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Measuring Collective Agency in Women's Self-Help Groups

Comparing measurement approaches and practical guidance for scaling

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Introduction

Despite the widespread use of group-based approaches (such as self-help groups, farmer producer organizations, and water user groups) to improve economic and livelihood outcomes for women and enhance women's agency and empowerment in agriculture, there remains a critical gap in measuring whether and how these groups effectively strengthen women's collective agency. Current empowerment metrics, have limited indicators for measuring collective dimensions of empowerment. The project level-Women's Empowerment in Agriculture Index (pro-WEAI), for example, only measures group membership and not the quality or efficacy of engagement in such groups and the collective action they foster. Such binary measures fail to assess whether groups function effectively, whether all members have voice and influence, and whether collective processes translate into meaningful empowerment outcomes.

This measurement gap is particularly challenging given the scale of investment in group-based approaches for women's empowerment. In India alone, one of the world's largest poverty alleviation programs, the National Rural Livelihoods Mission (NRLM), has mobilized over 100 million rural women into 9 million Self-Help Groups (SHGs) across more than 500000 villages (Raghunathan et al, 2023). Similar investments in producer organizations, water user groups, and other collectives are ubiquitous across initiatives in low and middle-income countries (Brody et al. 2015, Anderson et al 2014). Yet without adequate measurement tools, we cannot determine which types of groups effectively enable women to achieve collective agency, which women within these groups are able to exercise voice and influence decisions, how group characteristics shape empowerment and well-being outcomes and whether substantial investments in organizing women into groups translate to women's empowerment beyond economic benefits. By moving beyond simplistic indicators of group membership to assess the quality and outcomes of collective processes, we can better design and evaluate interventions that strengthen women's "power with" (Rowlands, 1995).

In India, several factors compound these measurement challenges. First, different types of groups (SHGs, producer organizations, cooperatives) serve diverse purposes and operate under unique models and levels, and collective agency may function differently at different organizational levels. Next, women's experiences of collective agency vary by the social group they belong to (caste, tribe, age, marital status) and their location in the social hierarchy of their communities, a dimension that may be invisible in metrics that aggregate to group level only. Finally, rapid scaling of SHG based platforms have prioritized coverage over quality, making measurement of group effectiveness and collective agency even more critical.

In addition to the measurement gap, there is also a practical challenge faced by implementing organizations: given the substantial costs of primary data collection, can collective agency be accurately assessed through group-level assessments with leaders during regular meetings, or are individual member surveys necessary despite being more resource-intensive? Understanding which measurement approach yields valid data under what circumstances is critical for organizations seeking to monitor and improve group quality at scale.

At the individual level, collective agency represents a person's capacity to pursue their own goals and values as a result of membership in a collective. At the group level, it represents the group's perceived ability to act on shared interests and achieve collective objectives (Delea et al, 2025). Our conceptualization builds on Kabeer's framework of empowerment, which identifies three interconnected dimensions of resources, agency, and achievements, extending it to the collective level (Meinzen-Dick et al, 2024). Within collective agency we make a distinction between intrinsic collective agency, which encompasses the characteristics and processes that enable groups to function more effectively, and instrumental collective agency that focus on how this agency is exercised and actualized in practice through influence and progress towards goals.

This policy brief presents findings from a pilot study in India that developed and tested new tools measuring for collective agency in women's Self-Help Groups. The measurement tool was specifically designed to understand how being part of a group, and the quality of collective functioning within that group, links to women's collective agency or "power with." This focus on group processes and dynamics, rather than simply group membership, enables programs to identify which aspects of collective functioning matter most for empowerment outcomes. Drawing on data from 900 women across self-help groups in central India, we developed and assessed the internal validity of collective agency indicators. We then compare two approaches to measuring collective agency: surveys with individual member and group-level surveys. We examine the advantages and limitations of each method, identify when individual versus group-level measurement is most appropriate, and assess how findings from each approach converge or diverge. Critically, this research was designed in partnership with PRADAN, a leading implementing organization working with women's collectives across India, to ensure the tools and insights are directly useful for practitioners seeking to monitor and strengthen group quality in their programs. Through this exercise, we offer practical recommendations on how to measure collective agency in group-based platforms, including guidance on cost-effective implementation and scaling of these measurement approaches for program monitoring.

Data and methodology

Our study used multi-stage sampling to select respondents and Self-Help Groups across two tribal states in Central India: Jharkhand and Chhattisgarh. The implementing partner, PRADAN, drawing on its long-standing experience in strengthening women's SHG federations and Village Organization (VO) platforms, identified groups, prepared the sampling frame of eligible VOs, and implemented the data collection for this study. Only those VOs that had been active for more than three years were selected (to allow for development of group norms and maturation) and further stratified based on tribal membership (>50% Scheduled Tribe members), intensive livelihood intervention, and experience with gender-intensive interventions. A total of 30 VOs were selected based on these criteria (15 per state) to ensure representation across program types and social contexts. Within each selected VO, we randomly selected 5 Self-Help Groups from the complete roster of active SHGs, yielding a sample of 150 groups. Finally, from each SHG's complete membership list, we randomly selected 5-6 women for individual interviews, with attention to representation across age and caste/tribe groups, resulting in a final sample of 900 individual respondents. In addition to individual member surveys, we conducted group-level interviews with a different set of 3-5 members from the same 150 SHGs, enabling comparison between responses when questions on assessment of collective agency are asked in private settings individually, versus publicly in group settings requiring consensus.

In both the individual and group interviews, the respondents listened to 14 statements about the group they belong to, and were asked to share whether they completely agree, partially agree, partially disagree, or completely disagree with the statement. The statements included 7 statements related to the domain of intrinsic collective agency, such as "the group has clear goals for the future," and 7 statements related to instrumental collective agency, such as "members of the group have influence in decisions about which goals the group should pursue." For the group interview, the group was encouraged to reach a consensus view, however, in the few cases where consensus was not possible, the enumerator recorded the majority response.

Table 1. Collective agency statements and mapping to domains and sub-domains

Domain	Statement		Indicator/Sub-Domain	Response
Intrinsic collective agency	**A.**	The group has clear goals for the future.	**Group goal Alignment**	For each statement, respondents were asked: **Q1. Do you agree with this statement?** Agree = 1 >>>Q2 Disagree = 2 >>>Q3 **Q2. Do you completely agree or partly agree?** Completely agree = 1 Partly agree = 2 **Q3. Do you completely disagree or partly disagree?** Completely disagree = 1 Partly disagree = 2 **Answers were recoded for analysis as:** 4= completely agree 3= partly agree 2=partly disagree 1= completely disagree
	B.	Members are aware of and agree with the group's goals.		
	C.	Members agree with the actions taken by the group in pursuit of the group's goals.		
	D.	Members of the group are confident that the group will achieve the group's goals.	Dropped after factor analysis	
	E.	Being part of the group helps members achieve their own personal goals.	**Group Support and Efficacy**	
	F.	Members of the group are confident they can work together to overcome obstacles.		
	G.	In critical situations, members of the group can rely on each other for help.		
Instrumental collective agency	**H.**	Members of the group have influence in decisions about which goals the group should pursue.	**Participatory Influence**	
	I.	Members of the group have influence in decisions about which actions the group should take to pursue the group's goals.		
	L.	The group is making progress toward achieving its goals.		
	J.	Members of the group are comfortable sharing worries and concerns with each other.	**Group Cohesion**	
	K.	Members of the group work with each other to find solutions to problems.		
	M.	Being part of the group, allows members to take actions to pursue their personal goals.		
	N.	Even when members disagree, they find ways to work together.		

We made decisions about which variables to retain and how to group them into indicators using exploratory and confirmatory factor analysis (EFA and CFA). Using a randomly selected half of the cases, we conducted EFA separately on the intrinsic and instrumental items, as well as the individual- and group-based data collection approach. Eigenvalues and scree plots were used to

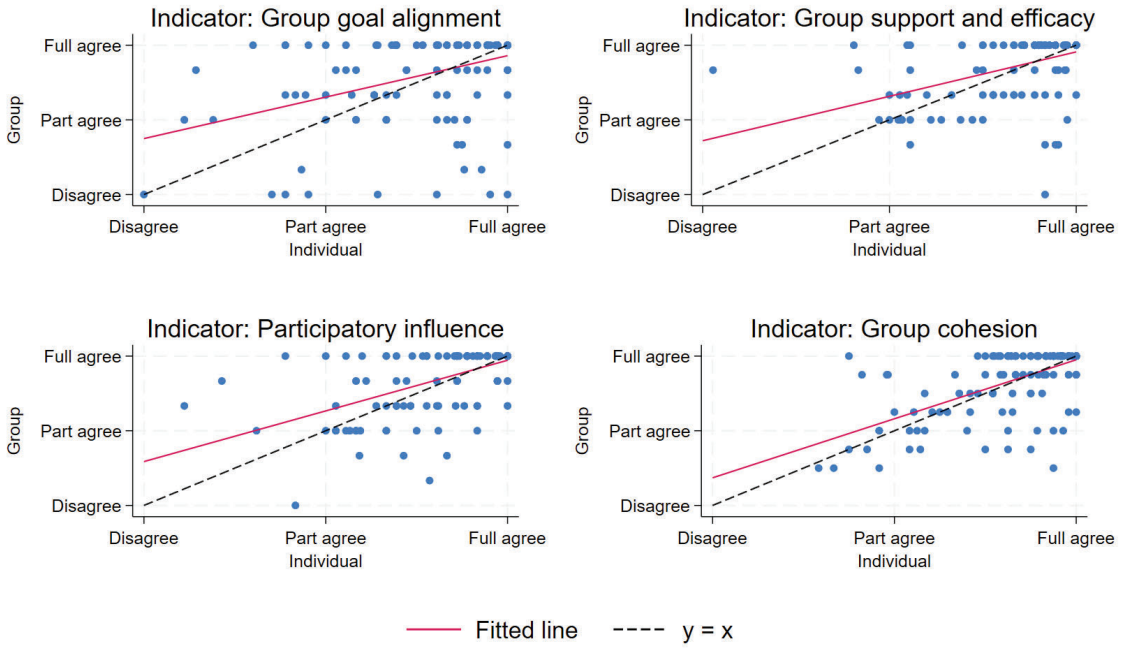
inform the number of factors. We retained factors that loaded on only one item with a value larger than 0.3 (that is, a simple structure). Models from the two data collection approaches yielded similar factor solutions. We selected the two-factor solutions for both the intrinsic and instrumental items and based this decision on the models and the theoretical underpinnings of these concepts (Table 1). We identified two domains of intrinsic collective agency—group goal alignment and group support and efficacy—and two domains of instrumental collective agency—participatory influence and group cohesion. We then used CFA to confirm the EFA solutions were not a result of chance. In all cases, the fit statistics were good and the individual factor loadings were significant. To construct scores for each of the 4 indicators, we used the means of the survey answers to each question (see Table 1; 4= completely agree to 1= completely disagree). The composite "index" value was constructed using the mean of the 4 indicators, though this method is not ideal as it relies on arbitrary equal weighting across the four domains.

Using the indicators that we developed, supported by internal validity checks, we address our primary research questions. These questions are twofold—which observable characteristics drive responses to questions on collective agency for the two data-collection methods, and whether this greater collective agency contributes to better individual outcomes. We hypothesize that there is likely to be differences in drivers of responses when answering questions in group settings versus individually, as group-responses may be guided by different motivating factors and there may be social pressure to give responses that exhibit greater social cohesion in group settings. Further, we hypothesize that groups that are caste-homogenous or are created for group-action are likely to be more cohesive/exhibit greater social cohesion. Finally, we expect collective agency to improve women's agency over household decisions, and greater self-efficacy, that is greater confidence in their own ability to set and achieve goals, overcome obstacles, and navigate challenges.

Results

We visualize how responses vary by data collection method in Figure 1 below. Responses closer to the line of equality (black dashed 45º-line) represent groups where answers did not vary by survey method. Responses above the 45º-line of equality are those where group-responses are more "positive" than individual responses. As demonstrated by the red fitted line, we see that for all indicators, in group-data collection method, respondents were more likely to converge towards answers that show greater collective agency (more agreement with positive statements about the group) than individual responses.

Figure 1: Responses by data collection method: group versus individual

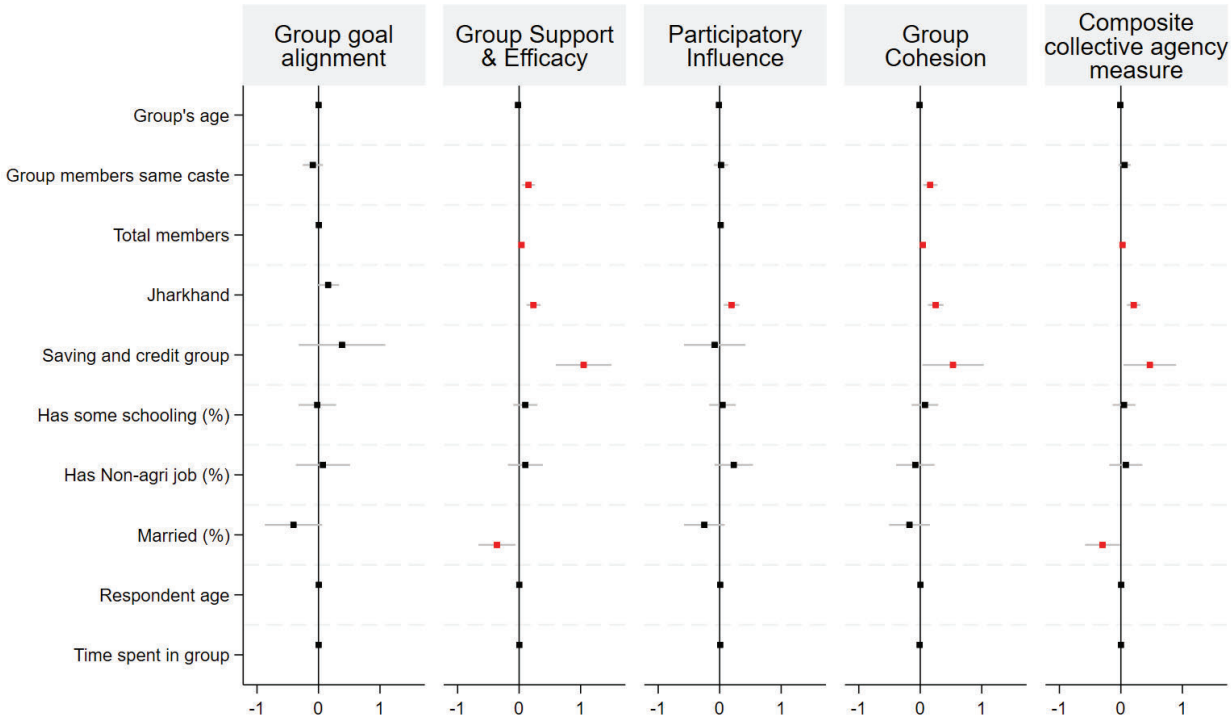


Note: The dashed line is 45-degree line of equality; the red line is the line fitted on the data from a bivariate regression. Blue dots are data points for individual groups. N=148 pair of observations for each plot.

To unpack this further, we test how observable group and individual characteristics drive responses to each of the four indicators and the composite index. We do this separately for the two data collection methods, with responses from the individual method collapsed to generate one average response per group.

We find that groups with more members, report more positively on their group's goal alignment, support and efficacy, goal achievement, and cohesion (Figure 2). More homogenous groups, with all members belonging to the same caste category, have greater positive assessment of their group than more heterogenous group. Additionally, groups formed for the purpose of saving and credit, an activity that requires joint liability and collective trust, are also more likely to respond positively, especially on group cohesion and group support and efficacy. This is likely because savings-credit oriented groups have structures that require repeated coordination, trust-building, and joint accountability. Thus, SHGs that engage in structured collective processes, may strengthen both intrinsic and instrumental collective agency through exercises that require members to deliberate, prioritize, negotiate trade-offs, and coordinate implementation. In these contexts, agency appears not only as a precursor to collective action, but also as an emergent capability shaped through practice, shared decision-making, and visible livelihood outcomes.

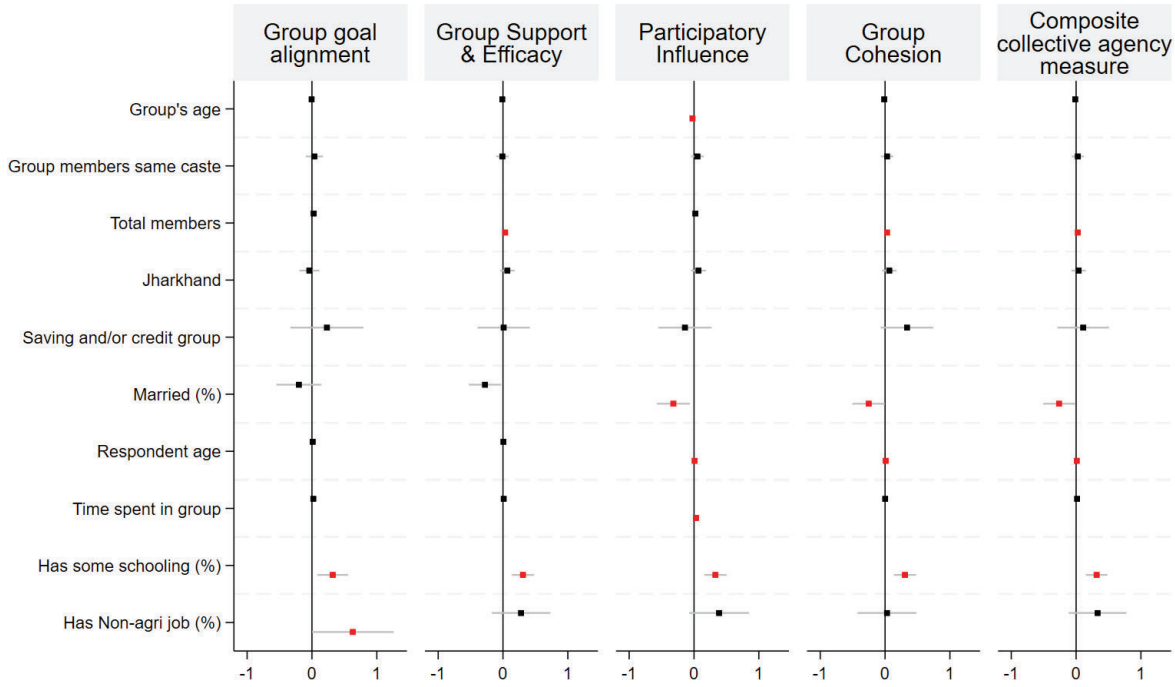
Figure 2: Coefficients from group-level data collection method



Note: Each plot shows the coefficients from regressions of a collective agency indicator and composite measure on group and individual attributes (calculated on average for each group) using group data. The red squares (black squares) highlight coefficients that are (are not) significant at 90% level of significance. N= 148 observation.

For the individual-level data collection method (Figure 3), group size is positively correlated with more positive responses. However, here caste-homogeneity is not statistically significant, indicating perhaps that caste-identity is less salient when respondents are answering in private settings where their responses are not known by other group members. Rather, unlike the group method more educated women (women with some education) were more likely to perceive the group more positively, than women with no education. We also find some evidence of negative association between marital status and collective agency responses. Overall, we find responses in group-settings and individual settings are driven by different observable characteristics, with responses in group data collection method associated more with group-level variables such as group-homogeneity and group-type, while individual responses are associated with individual-level variables such as education and marital status.

Figure 3: Coefficients from individual-level data collection method



Note: Each plot shows the coefficients from regressions of the collective agency indicator/sub-domain and composite measure on group and individual attributes using individual data (with group-level averages constructed from individual responses). The red squares (black squares) highlight coefficients that are (are not) significant at 90% level of significance. N= 143 observation.

Our results indicate that while group and individual surveys are both viable methods to collect information on collective agency, we need to consider trade-offs between response-quality, cost-effectiveness and circumstances under which bias could be minimized. In addition to social-desirability bias, individual responses often differ from group responses because women perceive the group through their own lived participation and personal journey within the collective including what roles they engage in, how much they engage, and whether they personally experience support and influence through this engagement, leading to varied assessments even within the same SHG.

Improving collective agency is a goal in and of itself, allowing groups to meet group objectives, foster collective action towards shared goals and improve the functioning of collective engagement-based platforms. However, collective agency is also critical for improving individual outcomes, allowing women to leverage gains from collective action and engagement to improve individual economic outcomes, self-efficacy and actualization, and improve agency and voice within the household. The ultimate value of measuring and strengthening collective agency lies in its contribution to individual women's empowerment. To further our analysis, we test whether there are associations between collective agency indicators and individual-level outcomes, to validate whether investments in group quality translate into tangible benefits for members. We do this using data from the individual survey that included comprehensive data on household outcomes and questions on individual agency and empowerment. We find evidence of positive association between the group cohesion indicator and greater decision making over how household income is spent, but not for the other collective agency indicators. However, we do find all four collective agency indicators to be positively associated with greater self-efficacy, suggesting that groups where women have genuine voice in decisions and can rely on mutual support are especially powerful in building individual psychological empowerment. In addition, we find that being a member of savings and credit groups is associated with greater decision-making over household incomes, household expenses and greater self-efficacy. The findings have direct relevance for large-scale platforms such as NRLM, demonstrating how agency-building is strengthened when SHGs are actively engaged in structured planning processes linked to livelihoods, a practice that PRADAN has operationalized through long-term work with mature SHG and VO systems.

Discussion

Our findings demonstrate that measuring collective agency requires careful consideration of both measurement method and context. The divergence between responses from individual and group-based data collection approaches has implications for practitioners:

while group-level data collection may be more cost-effective and logistically simpler, they may overestimate collective agency, particularly in contexts where social pressure to present group cohesion is strong. The choice between methods should thus depend on program objectives. While group-level measurement may suffice for monitoring overall trends and comparing across groups, individual-level measurement may be needed in some cases for understanding equity within groups and identifying members who may not be benefiting from collective processes. This distinction is crucial for programs that leverage collectives and implementing organizations that aim to reach marginalized women.

The positive association between collective agency indicators and individual-level outcomes underscores that collective agency measures meaningful dimensions of empowerment and quality of collective agency that have hitherto been understudied, and policy and programmatic efforts should focus on strengthening group quality, not just expanding group coverage. For large-scale programs seeking to integrate collective agency measurement into routine monitoring systems, we recommend a tiered approach. At the extensive margin, programs can deploy the instrument through group-level surveys conducted during regular meetings. This approach minimizes costs while providing comparable data across a large number of groups. However, periodically, this should be complemented with individual surveys in a subset of groups. This dual approach balances cost-effectiveness with data quality, allowing programs to track overall trends while maintaining validity checks and ensuring that aggregated data does not mask differences within groups.

As research on collective agency evolves, several critical research gaps remain. First, longitudinal studies are needed to understand how collective agency evolves over the lifecycle of the group, and whether early investments in building collective processes can yield sustained improvement in collective agency and individual empowerment benefits. Second, more research is needed on the mechanisms linking collective agency to outcomes, specifically, which sub-domains matter for which outcomes, or whether these relationships hold across different group types and program contexts.

A key contextual feature of the study sample is that the SHGs were drawn from Village Organizations that were active for more than three years and had varying exposure to intensive livelihood and gender-responsive facilitation processes, including structured collective planning exercises such as resource-based asset planning for individual and collective asset creation. This means that observed collective agency levels should be interpreted as reflecting performance within relatively mature SHG platforms rather than representing all SHGs in the general population. Finally, our measurement tools were developed and tested specifically in the context of women's Self-Help Groups in tribal dominated region in central India. More research is needed on the validity of these measurement questions and sub-domains for other types of groups, with different incentive and governance structures. Likewise, differences in responses across survey method may manifest differently based on social norms around conformity, collective identity, or class and caste relations. Adapting and testing these tools across diverse organizational structures, geographic contexts, and cultural settings is thus essential.

Our findings raise important questions about how research can inform intervention design. If caste-homogeneous groups exhibit higher collective agency what does this imply for targeting and composition strategies? Should programs prioritize homogeneous groups that may function better collectively, or diverse groups that may better challenge social hierarchies? What role can civil society and implementing organizations play to support groups in social settings where identity and power dynamics may undermine inclusive collective processes? Answering these questions would provide the evidence base needed to move from measurement to intervention and shed light on how tools to measure collective agency can not only be used to monitor program performance, but to actively strengthen women's power with.

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