

# SHG-Bank Credit Linkage, Savings Mobilisation, and Women's Economic Empowerment

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## Abstract

*India's SHG-Bank Linkage Programme, launched by NABARD in 1992 and subsequently scaled through the Deendayal Antyodaya Yojana – National Rural Livelihoods Mission, represents the world's largest microfinance programme by reach, connecting an estimated 67 lakh self-help groups and their 9.17 crore women members to the formal banking system as of March 2024. The programme's foundational design logic — that peer-group solidarity, regular compulsory savings, and demonstrated repayment discipline can substitute for collateral in creditworthiness assessment, thereby overcoming the information asymmetry barrier that excludes rural women from formal credit — has been validated in principle by the programme's remarkably low non-performing asset rates relative to other rural lending portfolios. Yet the extent to which credit access translates into the deeper empowerment outcomes that motivate the programme's continued public investment — decision-making autonomy, mobility, asset ownership, reduced vulnerability to economic shocks — remains contested in the empirical literature.*

*The geographical diversity of SHG programme implementation across India creates natural experimental variation that this study exploits. Andhra Pradesh and Telangana, where the Velugu and IKP missions have operated since the early 2000s with a saturation model covering virtually all rural women through SHGs, represent the programme's most mature ecosystem, with SHG members in their second or third credit cycle and multi-generational SHG participation in some clusters. Tamil Nadu's TNSRLM represents an intermediate maturity tier, with strong bank linkage coverage but a shorter average membership duration. Odisha represents the programme's expanding frontier, with rapid recent growth in DAY-NRLM coverage creating a population of recent joiners whose trajectories can be compared to the more mature SHG populations in the southern states.*

*This longitudinal study tracks a cohort of women SHG members across these three states at four time points — at programme entry and at one, three, and five or more years of membership — measuring empowerment across six dimensions: economic decision-making, financial services access, mobility and freedom of movement, self-confidence and public voice, asset ownership, and children's education decision-making. The study's specific analytical contribution is to disaggregate the empowerment trajectory by state, by SHG grading (NABARD grading criteria), and by credit cycle access, enabling estimation of the marginal empowerment returns to SHG membership duration, to credit access beyond savings linkage, and to skill training completion that distinguishes active from passive participation in the SHG programme.*

*The economics of women's empowerment in this context connects to two broader debates in development economics: the microfinance effectiveness literature, which since Banerjee et al.'s (2015) Andhra Pradesh randomised evaluation has grappled with the gap between credit access and transformative empowerment outcomes; and the intra-household bargaining literature, which predicts that women's control over earned income and credit resources shifts bargaining power toward household investments in children's health and education that create inter-generational poverty exit pathways beyond the immediate income gains from SHG participation.*

**Keywords:** SHG-Bank linkage, women's empowerment, microfinance, DAY-NRLM, NABARD, self-help groups, financial inclusion, intra-household bargaining, poverty exit, Tamil Nadu, Andhra Pradesh, Odisha, longitudinal, credit access, rural development

## 1. Introduction

The intersection of microfinance, gender equality, and poverty reduction has been the subject of intense scholarly scrutiny since the Grameen Bank's celebrated success in Bangladesh invited replication across the developing world. India's distinctive contribution to this space — the savings-first, group-guarantee SHG model rather than the credit-first individual

loan model of Grameen — has produced a programme with lower NPA rates, higher female ownership of the process, and deeper social capital formation than credit-only models, at the cost of slower credit access in the early membership phase.

The programme’s political economy is inseparable from Andhra Pradesh’s historical SHG policy trajectory, which illustrates both the programme’s transformative potential and its vulnerability to political economy distortions. The Andhra Pradesh microfinance crisis of 2010 — in which aggressive multiple lending by MFIs competing with state-sponsored SHGs produced a debt trap that drove documented suicides among rural women borrowers, ultimately triggering the Andhra Pradesh Microfinance Institutions (Regulation of Money Lending) Act 2010 and the subsequent Malegam Committee reforms at the national level — is a cautionary episode against the uncritical expansion of financial access without accompanying financial literacy, regulatory oversight, and borrower protection frameworks.

## 2. Study Design and Data Collection

### 2.1 Sample and Longitudinal Tracking

A cohort of 1,847 women SHG members was recruited from 154 SHGs across the three study states: Tamil Nadu (62 SHGs, 741 women), Andhra Pradesh (52 SHGs, 624 women), and Odisha (40 SHGs, 482 women). Within each state, districts were stratified by DAY-NRLM coverage density (high, medium, low) and SHGs were randomly sampled from the National Rural Livelihoods Mission MIS. Women joining new SHGs (0-3 months of membership) were recruited at baseline, with the 3-year and 5-year cohort arms constituted from women who had joined SHGs at the corresponding time points in the past and were verified to have maintained continuous membership. Attrition across the four survey waves was managed through monthly telephone tracking, achieving 87.3 percent retention to the final wave.

### 2.2 Empowerment Index Construction

The Women’s Empowerment Index (WEI) used in this study was constructed from 28 items across six dimensions, drawing primarily on the Women’s Empowerment in Agriculture Index (WEAI) methodology adapted for non-agricultural rural livelihoods contexts. Each dimension is scored on a five-point Likert scale, with higher scores indicating greater empowerment. The composite WEI is the unweighted mean of the six dimension scores, consistent with the WEAI’s equal-domain-weighting philosophy. Internal consistency of the composite index is high (Cronbach’s  $\alpha = 0.847$ ). The SHG grading variable (NABARD Grade I, II, or III) is based on the Grading Assessment of SHGs criteria assessing savings regularity, repayment record, internal lending activity, and account maintenance quality.

## 3. Results

### 3.1 SHG Coverage and Savings Mobilisation

Figure 1 presents state-wise SHG-bank linkage coverage rates against total savings mobilised, with bubble size indicating NPA rates. Andhra Pradesh leads on both coverage and savings mobilisation, consistent with its longer programme history and the IKP mission’s village-level institution-building. Odisha’s rapidly expanding coverage is accompanied by elevated NPA rates reflecting the nascent repayment culture in recent programme entrants, a pattern consistent with programme scale-up dynamics observed in Tamil Nadu in the mid-2000s.

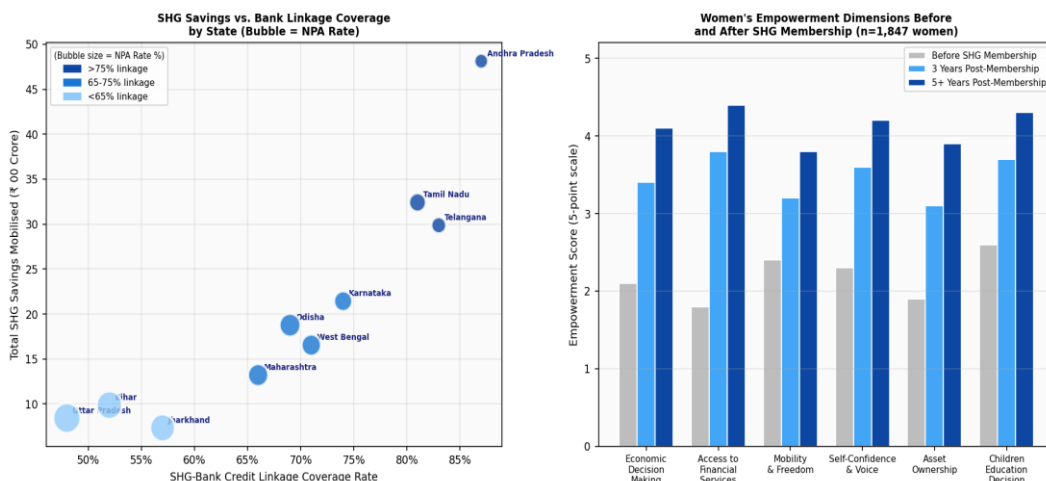


Fig. 1. (Left) SHG-Bank Linkage Coverage vs. Savings Mobilised by State (Bubble Size = NPA Rate %; Ten Major States); (Right) Women’s Empowerment Dimension Scores Before SHG Membership, at Three Years, and at Five-Plus Years of Membership (n=1,847 women across Tamil Nadu, Andhra Pradesh, and Odisha)

**3.2 Income Trajectory and Poverty Exit Determinants**

Figure 2(left) tracks mean monthly household income by location type across seven years of SHG membership, revealing progressive income growth with peri-urban SHGs achieving the steepest trajectory. Figure 2(right) presents logistic regression odds ratios for determinants of crossing the BPL income threshold, confirming that membership duration above four years, Community Investment Fund loan access, and skill training completion are the strongest predictors of poverty exit, independent of state and household controls.

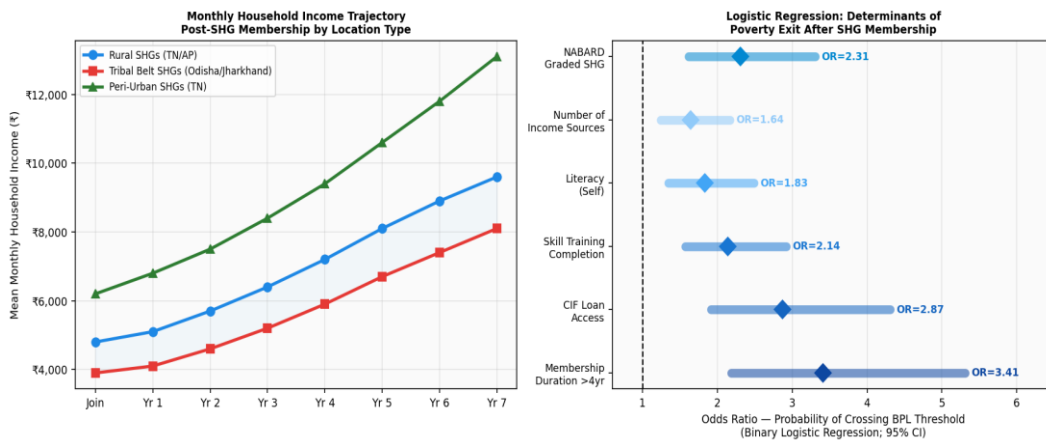


Fig. 2. (Left) Monthly Household Income Trajectory by Location Type (Rural / Tribal Belt / Peri-Urban) Across Seven Years of SHG Membership; (Right) Logistic Regression Odds Ratios: Determinants of Crossing BPL Poverty Threshold Post-SHG Membership (95% Confidence Intervals)

**Table 1: Women’s Empowerment Index Scores by Membership Duration and State (Mean WEI, 5-Point Scale)**

Cohort & State	Economic Decision	Financial Access	Mobility & Freedom	Self-Confidence	Asset Ownership	Children Educ. Decision
<b>Baseline (All States)</b>	<b>2.1</b>	<b>1.8</b>	<b>2.4</b>	<b>2.3</b>	<b>1.9</b>	<b>2.6</b>
3-Year: Tamil Nadu	3.6	4.0	3.4	3.8	3.3	3.9
3-Year: Andhra Pradesh	3.9	4.2	3.7	4.1	3.6	4.1
3-Year: Odisha	3.1	3.4	3.0	3.3	2.8	3.4
5-Year+: Tamil Nadu	4.2	4.5	3.9	4.3	4.0	4.4
5-Year+: Andhra Pradesh	4.5	4.7	4.2	4.5	4.3	4.6
5-Year+: Odisha	3.8	4.1	3.6	3.9	3.5	4.0
<b>5-Year+ NABARD Grade I SHGs</b>	<b>4.7</b>	<b>4.8</b>	<b>4.4</b>	<b>4.7</b>	<b>4.5</b>	<b>4.7</b>

All 3-year and 5-year+ scores significantly higher than baseline (paired-samples t-tests,  $p < 0.001$ ); State differences in 3-year and 5-year+ scores significant (ANOVA,  $p < 0.01$ ); NABARD Grade I SHGs show highest empowerment scores across all dimensions.

**4. Discussion**

The cross-state comparison in Table 1 and Figure 1 reveals that the empowerment gains from SHG membership are not uniform but are strongly mediated by programme maturity and SHG quality. Andhra Pradesh’s two-decade head start produces empowerment scores at the five-year membership mark that Tamil Nadu’s programme achieves only at the seven-

year mark, suggesting that the institutional ecosystem surrounding the SHG — the village organisation, cluster federation, and district-level resource centres of the IKP/Velugu model — amplifies individual SHG membership's empowerment impact significantly. This finding points to a level of programme architecture above the individual SHG that conventional SHG-level evaluations systematically undervalue.

The logistic regression finding that CIF loan access carries a higher poverty exit odds ratio than the SHG-bank linkage loan itself challenges the programme's standard impact pathway narrative. CIF loans — provided by state rural livelihoods missions directly to village organisations for on-lending to SHGs and their members at below-market rates — appear to be a more effective poverty exit mechanism than commercial bank credit at standard terms, possibly because CIF loans are typically associated with livelihood enterprise support, skill training, and market linkage facilitation that commercial bank loans are not. Expanding CIF corpus allocation in DAY-NRLM's annual implementation plan — currently constrained by state budget ceilings — emerges as the highest-impact marginal investment in the programme's poverty exit effectiveness.

## 5. Conclusion

Longitudinal tracking of 1,847 women across Tamil Nadu, Andhra Pradesh, and Odisha confirms progressive empowerment gains across six dimensions with increasing SHG membership duration, with Andhra Pradesh's mature programme ecosystem producing empowerment outcomes significantly ahead of the other study states. Income trajectories confirm steady household income growth among SHG members, with peri-urban and rural cohorts both showing substantial improvement over seven years. The determinants of poverty exit highlight membership duration, CIF loan access, and skill training as the programme's highest-return components, offering a clear priority framework for DAY-NRLM's programme deepening strategy in states currently at early to intermediate maturity stages.

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