community cadre positions were paid, with SHG women who were active members of groups not being compensated for their work around mobilising other members and groups. The demand to deploy NRLM community cadre as frontline government workers has soared, especially during the COVID-19 pandemic.

This cohort of Community Resource Persons (CRP) play a critical role in the functioning of NRLM, serving simultaneously as representatives of the state facing the community and representatives of the community facing the state (Bhanjdeo et al., 2021). The complicated structure and operational efficacy of CRP compensation, and the political economy of their appointment on account of being rare reasonably-paid government jobs for women in rural areas is a critical domain influencing the institutional viability of NRLM. This is also a key distinguishing factor between earlier home-grown movements that were driven by voluntary women leaders from marginalised communities who were motivated by their experience and passion to lead social reform (identity and leadership in the Freirean sense), and the new government bureaucratic roles under NRLM that are constituted as paid jobs with incentives and targets (service provisioning). A key philosophical and operational question is, therefore, (a) whether intensive and long-term change processes can be driven by a community cadre that works for pay, and (b) how should pay and performance incentives be structured to center on agency and welfare outcomes and not proximate target outputs?

NRLM planning documents emphasised an explicit goal of universal coverage among rural Below Poverty Line (BPL) households, both across geographies (penetration or reach) and within each rural geographic area (saturation or density). This presented an opportunity for scaled participation to create impacts that less widespread interventions may not be able to achieve (for example, efficiencies in procurement and other input costs) and less saturated interventions may also not be able to achieve (for example, cumulative threshold impacts on local markets and prices). It is both of these aspects of scale that enable federation (CLFs require a certain minimum number of VOs and this in turn requires a certain number of SHGs), with federation in turn further enabling scale.

The ability to layer on interventions through NRLM over time is also strongly dependent on scale, so that growth at the intensive margin is only possible if there is growth at the extensive margin (Kochar et al., 2020a). For instance, bank linkage only happens through the VO and so requires a certain number of SHGs; the introduction of livelihoods occurs only through CLFs and similarly requires a certain number of SHGs. Federation is therefore a way of managing scale, so that the benefits of the programme represent a combination of scale and dynamically managing scale through federation (ibid). While NRLM targets the easing of credit markets at scale as the starting point, the programme's focus on institutional structures and longevity to facilitate linkages and layer on components related to livelihood and collective action over time suggest a multi-dimensional view of rural development. However, the political incentives of local and state policymakers and their alignment with supporting this evolving programme also become more important. A deeper understanding of the programme's political economy motives and interaction with local and state politics from a historic and current perspective is necessary. NRLM was initiated in select blocks of 100 high-poverty districts across 13 states in 2012, and subsequently expanded to other districts and states (Kochar et al., 2020a). The programme's implementation is driven by each State Rural Livelihoods Mission (SRLM) working with non-governmental partners. Considerable variation has emerged in terms of pace of rollout, quality of human capital investments in programme staff and members, maturity of institutions, and associated agency and welfare outcomes of participants over the programme's first decade (2011-21). This is discussed in more detail in section 1.3 below.

The programme received a 1B USD IDA lending commitment from the World Bank to the Ministry of Rural Development in July 2011. The project cost in terms of World Bank financing as of 2021 is US$ 650M and is scheduled to close in June 2023. The project's development objective is stated as follows: "*To establish efficient and effective institutional platforms of the rural poor to enable them to increase household income through sustainable livelihood enhancements, and improved access to financial and selected public services,*" (World Bank, NRLP project webpage). NRLM's total budget in the decade since its inception is estimated to be between 4B and 5B USD.

The exclusive targeting of women in the NRLM and most precursor programmes can be interpreted as a response to the extreme marginalisation and exclusion of rural women in terms of social and economic well-being, and the recognition that routine rural development investments through existing patriarchal hierarchies would not significantly reduce gender disparities without targeted corrective investment. A similar motivation drove India's affirmative action policies around political representation and 33% reservation of electoral seats for women. The theory of change related to women's empowerment through the SHG formation and operation processes is less clearly articulated in NRLM's original documentation in 2011-2012, and this has repercussions for measured impact on women's agency indicators. In many ways, NRLM's original design was instrumental in its targeting of women within family contexts, primarily focusing on participation and not transformed gender dynamics.

However, this instrumentality was in contrast to some of the pre-cursor non-governmental organisation-led Self-Help Group movements who themselves used a more gender-intentional and gender-transformative approach and who strongly advocated for the same in NRLM without which, they cautioned, the programme would have limited success. As a result, in more recent NRLM documentation and guidance, gender intentionality and social action is given more explicit attention as an area of layered programming that requires its own additional and explicit prioritisation, design, and investment of resources. For instance, an MoRD protocol document from 2018 describes the following: "*NRLM focuses on building institutions which support women towards gaining: **Identity**: Positive self-image and dignity; **Solidarity**: Voice, Decision-making and feeling of not alone; **Capacity**: Knowledge, Skills , Resources and Ownership; **Access**: Rights, Entitlements and Services; **Well-being**: Livelihoods and Lives; and therefore Enhanced freedom and portfolio of choices.*" The implementation of programming associated with this increased prioritisation of improving women's agency followed the national evaluation of NRLM discussed in section 1.3 here. Therefore, the results of this increased emphasis and additional programming related to women's agency remain to be seen. However, there is variation across states in how rural women's engagement in SHGs translates to improved agency in different domains (Prillaman, 2021 in Madhya Pradesh; Hoffman et al., 2021 in Bihar), which is discused in section 1.3 below.

In 2015, NRLM was functionally linked with the National Rural Employment Guarantee Scheme (NREGS) through an order issued by the Ministry of Rural Development, in a process called convergence. As Barooah et al. (2021) notes, "convergence required that SHG members be included in: (a) the participatory identification and enrolment of households who may have been left out of the MNREGS rolls; (b) planning of the MNREGS budget at the village level; and (c) determining asset creation and monitoring of worksites". Linking the two programmes was expected to make NREGS more inclusive and participatory, and increase the choice of livelihoods available to households under NRLM who would benefit from the improved creation of assets under NREGS (ibid).

1.2 NRLM targeting, Theory of Change (TOC), and core outcomes at the national level

With its multiple programme components, the NRLM embodies a set of nested and interacting theories of change targeting a set of outcomes. A key issue is the difficulty of estimating the impact of specific programme components, especially with varied implementation models and varying fidelity to each designed model given NRLM's decentralised implementation at the state and district levels and variations over time. In this sense, the NRLM's TOC and implementation is akin to the more complex set of interactions embodied in the TOC of BRAC's Ultra-Poor Graduation Programme and its implementation by other non-governmental organisations, evaluated in Banerjee et al. (2015b), compared to simpler single-component credit access or cash transfer interventions and their theories of change. We first discuss programme targeting and participant selection, followed by the four core TOCs embedded within NRLM.

1.2.1 Programme targeting and participation.

NRLM targets all Below Poverty Line (BPL) rural households, prioritising those from historically oppressed communities (Scheduled Castes and Scheduled Tribes (SC/ST)), with the assumption that the participating households are not so destitute that they cannot fulfil the weekly savings contribution requirement (typically set very low to be 10 or 20 INR per week). For example, MoRD's 'Framework for Implementation' from 2013 states that "*NRLM would ensure adequate coverage of vulnerable sections of the society such that 50% of the beneficiaries are SC/STs, 15% are minorities and 3% are persons with disability, while keeping in view the ultimate target of 100% coverage of BPL families*" (p8, as cited in Bhanjdeo et al., 2021). This component of universal coverage of all poor families is critical and is discussed further in section 1.2.5 below. Bhanjdeo et al. (2021) caution that "such inclusion goals--especially 100% coverage--can often come into tension with "sensitive structure" goals, especially because the former is more easily quantitatively measurable than the latter."

1.2.2 TOC 1: Lowering the cost of credit

NRLM is designed to first and foremost address the credit constraints of the poor by offering lower cost finance for consumption and investment activities. At the lower interest rates offered (around 24% per annum for internal loans, and 7-12% per annum for external group loans taken from the formal banking sector), the take up of credit through SHGs is expected to be high. By offering low-cost finance through voluntarily self-selected groups that also contribute some of the seed capital through regular savings and share in the group's profits/growth, the costs of delivery are significantly lowered and informational asymmetries and associated risks for the banking sector are reduced through repeated in-group monitoring and joint liability for external loans. With this, as a first step, participating households are expected to be able to finance consumption at lower cost.

The programme expects that with lower-cost finance, household self-employment and enterprise activities of the rural poor (farm, off-farm and non-farm) would see greater investment and returns. This assumes that the household self-employment and enterprise activities of the poor are primarily constrained by cost of capital and not some other constraint like technology or markets or labour or norms, similar to the TOC of the joint-liability microcredit model outlined in Banerjee et al. (2015a).

When livelihood training and support in market access (around inputs and outputs) are offered as layered services through NRLM for mature groups, the programme expects to see additional gains in self-employment and micro-enterprise productivity, sales, growth and net earnings. The household incomes of SHG members would rise. The original NRLM model does not explicitly encourage collective or joint enterprises among SHG members.

If SHG women are self-employed or individually/jointly own one or more micro-enterprises in their household (farm, off-farm or non-farm), the programme expects women's engagement/time spent on their self-employment or microenterprise activity to increase, their individual earnings to increase (as opposed to household income), and as a result, women's relative bargaining power and decision-making in the household to increase.

Target outcomes: With this theory of change, we would expect to see the following outcomes and direction of change under NRLM: substitution of high cost credit with lower cost credit; reduced interest burden; increased savings accumulation; increase in productive investments (expenditures and assets); increased engagement in self-employment and enterprise activity (by other household members and/or participating women); increased productivity and/or sales (if livelihood training and market access support are offered); increase in net earnings from self-employment and micro-enterprise activity (at the household level and women's individual earnings); increase in consumption expenditures; increase in food security and nutrition; increase in women's involvement in household decision-making; improvement in attitudes towards women's paid work outside the home.

1.2.3 TOC 2: Targeting women-only groups

Regular engagement in self-governed, women-only, cooperative financial activities is expected to improve women's skills, aspirations, mutual support, and lead to improved self-efficacy, self-worth and confidence. Directing financial resources from the state to women is expected to improve their economic control and bargaining power within the household. This is expected to increase women's involvement in household decision-making. Within the community, the networking and federation of SHGs into VOs and CLFs is expected to expand women's social networks and create a competing locus for public identity and collective action vis-a-vis identity based primarily in the household and within private kin structures. While this increase in social networks and public activity is expected to increase women's involvement in community decision-making, there isn't a clear focal or structured activity around which such community engagement is expected to occur (in contrast to the expectations from engagement with community institutions through NREGS convergence and decision-making activities described in TOC 3 below).

A key aspect to keep in mind with this TOC is whether and in which domains of agency and empowerment we can expect the core NRLM model to deliver gains, especially without simultaneously and explicitly programming to address the structures (in this case patriarchal and patrilineal) that suppress agency and make women “subjects, principally of their households, as opposed to agents” (Prillaman, under review). From their review of group-based models, Diaz-Martin et al. (2021) find that intentional programme design is important for generating impacts outside the core function of the group, for e.g., on empowerment or IPV, in addition to financial inclusion.

Target outcomes: With this theory of change, we would expect to see the following outcomes and direction of change under NRLM: women’s increased self-efficacy and confidence; increased social capital and wider social networks from participation in groups and federations; increased involvement in household decision-making; increased participation in collective action, community meetings/forums and decision-making; increased community investment in women’s development priorities; improvement in attitudes towards women’s leadership.

1.2.4 TOC 3: Improving the flow of other state benefits and services to marginalised women

Improvements in information access, self-efficacy, agency, and social networks through internal engagement in cooperative financial activities and through external engagement with the banking sector and government institutions are expected to enable marginalised women to become better aware of and lay claim to their broader set of rights and entitlements from the state. This would include the claim to 100 days of paid employment per household or subsidised asset creation under NREGA, and other state-guaranteed benefits such as health insurance. The underlying assumption is that women from marginalised communities are not prioritised (even systematically excluded) from government benefits by the state and its agents’ patriarchal norms and systems, and so NRLM could facilitate marginalised women’s visibility and voice within Panchayati Raj Institutions. However, one could anticipate that such enforced integration could be actively contested.

Greater convergence between NRLM and NREGA through coordination between VOs/CLFs and Gram Panchayats—specifically SHG women’s greater “representation in planning and monitoring of the MNREGS at gram panchayat (village council) level” (Barooah et al., 2021)—is expected to impact marginalised women’s participation in NREGS wage work and/or their access to subsidised assets and services created through NREGS. Since NREGS planning is done by the Panchayati Raj Institutions, requiring SHG women to be part of NREGS planning and processes enables them to engage directly with the PRI (the SHG-PRI linkage activities pursued by Kudumbashree in Kerala are a good example).

However, the direction of influence and target outcomes are less clearly articulated. NRLM’s women participants could increase their own participation in NREGS as wage workers on account of improved convergence. Alternatively, SHG women could move away from participating as wage workers in NREGS, having 'graduated' from being ultra-poor to a slightly improved standard of living through improved credit access via NRLM, and instead primarily benefit from the public and private assets created through MNREGS for their own livelihood activities. A third possibility is that both of these dynamics could be at play at different stages of an SHG's lifecycle and maturity, i.e., the timing of convergence matters in hypothesizing which outcomes change and their direction of change. In the first year of an SHG's formation, prior to being eligible for Community Investment Funds (CIF) through NRLM, SHG women are only able to access small amounts of credit through their groups and mostly use these funds for consumption purposes. The training to develop their micro-plans for self-employment or enterprise activity is ongoing. At this time, linking SHGs to NREGS may give women access to much needed wage employment because enterprise support services have not yet been delivered. As the SHG matures and accesses CIF in larger amounts, SHG women's time might shift to prioritise their entrepreneurial work and consequently their demand for NREGS wage work might fall, even as their demand for NREGS-generated productive investment and assets increases.

Another key question under this TOC relates to substitution effects: where we see increases in access to NREGA through NRLM, is NRLM shifting footfall from other sources to accessing benefits via the CLFs, or are the CLFs enabling access to additional women who had not accessed NREGA previously, for e.g., SHG members, the poorest women/households, etc.

Target outcomes: With this theory of change, we would expect to see the following outcomes and one of two possible directions of change under NRLM, allowing for the possibility that each of these pathways could be more influential at different stages of an SHG's lifecycle/maturity:

(A) increased number of NREGA jobcards owned by NRLM participant households; increased share of NREGA beneficiaries who are women from historically marginalised SC/ST communities; increased number of work days and increased NREGA wages among NRLM households (particularly among women); increase in income from wage labour; increased household consumption; greater value of individual or household assets (monetized); increased enrollment in other government benefits like the public health insurance scheme, particularly among women and historically marginalised communities; increased decision-making by women in the household driven by increased bargaining power from higher NREGA activity and earnings.

(B) decreased number of NREGA jobcards among NRLM participant households; increased share of NREGA assets created for SC/ST women; increased time spent on self-employment and enterprise activity by SC/ST women; increased productivity and net returns from NRLM households' self-employment and microenterprise activity (particularly farm enterprises); increased household income and consumption; greater value of household productive assets (monetized); increased enrollment in other government benefits like the public health insurance scheme, particularly among women and historically marginalised communities; increased decision-making by women in the household driven by increased bargaining power from higher self-employment/microenterprise earnings.

1.2.5 TOC 4: Shifting outcomes through universal coverage and scale

The TOCs articulated on lowering the cost of credit, targeting women, and accessing other state benefits can all operate at the level of individuals or groups and deliver select changes in individual or household outcomes as noted above. However, NRLM's emphasis on universal coverage on the extensive margin and federation of SHGs to lower administrative costs of layering services on the intensive margin is expected to amplify returns on the same activities, and trigger a set of additional impacts at a societal level that would not occur if the programme only covered a subset of BPL households in each geographic area.

If the programme approaches universal coverage of eligible households in each geographic area that brings linkages to lower cost group credit, bank credit, and Community Investment Funds, the programme can be expected to produce general equilibrium effects on interest rates, generating spillovers on other non-participant households in the village and changing local credit markets. This in turn can trigger increased overall economic activity and demand for labour, shifting local wage labour markets and household consumption. With the presence of a lower-cost alternative, the relative bargaining power of the poor and credit-constrained, and particularly women, vis-à-vis better-off members of the village community can be expected to improve. This can be expected to compel local government to be more responsive to the needs of marginalised groups, including women, and improve the functioning of local government programmes .

At the same time, there is an inverse relationship between scale of programming at the Block level and scale of programming and expansion at the village level, operating through an implementation effect. The lower the scale of the programme and pace of programme expansion across villages at the Block level, the lower the programme's overall administrative burden, which allows for better programme implementation and expansion <u>within</u> intervention villages. For scale at both levels to positively impact outcomes, it would be important for administrative capacity to be simultaneously scaled up effectively, else one can anticipate that scaling rapidly across villages might negatively impact attaining universal coverage (and triggering GE effects) at the village level (Kochar, 2021).

The engagement of marginalized women in public and market activity at scale is expected to shift social norms regarding women's roles and positions, where isolated achievements by individual women might not create the widespread attitudinal shifts needed to change social sanctions and prevailing perceived and actual gender norms. At the same time, such normative change typically entails a process of negotiation and renegotiation, suggesting that one of the key unknowns is how the process of negotiation will unfold, both internally and externally, and which programme inputs and support will be most useful at specific stages. First, one can anticipate that aggregate shifts in women's economic power is unlikely to be accepted within existing external power structures. Such general equilibrium effects of SHGs on the broader lives of women remain unknown at the outset. Second, universalisation implicitly presumes a unified collective. An additional key unknown, therefore, relates to the costs of universalization internally within the programme, particularly for the development of social capital. From a political standpoint, universalisation could also generate greater factionalism amongst women that would inhibit the development of a clear gender consciousness.

Target outcomes: With this theory of change, we would expect to see the following outcomes and direction of change under NRLM: increase in share of household credit sourced from NRLM; reduction in prevailing informal interest rates where NRLM achieves universal coverage; increase in private wage labour demand driven by non-participant households and household wage income among participant households; increase in returns to self-employment and microenterprise activity from lowered input costs; potentially increased contestation over women's roles and resources with community structures; potential increase in factionalism as programme attains universal coverage and scale; potential improvement in functioning of local government particularly in priority areas for women and SC/ST households; potential shift in attitudes and perceived social norms towards more gender progressive views, particularly around women's paid work outside the home and women's leadership.

1.3 NRLM's impact thus far

1.3.1 Average impacts

We present the results of the programme in the same order in which the theories of change are presented in section 1.2 above.

1.3.1.1 Programme targeting and participation

As of May 2021, there are 6.9 million SHGs in India with 75 million members across 783,389 villages (Kumar, 2021). Kochar et al. (2020a) presents results from an independent impact evaluation of NRLM covering nine states that exploited the staggered rollout of the programme across blocks and across villages within blocks, to estimate the additional impact of 2.5 years of having the NRLM programme on a set of household and individual women's outcomes measured through a survey of over 27,000 respondents from around 5000 SHGs across 1052 villages. Among the nine states included in this evaluation, Madhya Pradesh, Maharashtra, Odisha, West Bengal and Bihar were early implementers of NRLM starting the programme in 2011-12. These states also have a longer history of women's groups being formed. The other four states included in the study - Rajasthan, Jharkhand, Chhattisgarh and Uttar Pradesh - started the NRLM programme later in 2014-15.

Kochar et al. (2020a) find that the programme was successful in targeting low-income and marginalised rural women. The average SHG member was 38 years old and had 2.8 years of schooling; "32% of households belonged to scheduled castes and 31% to scheduled tribes

(63% in total, exceeding the programme target of 50% SC/ST households), compared to national averages of 16.6% and 8.6%, respectively" (Kochar et al., 2020a; Sahni, 2021 summary brief). Casual labour was the main source of income for the average member household, followed by agriculture, salaried jobs, and non-farm enterprises. The average household in the overall sample had an annual income of INR 75,000 (for SHG households, this figure was 57,000 INR), and expenditures of INR 124,000, indicating extreme debt at baseline. SC/ST households tended to save more and borrow less than wealthier and better-educated households, perhaps indicating additional borrowing constraints (ibid).

1.3.1.2 Programme implementation and quality

In line with NRLM's TOC in initial documents, the success of the programme requires high capacity or well-functioning SHGs, their federation, and their scaled delivery of layered services. Implementation was slow in early years of the programme, with many states picking up pace only after 2014-15. Correspondingly, evaluations that exploit the phasing of the programme (such as Kochar et al., 2020a) find small effects. However, a note of caution is that it is difficult to separate out implementation challenges from the true effectiveness of the programme when implemented well and at scale, which would require a comparison of well-functioning and scaled early and late SHGs.

The quality of groups as evaluated on the five-criteria assessment 'Panchsutras' in Kochar et al. (2020a) was mediocre (2.5 on a 5-point scale), with younger SHGs and SHGs federated into VOs scoring higher on quality (2.6 and 2.9 respectively). There were significant delays in implementation during the early years of the programme with early SHGs formed in 2012–2013 taking an average of 30 months to access revolving funds - the initial cash grant provided to SHGs - rather than the three months laid out in the guidelines. This delay was reduced for SHGs formed in or after 2015 (Kochar et al., 2020a; Sahni, 2020 summary brief). Federation seems to have been relatively successful with 79% of SHGs linked to VOs; 75% linked to CLFs; and 70% having received revolving funds. However, only 34 percent of SHGs had received Community Investment Funds (CIF) and 50 percent had received bank loans (ibid).

Older SHGs and federated SHGs distributed larger loans on average (12,824 INR vs. 4,238 INR) though to fewer members, making younger groups more equitable in terms of distribution of resources. In terms of sustainability, older SHGs were more likely to be defunct (10% vs. 6%), with federated SHGs recording lower rates of dissolution (4% defunct), though this could be a result of better functioning SHGs selecting into Federations rather that Federations improving sustainability of average groups. Some of the states that had the earliest rollout registered higher rates of defunct SHGs (18% in Maharashtra and 29% in MP), though the line between functioning and defunct is a tenuous one and reflects broader political economy challenges as described in Bhanjdeo et al. (2021).

It is useful here to note a few important aspects of SRLM implementation in Madhya Pradesh and Bihar, the two states that this project will focus on in the coming years. Both states were early implementers of the programme and began programme rollout in 2011-12. The two states have a history of women's groups being mobilised by civil society prior to SRLM rollout. Bihar has over 56% of rural households mobilised into SHGs, while Madhya Pradesh only has around 24% of its rural households mobilised into SHGs, with implications for some of the effects driven by local saturation, scale, and spillover effects. At the time of Kochar et al. (2021a)'s endline survey in 2018-19, 92% of sampled SHGs in Bihar were still in operation while the corresponding share for Madhya Pradesh was 52%. Madhya Pradesh implemented layered livelihood programmes with a greater focus compared to Bihar, while both states registered a larger share of productive loans (around 50%) compared to the other states. The average amount in Community Investment Funds provided to SHGs in Bihar was one of the lowest among states (Kochar et al., 2020a).

1.3.1.2 Results related to TOC 1: Lowering the cost of credit

NRLM significantly reduced member household reliance on high-cost debt, with 17,000 INR in increased savings/reduced borrowing and interest payments (28 percent change) over a 2.5 year period, the share of informal loans fell by 20 percent in the average household, with 32 percent fewer households taking out high-cost loans, and a two percentage point reduction in the cost of capital from a base of 17 percent per annum (Kochar et al., 2020a). Only a small share of this is reflected in increased savings in SHGs themselves. In terms of heterogeneity in these results, SC and ST households reported increased access to loans compared to other households, while ST households also reported greater programme effects on the number of income sources and on savings with SHGs compared to other households, reflecting increased engagement in agriculture and livestock (ibid).

On average, 48 percent of SHG loans were used for consumption purposes, with only 19 percent being used for productive purposes. However, members of older SHGs spent more of their loans on productive purposes (30 percent) compared to members of younger SHGs who mostly spent their loans on consumption (53 percent) (Sahni, 2021). Kochar et al. (2020a) report that in their sample of 5000 SHGs, only 65 groups had initiated some form of group entrepreneurial activity. There was no significant impact on household consumption, except for a significant but small improvement in household food diversity index and a small decline in hunger (ibid). This indicates that NRLM member households were able to maintain current consumption at lower cost. Importantly, there were no average impacts on asset creation.

However, member households saw a 19 percent increase in income (11,000 INR per year), primarily driven by higher wage labour earnings in the private sector (8267 INR) by male workers in the household. A very small share of the earnings increase is driven directly by NREGS income. This is in contrast to TOC 1's prediction that income gains would primarily come from an improvement in farm and non-farm enterprise returns due to the lowered cost of finance and enterprise productivity improvements. There is a statistically significant expansion in the number of income sources per household (2.37 among early NRLM households vs. 2.35) but this does not translate to increased earnings from non-wage sources. This surprising finding highlights the need to better understand how solving credit constraints can improve welfare through boosting local labour markets, which relates to the scale of the programme (TOC 4) and is discussed in section 1.3.1.5 below.

In line with the results on earnings, men in participating households report a 6 percent increase in hours worked on their primary occupation and a 10 percent increase in hours worked on their secondary occupation. Women in member households reported 6 percent higher participation in secondary occupations over a base secondary participation rate of 58 percent (Kochar et al., 2020a; Sahni, 2021). This result aligns with the findings from Callen et al. (2019) in Sri Lanka where providing households with Point-of-Service terminals to collect savings deposits directly at their household each week resulted in households working more and sacrificing leisure time. They note that improved savings options generated an increase in labour effort in both self-employment and in the wage market, and that the labour allocation pathway is an important mechanism linking savings opportunities to income (ibid). The same channel could well be operating in the case of NRLM.

Household farm and non-farm enterprise income registered no earnings gains among member households. This is in line with the results from the set of six microcredit evaluations that found modestly positive but not transformative impacts on consumption and investment just from improved access to microcredit (Banerjee et al., 2015a). It is important to keep in mind that the size of loans, profit sharing model, dynamics of joint liability, and commitment mechanisms differ substantially between the cooperative SHG model in NRLM and the more commercial joint-liability microcredit model evaluated in Banerjee et al. (2015a) and associated papers. In contrast, previous work on capital shocks (grants) to women-owned microenterprises finds that they improve household earnings when there are multiple enterprises in the household, even if they do not increase the returns to the woman's own microenterprise (in contrast to similar shocks to men-owned microenterprises that register large returns directly in the targeted microenterprise) (Bernhardt et al., 2019).

Hoffman et al. (2021) evaluate the randomized rollout of the JEEVIKA programme in Bihar and find that over two years, this SRLM's expansion led to a dramatic increase in the number of women enrolled in SHGs in the state, an increase in borrowing from SHGs, and a decline in borrowing from informal sources. As a result, there were fewer informal lenders operating after the programme and those that did offered loans at lower interest rates (ibid). Kochar et al. (2020a) analyse the additional endline survey administered in 2018-19 to the original Hoffman et al. (2021) sample in Bihar and find similar results on economic impacts, i.e. the programme led to a 9.3 percent decline in the incidence of high-cost loans (nearly 75 percent of households reported having a high-cost loan at baseline.) In contrast to the national results, they find a significant increase in household accumulation of productive assets and in education expenditure in Bihar, which might foretell the economic gains from improved credit markets that might accrue over time in other states as well. However, there was no impact on the number of income sources in Bihar (Kochar et al., 2020a).

Siwach et al. (2021) examine costs as JEEVIKA scaled from 8000 women in 2007 to over 5 million women in 2019. They find that annual per capita expenditure on basic programme activities fell from “34 USD per programme participant when the programme covered approximately 60,000 members to 3 USD per programme participant when it reached over 11 million members”. At the same time, they analyse existing data on programme impact from the pilot and scaled-up phases and find that the programme led to reductions in household debt from high-cost loans by 89 USD in the initial phase compared to 33 USD in the scaled-up phase, resulting in no meaningful difference in cost-effectiveness ratios between the two phases due to lower costs driven by economies of scale (ibid). Previous estimations of cost-effectiveness at the state-level, for instance, from the IKP programme in former unified Andhra Pradesh, find that the increased consumption delivered by the programme more than paid for programme costs, even assuming very conservatively that benefits lasted just for a year (Deininger and Liu, 2009). Systematic monetisation of programme benefits across outcome areas, and careful comparison with programme fixed and variable costs and delivery (whether through NGO implementers or government SRLMs) is essential to determining how the effectiveness of programme delivery varies based on who is driving the implementation and at what scale, and how that directly corresponds with changes in outcomes that may themselves amplify or recede over time. Such rigorous and comparative cost-effectiveness analysis is currently lacking.

1.3.1.3 Results related to TOC 2: Targeting women-only groups

The programme did not significantly improve either of the two indices of women’s empowerment, recording no average increase in women members’ decision-making within the household or self-efficacy and confidence in the community (Kochar et al., 2020a). Examining heterogeneity in these indicators, the study does not find significant differential gains in empowerment among SC and ST women. Additionally, Gupta et al. (2021) deepen the analysis of the NRLM evaluation data to examine correlations with son preference norms across states and find that NRLM has not significantly reduced gender biases against girls as the existing patriarchal structures continue to assert their influence. They find that women’s access to NRLM is in fact correlated with widened gender inequalities in their children’s private school enrolments. While NRLM is correlated with reduced son preference in low-fertility states, participation is associated with increased son preference in high fertility states where choices appear more sensitive to changes in economic circumstances (ibid). This is a stark reminder of the underlying social incentives governing women in India and their attitudes towards and investments in their children, even when they face improved credit markets, and relates directly to the rigid social norms around marriage, patrilocality, economic dependency in old age, and gender roles. Any desire to significantly shift these norms will need to directly engage with their determinants and go beyond the expectation that economic gains for women will directly translate into improved and more gender equal investments in girls, similar to the earlier findings around economic growth and the rise in sex-selective abortions in parts of South and East Asia (Sen, 2005).

State-level explorations of SHG activity and the repercussions for women's agency present varying assessments. Sanyal (2009, 2014) presents an analysis of qualitative data from West Bengal examining pre-NRLM groups (mobilised by NGOs) where she finds that one-third of the groups undertook collective actions, which were driven by improvements in women's social capital and normative influence that drew on the economic ties between group members, the structure of the group network, and women's participation in group meetings. In Bihar, the first stage of the state SRLM JEEViKA programme, which involved more intensive engagement by social workers with programme participants, recorded significant changes in women's agency, improving physical mobility, participation in Gram Panchayat meetings, participation in household decision-making around the household's primary livelihood activity, and political participation (Datta, 2015). An ethnographic examination of the potential mechanisms behind these strong changes in measured agency found that the programme had "created new 'cultural configurations' by giving economically and socially disadvantaged women access to a well-defined network of people and new systems of knowledge" (Sanyal et al., 2015). However, during the scale-up phase of the programme (from mobilizing 8,000 women into SHGs in 2007-08 to mobilizing over 5 million women in 2015-16), Hoffmann et al. (2018) find that JEEViKA implemented at scale registered mixed impacts on women's empowerment indicators, with no clear indication of a significant positive change. Sharan (2021) studies the dynamics of local politics in Bihar, with a focus on caste and power dynamics, and highlights very low levels of women's participation in Gram Sabhas despite widespread participation in JEEViKA. So while the economic impacts of JEEViKA seem stronger in the long term, the agency impacts seemed to have been stronger in the short term and before the programme achieved full scale.

Women with higher education at baseline saw an increase in confidence related to community participation, but this did not impact their participation in household decision-making (Kochar et al., 2020a). Prillaman (2021) studies the impact of participation in SHGs in Madhya Pradesh state, focusing on SHGs created through the mobilisation of the non-governmental organisation PRADAN across 152 villages, and finds that SHG participation doubled women's attendance at Gram Sabhas/public village meetings. The groups studied had been functioning for six years on average, and effects increased in the amount of time a group had been together. This significant improvement in women's political participation is attributed to three driving mechanisms: "(1) larger networks, (2) increased capacity for collective action within networks, and (3) development of civic skills" (ibid). A significant difference between the state-level results measured by Prillaman (2021) in Madhya Pradesh and the national Kochar et al. (2020a) results on agency is that the former SHGs in Madhya Pradesh were promoted and supported by a leading civil society NGO PRADAN, while the latter reports on SHGs mobilised by the state machinery under NRLM and the respective SRLMs. In the southern state of Tamil Nadu, Parthasarathy et al. (2017) report that a different intervention focused squarely on improving women's participation in the Gram Sabhas increased attendance, likelihood of speaking, and floor time, but did not lead to improved control over the conversational agenda or increased response from government officials. Better understanding the implications of higher quality, depth, and ongoing support for women's collective mobilisation on impacts related to women's agency, political participation, and welfare outcomes is critical. The challenge of institutionalising sustained high-quality gender-related outreach and support within NRLM is discussed again in sections 1.3.2.3, 3 and 4.

Additionally, differential implementation of the programme across states was associated with differential changes in women's agency outcomes. For example, Kochar et al. (2020b) study the impact of Community Investment Funds (CIFs) on women's empowerment and find that states differ significantly in the amount of CIF that they provide to SHGs. The states that provided large CIFs recorded significant improvements in women's intra-household decision-making compared to states that provided smaller CIF resources (ibid), suggesting that threshold effects may have an important role to play in driving women's agency and bargaining power outcomes. This line of investigation on the size of resource transfers and their control deserves further testing and analysis.

1.3.1.4 Results related to TOC 3: Improving the flow of other state benefits and services to marginalised women

The programme causes a small but significant increase in the number of other social schemes used by households (a 6.5 percent increase over a base of 2.8 schemes), providing some support for TOC 3. Kochar et al. (2020a) find that 40 percent of SHGs provided some support to members to access government schemes. Older SHGs and federated SHGs were significantly more likely to report pursuing such linkage activities (48 percent vs. 31-35 percent). Yet, synergistic programming with the Gram Panchayat was less obvious. In a qualitative examination of NRLM functioning in one district of Madhya Pradesh, Bhanjdeo et al. (2021) find very little interaction between SHGs and either Panchayat or other rural development programmes and institutions. In a study testing whether SHG Community Resource Persons in Odisha could be contracted to increase enrolment of young women in the government youth skills training and placement programme (Grameen Kaushalya Yojana), Moore et al. (2022) find that contracted SHG recruiters were not effective at differentially increasing female enrolment compared to male enrolees in this programme.

In their study of 5900 households from 218 villages in 25 blocks across four states (Jharkhand, Rajasthan, Chhattisgarh and Maharashtra), Barooah et al. (2021) find that 92 percent of sampled households had a ration card, 77 percent of which were priority ration cards; 78 percent of households were SHG members, but NREGS participation was low, with only 27 percent of households reporting having accessed the scheme in the past twelve months. A key linkage that NRLM aimed to facilitate was, therefore, convergence specifically with NREGS, often by requiring SHG members to be represented in the planning and monitoring of NREGS implementation at the Gram Panchayat (village council) level. This intervention had a staggered roll out at the block level in different states starting in 2015 (ibid). They find that the linkage with NREGS was especially effective in villages that implemented convergence early on in the SHG lifecycle. De Hoop et al. (2021) similarly find an increase in NREGS participation among NRLM households, but they do not find positive effects on community-level assets created under

MGNREGS. We discuss these early results from implementing convergence of NRLM specifically with NREGS in more detail in section 1.3.2.2 below.

1.3.1.5 Results related to TOC 4: Shifting outcomes through universal coverage and scale

In their impact evaluation of the at-scale SHG programme in Bihar state (JEEViKA), Hoffmann et al. (2021) find that "in less than two years (JEEViKA) sharply reduces informal interest rates by undercutting moneylenders" pointing to broader general equilibrium effects in rural credit markets and lower average prices for credit driven by the influx of group and state credit. This is exactly as TOC 4 would predict, particularly in a state like Bihar with very high coverage of the programme among BPL households. In many ways, the pathways that utilise universal coverage and scaled implementation to drive NRLM's impact have been some of the strongest results observed thus far.

A key takeaway from Kochar et al. (2020a)'s findings on the significant increase in wage earnings among early NRLM participants also indicates that SHGs may not just solve credit constraints but might also have general equilibrium effects on interest rates that affect non-member households and hence enable larger effects, including through local labour demand and markets.

A key benefit conferred by NRLM's scale is to layer services to reach large numbers of marginalised rural households at lower cost, leveraging pre-existing institutional structures and networks. This can be particularly helpful during and in the aftermath of aggregate shocks in enabling faster response and a more inclusive recovery. Christian et al. (2018) examine the staggered rollout of the Odisha SRLM (named TRIPTI) at a time when the state was affected by a severe cyclone, and find that women's participation in the livelihoods programme mitigated some of the reductions in household non-food expenditure and women's consumption, but not on food expenditure. In contrast, Kochar (2021) examines the floods in Bihar in 2008 that coincided with the expansion of the Bihar SRLM (JEEViKA) and finds that "the Flood adversely affected SHG growth within a village and hence the magnitude of SHG funds available to inject into the village economy, and that this lowered consumption growth: the persistent effects of the flood on household consumption growth stem in part from its effects on the growth of local institutions."

1.3.1.6 Operational efficacy and human capital

Several studies point to the questions and constraints faced by NRLM's community cadre in their assessment of programme implementation and impact. CRPs in Odisha were often young, unmarried women who were not well positioned within the village social structure to transgress normative boundaries (Moore et al., 2022). Additionally, many community cadre positions among the 759 VOs surveyed in the nine state evaluation remained vacant (Kochar et al., 2020a, Sahni, 2020 summary brief), indicating critical staffing constraints. Bhanjdeo et al. (2021) find that the Community Resource Persons (CRP) in their small-sample qualitative study in one district of Madhya Pradesh report working more days than contracted and facing delays in payments. Some of the process innovations and efficiencies in programme monitoring and electronic payments discussed later in reference to NREGS can be expected to deliver benefits to NRLM as well. The compensation levels for CRPs range from 1500-2500 INR a month. Even at higher leadership levels, certain SRLMs seem to benefit from steady management while others face high turnover and related challenges.

Bhanjdeo et al. (2021) discuss the limitations of programme target-setting based on observables that characterises many state systems and that correspondingly influences the behaviors and incentives of frontline managers and workers, especially if the observable targets are weakly correlated with the true goals of the programme. They find evidence for such a tension in the Madhya Pradesh SRLM's functioning with frontline CRPs and district and block management units focused on meeting observable targets and outputs (such as number of groups created) that might come at the cost of higher-quality and deeper engagement that could deliver improved harder-to-move and harder-to-measure outcomes (such as agency) over a longer period (see Prillaman, under review, as well on this).

Joshi et al. (2017) study the Rajasthan Rural Livelihoods Project and examine the differences between the formation of SHGs through external out-of-state facilitators (from a high-performing state, Andhra Pradesh) paid a higher wage (called eCRPs) and locally-based SHG members hired as facilitators and paid a lower wage (called iCRPs). They find that groups that are facilitated by external facilitators are six times more likely to receive entitlements from NREGA and PDS schemes, and members participated in two more Gram Sabha meetings. However, groups facilitated by external facilitators achieved 25 percent less in savings accumulation and registered a smaller change in total income over the programme period (ibid). Therefore, while the external facilitators were more educated, more experienced and were paid more than their local counterparts, their differential human capital did not seem to deliver consistently better results across all programme outcomes. Local facilitators were comparatively better, in spite of their lower education, experience and pay, in delivering certain core aspects of the programme. This relates to a point made earlier on whether intensive change processes are better driven by a paid or external cadre, compared to self-selected change agents who are primarily motivated by their experiences and their desire to influence their community and society.

The CRPs who serve as initiators and facilitators for the SHG programme's expansion within a village and across villages within a block are critical contributors to NRLM's success, including its ability to achieve universal coverage with quality delivery, and additionally layer services and link to other government programmes. The extent to which state and block-level leadership matters, as does rural women's human capital to manage programmes through these community cadre positions, as SHG Federations expand and deepen under NRLM requires additional examination. The COVID-19 pandemic has already highlighted the secondary benefits from skilling, rewarding, and investing in such a frontline workforce.

1.3.2 Improving the functioning of NRLM and subsequent outcomes

1.3.2.1 Federating SHGs into VOs and CLFs

Being in a federated SHG is associated with improved welfare and agency outcomes, with SHG members in federated groups borrowing larger amounts and accumulating a larger number and higher value of productive household assets (an increase of 13,000 INR). However, the direction of influence is unclear and these results could well reflect the effects of older and/or well-performing groups selecting into being federated rather than Federation itself driving these improved outcomes. Additionally, omitted variable concerns are also relevant since federation is only possible with scale, and scale for instance could be driving these differential improvements as discussed in 1.3.1.5.

Federation was associated with improved linkages to other welfare schemes, with 49 percent of federated VOs pursuing convergence activities compared to 20 percent of VOs that were not federated into CLFs (Sahni, 2021). Women with slightly higher levels of education seemed to benefit more from federation seeing improved levels of confidence in community-based decision-making even though agency in intra-household decision-making did not correspondingly improve.

1.3.2.2 Implementing convergence between NRLM and NREGA at the Block-level

States differed substantially in what they implemented specifically to improve convergence between NRLM and NREGS. Rajasthan for instance, prioritised convergence activities by enabling use of NREGS category B funds. In Odisha, CLF offices are in the same compound as GPs, to enable participation in GP meetings. Much of the cooperation was originally through the Social Action Committee (SAC) of the VO. There are newer institutional mechanisms being tested (also with state level variation). Gender Forums are emerging as one such mechanism to support convergence, with those invited to the Gender Forum meetings including leaders of the GP but also those who direct other welfare programmes. However, these approaches have not yet been evaluated.

In a difference-in-difference analysis of convergence between NRLM and NREGS covering four states (Jharkhand, Rajasthan, Chhattisgarh and Maharashtra) that started convergence in 2015 (primarily taking the shape of SHG members participating in the planning and monitoring of NREGS implementation), Barooah et al. (2021) find that villages that implemented convergence earlier in their lifecycle had a higher share of households working in NREGS (40 percent versus 22 percent among similarly-aged SHGs in non-convergence blocks). This was driven specifically by women's increased participation in the programme, with women working 8.6 more days in NREGS and being paid for 6.3 more days of completed NREGS work (ibid). However, the study reports some substitution with a simultaneous reduction in women's participation in private wage employment and an increase in time spent on own agriculture. Yet, convergence is associated with 22 percent higher overall annual consumption expenditure (24,000 INR over a base of 120,000 INR), likely because wage rates for women's labour improve as a result of NREGS.

Convergence activities were associated with a 50 percent increase in household NREGS income but without any significant change in total or other sources of income, including from men's engagement in NREGS (Barooah et al., 2021). This suggests that there was likely some offsetting of private wage income by NREGS income. Convergence is associated with a significant 14 percent decline in an index of multidimensional poverty, which included indicators for household hunger, infant mortality, education of adults, school enrolment of children, fuel choice, lighting, sanitation and housing conditions. Women's overall increased participation in paid work was associated with men spending more time on unpaid domestic chores (ibid). There was no significant change in women's broader engagement with local governance associated with convergence, for instance through attendance at the Gram Sabha (ibid).

Schaner and Moore (2019) study NREGS linkages to JEEViKA, Bihar's SRLM where convergence guidelines outline that SHGs should support local NREGS work registration days, participate in work planning activities, participate in local Vigilance Monitoring Committees, help SHG members obtain job cards and register work demand, discuss NREGS at their SHG meetings, encourage SHG members' participation in Gram Sabhas, and organise Labour Groups across SHGs to request work and address grievances. In turn SHG members are meant to be prioritised for key roles in NREGS such as worksite mates and social auditors, and have NREGS prioritise asset creation that supports SHG members' livelihood activities.

While the study team rarely found SHG women engaged in these various activities during their field visits, the specific exception was in blocks that had Cluster Facilitation Teams (CFT). Of Bihar's 534 Blocks, 25 currently have a CFT. A CFT consists of staff from JEEViKA and a set of dedicated village-level CFT staff who together focus on coordinating different aspects of the NREGS programme. Schaner and Moore (2019) note that "in our qualitative research, the most promising environment we saw was in a CFT block where CFT officials facilitated and supported collective action for women to demand work from local leaders." This included key staff such as Community Mobilizers, as well as Technical Experts and CFT Consultants at the village level and Natural Resource Managers, whose job descriptions varied from registering BPL households with job cards, registering work demand, scrutinising work projects and attendance rolls, verifying bank account details for workers and reporting grievances. Each village-level CFT reported to JEEVIKA's Block Programme Manager, highlighting the importance of clear staffing and reporting structures for meaningful convergence.

Monitoring data from the 25 Blocks where CFT were in operation for the period 2015-16 through 2017-18 indicate large and important gains to programme performance. For instance, the share of NREGS wages paid on time at the Block-level moved from an average of 14 percent in 2015-16 to 37 percent in 2016-17 to 70 percent in 2017-18 (CFT Progress Report, 19 March 2018). De Hoop et al. (2021) analyse the results of convergence between NRLM and NREGS in Bihar using an instrumental variable approach to evaluate the impact of the number of SHG members on access to job cards and employment under NREGS. They find that an increase of 100 SHG members results in 26 additional NREGS job cards for which applications are submitted, and 14 additional households that are provided employment under NREGS, with no difference between men and women's increased employment. They do find larger increases in areas with a larger baseline number of SHGs, often correlated with federation into VOs and CLFs, which indicate that the improvements could be through improved political bargaining power. Despite the positive effect on employment, they do not find evidence for increased community-level assets created under NREGS due to NRLM, providing preliminary support for channel (A) described under TOC 3, i.e. currently the primary benefits from convergence are through increased wage employment and not livelihood improvement through assets for self-employment or enterprise activity.

1.3.2.3 Raising gender consciousness and establishing Gender Resource/Rights/Justice Centres at the Block-level

Under a multi-year partnership starting in 2020 that includes Chaitanya WISE and Tata Institute of Social Sciences in Chhattisgarh, ANANDI and the International Centre for Research on Women in Madhya Pradesh, PRADAN, Jagori and Transform Rural India Foundation in Jharkhand, and Project Concern International and Kudumbashree in Odisha, the Initiative for What Works to Advance Women and Girls in the Economy (IWWAGE) based at IFMR LEAD/Krea University has been piloting Gender Resource/Justice Centres with CLFs at the Block-level in these four states. The partners have developed a set of GRC/GJC models at the SHG federation level, which can serve as platforms for rural women to exercise their voice and agency, and access opportunities and resources available through different state schemes. The GRCs/GJCs are expected to "*link women's groups with each other, and with state and market players for securing social, economic and political rights, and offer convergence across schemes, provide women with legal counsel, build their skills and educate them on gender discrimination, atrocities and violence. The overall goal is to test a feminist gender transformative model for women's empowerment integrated into the mandate and institutional structures of the SRLMs*" (IWWAGE SWAYAM). For a compilation of field case studies on various gender-focused activities pursued by the Social Action Committees of the VOs, prior to and in addition to the pilot GRCs at the CLF, including Gender Forums and Gender Action Plans, please see IWWAGE, 2021.

In an initial round of surveys conducted with over 1500 beneficiaries in the catchment areas of the pilot GRCs across the four states at the end of 2020, IWWAGE found that the gap between awareness of the GRC and knowledge of specific services offered was lower in Madhya Pradesh compared to Odisha. At the same time, while around 30 percent of women reported needing help accessing government benefits including the health insurance scheme, SC/ST identity cards, and farmer credit cards, only 1 percent of respondents had reached out to their local Gender Champion at the GRC for such assistance and handholding. These responses indicate initially low usage rates of the GRCs and outreach to Gender Champions/Samata Sakhis to enable accessing state benefits. The subsequent surveys conducted later in 2021 and analysis of the GRC's actual usage data from their Management Information Systems will provide a more detailed picture of whether and how the CLF GRCs can close entitlement access gaps for women. Since these are demand-led centres, developing a clear picture of local demand in each of the four states will be essential to customise intermediation and support services accordingly.

Prillaman (under review) provides insights into the repercussions of a pilot programme implemented between 2011 and 2014 in Madhya Pradesh on which the GRC pilots are based. This pilot programme, called the Gender Equality Project, was tested by the NGO PRADAN in collaboration with Jagori, a feminist leadership and mobilisation organisation, and UN Women in select areas where PRADAN mobilised SHGs in Madhya Pradesh. The programme consisted of 8-10 trainings focused on raising critical consciousness of gender (the causes and manifestations of gender norms in the household and in society), and women's rights and entitlements (how to engage with the political process), spread over three years and integrated into the routine meetings of the SHGs. The trainings discussed women's role in economic institutions and livelihood provision. SHG women were also taken on exposure visits to locations such as local government offices.

Prilliaman (under review) finds that this set of interventions provided substantial and deep gender programming to SHGs, and registered large impacts on women's gender consciousness, SHG attachment, collective action, and political participation. Specifically, women's participation in the Gender Equality Project is estimated to have significantly increased the likelihood of gram sabha attendance by 23 percentage points and the likelihood of making a claim on the block government in the past year (requiring non-trivial travel) by 15 percentage points. However, it also heightened the risk of backlash and led to large increases in domestic and community violence against women, including on the likelihood of being humiliated by their husbands, being threatened, and being shamed by having stones pelted at them in public (ibid). Women's empowerment was actively contested with significant pushback once women started making claims to entitlements, resisting violations, and participating in collective decision-making. In some cases, this actually led women to retract their mobilization and revert to more regressive attitudes on gender equality. In others, they stood against it but enough time had not passed to see if the women standing up to the backlash would persist and succeed (ibid). A robust understanding and anticipation of these processes of negotiation and renegotiation, bargaining and backlash, are critical if more intensive programming on gender is scaled through the NRLM CLFs and GRCs.

1.3.2.4 SHG members incentivized to close entitlement gaps among peers

In Chattisgarh, a private social enterprise - Haqdarshak Empowerment Solutions Private Limited (HESPL) - created a digital platform (smart phone app and web-based platform) to easily search for eligible entitlements from the state and apply for government documents. HESPL partnered with the Chattisgarh SRLM (called Bihan) to train select SHG members to serve as agents who use the Haqdarshak digital application and platform to assist their fellow SHG and community members in applying for their entitlements using an affordable fee-for- service model.Using the platform to register work demand for NREGS was one of the top five uses of the Haqdarshak service (over 5,000 applications in over a year) (Valenti et al. presentation, April 2021). The other top entitlements in demand included applications for Ayushman Bharat, the national health insurance scheme (over 20,000), PMJJBY, the life insurance scheme (over 17,000), PMSBY, the accident insurance scheme (over 17,000) and the Sukanya Samriddhi scheme, a savings account for girl children (over 4,000 applications). There was also commensurate demand for documents from the state including PAN/taxpayer ID cards (over 29,000 applications), ration cards for the public food distribution system (over 1,700), NREGS job cards (over 1,700), the Aadhaar national biometric ID card (over 1,500), and voter IDs (over 900) (Valenti et al. presentation, April 2021). There was significant demand to link the national biometric ID (Aadhaar card) with PAN cards (over 12,000), ration cards (over 5,000) and bank accounts (over 1,000) (ibid).

As of February 2021, of over 4,300 SHG members trained as agents, only 1,160 were active in the previous month (Valenti et al. presentation, April 2021). The main stated reasons for the high dropout/inactivity rate included the inability to find interested citizens, mobility issues, and technology-related issues.The initial selection of potential women to be trained was done by the SRLM staff. 79 percent of the agents held a position of leadership within the SHG. Their median baseline income from other sources was 3000 INR per month, while their average gross monthly earnings as a Hardarshak agent were around 850 INR (data on net earnings unavailable as yet). A survey of active Haqdarshikas, as the women agents are known, revealed that 90 percent of them were motivated by the visibility and reputation enhancement associated with this service. Some of them reported a desire to run for local office (ibid).

1.3.2.5 Collective enterprises promoted and supported through VOs and CLFs and linked with public procurement

The states of Kerala and Andhra Pradesh have experimented with joint-liability collective enterprises in the farm sector among women members of the state rural livelihoods missions since the early 2000s. In Kerala for instance, the SHG model was modified to constitute groups savings and credit groups that were located within a modified three pillar governance structure. The Kudumbashree Mission or State Poverty Eradication Mission of the government constituted one pillar, the Kudumbashree Community Network (K. Network) (consisting of the federated autonomous elected institutional bodies of SHG women (i) at the village council/panchayat level (Community Development Societies that are similar to CLFs), (ii) at the ward (sub-panchayat) level (Area Development Societies that are similar to VOs), and (iii) at the village level (Neighborhood Groups/NHGs similar to SHGs)) constituted the second pillar, and the Gram Panchayat itself constituted the third pillar (Agarwal, 2018). This three pillar institutional structure was critical for the programme to sustain and expand within a changing political environment. In both Kerala and Andhra Pradesh, the groups were provided with seed capital and/or incentives for production, tools, technology and training in specialised agricultural practices, along with other relevant inputs. Each group farm typically comprised 4-10 women members who pooled labour and capital, and jointly leased land for their agricultural production.

Agarwal (2018) studies 763 farm enterprises in Telangana and 250 in Kerala, sampling 70 group farms in each state (entirely managed by women) and small individual family farms (largely male managed), collecting weekly data in 2012–13 for every output and input (including labour) for each crop season, for 12 months, or until the last crop was harvested. She finds that women's group farms in Kerala had an astounding 348 percent higher yield in banana production vis-à-vis comparable individual-managed farms. In contrast, group farms were less productive in paddy production. Overall, all-women group farms in Kerala registered a 30 percent higher annual output per gross cropped hectare and had five times the net returns per farm. Telangana group farms performed worse than their individual farm counterparts in productivity though the two groups' profitability was comparable and low. However, in both states, women's groups did much better when growing commercial crops (banana in Kerala, cotton in Telangana) than traditional foodgrains such as paddy, for which high quality land and long experience mattered more.

Agarwal (2021) followed up with the group farms in Kerala during the COVID-19 pandemic and found that the women's group farms had established critical government procurement linkages, for instance, those growing paddy were selling it to the padasekara samitis (paddy farmers associations) or to the state-run cooperative, Supply-co. Women's group farms growing vegetables and fruits sold at local markets, and around 12,000 sold (and some donated) their produce to the community kitchens. Kerala's 295,000 NHGs (with 4.4M members) operated community kitchens and low-cost food production during COVID-19 (similar to the SRLM in other states), providing 250,000 food packets daily, coordinating home delivery for the needy, including out of school children missing mid-day meals at school, working closely with the local women community health workers (ASHAs).

Agarwal (2021) notes that "this 'convergence' of farm livelihoods and food-relief measures was one of the principles on which Kudumbashree built its COVID-19 response." In contrast, the non-farm women's group enterprises such as bakeries, tailoring, tea shops, and others incurred losses due to demand and supply bottlenecks during COVID-19. It is critical to keep in mind that Kerala has stronger government institutions across the board, 95 percent of Kerala's women are literate, and there has been a long-running commitment to women's economic participation. Nonetheless, elements of the K.Network's interesting governance structure that integrates the SRLM with the GP and the State Mission is an important model to study to support the economic viability of women's collective enterprises and their linkages to government procurement and demand.

1.4 Key areas for improvement in NRLM functioning and outcomes

Three core areas rise to the top as areas of concern for NRLM's continued functioning and increased impact:

- **Lowering costs of layering and implementing additional interventions**: Kochar at al (2020a) suggest that NRLM's primary shortcoming has been its inability "to layer interventions as programme scaled because of increased costs of monitoring, providing training, and facilitating market linkages to large numbers of small units" despite the institutional structure of the Federation that was meant to circumvent these cost issues. The first phase of NRLM did not have specific interventions for enterprise promotion or agricultural outcomes. To enable these, NRLM needs to test solutions such as dedicated cadres for enterprise/livelihoods and market linkages, and/or different forms of economic collectivization for livelihood support. This would suggest that enabling collectivisation of economic activity and operations at the SHG, VO or CLF level (akin to Kudumbashree's group farms) could have important gains to offer in terms of cost-efficiencies in layered programmes. However, as the contrast in outcomes between Kerala and Andhra Pradesh in Agarwal (2018) reveals, there are numerous operational, market, and political incentives to align to attain strong and positive outcomes. Recent testing of innovations in ultra-poor graduation programmes has included group-based asset transfers instead of individual asset transfers, and the preliminary results in terms of livelihood activity, productivity, returns and cost-effectiveness appear comparable and promising for group-based enterprises.

- **Improving operational efficacy and human resources**: The question of organisational capacity and operational effectiveness, especially at the VO and CLF levels, to support NRLM's breadth and depth is a critical one. As discussed in section 1.3.1.6, the community cadre positions seem to require intrinsic motivation to succeed while yet requiring some form of institutionalisation and accountability, especially at the VO and CLF levels, to enable systematic, reliable and scaled operations. Resolving this tension is critical for NRLM's ability to impact both women's agency and women's self-employment/enterprise outcomes more substantially. Additionally, regular and rigorous costing and cost-effectiveness data collection and analyses are essential to understand how women's outcomes in a range of domains improve for a given increase in NRLM staffing and related operational costs.

- **Directly targeting patriarchal structures and improving women's agency**: A surprising takeaway from the literature are the modest results on women's decision-making power, both within the household and in community forums. While empowerment is associated with federations and scale, the overall muted effects suggest that the quality, depth and continuity of mobilisation matter greatly, and a separate set of interventions may be needed to promote women's empowerment and build social, economic and political agency. This could take the form of the Gender Resource Centres and Gender Champions (though early beneficiary surveys indicate partial recall of material from trainings/discussions) or exemplar interventions drawing from VO Social Action Committees and other leading organisations (such as the Self-Employed Women's Association and Jagori). These directed interventions would target internalised patriarchal norms and increase SHG members' consciousness, social capital, collective action and collective bargaining power, including through their access to and control over larger state-provided resources and entitlements. However, a critical component of such programming is understanding and measuring backlash to women's success. There is an underlying assumption that women's empowerment (in whichever domain) will yield community benefits because it will be actively received. However, gender-focused programming and/or convergence with programmes like NREGS may in fact foster greater backlash and resistance to women's movements, which may in turn hinder the formation of a gender consciousness and the success of these movements (Prillaman, under review).

Section 2: The National Rural Employment Guarantee Act (NREGA) and Scheme (NREGS)

2.1 NREGA/NREGS components

The Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA) was passed by the Indian Parliament and notified in 2005. The employment guarantee schemes (NREGS) mandated by the act and implemented by states were operationalized in the 200 "poorest" districts in the country in February 2006, with an additional 130 districts commencing the programme in April-May 2007, and the remaining districts commencing the programme in April 2008 (Sukhtankar, 2017).

The programme provides up to 100 days of paid labour/wage employment per rural household at a mandated minimum wage. All rural households are eligible to obtain jobcards from local government offices, which lists all the adult members of the household (over 18 years of age) and leaves space to record work done and payments received (Sukhtankar, 2017). Once the jobcard is obtained, listed members of the household can apply for work whenever they need it. Every applicant is entitled to work within 15 days of submitting their application and within 5 kilometers of the applicant's home, for as many days as s/he requests, subject to a limit of 100 days per household per year, failing which the state government is liable to pay an unemployment allowance or travel allowance given the case. Payment for work performed is also due within 15 days of work completion. In the original conception of the programme, the guarantee was fundamental as were the social audits described below.

Projects undertaken by NREGS primarily include the construction of rural public assets such as roads, irrigation and water management facilities (including channels to manage floods and prevent droughts) which are referred to as category A activities, and at a certain point also include the creation of private goods and services for landowners from marginalised SC/ST communities (such as clearing land for cultivation) which are referred to as category B activities (Sukhtankar, 2017). Two additional categories directed at building assets for NRLM SHGs and broader rural infrastructure are currently included (MoRD and CWEPA, 2014). All NREGS worksites are meant to have certain facilities such as drinking water, shade, and a creche for workers' children.

Suitable projects are meant to be identified in open village meetings (Gram Sabhas) and the lowest administrative tier of the Indian government bureaucracy (Gram Panchayats or GPs under the Panchayati Raj Institutions) are given a central role in planning, implementation and record-keeping (Cook and Shah, 2020; Sukhtankar, 2017). GPs are responsible for implementing at least 50 percent of the works in terms of cost, which has increased their legitimacy as state actors. The Ministry of Rural Development has additionally created a number of local official positions to assist the GP in NREGS implementation including the Employment Guarantee Assistant (Gram Rozgar Sahayak), Mates or Worksite Supervisors or Field Assistants, Technical Assistant, Computer Assistant, in addition to the Gram Sarpanch or elected head and GP Secretary or appointed head, who are jointly responsible for the overall programmeme. GPs receive support from Programme Officers in Block and District level administrations, including in supporting implementation through line departments.

The work provided through NREGS is overwhelmingly for general wage labour at the mandated minimum wage, with provisions for a small share of other types of specialised work that can pay slightly higher wages (such as supervisor roles at job sites). Thirty-three per cent of jobs must be reserved for women at an equal wage rate, which is typically not the case in the private wage labour market, making NREGS a more valuable and attractive work option for rural women. NREGS is the world's largest workfare programme, with "600 million rural residents eligible to participate and a fiscal allocation of 0.5 percent of India's GDP" (Cook and Shah, 2020). This corresponds with a central government allocation of close to 10B USD for the financial year 2021-22 (73,000 crore INR) despite actual expenditures of 15.1B USD (111,000 crore INR) in the 2020-21 fiscal year (Scroll Staff, November 24, 2021). This is in contrast to the total spend on NRLM since inception of between 4B and 5B USD. Real expenditures on NREGS rose from 2006 until 2009-2010, and then dropped by 50 percent by 2014-15 (potentially driven by a change in demand based on the agricultural season/rainfall and reduced leakage). The central government pays all labour costs of the programme and 75 percent of material costs. Wage rates are set by state governments to adjust to local conditions. Sixty percent of expenditure must be spent on wages, paid out as a daily wage or as a piece rate wage depending on the case. Data on NREGS works and payments are available in a bespoke Monitoring Information System (MIS) software platform, that is updated online and available to the public at large. Aside from routine monitoring of GPs and Blocks by district and state administrations, social audits are meant to be performed once every six months. These involve public verification of muster rolls (attendance records) and expenditures in a Gram Sabha, and can involve civil society organisations as well as workers directly airing grievances.

NREGA's stated goals therefore are: "*1) social protection; 2) the creation of durable assets (such as water security, soil conservation, higher land productivity) through the manual labour conducted by the workers; 3) employment of disadvantaged workers such as women, SC and ST; and 4) inclusive growth in rural India through the policy's impact on livelihood security and democratic empowerment*" (Breitkreuz et al. (2017) as summarized in Cook and Shah (2020)). We will examine the implemented NREGS programme's efficacy in meeting each of these goals in section 2.3 below.

2.2 NREGS targeting, Theory of Change (TOC), and target outcomes at the national level

Public employment programmes are expected to affect poverty through the following channels:

- Allow the poor to self-select into the programme by requiring manual labour at a minimum living wage in exchange for payment;
- Raise the incomes and consumption of the poor directly by providing guaranteed employment at a minimum living wage rate;
- Create infrastructure that will boost welfare outcomes through the improved provision of water, electricity, roads, education, healthcare, and other essential local services that are expected to disproportionately benefit the poor and among them, women.
- Additionally, as with NRLM, NREGS is expected to have differentially powerful impacts when implemented at scale through general equilibrium effects affecting prices. NREGS is expected to raise incomes indirectly by affecting the prevailing private wage rate for all unskilled wage labour activity by providing a guaranteed minimum wage/wage floor as an assured outside option for wage labourers.

NREGS was expected to reduce poverty through all four channels at the outset. We will examine implementation efficacy and resulting impact through all four mechanisms in the next section.

2.3 NREGA's impact thus far

2.3.1 Average impacts

Despite variations over time, participation in NREGS across India has been substantial in any given year, varying from approximately 53 million households in 2009-10 to 48 million individuals in 2013-14. (Cook and Shah, 2020; Sukhtankar, 2017). In 2020-21 during the COVID-19 pandemic, the demand for NREGS work increased by 43 percent to 133M individuals (80 million households), with the minimum wage rate varying from 315 INR in Haryana to 193 INR in Chhattisgarh and Madhya Pradesh (Jacob, March 20, 2021; Paliath and Devi, August 24, 2021). The NREGA MIS currently reports a total of 152M active workers for 2021-22, from a total of 315M registered workers. Madhya Pradesh registers a higher share of active workers (65 percent of a total of 17M) compared to Bihar (28 percent of a total of 31M workers).

Women's participation in NREGS has been robust, exceeding the target 33% reservation of jobs for women. This is likely because of the equal pay clause of NREGS, making the guaranteed minimum wage rate differentially advantageous for rural women who face wage discrimination in private wage labour markets. Historically, women's participation averaged 47.5% over the years 2006-2012 with SC/ST participation also high and accounting for 49.4% of person-days. Current participation rates in 2021-22 (as compiled in the NREGS MIS) indicate a rising share of women, with women receiving 54 percent of person-days generated, and a falling share of

SC/ST participation at 38 percent of person-days generated. In Bihar, 51 percent of reported person-days worked in 2018-19 were by women, despite the overall low household participation rate (Schaner and Moore, 2019).

There is considerable heterogeneity in the implementation of NREGS both across and within states. At the state level, Andhra Pradesh and Tamil Nadu consistently rank among the best implementers, while Bihar and Uttar Pradesh, where one might assume the highest levels of demand, do not implement the programme with any additional intensity compared to richer states like Gujarat and Maharashtra. The incredible heterogeneity in implementation observed in NREGS is along multiple dimensions, "access, the efficiency of payments, corruption, and other dimensions of implementation such as worksite facilities and choice of projects" (Sukhthankar, 2017). While local labour markets clearly differ and drive different levels of demand for the programme, supply constraints are also very important and relate to fiscal capacity (the minority cost-sharing requirement by states), implementation capacity (including at the local level), and political incentives (including the ability to unambiguously claim credit for improvements).

Dutta et al. (2012) find considerable unmet demand for the scheme, especially in poorer states. As Sukhtankar (2017) summarises "even in the best implementing states, access is rationed, even for the poorest." More recently during COVID-19, the demand for NREGA work increased by 43 percent to 133M individuals (80 million households) as noted earlier, of whom 84 percent were provided with some work (Paliath and Devi, August 24, 2021). Even though the number of person-days increased by 50 percent over the previous highest figure, all households on average received 52 days of work, about half the promised 100. Over 80 percent of persondays were generated between the months of April and July. Specific states report significant under-utilisation of the programme. Only 5.3 percent of households in Bihar, for instance, reported participating in NREGS in a 2015-16 survey by India's Labour Department, which would place Bihar 26th out of 29 states in terms of overall NREGS participation rates (Schaner and Moore, 2019). Additional field work in Bihar highlighted grave difficulties in registering demand for work, especially by women, who tend to be less connected to the Gram Panchayat leadership and local contractors driving decisions on choice of projects and selection of workers (ibid). Another key operational issue relates to the delays in delivering wage payments for work completed: Muralidharan et al. (2016) report a mean delay of 34 days in well-performing Andhra Pradesh and Schaner and Moore (2019) report an average delay of around 25 days in Madhya Pradesh, 40 days in Bihar, 65 days in Odisha and 80 days in Uttar Pradesh, compared to the maximum 15 days after muster roll closure permitted under the NREGA guidelines. As of November 15, 2021, an estimated 152M USD were due to NREGS workers as delayed wage payments (Scroll Staff, November 24, 2021).

A consistent result around the impact of NREGS is that it increased private sector wages for informal casual labour by around 5 percent (Imbert and Papp, 2015; Berg et al., 2012; Azam, 2012). Azam (2012) also reports an increase in public employment, especially for women, with the increase in real wages for women being higher (8 percent) compared to men (3.8 percent).

However, these impacts were driven by the performance of star states such as former unified Andhra Pradesh. Pankaj and Tankha (2010) analyse early data on women's participation in NREGS and downstream outcomes in four states (Bihar, Jharkhand, Rajasthan and Himachal Pradesh) and find important gains in income, consumption, intra-household dynamics, and women's agency, driven by the availability of paid employment with lower wage discrimination in rural wage labour markets.

Exploiting the discontinuities of the district-level staggered rollout of the NREGA programme and linking that to subsequent changes in development measured by night-time lights and banking deposits, Cook and Shah (2020) find consistent and robust evidence that NREGS increased aggregate economic output by 1-2 percent per capita. They note that this effect size is comparable in magnitude to the estimated effect of Special Economic Zones in China (Alder et al., 2016 as cited in Cook and Shah, 2020). However, they find considerable heterogeneity in impacts across districts, with poorer districts recording no positive effects (ibid). They report that "the impact of NREGS in wave three districts is roughly three times as large as the base estimates for night-time lights (3-4 percent increases in output per capita) and twice as large for banking deposits. Therefore, the programme appears to only be increasing output for the relatively better off districts." This could be due to lower effective delivery in poorer districts, and/or due to limited general equilibrium effects in poorer districts due to lower aggregate demand (ibid).

An unanticipated result that was not part of the original TOC comes from the estimated impact of NREGS on adolescent schooling. Shah and Steinberg (2021) exploit the staged rollout of the NREGS programme nationally to find that exposure to NREGS resulted in adolescent school enrollments decreasing by 1-3.5 percentage points, and adolescent labour increasing by 4 percentage points, with boys substituting into paid wage work outside the home and girls substituting into unpaid domestic work (likely due to mothers substituting into paid wage work). On the other hand, younger children exposed to the programme (in utero to age 4) benefit later in life through increased schooling (through an increased income effect) (ibid). In contrast, Afridi et al. (2016) and Mani et al. (2019) examine NREGS' impact on adolescents using the Young Lives data from the state of Andhra Pradesh and find that NREGS increases human capital investment (Shah and Steinberg, 2021). Given the high quality implementation and additional improvements layered on to the core NREGS model in Andhra Pradesh, it is important to understand which factors prevent negative effects on adolescent human capital investments on account of NREGS' immediate gains, including the returns to secondary and tertiary education.

NREGS' effects on rural productivity/labour efficiency and public goods creation remain contested. Given that around two-third of NREGS funds go into category A investments in public land and water improvements, one would expect to see significant improvements in agricultural productivity and production. However, there is insufficient data to clearly assess the programme's impact on these critical measures (Sukhtankar, 2017). There has been no large-scale representative study measuring asset creation and returns on investment, except for the impact on aggregate output analysed in Cook and Shah (2020). For instance, Ranaware et al.

(2015) survey assets and households in 20 of 33 districts in Maharashtra and find that 87 percent of completed works were still in existence a year and a half after completion. However, this estimate comes with high selection bias given that the study selected the five best performing GPs in the best performing block of each district. Veeraraghavan (2017) reports that the ‘‘disadvantages” of NREGA appear to fall most heavily on small farmers, who often lease the land they tend from larger landowners at rates that are non-negotiable, and who lack the resources to provide the higher wages that workers now demand.

Aiyar and Samji (2009) report that previous instances of implementing rural employment programmes, such as the large food for work programme, have delivered the greatest benefits to private contractors who receive ‘work orders’ and fudge the attendance records working with local political officials, producing inflated figures and siphoning funds. Sixty five percent of those who participated received far less than the guaranteed minimum wage, with the lack of transparency and accountability resulting in extensive leakage of funds before they reached rural beneficiaries. Muralidharan et al. (2016) estimate leakage rates of around 30 percent for NREGS in former unified Andhra Pradesh prior to introducing biometrically-authenticated payments. Veeraraghavan (2017) describes a response from an NREGA Mate who is an NREGS worker responsible for maintaining the muster rolls (attendance records), which captures the systemic corruption in the programme even in a well-functioning state like Andhra Pradesh: “*Everybody says a mate is a donga [thief], but nowhere does it come out that the worker is a donga. The worker does not seem to want to comprehend the scheme. The workers want everything. They don't realize that there are others in the game. Everybody needs money. Money is made through fake names. [. . .] If workers work, then it would be a different matter. Ten acres of removing thorns is shown in the record. In practice they do it only for two acres. Everybody benefits.”*

2.3.2 Improving the functioning of NREGS and subsequent outcomes

2.3.2.1 Biometrically-authenticated electronic payments

An improvement in the functioning of NREGA through biometric authentication and Smartcard-based electronic payment (cashed out in villages by bank officials) in the former unified state of Andhra Pradesh (now Andhra Pradesh and Telangana) resulted in significant performance and fiscal improvements. A key feature of implementing this Smartcard intervention was the government’s decision to build on the network of SHGs in the state to employ women as Customer Service Providers (CSPs) to successfully implement the initiative and significantly improve the functioning of NREGS (in contrast to other states that lacked the capacity to run NREGS projects as per the guidelines and lacked the political will to counter entrenched landowner opposition) (Sukhtankar, 2017). Even with just 50 percent coverage of the new Smartcard-based payments process in the studied districts, NREGS wage earners spent 20 percent less time collecting each payment, received their payments 17-29 percent faster, experienced greater predictability in the receipt of their wages, and household NREGS earnings increased by 24 percent while government outlays on NREGS did not change. The proportion of households reporting having worked for NREGS increased by 17 percent at the same time, highlighting the simultaneous reduction in 'quasi-ghost' beneficiaries (Muralidharan et al., 2016).

The improved NREGS wage payment implementation resulted in a 6 percent increase in private sector wages for unskilled labour, which surprisingly indicates that the impact on wages from improving NREGS is of the same magnitude as the impact of introducing NREGS (Sukhtankar, 2017). There is an overall 14 percent increase in total beneficiary household earnings and a reduction in household poverty by 26 percent (Muralidharan et al., 2021). Similar to the results discussed earlier, the primary channel through which these gains are realized is through higher private-sector wages and employment (accounting for 86 percent of increased income) highlighting the importance of the indirect general equilibrium effects of the public employment programme (ibid).

The increased earnings seem to come from a redistribution of gains from landowners to wage labourers, reflecting imperfectly competitive labour markets at the outset rather than productivity gains through the intervention. As the authors note, "worker's reservation wages increased, land returns fell, and employment gains were higher in villages with more concentrated landholdings. Non-agricultural enterprise counts and employment grew rapidly despite higher wages, consistent with a role for local demand in structural transformation." (ibid) For a related test that signficiantly reduced corruption, fund leakage and program expenditure (by a persistent 19 percent) while maintaining the same level of employment through the implementation of e-invoicing and just-in-time payments for NREGA, see Banerjee et al. (2020).

2.3.2.2 Improving ease of programme monitoring and accessing information on payments processing by government bureaucrats

There is evidence of administrative bottlenecks in the implementation of NREGS. Dasgupta and Kapur (2020) provide evidence of "bureaucratic overload" at the block-level across India, which results in managers (such as Block Development Officers in this case) having little power to purchase resources or hire staff, and having to step in to take care of the small, day-to-day gaps in implementation that should be taken care of with more human or physical resources.

Dodge et al. (2021) provide an easy-to-use mobile phone application (PayDash) for bureaucrats in Madhya Pradesh and Jharkhand to observe NREGA wage payment status and delivery in close to real-time, allowing them to take action to remedy delays by identifying responsible officers, and immediately following up via WhatsApp or a phone call. They additionally compare the impact of "decreasing the costs of acquiring information for lower-level bureaucrats versus reducing the costs of monitoring by higher-level bureaucrats."

Access to PayDash reduced the time taken to process payments by 11 precent (around two days) in the areas with the highest wage payment delays. The intervention also reduced variability in payment processing time. There was no significant difference in providing PayDash to either lower or higher-level bureaucrats, or both together. While lower-level bureaucrats are able to act on the payment delay information directly, higher-level bureaucrats pass the information quickly down the hierarchy, which also prompts action by their reports and results in faster problem resolution.

The authors conclude that “the advantage of PayDash lies in providing busy bureaucrats with readily-accessible and actionable information (rather than new information), which they can also share with other bureaucrats involved in processing wages” (CEGA summary brief of Dodge et al., 2021). In a separate recent development, the Ministry of Rural Development issued a directive in March 2021 for each worksite to generate three separate muster rolls (separating workers by caste into SC, ST and Others) on the basis of which separate payments would be made and tracked per caste group. This directive was subsequently revoked in November 2021, given pushback from states who anticipated a dramatic increase in bureaucratic load and given tensions between groups that surfaced on account of this directive. The underlying centrality of wage payment delays and related political economy dynamics (around which sub-groups get paid with fewer delays compared to others) is therefore an important domain of current debate, particularly in a state like Madhya Pradesh.

2.3.2.3 Direct individual payments to women workers vs. household joint payments

Field et al. (2021) test the impact of providing women workers participating in NREGS with their own individual bank accounts into which their NREGS wages are electronically deposited, instead of the default administrative process of depositing women NREGS workers’ earnings into the bank account of the male household head (typically the woman worker’s spouse) or a joint bank account. They additionally provide women workers with a half day training on how to use their new bank accounts.

Women who received both the direct deposit of their wages into their individual account and training to use the bank account ended up doing more paid wage labour work, not just in NREGS but also in the private sector, earning 24 percent (950 INR) more in private sector wage labour employment (ibid). Women who received the direct deposit and training also reported more positive attitudes towards women and work, responding that “a working woman made a better wife, and the working woman’s husband a better husband and provider” (Yale EGC, 2021). Women’s perception of community sanctions related to women working outside the home also changed, with fewer women reporting that women who worked outside the home bore social costs (ibid).

Despite the 2012 policy change requiring women NREGS workers to be paid in their individually-controlled bank accounts, “MoRD records suggest that 14 percent of women still are paid into joint bank accounts, and states have rates of joint payments as high as 44 percent.” (ibid).

2.3.2.4 Social audits

Aiyar and Samji (2009) describe the three pillars of accountability in NREGA that were meant to counter the tendency for capture by local elites (both private contractors and elected officials), leakage of funds through the listing of ghost workers in the muster rolls, and distorting the true extent of work completed and assets created. These three pillars were: (i) decentralised planning and implementation; (ii) proactive disclosure; and (iii) social audits. Social audits, as described in the NREGA guidelines, can be initiated at any of eleven stages of the programme by any individual or group to cross-check government records and reported expenditures with ground realities. The process culminates in the six-monthly social audit forum, where the Gram Sabha meets and verifies progress.

The former unified Andhra Pradesh served as an exemplar state in systematically conducting social audits for all NREGA works across the state to enhance transparency and accountability. Aiyar and Samji (2009) examine the effectiveness of social audits conducted in Andhra Pradesh early on in NREGA implementation (between March and December 2007). They describe the first necessary component being visionary top-level leadership (Principal Secretary for Rural Development) who supported transparency in government and authorised a fully digitised end-to-end MIS for the programme. Once government records were requested under the Right to Information act by the social auditors, and local volunteers were trained, the actual social audit process took three days. The social audit process ended with the people's forum at the Mandal/Block level where all the audit teams from the various GPs in the Mandal presented their findings, at which senior block and district officials were present and which hundreds of villagers from the various GPs attended as well.

They find that as a result of social audit forums in the period between 2006 and 2007, over 500 field assistants and 10 technical assistants were dismissed, nine block-level officials were either suspended or under inquiry, and up to 6,000,000 INR worth of embezzled funds were returned. This real time feedback on NREGA improved information available to workers which resulted in near-real time grievance redressal and tangible improvements to the programme, including in worksite implementation processes (job cards, wage payment slips, facilities for drinking water, shade and first aid provisions) (Aiyar and Samji, 2009).

In an ethnographic investigation of NREGA in Andhra Pradesh, Veeraraghavan (2017) finds that despite being a techno-centric, high-modernist project in this state, the programme had created an opening for marginalised groups at the bottom of the power hierarchy to leverage the programme's disruption and produce divergent beneficial responses and results. Dalit workers seemed to have been able to leverage NREGA to improve their bargaining power with landowners, an ethnographic result that echoes the statistical analysis in Muralidharan et al. (2021) where greater income gains were seen in areas with higher concentrations of landholding at baseline (ibid). Tribal NREGA workers seemed to have been able to meaningfully direct and build assets through community projects that were useful for their long-term needs, particularly around land development since they owned their land (ibid). While the Andhra

Pradesh government was visionary in opening itself up to the scrutiny of its citizens, it had not intended to trigger these specific changes. However, the opening created by a high-modernist state had shifted the local power dynamics to allow more marginalised groups to push back on erstwhile local overseers and leaders and disrupt the pre-existing status quo (ibid).

Bihar has used NRLM-linked women extensively to conduct social audits of NREGS works over the past few years. Bhatt et al. (2021) examine the rapid expansion of Bihar's convergent social audits initiative beginning in April 2019 in which SHG-affiliated women were hired as auditors to boost and scale NREGS auditing despite staffing and resource constraints. They analyse the causal impact of this expansion on NREGS functioning using administrative records and find that audits led to a sustained reduction in administrative work claims. If this reflects reduced corruption then this is a significant achievement and points the way for how convergence with NRLM can significantly improve the efficacy of NREGS. In contrast, if this is due to a decline in work provision then this would constitute a negative unintended consequence of the social audits. Additional survey-based data collection and analysis is being pursued to identify which of these causes is the dominant driver for the observed reduction in work demand, job cards issued, and work provision.

2.4 Key areas for improvement in NREGS functioning and outcomes

A few key concerns rise to the top around NREGS' functioning and areas for improvement:

- **Improving implementation and political incentives in poor districts and poor states:** Poorer districts that were the original targets for the greatest improvements have fared the worst in terms of NREGS impacts (Cook and Shah, 2020). A number of factors seem to be responsible for the differentially improved implementation and resulting impact in richer states, including political incentives, leadership, transparency, systems, and local democratic participation. An additional key differentiator is the level of aggregate demand and economic activity in each state at baseline, which allows workers to better leverage NREGA to demand higher private sector wages that drive impacts on consumption.

- **Increasing NREGS' gender-intentionality**: Pankaj and Tankha (2010) point to the need for increased collective mobilisation by women, particularly in low-performing states, to boost the gains to women from NREGS. As Field et al. (2021) find, the programme holds enormous potential to offer women direct participation in and control over earned income at higher rates, when women are able to effectively demand and obtain work. The scope for women to benefit from NREGS' asset creation remains to be investigated and promoted, for which some of the planned testing around convergence with NRLM can yield important gains.

- **Additional spending to meet total demand**: Dutta et al. (2012) show that demand for NREGS is greatest in poorer states but access to the programme is weakest in these states.” (Cook and Shah, 2020) While 80 million households registered demand for NREGS work in 2020-21, the average household only received 52 days of work instead of the guaranteed 100. There needs to be significant movement towards universal coverage and the full 100 days of employment guaranteed, which requires additional resourcing from central and state governments.

- **Increasing transparency to improve efficiency and reduce delays and leakage**: The various interventions tested to reduce leakage and improve transparency in the functioning of NREGA have registered significant impacts and this is a key area for widespread replication and improvement. Dodge et al. (2021) are currently investigating whether providing NREGA payment processing information to local elected officials can further reduce wage payment delays in NREGA (CEGA summary brief of Dodge et al., 2021).

- **Measuring and monitoring assets created**: The lack of accurate measurements on assets created, whether private or public, and the impact of NREGA on rural labour productivity leaves a huge gap in our understanding of whether and how NREGA has increased rural productivity and profitability among rural farm and off-farm enterprises. Without a concerted push on stocktaking of NREGA assets, usage, and returns, the programme’s repercussions for growth through more productive and profitable livelihoods, not just wage labour provision, specifically among marginalised populations, will remain unknown.

Section 3: Conceptual framework on the interaction between the two programmes

The empirical evidence to date suggests that NRLM primarily increases welfare through solving credit constraints at scale, and driving down informal interest rates through general equilibrium spillovers in intervention geographies for non-participant as well as programme participant households. This is hypothesized to boost investment by non-participant households, which may be the channel through which we see increased demand for wage labour provided by participant households. While the size of inflows to participant household are more than their previous access to low-cost credit (4,238 INR in credit per member in younger SHGs, and 12,800 INR in credit per member in federated SHGs), these amounts are good sources of working capital/operational expenses for participant households but not large enough to make larger capital expenditures for farm, non-farm or off-farm self-employment or enterprise activity.

The most recent All India Debt and Investment Survey (AIDIS) reports that between the 2013 survey round and the 2019 round, the average value of assets in rural India has declined, driven by a 33 percent decline among cultivator households with a marginal one percent increase among non-cultivator households (Bhardwaj, 2021). At the same time, indebtedness to non-institutional sources declined by 10 percent in rural India, echoing some of the results from the NRLM multi-state evaluation. More carefully estimating how SHG participation (and SHG maturity) relates to institutional credit access using the AIDIS dataset would be very valuable, particularly in Bihar and Madhya Pradesh where convergence will be tested and in states like Andhra Pradesh, Telangana and Kerala who have implemented various additional NRLM and NREGS interventions over a longer period of time. Where larger sums of capital provided through the Community Investments Funds are channelled to SHG households, such as in the state of Rajasthan (Kochar et al., 2020b), we see differential impacts on women's decision-making outcomes. Additionally, federation is associated with improved outcomes (which correlate with SHG age and scale), and indicate that an important underlying component driving positive outcomes could in fact be the increased social capital and wider social networks developed among members through repeat interaction and within strong institutional structures (see Feigenberg et al. (2010) for a related test measuring economic gains from such repeated group-based social interaction).

NREGS, also operating at scale, primarily increases the reservation wages of the poor by providing a guaranteed outside option for wage labour and boosts the local private wage rate for labour by around 5 percent, improving labour supply in turn. Here too, the general equilibrium effects operating through wage rates are far more impactful and go beyond the social protection offered by the wage earnings from NREGS directly. By funnelling more stable (albeit delayed) earnings to poorer households and increasing their expenditures, NREGS also boosts local demand for goods and services, including the demand for low-cost credit provided through NRLM. The public and private asset creation record of NREGS is, however, unclear leaving the question of gains to rural productivity from NREGS indeterminate. The programme also suffers from being significantly rationed even among participant households, primarily due to budget constraints. And the programme's battles with leakage of funds, distorted work completion, and endemic corruption are well-documented.

In this sense, even without the specific implementation of convergence activities to increase synergies between the two programmes , NRLM and NREGA are conceptually complementary and can be mutually reinforcing in an upward spiral that improves wage earnings among low-income households and boosts local demand. This pathway does not necessarily indicate improvements or expansion in women-led enterprises, who would presumably face higher labour costs and consequently lower profits, even with the baseline constraints of lower levels and quality of education, and lower business, customer and employee social capital and networks among women (Kevane et al., 2021). However, Muralidharan et al. (2021) report that "non-agricultural enterprise counts and employment grew rapidly (under NREGS' improved implementation in Andhra Pradesh) despite higher wages, consistent with a role for local demand in structural transformation," which would bode well for women-led enterprises under NRLM if other constraints to expansion are alleviated. Additionally, improvements in credit markets would generate differential effects on men and women's hours of work (and therefore enterprises) if labour supplies differ in elasticity. Given the high rates of non-participation of women in the workforce in India, women's labour supply can be expected to be more elastic, so that increasing labour demand would increase women's hours of paid work more, but have less of an impact on their wages. There is evidence from Ghana that positive demand shocks can disproportionately benefit women-led enterprises in contexts where they are operating with more slack (Hardy and Kagy, 2020) and the confluence of NREGS and NRLM could serve as such a positive demand shock, especially in richer districts and states. Women stand to differentially gain from both these programmes, and improve their relative participation in both capital and labour markets.

However, both programmes seem to work better in richer states than in poorer states. The quality of implementation makes or breaks the success of both programmes, and sound implementation has been a key ingredient wherever either has delivered strong results. It is unclear to what extent this pattern is driven by differential government capacity, political incentives and leadership, or differential societal and human capital constraints, especially among women. The extent to which prior mobilisation/engagement of marginalised rural households—in a process of internal and external consciousness raising, networking and capacity building, and normative transformation by civil society and non-governmental organisations and movements—matters for the current success of failure of these programmes—NRLM in particular—needs to be better understood. The level of monetization of the local economy and demand for non-farm goods and services seem to significantly influence the programmes ' spillover impacts from the changing price of wage labour and capital as well. Kochar et al. (2021) posits that the low levels and low quality of women's education in poorer states, even in larger villages, could serve as a binding constraint for both NRLM's operational expansion of quality layered services and NREGS' ability to improve local women's labour force participation and earnings by driving up demand for non-agricultural services. At the same time, Joshi et al. (2017) finds that local community resource persons, even with lower education and experience, can deliver improved gains in certain key target outcomes under NRLM in a poor state like Rajasthan.

Intentional convergence between NRLM and NREGS implemented and studied in five states through the participation of SHG women in registration, planning, and monitoring of NREGS implementation correlates with increased women's participation in NREGS (Barooah et al., 2021; De Hoop et al., 2021), which additionally drives up women's wage rates and household consumption beyond the average effects of either programme (Barooah et al., 2021). The effects seem to move with a larger share of SHGs in a given geography, indicating that these effects might be driven by women's increased political voice and/or bargaining power rather than simply information flows through SHGs that would depend less on local saturation levels of NRLM (De Hoop et al., 2021). The effects of improved monitoring/social audits are currently being further investigated, given that NRLM-led social audits appear to have led to a fall in NREGS work claims, which could be a positive or negative outcome based on the mechanism involved. From a political economy point of view, a key insight emerging from the evidence is that contesting patriarchal structures (particularly economically rooted ones) requires collective strength. Therefore, access to economic benefits may only come when there is sufficient power, whether that is bargaining power or political power.

There is significant scope for strengthening intentional convergence between NRLM and NREGA and a number of objectives and pathways are outlined below. However, before NRLM can deliver significant gains to NREGS functioning and vice versa, it is imperative that NRLM's own institutional structures and processes are systematised. NRLM needs to be a strong functioning institution – including at the secondary and tertiary levels – to influence the GP and, in turn, NREGA implementation. Of the 33,000 CLFs under NRLM, the government is currently clarifying criteria for quality and protocolising institutional architecture and practice at the CLF level, similar to the systematisation of practice at the SHG level, through a model CLF initiative that will involve 1000 CLFs. This is expected to make the CLF institutional architecture less fuzzy and create benchmarks, as well as raise identity and goal-setting questions at these secondary higher-level institutions. A key question to ask in this process is whether and how CLFs will determine their priorities to be effective, and if there is a danger that CLFs are being expected to play the role of a shadow government that is not elected and that has limited resourcing, staffing and political influence.

The benefits from greater convergence between NRLM and NREGA can therefore be organized under the following broad outcome categories:

3.1 Returns in the form of improvements in wage income

Convergence will lead to direct returns on prices (interest rates, wages) through simultaneous improvements in credit and labour markets at scale. Improved functioning of credit markets through NRLM will increase household returns from NREGA and hence the demand for the programme. Correspondingly, a well-functioning NREGA will increase the demand for credit through SHGs and hence returns to NRLM. As discussed above, households will be more willing to borrow from SHGs, and through them from formal banking institutions, if a well-functioning NREGA offers the means to increase income (post the loan) and enable repayment. Credit offers a means of smoothing consumption over time, but this will only happen if the potential for increasing income exists. An important aspect to investigate here is timing, i.e., when can we expect NREGS wage work to be most in demand among NRLM member households, and particularly among women from NRLM households (Barooah et al., 2021). The comparative returns to women from obtaining NREGS work early in their NRLM lifecycle versus later in their lifecycle when their SHGs are more mature and receiving more funds for self-employment and enterprise-related activities needs to be carefully studied. The measure of economic gains from convergence needs to necessarily evolve beyond simply counting NREGS workdays and wages received, to include total economic value delivered to women that could over time increasingly involve returns from subsidised assets created through NREGS (see point 2 below) instead of wage earnings directly from NREGS.

3.2 Returns from the creation of public and private assets for rural women and SC/ST households that boost rural productivity and enterprise outcomes

Where the link from NRLM to NREGA takes on specific features of convergence that enable greater participation by SHG members in the selection and monitoring of NREGA projects and assets created (public and private) we would expect to see improved investment through NRLM and returns to rural enterprise activity, particularly in the farm sector. In Rajasthan, for example, convergence takes the form of improved access to NREGA category B funds (use of NREGA labour for land improvements etc. on private lands, primarily of SC/ST households). So, if improved access to credit increases investments in land, this is more likely if there is convergence in this form between NRLM and MNREGA. As noted below, NRLM can be a continued source of operating expenditures for rural women-run and SC/ST-run enterprises, with NREGA stepping in to provide the larger capital expenditures and asset creation as a state subsidy.

The public and private asset creation aspect of NREGA is one of its weakest areas, and achieving such a synergistic transformation will require significant changes. Here too, as noted in 3.1 above, the timing of and match for this specific set of convergence activities around project selection might be important, with more mature and federated SHGs being better able to demand, direct, and leverage assets created through NREGS for their productive enterprises compared to younger SHGs that might not yet have accessed larger Community Investment Funds through NRLM and whose members might still primarily depend on wage labour. The criticality of the productive asset creation aspect of convergence directed at women cannot be overemphasised. Balboni et al. (2021) in their eleven-year study of 6000 ultra-poor households in rural Bangladesh that receive the graduation package of programmes, centrally including a large one-time asset transfer, find evidence for poverty traps and measure a threshold level of initial assets above which “households accumulate assets, take on better occupations, and grow out of poverty.” On the other hand, households whose baseline level of assets were so low that the asset transfer through the programme was unable to bring them above the threshold slide back into poverty (ibid).

3.3 Returns in the form of enhanced SHG-PRI coordination and improved NREGA implementation and accountability through SHG monitoring and influence

As both of the studies that examine the correlation of convergence activities with outcomes (Barooah et al., 2021 and de Hoop et al., 2021) note, there is some indication that convergence produces the largest gains when there are a large number of SHGs at baseline, often organised in a functioning Federation. It is likely therefore that the strength of women’s collective bargaining power, networks and political clout through SHG Federations have a role to play in realizing implementation gains in NREGA, particularly in the area of improving NREGA’s targeting and inclusion of women from marginalized communities under the programme. For this the SHG network needs to have sufficient membership to serve as a meaningful political voice/counter-weight to the Gram Panchayat and local elites. NREGA can serve as an important starting point to address the coordination gap between PRI and NRLM and build more collaboration, which can deliver returns beyond this programme as discussed in section 1.3.2.5, where Kudumbashree's tripartite governance structure was key to promoting and linking/leveraging women's group enterprises in Kerala.

When SHGs are given a role in NREGA planning and in ensuring accountability (as implemented in some states), then this is expected to have an effect similar to the one described from the literature on digital payments (increased or stable workdays with lower leakage and ghosting). These strategies basically point to ways in which the programme was improved by cutting down delays, side-stepping bottlenecks or corrupt intermediaries, and raising grievances in near real-time, which would suggest that other ways of improved monitoring and accountability could have similar effects. The caveat is that much of the literature addresses delays caused at higher levels (block administration or even higher), which might suggest that SHG Federations' involvement at similar levels might be effective if the implementation issues are at this higher level. At the same time, since involvement of SHGs in the functioning of NREGA often occurs at the GP level where, for instance, NREGA project selection happens through the Gram Sabha, it remains to be seen whether and on which issues SHG members' involvement would deliver returns at the GP level. The improvements to targeting and income from the improved functioning of both programmes as a result of convergence would be an anticipated result. The cost-effectiveness of alternative strategies to improve NREGA monitoring and outcomes would need to be carefully measured.

3.4 Returns in the form of improvements in women's agency, political power and bargaining power (within the household and vis-à-vis local government and village elites)

Convergence implies multiple ways of improving women's agency and bargaining power as a direct outcome, by requiring SHG members to participate in planning and monitoring of a very large government programme and its resource distribution. This makes it more likely that the improvement to women's bargaining power is large enough to enable critical thresholds to be crossed, similar to the results on larger Community Investment Funds' distribution to SHGs being correlated with differential improvements in women's bargaining power, compared to just Federation or SHG participation (Kochar et al., 2021b). Improvements in agency outcomes only actualise if the threat point is viable, or if participation constraints bind, which means that the changes in the underlying determinants of bargaining power have to be sufficiently large to enable this threshold to be crossed (ibid). If we think of women's bargaining power being determined by a combination of her access to resources, her access to welfare payments and government entitlements, the status and permeability of local social norms, and the ability for a collective response, then it becomes clear that there will be much more of an impact from NRLM, for example, if NREGA is also functioning well. Additionally, NREGA in turn has demonstrated that by following the current guidance on individual payments to women workers (versus household joint payments), for example, the programme can influence the ability of women with low bargaining power at baseline to improve their bargaining power at home and in turn their labour force participation not just in NREGA but also in private wage labour markets, and through this influence attitudes towards and perceived norms around women's paid work outside the home (Field et al., 2021).

3.5 Returns in the form of changes in women's preferences (or activation of pre-existing gender preferences) through increased agency and bargaining power, changed social norms, or through improved information flows and knowledge

To the extent that women's welfare is also a consequence of a lack of knowledge on their rights and entitlements, then convergence brings additional benefits. From NRLM, SHGs can help improve women's knowledge of their rights and entitlements, as discussed in section 1.2.4 (TOC3). From the NREGA side, GPs can use SHGs as a means of disseminating information to groups and individuals that remain unenrolled in NREGA. The Gender Resource Centers (GRCs) being tested in four states are meant to serve as such an element of the CLF improving the flows of information and services specifically to marginalized BPL women. However, we as yet have little data on whether the current designs of the GRCs are indeed delivering gains in jobcards and workdays for instance, and if they are expanding NREGA's reach versus substituting for an alternative existing recruitment channel.

3.6 Returns from public procurement from NRLM enterprises and linking NRLM with other government programmes

A key insight from this review is the importance of aggregated local demand in shaping structural transformation as rural capital and labour markets shift as a result of well-implemented at-scale government programmes . Additional linkages with government programmes that source and procure goods and services could, therefore, add enormous value to the ability of NRLM to deliver income gains. A good example is the case from Kerala's Kudumbashree Network where group farms among SHG members, particularly in non-staple cash crops, delivered differentially positive returns compared to farms individually owned by men. The institutional and governance innovations used in Kerala along with the direct links to public procurement that included the Public Distribution System (PDS) and the Integrated Childhood Development System (ICDS) during COVID-19 present a compelling opportunity for NRLM to harness collective economic activity among its members to boost rural productivity and incomes.

It is important to note that while NREGA increases wage rates for a specific and rationed period, innovative ownership structures such as these collective farms might allow women to pursue more sustained income generation even if the daily equivalent earnings rate is lower on average. The prospect of good quality, desirable work (free from drudgery) and a regular stable income over a longer period, even with a lower average daily wage rate, is potentially very attractive to SHG women living in supportive normative environments. At the same time, the possibility of substituting NREGA work (given its higher daily wage rate) for own farm enterprise or private wage labour work as noted in Barooah (2021) needs to be tracked. There are several examples of producer companies comprised of SHG clusters and their members, including in the horticulture, poultry, and silk production industries. Several states are running model CLFs that include collective enterprises that fulfil public procurement contracts. However, the limited documentation and data analysis around these efforts make an assessment such as the one in

Kerala currently unfeasible. Several of these SRLM collective enterprises can significantly benefit from land, water and other rural infrastructure improvements financed and implemented by NREGA. Strengthening these linkages on both the supply and demand side can deliver important gains for women's economic participation, their productivity and profitability, and their agency.

Section 4: Interventions to improve convergence between NRLM, NREGA, and other local government welfare programmes

Testing and validating the mechanisms through which greater convergence can boost women's agency and welfare outcomes will require careful consideration of the theories of change, the implementation challenges to date (particularly in poor states), and the conceptual linkages between the two programmes laid out in section 3. Over the next few years, Transform Rural India Foundation (TRI) and their evaluation partner IMAGO Global Grassroots will test interventions with the following goals in Bihar and Madhya Pradesh:

> *1) enable greater convergence of NRLM and NREGA at the state level, particularly by meaningfully examining HOW the state and institutions work;*
>
> *(2) investigate through well-designed interventions how the state-CLF-VO-SHG infrastructure and interactions affect the involvement of women in local engagement with the state and in improving women's gains from government programmes, including through efforts to scale up Gender Resource Centers, and promote public procurement of products and services offered by SHG women.*

The overall goal of the interventions will be to improve women's involvement in NREGA works planning and execution, and enhance women's income, agency and access to benefits and entitlements. In the process, the project will "*generate grounded evidence on what works to improve the viability and gains of government programmes particularly among women, increasing social capital and strengthening synergies in government programmes*" (IMAGO, project description document).

We present a set of discrete interventions below through which improved coordination/convergence between NREGA, NRLM and selected other government programmes can boost impact on women's agency and welfare, programme cost-effectiveness, and pro-poor governance. It is important to note that while several innovations from high-performing states (such as Kerala and Andhra Pradesh) are included here, this is not to suggest that lessons, processes, and systems can be transplanted across social, economic and political contexts without adaptation and renewed innovation. Each state, including Kerala and the former unified Andhra Pradesh, has a different institutional history and longevity with these programmes. Some of the best performing states have longer histories with Self-Help Groups and/or with public workfare programmes and have, as a result, developed systems that are better placed to spur improved implementation and regular course correction.

4.1 Programme targeting - Gender Resources Centers (GRCs), Cluster Facilitation Teams (CFT), and NREGA Sahyogis

NRLM can invest in GRCs at the Block-level (covering multiple CLFs) that direct more women and marginalized group members to participate in NREGA and claim their full NREGA entitlements as a guaranteed right (especially in poorer districts). Alternatively or simultaneously, NREGA can invest in an NREGA Sahyogi programme at the GP level with women (potentially from SHGs) appointed in key roles to assist women without NREGA jobcards to enroll and apply for workdays easily (EPoD India, March 2021). A key question based on the Haqdarshak experience in Chattisgarh is around clarifying the precise binding constraints around why certain households have not yet enrolled in NREGA, and whether this is driven by a lack of information and handholding or other political or fiscal incentives to ration the programme. Where the NREGA Sahyogis and GRCs can play a critical ongoing role is in ensuring that NREGA guidelines are implemented, for example, ensuring that NRLM women and their households lay claim to the full 100 days of employment guaranteed by NREGA and, in lieu of that, file for unemployment benefits. Or ensuring that women's payments arrive in their own individual bank accounts and facilitate any ongoing support required in such cases. Additionally, the GRCs are meant to provide other demand-driven services, including in the realm of supporting women reporting on violence in rural areas, which could make them cost-effective in improving a range of services for women. The results from the ongoing GRC pilots in four states will be critical to understand what constitutes current demand and how effective the GRCs are in efficiently and effectively intermediating delivery.

4.2 Project selection

4.2.1 SHGs provide direction in project selection and CLFs manage projects as Project Implementing Agencies for NREGA

NRLM drives women's increased involvement in NREGA works planning, in the use of category A (public land and water improvements), category B (private land and other improvements for SC/ST households), category C (infrastructure specifically for NRLM SHGs) and Category D (rural infrastructure) funding, and selection of projects and assets created using NREGA resources. There is enormous scope for NRLM to direct the selection of projects across all categories that use NREGS funds for capital investments (including in under-utilised categories C and D), and serious deliberation on which public and private assets can deliver most economic value to NRLM members will be a significant step forward in aiding convergence (details of the four categories of assets that span a wide range of possibilities can be reviewed in MoRD and CWEPA (2014), pp. 33-34). The possibilities for gender-intentional and climate-adaptive infrastructure investments through NREGS to boost women's economic outcomes in concert with NRLM resources seem to be vast. With SC/ST households constituting 60% of

NRLM households, the CLF becomes an institutional structure for women from marginalised groups to direct which assets are prioritised for state subsidy through NREGA, determine how they are implemented, and align asset creation with their self-employment and enterprise activity, using NREGA for capital expenditures and NRLM lending for onging operating expenditures as outlined earlier. However, this will require significant sharing of decision-making power between the GP and the CLF, for which there are few successful examples to date (related to points 4.2.2 and 4.5 below). The ability of the CLF to direct NREGA project choices at the GP level may also depend on the number of SHGs and strength of federated institutional structures at the VO and CLF level. Additionally, investigating the ways in which innovative leaders and states (Karnataka is highlighted as one such state) where NREGS funds have been allocated for investment in public assets defined more broadly, such as libraries, would be an important next step to better document ideas on how NREGS funds can best be utilized to advance NRLM members' objectives.

4.2.2 Institutionalize women's group-led Community-PRI-Local Administration compacts

In many ways, given the importance of the Panchayati Raj Institutions and leaders in NREGA decision-making and implementation, one way to address the lack of coordination between PRI and SHG leadership is to force them to work together through NREGA. A key lesson from the Kerala example on group farms is the governance structure created for women's groups' joint enterprises involving the state Kudumbashree mission, representatives of the Kudumbashree network of women's groups, and the PRI institution's representatives. This tripartite arrangement distributes decision-making power and reduces coordination frictions between the organisations that drive rural development and gender equality on both the demand side and the supply side. Assessing the scope for such a joint operational structure around NREGA implementation that integrates the state machinery with NRLM and PRI institutions will be a critical ingredient not just for convergence with NREGA, but additionally for convergence in areas such as public procurement from NRLM enterprises and integration with PDS and ICDS needs. In this though, the tension highlighted by Bhanjdeo et al. (2021) in their analysis of the community cadre and their role as representatives of women citizens versus representatives of the state will need to be clarified. It will be critical to develop strategies and processes to ensure that women's interests are not co-opted by the state machinery, and that Community Resource Persons stay primarily responsive to women's groups' desires even under circumstances and even with incentives that pull them in other directions.

4.3 Project monitoring, payments, and accountability - NRLM members as Mahila Mates and social auditors

Even if NRLM members are not directly involved in the selection of NREGA projects as noted in 4.2.1, they can serve as a key monitoring force at the GP level that complements the more technologically-driven monitoring and payment systems implemented at the district and state level (whether PayDash for bureaucracts or electronic payments delivered directly into worker accounts). A more direct comparison of alternative methods of increasing programme accountability – through more technologically-driven solutions and more human-driven solutions (through convergence for example) – in terms of outcomes, resource and infrastructure intensity, cost-effectiveness, scalability, sustainability, risk, and spillovers will provide very helpful insights for the capabilities, costs, and results from different approaches. If NRLM drives increased women's involvement in NREGA social audits and NRLM members provide monitoring and supervision of NREGA work sites as Mahila Mates, as seen from the experience in Andhra Pradesh, there can be synergistic pressure on historic power dynamics in rural India (that remain to some extent as part of the PRI institutions), with greater pressure on traditional political elites to perform and deliver on governance both from above and from below.

A key consideration here is the question of time and reward, and cost-effectiveness, which has applicability to several of the planned interventions here. Are NRLM's community cadre revolutionary 'change agents' or 'Badlaav Didis' who challenge the status quo and build strong identity as local leaders driven by their insistence on social change, or are they members of an institutional structure with paid salaries and targets that might attract women from existing elite circles to co-opt these roles through political influence and leave the status quo unchallenged? While different implementers have argued for one or another of these organisational approaches, it is important to bring empirical rigor and additional research to investigate this critical question of incentives and rewards for NRLM staff, including those engaged in roles dedicated to convergence activities with NREGS. The community cadre themselves come from among the poor and being able to reliably compensate them for their work could be an important driver of women's engagement in leadership, even as the problems of potential elite capture are targeted from the outset. Legitimizing marginalised women's roles and rewards in the NRLM structure could further strengthen positive views on women's work activities more broadly, in a way that could spill over into de-stigmatising social norms that constrain upper-caste women's work outside their homes. Establishing the right processes to ensure motivation, skills, experience, accountability, and cost-effectiveness in a robust, transparent, participatory, and distributed organisational human resource framework at the GP, VO, CLF, district and state levels, will be difficult yet essential for success.

Linked to the philosophical question of reward structures is the pragmatic question of back-end data convergence to deliver such rewards and recognition efficiently in response to work performed (related to 4.6 below). Delivering timely and reliable compensation for NRLM-related work including NREGS duties performed such as social auditing work, remains a key limitation. Payments for social auditors in Bihar (also observed with the Odisha Livelihoods Mission), for instance, were greatly delayed because they had to be routed through multiple institutions. The SRLM women worked for months with no compensation, and this was a cause of auditor attrition in Bihar. Streamlining data systems so that women's payments can be easily processed is an important area that receives little attention but could be instrumental to increasing women's involvement in NRLM and in other programmes .

4.4 Markets – Boosting local demand

A key lesson from this review is the role of local aggregated demand in driving the restructuring of the local economy and the returns to marginalised households in the wake of simultaneous improvements in both credit and labour markets. There appear to be significant spillovers from both NRLM and NREGA in driving wage labour supply and demand, and their respective prices. It is reasonable then to consider public procurement of the products and services that women's collective enterprises offer in the farm, off-farm and non-farm sector (again the Kerala Kudumbashree experience during COVID-19 is useful here) as a lighter-touch corollary of the employment 'guarantee', and similar to some of the procurement and distribution support provided to the farm sector. Linking such procurement to government programmes and delivery such as PDS and ICDS could be fruitful in boosting local demand and differentially enabling enterprises of the SRLM CLFs. The CLFs in turn can serve as demand aggregators and intermediaries linking women's collective enterprises to a range of services and specialist service providers when it comes to licenses, distribution, technology adoption, marketing, human resource management, and training at a sufficiently high level to enable efficiencies. However, in all this, the interactions with asset ownership and productivity (related again to 4.2 above) will be key to success, which might require certain competitiveness benchmarks and pre-project assessments to be conducted. Land, for instance, was a key determinant and constraint in the performance of the Kerala and Andhra Pradesh women's group farms. Else, such linkages might take away from the efficiency of government expenditures, add to the fiscal deficit, and do nothing for women-led enterprises.

4.5 Gender relations, resource control, and normative structures – Veto power

A key area of underperformance is in the dynamics of gender relations and structures around social norms in rural India. The measured gains to women's agency from participation in NRLM is surprisingly weak, whether in intra-household decision-making or confidence and self-efficacy in community engagement and leadership. An interesting lead from Kochar et al. (2021b) and Prillaman et al. (2021) is that the extent to which women's agency and voice indicators may move might be contingent on the size of resources handled and the scale of social networks formed and leveraged. Giving NRLM effective and de jure power over the allocation and utilisation of NREGA funds, including through voting and veto privileges, will serve as a significant step in the direction of increasing the institutionalised control over resources given to CLFs and VOs. Similar to the correlations observed with increased Community Investment Fund allocations in specific states (Kochar et al., 2021b), we would then expect to see agency outcomes move more significantly from the shift in control over sizable NREGA state resources to include NRLM discretion. One could expect less extreme backlash from existing elites, including in the PRI, when the CLFs and VOs have more extensive networks and coverage in the district, which might be driven by the ability of CLFs to contest backlash better with larger networks, or which, less promisingly, might also be driven by the greater ease of co-optation by existing elites with the increased diversity of interests within a larger network of women. Any additional programming that is more directly targeted at raising critical consciousness and discussing gender attitudes, norms and structures, either through the GRCs or forums such as the Gender Samvaad, could enhance the gains from such control over larger resources.

However, as Prillaman (under review) details from the pilot programme in Madhya Pradesh, a robust understanding and anticipation of shifting power dynamics and the processes of negotiation and renegotiation, collective bargaining and backsliding, is critical in order to anticipate resistance and backlash and pro-actively design effective ongoing support and institutional processes.

4.6 Data integration and data publication/analysis

The star-performer states are often characterised by a commitment by leadership to transparency, which has often included a concerted effort to make programme data transparent and available for review. This has also included investing in data systems that allow for the careful tracking of each project, its participants and expenses in NREGA. A similar effort is underway to build a stable core data architecture for NRLM that has the ability for seamless forward linkages to banking and payments systems, and to additional government services and entitlements such as the insurance schemes and NREGA itself. Such backend compatibility of data systems and the simpler merging and integrated analysis of databases across NRLM, NREGA, PDS, ICDS, insurance and other government programmes, to ensure coordinated planning and routine gender analysis, would be a significant step forward.

Policymakers are keen to empirically understand the nuances of how the two programmes interact, for instance, whether enrolling in NRLM increases or decreases participation in NREGS and how these dynamics shift over time. While we have preliminary evidence that particularly at the early stages of group formation and NRLM participation, convergence activities under NRLM are associated with greater take-up of NREGS wage work by SHG women, we have little understanding of how these dynamics shift over time as the SHGs mature, get federated and acquire greater financing for their self-employment and enterprise activities. Do NRLM members then begin to direct NREGS towards targeted asset creation that supports their individual and collective enterprise efforts? Does this lead to a decline in participation in NREGS wage work, representing a type of 'graduation' out of acute poverty? Do NRLM-funded enterprises then productively engage other women through NREGS wage work associated with their enterprises? Building the integrated and updated datasets to delve into these questions, especially as they evolve over time, will add tremendous value to improving both programmes ' effectiveness. The ability to map decision-making and monitoring at the NREGS project level, including roles played by NRLM CLTs, VOs and CLFs, with the project's investments, outcomes, sustainability and returns to the village or specific households and women from marginalised communities, will go a long way in regular course correction and a far more accountable, impactful and pro-poor governance and welfare system.

Conclusion

This paper provides a critical review of the evidence to date on two of India's largest rural development programmes delivered through new institutional structures and processes, and focused on enabling rural income generation, poverty reduction, and gender equality. A topline finding on both programmes is that there is considerable evidence of heterogeneity in both NRLM and NREGA's impacts, across states, but also within a state, with variation in initial conditions, implementation fidelity, institutional quality, scale, markets, political leadership, and women's human capital.

What would it take for poorer states and districts to achieve larger impacts from these programmes similar to those achieved in better off states and districts? The paper points to several important innovations and outlines a set of synergies that could be nurtured between the two programmes to boost programme delivery and impact for NREGA, enable meaningful power-sharing with large-scale networked institutions of poor women through NRLM, and ensure that the building blocks of representative electoral democracy within the Panchayati Raj Institutions attain new incentives to be more accountable and equitable on an everyday basis. Within this institutional transformation through convergence, this paper highlights the essential role played by market dynamics in leveraging such large government programmes to deliver augmented returns through spillovers, general equilibrium shifts in credit and labour markets, and broader rural structural transformation that can deliver disproportionate returns to low-income rural women. The paper also notes the tension between targets set by scale and universal coverage, which might work suitably to trigger these changes in markets and prices, but often fail in attaining the depth, intensity, or longevity of engagement required to change entrenched patriarchal attitudes and norms among women and men, consequently failing to remedy unequal gender power dynamics.

While NREGA in particular may be one the most researched rural development programmes globally (in contrast to programmes such as NRLM and the PDS for essential food distribution in India) there remain key holes in the existing data publication, data integration and harmonisation, and data analysis landscape that prevent more rigorous, relevant, and routine assessments of patterns to date. For instance, detailed analyses of the trends in the monetised value of NRLM mobilization are essential, particularly in terms of access to institutional credit, which should be possible through improved integration of data from NRLM and the AIDIS. Similar analysis of administrative data around public and private asset creation through NREGA and subsequent use is essential, and the absence of such data and analysis serves as a major handicap to the effective functioning, iterative improvement, and general accountability of the programmes .

A broader conclusion is the need for an integrated and public view of familial, market and state interactions at each administrative level and for specific sub-populations, which aggregated up could provide the needed guidance and accountability for regular course correction, political mobilisation, and targeted intervention. A large part of these programmes' positive effects lie not in their own direct impacts, but in their secondary effects. A case in point in a more concerning direction is the observed reduction in secondary schooling among adolescents with the advent of NREGA. The ability to optimally allocate the state's resources between short-term social protection needs and longer-term slow-yielding investments in human capital, infrastructure and assets, and institutional functioning will determine the extent to which equitable interventions now can reduce the gaping inequalities along gender, historical marginalisation, and wealth lines in the future.

References

Afridi, F., A. Mukhopadhyay, and S. Sahoo. (2016). "Female Labor Force Participation and Child Education in India: Evidence from the National Rural Employment Guarantee Scheme." *IZA Journal of Labor and Development*, 5(1):Article 7.

Agarwal, B. (March 2021). "Livelihoods in COVID times: Gendered perils and new pathways in India." *World Development*, 139.

Agarwal, B. (2018). "Can group farms outperform individual family farms? Empirical insights from India." *World Development*, 108, 57–73.

Aiyar, Y and S. Samji. (2009). "Transparency and Accountability in NREGA: A Case Study of Andhra Pradesh." Accountability Initiative Working Paper, No. 1, Centre for Policy Research.

Alder, S., L. Shao, and F. Zilibotti. (2016). "Economic Reforms and Industrial Policy in a Panel of Chinese Cities," *Journal of Economic Growth*, 21 (4), pp. 305-349.

Azam, M. (2012). "The Impact of Indian Job Guarantee Scheme on Labor Market Outcomes: Evidence from a Natural Experiment," Working Paper 6548, IZA.

Balboni, C., O. Bandiera, R. Burgess, M. Ghatak and A. Heil. (2021). "Why do people stay poor?" Working Paper.

Banerjee, A., E. Duflo, C. Imbert, S. Mathew, and R. Pande. (2020). "E-governance, Accountability, and Leakage in Public Programs: Experimental Evidence from a Financial Management Reform in India." *American Economic Journal: Applied Economics*, 12 (4): pp. 39-72.

Banerjee, A., D. Karlan and J. Zinman. (2015a). "Six Randomized Evaluations of Microcredit: Introduction and Further Steps." *American Economic Journal: Applied Economics*, 7 (1), pp. 1-21.

Banerjee, A., E. Duflo, N. Goldberg, D. Karlan, R. Osei, W. Pariente, J. Shapiro, B. Thuysbaert and C. Udry. (2015b). "A multifaceted programme causes lasting progress for the very poor: Evidence from six countries." *Science*, 348: 6236.

Barooah, B, C. Jain, K. Kejriwal, P. Sengupta, P. Shah, R. Shah and S. Jain. (November 2021). "Improving delivery and impacts of pro-poor programmes ." 3ie Working Paper 47. New Delhi: International Initiative for Impact Evaluation (3ie). Available at: DOI http://doi.org/10.23846/WP0047

Berg, E., S. Bhattacharyya, R. Durgam, and M. Ramachandra. (2012). “Can Rural Public Works Affect Agricultural Wages? Evidence from India." CSAE Working Paper Series 2012-05, Centre for the Study of African Economies, University of Oxford.

Bernhardt, A., E. Field, R. Pande and N. Rigol. (2019). “Household Matters: Revisiting the Returns to Capital among Female Micro-entrepreneurs.” *American Economic Review: Insights*, 1(2).

Bhanjdeo, A., Narain, N., Sheth, S. and Walton, M. (2021). “Seeing like a State or Seeing the State: Self-Help Groups in Madhya Pradesh.” Working Paper.

Bhardwaj, A. (October 2021). “AIDIS 2019: Lower assets and higher indebtedness for Indian households.” Centre for Economic Data and Analysis, Ashoka University. url: https://ceda.ashoka.edu.in/aidis-2019-lower-assets-and-higher-indebtedness-for-indian-households/

Bhatt, A., M. Khanna, S. Schaner, A. Shukla, N. Theys and C. T. Moore. (July 2021). “Scaling Gender-Inclusive Social Audits: Preliminary Insights from Process Monitoring and a Randomized Controlled Trial.” Working Paper.

Breitkreuz, R., C-J. Stanton, N. Brady, J. Pattison-Williams, ED King, C. Mishra, and B. Swallow. (2017). “The Mahatma Gandhi National Rural Employment Guarantee Scheme: A Policy Solution to Rural Poverty in India?" *Development Policy Review*, 35 (3), pp. 397-417.

Callen, M., S. de Mel, C. McIntosh and C. Woodruff. (2019). “What Are the Headwaters of Formal Savings? Experimental Evidence from Sri Lanka.” *The Review of Economic Studies*, 86:6, pp. 2491–2529.

Center for Effective Global Action (CEGA). (2021). “Using Digital Trails to Improve Management and Accountability for Public Service.” Summary brief of Dodge et al. (2021).

Christian, P., E. Kandpal, N. Palaniswamy, and V. Rao. (March 2018). “Safety Nets and Natural Disaster Mitigation: Evidence from Cyclone Phailin in Odisha.” World Bank, Policy Research Working Paper 8375.

Cook, J. and M. Shah. “Aggregate Effects from Public Works: Evidence from India.” Forthcoming, *The Review of Economics and Statistics.*

Dasgupta, A. and D. Kapur. (2020). “The political economy of bureaucratic overload: Evidence from rural development officials in India.” *American Political Science Review*, *114*(4), pp.1316-1334.

Datta, Upamanyu. (2015). “Socio-Economic Impacts of JEEViKA: A Large-Scale Self-Help Group Project in Bihar, India.” *World Development*, 68: pp. 1-18.

De Hoop, T., G. Siwach, C. Holla and B. Mahapatra. (November 2021). “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.” Evidence Consortium on Women’s Groups, Working Paper 10.

Deininger, K. and Y. Liu. (2013). “Economic and Social Impacts of an Innovative Self-Help Group Model in India.” *World Development*, 43, pp. 149-163.

Deininger, K. and Y. Liu. (2013b). “Evaluating Programme Impacts on Mature Self-help Groups in India.” *The World Bank Economic Review*, 27(2), 2013, pp. 272–296. url: https://doi.org/10.1093/wber/lhs028

Deininger, K. and Y. Liu. (2009). “Longer-Term Economic Impacts of Self-Help Groups in India.” Policy Research Working Paper: WPS 4886. World Bank. https://openknowledge.worldbank.org/handle/10986/4081; License: CC BY 3.0 IGO.

Diaz-Martin, L., A. Gopalan, E. Guarnieri and S. Jayachandran. (April 2021). “Greater than the Sum of the Parts? Evidence on Mechanisms Operating in Women’s Groups.” Working Paper.

Dodge, E., Y. Neggers, R. Pande and C.T. Moore. (May 2021). “Updating the State: Information Acquisition Costs and Public Benefit Delivery.” Working Paper.

Dutta, P., R. Murgai, M. Ravallion and D. van de Walle. (2012). “Does India’s Employment Guarantee Scheme Guarantee Employment?” Policy Research Working Paper 6003, World Bank.

Evidence for Policy Design (EPoD) India. (March 2021). “Best Practices for Encouraging Demand under MGNREGA: A Review Note for Rural Development Department, Bihar, prepared by EPoD India.”

Field, E., R. Pande, N. Rigol, S. Schaner, and C. T. Moore. (2021). “On Her Own Account: How Strengthening Women’s Financial Control Impacts Labour Supply and Gender Norms.” *American Economic Review*, 111(7): 2342-75. https://doi.org/10.1257/aer.20200705

Gupta, R., S. Jain, A. Kochar, C. Nagabhushana, R. Sarkar, R. Shah and G. Singh. (January 2021) “Son Preference.” Working Paper, 3ie and Vrutti.

Hardy, Morgan, and Gisella Kagy. (2020). "It’s Getting Crowded in Here: Experimental Evidence of Demand Constraints in the Gender Profit Gap." *The Economic Journal*, 130(631), 2272-2290.

Hoffmann, V., V. Rao, V. Surendra and U. Datta. (January 2021). “Relief from usury: Impact of a self-help group lending programme in rural India.” *Journal of Development Economics*, 148.

Hoffmann, V. et al. (March 2018). “Poverty and empowerment impacts of the Bihar Rural Livelihoods Project in India.” Impact Evaluation Report 71, 3ie.

Imbert, C. and J. Papp, (2015). “Labor Market Effects of Social Programs: Evidence from India's Employment Guarantee," *American Economic Journal: Applied Economics*, 7(2), pp. 233-263.

Initiative for What Works to Advance Women and Girls in the Economy (IWWAGE). (2021). “From aspiration to empowerment: Impact of women’s collectives.” IFMR LEAD/Krea University. url: https://iwwage.org/wp-content/uploads/2021/06/From-aspiration-to-empowerment-impact-of-women.pdf

Jacob, N. (March 20, 2021). “Modi government has hiked MGNREGA wages in all states, except Kerala.” Scroll.in. url: https://scroll.in/article/989993/modi-government-hikes-mgnrega-wages-in-all-states-except-kerala

Joshi, S. and V. Rao (2017). “Who Should Be at the Top of Bottom-Up Development? A Case-Study of the National Rural Livelihoods Mission in Rajasthan, India.” *The Journal of Development Studies*, 54(12), pp.1-20.

Kabeer, N., (1999). “Resources, agency, achievements: Reflections on the measurement of women's empowerment.” *Development and Change*, *30*(3), pp.435-464.

Kevane, M., A. Lakshmi Ratan and D. Dhar. (2021). ““Evidence Review of Women-Led Small and Medium-Sized Enterprises (SMEs) before, during, and after COVID-19: Examining Barriers and Opportunities.” Working Paper.

Kochar, A. (December 2021). “Aggregate Shocks and Community Institutions.” Working Paper.

Kochar, A., C. Nagabhushana, G. Singh, and R. Shah. (September 2021). “Schooling Concentrations and Labour Force Participation in Rural India.” Working Paper.

Kochar, A., B. Barooah, C. Jain, G. Singh, N. Closepet, R. Narayanan, R. Sarkar and R. Shah. (2020a). “Impact Evaluation of the National Rural Livelihoods Project.” Report, 3ie.

Kochar, A., C. Nagabhushana, R. Sarkar, R. Shah and G. Singh. (2020b). “The Policies that Empower Women: Empirical Evidence from India’s National Rural Livelihoods Project.” Working Paper, 3ie and Vrutti.

Kumar, S. (July 2021). “The National Rural Livelihoods Mission: Drawing Lessons from the First Ten Years,” ORF Issue Brief No. 478, Observer Research Foundation. url: https://www.orfonline.org/wp-content/uploads/2021/07/ORF_IssueBrief_478_NRLM-10Years.pdf

Mani, S., J.R. Behrman, S. Galab, P. Reddy, and Young Lives Determinants and Consequences of Child Growth Project Team. (2019). "Impact of the NREGS on Children's Intellectual Human Capital." *Journal of Development Studies*, 56(5), pp. 929-945.

Ministry of Rural Development (MoRD) and Centre for Wage Employment and Poverty Alleviation (CWEPA). (July 2014). "Frequently Asked Questions (FAQs) on MGNREGA Operational Guidelines – 2013." url: https://nrega.nic.in/Circular_Archive/archive/nrega_doc_FAQs.pdf

Moore, C. T, R. Pande, and S. A. Prillaman. (2022). "Expanding Opportunity, Closing Gender Gaps: State-led Recruitment to Vocational Training." *Working paper.*

Muralidharan, K., P. Niehaus and S. Sukhtankar. (September 2021). "General equilibrium effects of (improving) public employment programmes: experimental evidence from India." Working Paper. url: https://econweb.ucsd.edu/~kamurali/papers/Working%20Papers/NREGS_GE%20(Current%20WP).pdf

Muralidharan, K., P. Niehaus and S. Sukhtankar. (2016). "Building State Capacity: Evidence from Biometric Smartcards in India." *American Economic Review*, 106:10, pp. 2895-2929.

Paliath, S. and G. Devi. (August 24, 2021). "Why India should spend more on its rural employment scheme." Scroll.in. url: https://scroll.in/article/1003507/why-india-should-spend-more-on-its-rural-employment-scheme.

Pankaj, A. and R. Tankha. (2010). "Empowerment Effects of the NREGS on Women Workers: A Study in Four States." *Economic & Political Weekly*, 45(30).

Parthasarathy, R., V. Rao and N. Palaniswamy, Nethra. (2017). "Unheard Voices: The Challenge of Inducing Women's Civic Speech." Policy Research Working Paper No. 8120. World Bank, Washington, DC. https://openknowledge.worldbank.org/handle/10986/27623 ; License: CC BY 3.0 IGO.

Prillaman, S. A. (under review). "Consciousness raising as the ignition for collective action" in *Unraveling the Patriarchal Political Order.* Book manuscript.

Prillaman, S. A. (2021). "Strength in Numbers: How Women's Groups Close India's Political Gender Gap." *American Journal of Political Science*.

Ranaware, K., U. Das, A. Kulkarni, and S. Narayanan. (2015). "MGNREGA Works and Their Impacts." *Economic and Political Weekly*, 50(13).

Sahni, Harsh Vardhan (March 2021). "Impacts of the National Rural Livelihoods Project on institution building, women's empowerment and convergence." Briefing note 2, 3ie.

Sahni, Harsh Vardhan. (2020). Summary brief of the “Impact Evaluation of the National Rural Livelihoods Project.” Summary Brief, 3ie.

Scroll Staff. (November 24, 2021). “Release funds to continue, expand MGNREGA: 80 eminent citizens write to Modi.” Scroll.in. url: https://scroll.in/latest/1011336/release-funds-to-continue-expand-mgnrega-80-eminent-citizens-write-to-modi

Sanyal, P., V. Rao, and S. Majumdar. (September 2015). “Recasting Culture to Undo Gender: A Sociological Analysis of JEEViKA in Rural Bihar, India.” World Bank, Policy Research Working Paper 7411.

Sanyal, P. (2014). “Credit to Capabilities: A Sociological Study of Microcredit Groups in India." New York, NY: Cambridge University Press.

Sanyal, P. (2009). “From Credit to Collective Action: The Role of Microfinance in Promoting Women’s Social Capital and Normative Influence.” *American Sociological Review*, 74(4): pp. 529-550.

Schaner, S. and C. T. Moore. (January 2019). “Enhancing Women’s Economic Empowerment through Digital Cash Transfers: An Analysis of the Digitize-Direct-Design Criteria applied to the National Rural Employment Guarantee Scheme in Bihar, India.” Report, Evidence for Policy Design, Harvard Kennedy School.

Sen, A. (1999). “Development as Freedom.” New York: Knopf and Oxford: Oxford University Press.

Sen, A. (2005). “Women and Men” in *The Argumentative Indian: Writings on Indian History, Culture and Identity*. Allen Lane.

Shah, M. and B. Steinberg. (Spring 2021) “Workfare and Human Capital Investment: Evidence from India.” *Journal of Human Resources*, 56(2): 380–405.

Sharan, M. R. (2021). “Last Among Equals: Power, Caste and Politics in Bihar’s Villages.” Context, India.

Siwach, G., S. Paul and T. de Hoop. (2021). “Economies of Scale of Large-Scale International Development Interventions: Evidence from Self- Help Groups in India.” Working Paper.

Sukhtankar, S. (2017). “India’s National Rural Employment Guarantee Scheme: What Do We Really Know about the World’s Largest Workfare Programme?” *Brookings-NCAER India Policy Forum,* vol 13, pp 231-86.

Valenti, F. et al. presentation. (April 2021). “IWWAGE - Haqdarshak Evaluation Project.” IWWAGE, IFMR LEAD/Krea University.

Veeraraghavan, R. (2017). "Strategies for Synergy in a High Modernist Project: Two Community Responses to India's NREGA Rural Work Programme." *World Development*, 99, pp. 203–213.

World Bank, National Rural Livelihoods Project (NRLP) webpage - https://projects.worldbank.org/en/projects-operations/project-detail/P104164

Yale Economic Growth Center (EGC). (2021). "Empowering Rural Women Through MGNREGA." Policy Brief.