

Empowering Rural India: The Impact of Social Audits on Transparency and Accountability in MGNREGS

Prabha P^{1*}, Kanniammal K²

¹ Research Scholar- Ph.D. Part Time, School of Commerce and Management, Aravinshilingam Institute for Home Science and Higher Education for Women Coimbatore, Barathi Park Road, Saibaba Colony, Coimbatore, Tamil Nadu, INDIA

² Professor & Research Guide, School of Commerce and Management, Aravinshilingam Institute for Home Science and Higher Education for Women Coimbatore, Barathi Park Road, Saibaba Colony, Coimbatore, Tamil Nadu, INDIA

*Corresponding Author: prabhanscollege@gmail.com

Citation: Prabha, P. and Kanniammal, K. (2025). Empowering Rural India: The Impact of Social Audits on Transparency and Accountability in MGNREGS, *Journal of Cultural Analysis and Social Change*, 10(2), 4966-4982. <https://doi.org/10.64753/jcasc.v10i2.3018>

Published: November 25, 2025

ABSTRACT

This study analyses the quality of the implementation of social audits and its effect on perceived accountability, using the case of the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) in India, for which perceived transparency serves as a possible mediating mechanism. Despite legal requirements that social audits be used as a governance tool, there is considerable variation in their quality and effectiveness across states, which has created a gap in understanding what quality implementation means for more meaningful accountability outcomes for recipients and officials. The research was conducted using the partial least squares structural equation modelling technique with panchayat officials in various administrative locations. Three key constructs were explored: Social Audit Implementation Quality, including dimensions such as timeliness, participation of the community, independence of the political system, accessibility of information, and systematic follow-up of irregularities; Perceived Transparency, including dimensions of visibility and verifiability of MGNREGS processes; and Perceived Accountability, including dimensions of belief in official responsibility and responsiveness of institutions. The results show that the quality of audit implementation is a significant factor in the perception of transparency. Transparency significantly impacts the accountability perceptions of panchayat officials. Furthermore, audit quality has a direct impact on perceptions of accountability that are separate from the path of transparency. Notably, perceived transparency mediates a meaningful part of the relationship between audit quality and accountability, with direct pathways also being substantive, suggesting that more than one mechanism works simultaneously. The proposed model shows good explanatory power regarding accountability and transparency perceptions. These findings validate the high-quality implementation of social audits, an approach which emphasises procedural integrity, inclusiveness, independence, and responsive follow-up, as a substantive governance intervention. The research highlights the need for transparency alone to be not adequate for accountability, and meaningful improvement would require linking improvements in transparency with evidence of institutional responsiveness and corrective action to improve rural governance under MGNREGS.

Keywords: Social Audits; Accountability; Transparency; MGNREGS; Participatory Governance

INTRODUCTION

Worldwide, the ideas of transparency and accountability have gained mainstream governance discourse, particularly regarding the provision of public goods and anti-corruption interventions. The United Nations' SDGs (specifically SDG 16) disproportionately highlight the need for just, peaceful, and inclusive institutions, including mechanisms to increase transparency, limit corruption, and enhance accountability (United Nations, 2015).

Participatory monitoring tools, such as social audits, citizen report cards, and community score cards, are increasingly used around the world as a way for citizens to connect with, examine, and impact the implementation of public policies (Fox, 2015; Petesch et al., 2005). Empirical studies have shown that if social accountability mechanisms are well-designed, they can curb the misuse of public funds, raise awareness about beneficiary rights, and make institutions more responsive (Bjorkman & Svensson, 2009; Olken, 2007). However, these results are strongly conditional on implementation quality - timeliness, inclusiveness, capacity to access relevant information, audit findings followed up with, and local governance context usually mediate their effectiveness (Birdsall, 2013; Mansuri & Rao, 2012). In India, among social welfare programs, the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) is the exception, as it is legally bound to social audits. Instituted in 2005, the scheme has made social audits a part of its operational framework for residential monitoring, transparency in the implementation of work, payment of wages, and record keeping (Ministry of Rural Development, Government of India). Under the MGNREGS, social audits have been developed as a means of connecting beneficiaries and the administration through the involvement of Gram Sabhas, civil society actors, and implementing state agencies. However, empirical studies show wide variations in how social audits are conducted in the states, despite the strong statutory foundation. For instance, Varghese, Narayanan, Agnihotri, and Godbole (2019) report extensive heterogeneity in the quality of social audit functioning in Sikkim: the difference in community awareness, independence of audit units, follow-up of irregularities, and level of participation influences their quality. Similarly, in Himachal Pradesh, Ram B and Sapna K. Sharma (2023) found that although social audits were successful in increasing community participation and the visibility of the work of MGNREGS in tribal areas, some difficulties were faced in ensuring that irregularities found were acted upon and that information was accessible to beneficiaries. In addition to India, there is growing evidence of the impact of audit and monitoring interventions on transparency and accountability from experimental and quasi-experimental studies. A notable example is Olken's (2007) randomised field experiment in Indonesia, which showed that increasing the probability of government audits from zero (4%) to 100% caused a significant reduction in "missing expenditures" in road projects (around 8 percentage points), showing the effectiveness of a robust auditing mechanism in fighting corruption. Olken also noted that increasing the participation of communities alone, without any attention to other dimensions of quality, had more limited results, particularly where free-rider problems or elite capture existed. Despite this collection of literature, there is a large void in the understanding of how and to what extent the perceived quality of implementation of social audits leads to perceived transparency to beneficiaries, and how that perceived transparency translates into perceived accountability in MGNREGS. While some studies have demonstrated correlations between the presence or frequency of social audits and outcomes, few have rigorously evaluated the mediating role of transparency (i.e. whether transparency is the mechanism through which the quality of social audit implementation affects accountability). This provides the impetus for a study that measures these relationships, disaggregates the dimensions of quality of implementation (timeliness, inclusivity, follow-up, disclosure of information), and measures beneficiary perceptions of transparency and accountability. Such a formulation not only promises conceptual clarity but also provides useful pointers for policy interventions that hope to improve rural India's governance during MGNREGS.

Problem Statement

Despite the legal mandate and policy emphasis on social audits under MGNREGS, there is still ambiguity related to the quality of implementation of social audits as perceived by beneficiaries and, later, the perceived accountability of authorities. Studies suggest that many social audits in India may be pro forma (for compliance), may lack strong community engagement, be delayed, and there may be poor follow-up of the revealed irregularities (Rajasekhar, Lakha & Manjula, 2013; Varghese et al., 2019). Furthermore, although transparency is commonly expected to be associated with accountability, the pathway for this is less empirically examined in the Indian rural context, particularly whether perceived transparency by beneficiaries mediates the impact of social audit implementation quality on perceived accountability. Without an understanding of this mediating pathway, policymakers may not know which aspects of social audit quality (e.g. procedural fairness, timeliness, and inclusivity) to strengthen to enhance accountability. Thus, the purpose of this study was to address this gap.

Research Objectives

General Objective

To examine the effect of social audit implementation quality on perceived accountability in MGNREGS, and to test whether perceived transparency mediates this relationship.

Specific Objectives

1. To quantify the effect of the quality of Social Audit implementation on perceived transparency in MGNREGS operations.

2. To estimate the effect of perceived transparency on perceived accountability in MGNREGS.
3. To test whether perceived transparency mediates the relationship between Social Audit implementation quality and perceived accountability.

Significance of the Study

By theoretically modelling and empirically testing transparency as a mediator, this study contributes to the literature on social accountability mechanisms by providing helpful nuances on how and why social audits are important. Findings will inform policy makers and implementers of MGNREGS of the dimensions of the social audit implementation that most strongly influence transparency and accountability to guide reforms on how to improve scheme governance. Lessons from this study can be used by communities, CSO, and local governance bodies to make social audits more effective to ensure that the rights and entitlements are effectively translated in the field through MGNREGS. Ultimately, improving transparency and accountability helps lower corruption, build a greater degree of trust in institutions, and ensure equitable service delivery to the rural poor.

LITERATURE REVIEW AND THEORETICAL UNDERPINNINGS

Conceptual Clarifications

Quality of Social Audits Implementation

The provision for social audit in the MGNREGS program asks about the extent to which social audits are organised, inclusive, independent, followed up with corrective action, and so on. Good implementation includes timely audits, widespread community involvement, autonomous Social Audit Units, easily accessible records, and systematic grievance redressal (Pande, 2021; Varghese, Narayanan, Agnihotri, & Godbole, 2019). In contrast, audits that are perfunctory, non-publicised, or politically motivated do not increase beneficiaries' trust and access to information (Rajasekhar, Lakha, & Manjula, 2017).

Perceived Transparency

Perceived Transparency refers to the extent to which the beneficiaries perceive that the processes of MGNREGS (disbursement of funds, allocation of jobs, and keeping of records) are transparent, accessible, and verifiable. Transparency enables citizens to witness the actions of the government, thereby decreasing information asymmetry and publicising government actions for scrutiny (Fox, 2015; Bovens, 2007). Under the MGNREGS, transparency is operationalised in the form of proactive disclosure of muster rolls, wage payments, and social audit findings (Varghese et al., 2019).

Perceived Accountability

Perceived Accountability reflects the belief within citizenry that public officials and implementing agencies are responsible for their actions and decisions and the use of public resources (Brinkerhoff, 2004). The MGNREGS mechanisms of accountability are intended to ensure that corrective action is taken in response to the results of social audits and to discourage future malpractices. When beneficiaries feel both transparency and responsiveness, their perception of accountability increases (Chawla, 2021; Prabha & Kanniammal, 2024).

Theoretical Underpinnings

Social Accountability Theory

Social Accountability Theory is the basis for understanding the role of citizen-driven mechanisms, such as social audits, in improving governance outcomes. The theory holds that citizen participation and access to information increase feedback loops between communities and those implementing development, which enhances transparency and accountability (Brinkerhoff, 2004; Fox, 2015). In the case of the MGNREGS, social audits serve as institutionalised spaces for citizens to check records, raise grievances, and demand corrective action, which facilitates vertical (citizen-state) and horizontal (inter-agency) accountability.

The Transparency - Accountability Nexus

Transparency and accountability are interdependent and conceptually distinct aspects of good governance. Transparency provides for the disclosure of information, and accountability provides answerability and enforcement (Bovens, 2007). As such, transparency acts as a mediating mechanism through which social auditing initiatives such as social audits affect accountability outcomes (Fox, 2015). In empirical terms, increases in transparency lead to and support increases in accountability perceptions among beneficiaries (Varghese et al., 2019; Chawla, 2021).

Mediation Model of Mechanisms of Governance

Drawing from the mediation model of institutional performance (MacKinnon, 2012), the relationship between implementation quality and accountability can be modelled as a causal chain, where transparency mediates the pathway. This approach helps clarify the role of social audit implementation in improving accountability, which can be done by first increasing the openness and clarity of program operations.

Empirical Evidence

Social Audit Implementation Quality and Perceived Transparency

Evidence has consistently shown that states with better audit mechanisms have higher levels of perceived transparency. Varghese et al. (2019) found that states having independent Social Audit Units, regular audits and effective dissemination of findings reported higher levels of transparency in terms of utilization of funds and disbursement of wages. Similarly, Pande (2021) highlighted that participatory audits conducted in Andhra Pradesh and Telangana with the support of civil society organisations resulted in a significant improvement in public access to information about the programs and a reduction in the manipulation of data.

Perceived Transparency and Perceived Accountability

Several studies have highlighted the role of transparency as a key driver of accountability perceptions. Chawla (2021) reported that they increased citizen confidence in local governance structures with the transparency of social audit practices, thereby leading to improved perceptions of official accountability. Varghese et al. (2019) also found a significant positive relationship between access to information and the belief by beneficiaries that grievances were facilitated.

Social Audit Implementation and Quality and Perceived Accountability

While there is evidence of a theoretical relationship between audit quality and accountability, there is limited evidence in practice. Rajasekhar et al. (2017) observed that poor audits due to political interference and poor follow-up were linked to lower perceptions of accountability among MGNREGS beneficiaries. In contrast, Prabha and Kanniammal (2024) found that well-structured audits in Kerala increased the level of transparency in operations and public confidence, which reinforced the perception of accountability.

Research Gap

Despite the widespread adoption of the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) as a flagship social protection program in India, persistent issues of integrity, transparency, and accountability remain in its implementation. Social audits have been institutionalised as a corrective mechanism to improve participatory governance, but empirical evidence on the context is fragmented and context-specific (Pande, 2021; Rajasekhar et al., 2017). Most previous studies have mainly considered the procedural and operational characteristics of social audits, such as frequency, coverage, and compliance (Narayanan, 2017; Dey, 2019), whereas few studies have considered the quality of implementation as a multidimensional concept which affects transparency and accountability outcomes. Additionally, much of the available literature is descriptive or policy-oriented, with limited application of quantitative analytical frameworks to test the existence of causal relationships between audit quality, perceived transparency, and accountability. Furthermore, although studies have recognised that transparency is a necessary prerequisite for accountability (Fox, 2015; Bovens, 2007), few have examined the mediating role of transparency in the relationship between audit quality and perceptions of accountability in the MGNREGS context. This gap hampers the understanding of the extent to which high-quality social audit practices are translated into actual improvement in perceived program integrity through transparency enhancement. There is also a dearth of beneficiary-centric views, as most prior evaluations have relied heavily on administrative or secondary data rather than primary perceptions of stakeholders directly involved in or affected by social audits (Kaur & Singh, 2022). Plugging these gaps is important to obtain a better understanding of how social audits promote trust, better governance, and the empowerment of rural citizens to hold institutions accountable.

Research Questions

Drawing upon the identified gaps and theoretical foundations, the present study addresses the following research questions (RQs):

1. **RQ1:** To what extent does the quality of social audit implementation influence perceived transparency in MGNREGS operations?
2. **RQ2:** How does perceived transparency affect perceived accountability among MGNREGS stakeholders?
3. **RQ3:** Does the quality of social audit implementation directly affect perceived accountability?

4. **RQ4:** Does perceived transparency mediate the relationship between social audit implementation quality and perceived accountability?
5. **RQ5:** What implications can be derived from the empirical relationships among these constructs for strengthening participatory governance in rural India?

CONCEPTUAL MODEL AND RESEARCH FRAMEWORK

Conceptual Model

Figure 1 illustrates the conceptual model that describes the relationships among three key constructs (Social Audit Implementation Quality [SAIQ], Perceived Transparency [PTR], and Perceived Accountability [PAC]) proposed by the conceptual model. Social audits as part of the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) are participatory monitoring systems for public expenditure to increase transparency and accountability of public expenditure. However, the quality of their implementation, in terms of procedural integrity, inclusiveness, timeliness, and follow-up, determines their effectiveness in producing credible and actionable insights (Varghese et al., 2019; Pande, 2021). As illustrated in Figure 1, the study assumes that the higher the quality of implementation of social audits, the greater the perceived transparency that the beneficiaries feel, which in turn contributes to a higher perception of accountability. The model also provides a direct effect from SAIQ to PAC while testing whether transparency can be considered a mediating variable for the relationship between audit quality and accountability perceptions.

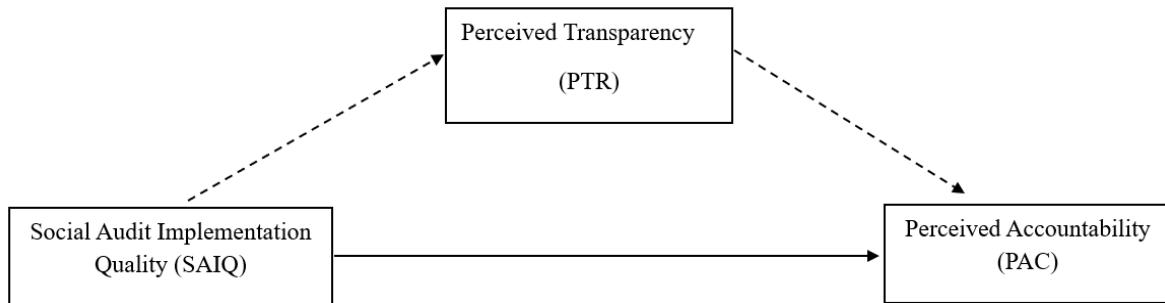


Figure 1. Conceptual Model of the Study

Theoretical Rationale

Direct Path: SAIQ → PTR

According to the Social Accountability Theory (Brinkerhoff, 2004), institutionalised citizen oversight is enhanced when mechanisms such as social audits are implemented in a procedurally rigorous and participatory fashion. Effective social audit execution creates trust and reduces information asymmetry, increasing perceived transparency (Fox, 2015).

Direct Path: PTR → PAC

Accountability requires transparency. As Bovens (2007) and Fox (2015) argue, if stakeholders can obtain and verify information about programs, they are better able to demand explanations and corrective actions; therefore, perceptions of accountability are strengthened.

Direct Path: SAIQ → PAC

Second, implementation quality could also directly impact perceived accountability as remedial action is perceived to be in place after an audit, and so confidence in institutional response is built by this (Rajasekhar et al., 2017; Prabha & Kanniammal, 2024).

The Mediation Role of Transparency

Drawing on the mediation model of institutional performance (MacKinnon, 2012), transparency is suggested to be the mediating variable through which the quality of social audit implementation affects accountability. High-quality audits create transparent information flows that at the same time empower citizens to hold officials accountable (Fox, 2015).

Hypotheses Development

Based on the theoretical rationale and conceptual model, the following hypotheses are proposed:

H1: Social Audit Implementation Quality (SAIQ) positively influences Perceived Transparency (PTR).

H2: Perceived Transparency (PTR) positively influences Perceived Accountability (PAC).

H3: Social Audit Implementation Quality (SAIQ) positively influences Perceived Accountability (PAC).

H4: Perceived Transparency (PTR) mediates the relationship between Social Audit Implementation Quality (SAIQ) and Perceived Accountability (PAC).

METHODOLOGY

Research Design and Approach

This study used a quantitative cross-sectional research design and partial least squares structural equation modelling (PLS-SEM) to analyse the relationships between the three constructs: Social Audit Implementation Quality (SAIQ), Perceived Transparency (PTR), and Perceived Accountability (PAC). The Partial Least Squares Structural Equation Modelling (PLS-SEM) approach was adopted because it is appropriate for testing a complex mediating relationship and is robust in multivariate data analysis with relatively small to moderate sample sizes (Hair et al., 2017). The cross-sectional form of the questionnaire allowed data collection simultaneously from several respondents, and therefore made it possible to test the conceptual model and additionally provide validation of the proposed hypotheses.

Population and Sampling

The target population for this study comprised Panchayat-level officials directly engaged in the implementation, monitoring, and post-implementation activities of the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) in selected districts of India. These officials represent the critical administrative tier that translates policy directives into operational outcomes at the grassroots level, and their close involvement in planning, implementing, and monitoring MGNREGS projects positions them as key informants capable of offering nuanced insights into the quality of social audit implementation and its influence on transparency and accountability within the scheme's governance framework. The inclusion of this group ensured that the study captured the perspectives of actors operating at the interface of policy implementation, public scrutiny, and beneficiary participation, thereby enhancing the validity of the findings (Varghese et al., 2019). To obtain representative and unbiased insights, a stratified random sampling technique was employed, designed to reflect the hierarchical and functional diversity within the Panchayat administrative system so that all key governance roles in MGNREGS were proportionally represented. The sample was stratified into four major administrative categories: Panchayat Secretaries, responsible for overall implementation, documentation, and coordination with higher authorities; Ward Members, who represent the community and contribute to identifying works, mobilising beneficiaries, and participating in social audits; Block Development Officers (BDOs), who oversee multiple panchayats ensuring procedural compliance, fund management, and institutionalisation of social audits; and Account Officers, who manage financial transparency through record-keeping, fund flow monitoring, and expenditure verification. This multi-tiered stratification facilitated a comprehensive understanding of social audit practices across various functional roles and decision-making levels in local governance. By including both administrative and elected representatives, the sampling frame captured perceptual differences in audit quality, transparency, and accountability, thereby improving the analytical robustness and generalisability of the study results. The final sample consisted of 410 Panchayat officials across the four organisational categories, with an age distribution of 10.0% below 35 years, 44.9% between 35–45 years, and 19.5% above 55 years; 45.9% were men and 54.1% were women. Educational qualifications showed 47.8% postgraduates, 28.0% graduates, 16.1% with professional or technical qualifications, and 8.0% below graduate level. Experience in Panchayat administration ranged from less than three years (33.2%) to over ten years (11.7%), while exposure to social audits varied, with 20.7% having participated in fewer than three and 12.0% in more than nine audits. The heterogeneity of the sample in terms of administrative role, experience, and exposure strengthened the external validity of the study results.

Instrumentation and Measurement

Three latent constructs were operationalized based on the existing literature and theories; namely, Social Audit Implementation Quality (SAIQ) was measured according to five indicator variables (SAIQ1-SAIQ5) reflecting the multidimensional nature of audit implementation including audit timeliness, inclusiveness of community participation, independence of audit units, records accessibility, and irregularities follow-up. Respondents evaluated each dimension using structured Likert-scale items (ranging from 1=strongly disagree to 5=strongly agree). Perceived Transparency (PTR) was operationalised through five indicator variables (PTR1-PTR5) that measure beneficiary perceptions of the clarity, accessibility, and verifiability of MGNREGs processes. Items were used to evaluate respondents' perceptions of the proactive release of muster rolls, wage payment records, and audit reports, as well as overall fund usage and resource utilisation disclosure. Perceived Accountability (PAC) was measured by five indicator variables (PAC1-PAC5) which assessed respondent perceptions of official responsibility, responsiveness to grievances, corrective action mechanisms, and institutional trustworthiness with respect to using public resources and relation to scheme rules. All indicator variables were first validated in previous social accountability research contexts and then adapted to the MGNREGS-specific operational context to ensure contextual relevance and cultural appropriateness.

The measurement instrument was subjected to rigorous validity and reliability measures. Internal consistency was assessed using Cronbach's alpha coefficients and composite reliability indices, all of which were above the conventional thresholds, indicating adequate internal consistency (Nunnally & Bernstein, 1994). The Average Variance Extracted (AVE) was calculated to test convergent validity, and all the values were at par with the established values to demonstrate adequate construct validity (Fornell & Larcker, 1981). Discriminant validity was evaluated using both the Fornell-Larcker and Heterotrait-Monotrait (HTMT) ratios to verify the uniqueness of the three constructs and ensure that they measured conceptually different phenomena.

Data Collection

Data were gathered using structured self-administered questionnaires distributed to sampled Panchayat officials across several administrative locations. The questionnaires were conducted in both official and local languages to ensure comprehension and accurate responses. Trained data collectors followed standardized administration protocols to minimize measurement error and maintain consistency across survey sites. Respondents were assured of confidentiality and anonymity, and participation was voluntary, with each questionnaire taking approximately 15–20 minutes to complete. Completed questionnaires were screened for completeness and consistency, and cases with more than 5% missing data were excluded from the analysis. No significant missing data or imputation-based replacements were identified, and the final response rate of 92.3% indicated high data quality. Descriptive statistical analyses, including means, standard deviations, and frequency distributions, were performed to describe the study sample and examine the distributional properties of the variables. The proposed conceptual model was tested using partial least squares structural equation modelling (SmartPLS software) based on a two-stage analytical approach (Hair et al., 2017). In Stage 1, the measurement model was evaluated to assess the reliability and validity of the three latent constructs. Internal consistency was examined using Cronbach's alpha and composite reliability coefficients, convergent validity through Average Variance Extracted (AVE), and discriminant validity using the Fornell–Larcker criterion and HTMT ratios. Variance Inflation Factor (VIF) values were also checked to identify multicollinearity issues. In Stage 2, the structural model was assessed to test the hypothesised relationships among constructs. Direct effects were analysed using path coefficients (beta), t-statistics, and p-values through bootstrapping procedures, while model fit was evaluated using indices such as the Standardised Root Mean Squared Residual (SRMR), Geodesic Distance, comparative fit index (NFI), and chi-square statistics. The model's explanatory power was determined by the coefficient of determination (R^2) for endogenous constructs, and effect sizes were computed to evaluate the practical significance of predictor variables based on Cohen's (1988) thresholds for small, medium, and large effects.

Mediation Analysis

To examine the proposed mediating relationship of perceived transparency, indirect effects were examined using established approaches to mediation analysis (Preacher & Hayes, 2008). The total, direct, and indirect effects of Social Audit Implementation Quality on Perceived Accountability were decomposed and assessed using bootstrapping procedures. The statistical significance of the indirect effects was obtained using confidence interval analysis. A mediating effect was confirmed if the criteria described in the modern-day frameworks of mediation were met (Hayes, 2013).

Model Fit Assessment

The saturated and estimated models were compared using several goodness-of-fit indices to determine the adequacy of the proposed model structure. SRMR, NFI, chi-square, and associated fit statistics were used to ensure the acceptability of the models. Multicollinearity among predictor variables was examined among all inner model paths to ensure that no problematic multicollinearity among predictor variables was present (values were well below the established thresholds; Kline, 2015).

Ethical Considerations

This study followed the established ethical guidelines for research involving human participants. Institutional ethics approval was obtained before data collection. All those who responded provided informed consent, with an explicit explanation of the study objectives, data usage, and confidentiality protections. Participants had the right to quit the study without penalty. All personal identifying information was stored securely and was accessible only to authorised research personnel. Data storage and analysis were performed in accordance with institutional data protection policies and legal requirements.

RESULTS AND DISCUSSION

Table 1. Demographic profile of the Respondents

Age	Panchayat Officials	Percent
Below 35	41	10.0
35 - 45	184	44.9
45 -55	105	25.6
Above 55	80	19.5
Total	410	100.0
Gender	Panchayat Officials	Percent
Male	188	45.9
Female	222	54.1
Total	410	100.0
Educational Qualification	Panchayat Officials	Percent
Below Graduate	33	8.0
Graduate	115	28.0
Postgraduate	196	47.8
Professional / Technical	66	16.1
Total	410	100.0
Role in Panchayat	Panchayat Officials	Percent
Panchayat Secretary	133	32.4
Ward Member	155	37.8
Block Development Officer	24	5.9
Account Officer	98	23.9
Total	410	100.0
Years of Experience in Panchayat	Panchayat Officials	Percent
Less than 3 years	136	33.2
4-6 years	162	39.5
7-10 years	64	15.6
More than 10 years	48	11.7
Total	410	100.0
Number of Social Audits Participated	Panchayat Officials	Percent
Less than 3	85	20.7
3-5	108	26.3
5-7	88	21.5

7-9	80	19.5
Above 9	49	12.0
Total	410	100.0

As presented in Table 1, the study sample consisted of 410 officials from the panchayat with varying representations from different organisations. The age distribution was highly concentrated in the 35-45 years age group (44.9%), indicating a mature and experienced workforce. The gender composition was almost balanced, with 54.1% female and 45.9% male respondents, which implies gender inclusivity in rural governance. Educational attainment was significantly high, with 47.8% having postgraduate qualifications and another 28.0% having graduate degrees to ensure that the respondents had enough capacity to review complex governance mechanisms. Organisational positions were spread among Ward Members (37.8%), Panchayat Secretaries (32.4%), Account Officers (23.9%), and Block Development Officers (5.9%), giving institutional perspectives of multifaceted nature. Professional experience was very variable, with 39.5% of the personnel having 4-6 years of tenure and 33.2% having <3 years, allowing the exploration of the role of experience in perceptual differences. Participation exposure to social audits varied from less than three audits (20.7%) to more than nine audits (12.0%), with 26.3% having participated in to 3-5 audits, thus ensuring that there is meaningful hands-on experience with social accountability mechanisms. Collectively, the demographic profile speaks of a mature, educationally qualified, gender-balanced sample placed across the various roles of panchayats with different yet significant exposure to MGNREGS social audit processes.

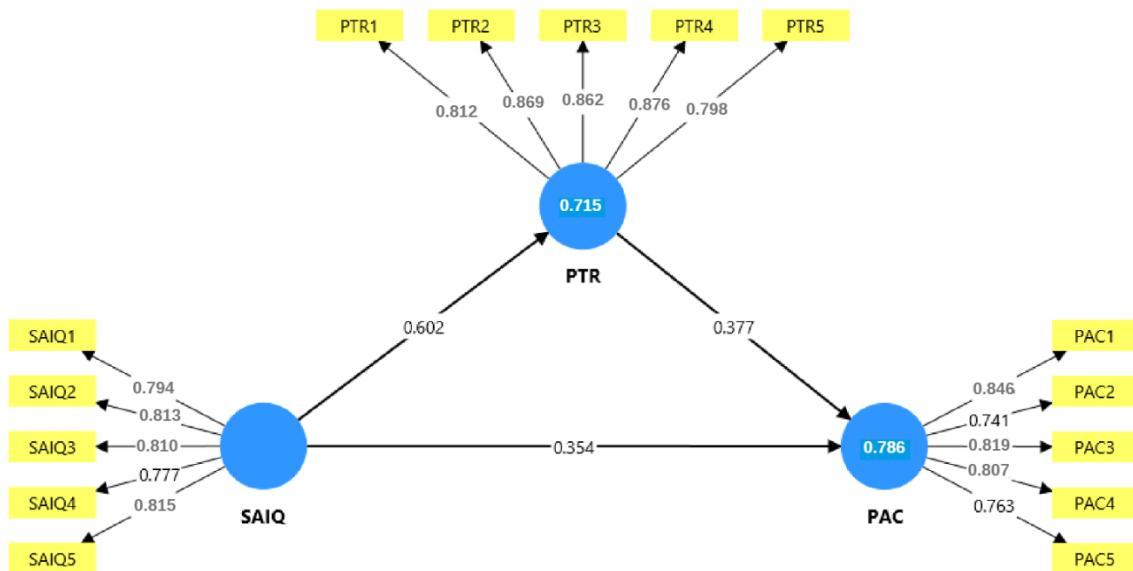


Figure 2: SAIQ->PTR->PAC Model

Table 2. Direct Hypothetical relationships in the Model

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
PTR -> PAC	0.377	0.383	0.056	6.703	0.000
SAIQ -> PAC	0.354	0.351	0.060	5.889	0.000
SAIQ -> PTR	0.602	0.607	0.065	9.312	0.000

As shown in Table 2, all three hypothesised direct paths were statistically significant. The highest impact was found for the relationship between Social Audit Implementation Quality and Perceived Transparency (SAIQ → PTR), with a path coefficient of 0.602 ($t = 9.312, p < 0.001$), suggesting that the better the quality of social audit implementation, the higher the beneficiary perceptions of transparency. The direct influence of Perceived Transparency on Perceived Accountability (PTR → PAC) was medium in strength at 0.377 ($t = 6.703, p < 0.001$), showing that transparency perceptions have a substantial influence on accountability perceptions among panchayat officials. Additionally, Social Audit Implementation Quality had a direct influence on Perceived Accountability (SAIQ+PAC) of 0.354 ($t = 5.889, p < 0.001$), indicating that audit quality contributes to Perceived Accountability over and above other factors. All path coefficients were positive and significant at $p < 0.001$, providing validity to

the proposed hypotheses and suggesting that social audit implementation quality functions both directly and through transparency-mediated pathways to improve perceived accountability in MGNREGS operations.

Table 3. Specific Indirect effect in the Model

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
SAIQ -> PTR -> PAC	0.227	0.233	0.039	5.817	0.000

As shown in Table 3, the indirect effect of Social Audit Implementation Quality on Perceived Accountability via Perceived Transparency (SAIQ towards PTR towards PAC) was found to be statistically significant, with a coefficient of 0.227 ($t = 5.817, p < 0.001$). This finding confirms transparency as a significant mediating mechanism in the relationship between social audit implementation quality and accountability perceptions. Specifically, approximately 39.0% of the total effect of social audit quality on accountability is achieved through the transparency pathway, and the rest is direct, showing that both direct and mediated pathways are substantive contributors to improved perceptions of accountability. The statistical significance of the indirect effect, together with the meaningful magnitude of the effect, confirms the theoretical proposition that improved transparency emanating from improved quality social audits is a crucial intermediate process through which beneficiaries develop stronger perceptions of institutional accountability in MGNREGS operations.

Table 4. Total effect in the Model

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
SAIQ -> PAC	0.581	0.584	0.042	13.912	0.000

As presented in Table 4, the combined effect of Social Audit Implementation Quality on Perceived Accountability ($SAIQ \rightarrow PAC$) was substantial, as it was equal to 0.581 ($t = 13.912, p < 0.001$), the result of both direct and indirect pathways. This highly significant total effect shows that the implementation quality of social audits is a powerful predictor of accountability perceptions by the panchayat officials. The direct pathway explains 0.354 of this total effect, and the indirect pathway through transparency explains 0.227 of this total effect, thus constituting the total influence of audit quality on accountability. The importance and statistical significance of the overall effect highlight that increasing the quality of social audit implementation constitutes a substantive governance intervention with credible implications for enhancing perceived institutional accountability in MGNREGS and validates the theoretical framework in which audit quality is seen as a basic mechanism to promote rural governance transparency and accountability.

Table 5. Model Fit Indices for the Saturated and Estimated Models

	Saturated model	Estimated model
SRMR	0.055	0.055
d_ULS	0.106	0.106
d_G	0.154	0.154
Chi-square	605.627	605.627
NFI	0.921	0.921

As shown in Table 5, the proposed structural equation model showed an acceptable fit to the data, as the same indices of fit were found for the saturated and estimated models, which indicates model stability and parsimony. The Standardised Root Mean Squared Residual (SRMR) value was 0.055 (much lower than the classic threshold of 0.08), indicating a good model fit. The NFI of 0.921 was greater than the recommended cutoff of 0.90, showing that the proposed model accounts for a significantly higher variance than the null model. The Unweighted Least Squares Distance (d_ULS) and Geodesic Distance (d_G) were 0.106 and 0.154, respectively, which were in an acceptable range, indicating that there was not much difference between the observed and model-implied covariance matrices. These fit indices show that the hypothesized 3-construct mediation model sufficiently reflects the relationships among Social Audit Implementation Quality, Perceived Transparency and Perceived Accountability for empirically validating the theoretical model and supporting the interpretation and use of model parameters for governance mechanisms in MGNREGS.

Table 6. Reliability and Convergent Validity of Constructs

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
PAC	0.897	0.897	0.914	0.634
PTR	0.853	0.925	0.932	0.712
SAIQ	0.772	0.917	0.928	0.643

As shown in Table 6, all three latent constructs exhibited robust internal consistency and convergent validity. Cronbach's alpha values all scored above the minimum threshold of 0.70, with Perceived Accountability (PAC) scoring 0.897, Perceived Transparency (PTR) at 0.853, and Social Audit Implementation Quality (SAIQ) with a score of 0.772, indicating that sufficient internal consistency between items was present. Composite reliability indices (rho_c) were consistent and found to be uniformly high across all constructs, and PAC (0.914), PTR (0.932), and SAIQ (0.928) substantially surpassed the 0.70 threshold, indicating strong evidence of construct reliability. The Average Variance Extracted (AVE) values for all constructs exceeded the threshold of 0.50 and showed that PTR had the highest convergent validity (0.712), followed by SAIQ (0.643) and PAC (0.634), meaning that each construct adequately measured the variance shared between indicator variables. Collectively, these measures of reliability and validity demonstrate that the measurement instruments had adequate psychometric properties for the reliable operationalisation of the three theoretical constructs and for the robust interpretation of the structural model parameters.

Table 7. Fornell Larcker Criteria for Discriminant Validity

	PAC	PTR	SAIQ
PAC	0.796		
PTR	0.590	0.844	
SAIQ	0.581	0.602	0.802

As shown in Table 7, the Fornell-Larcker criterion was used to verify the discriminant validity of the model, with the condition that the square root of the Average Variance Extracted (AVE) values of each construct should be greater than its correlations with other constructs. The diagonal values are the square root of the Average Variance Extracted (AVE) values for each construct: PAC (0.796), PTR (0.844), and SAIQ (0.802). They were all greater than the relevant off-diagonal correlations; inter-construct correlations ranged from 0.581 (SAIQ-PAC) to 0.602 (SAIQ-PTR), indicating that the three constructs are sufficiently distinct and capture conceptually different phenomena. The pattern of correlations indicates that the constructs are correlated as theoretically anticipated, but they retain sufficient discriminant validity and are not plagued by problematic multicollinearity. The results confirmed the discriminatory power of Social Audit Implementation Quality, Perceived Transparency, and Perceived Accountability as latent classes, which confirmed the validity of the proposed mediation model and ensured that the relationships between constructs were indeed theoretical and not measurement redundancy.

Table 8. Heterotrait-Monotrait (HTMT) Ratio for Assessing Discriminant Validity

	PAC	PTR	SAIQ
PAC			
PTR	0.651		
SAIQ	0.762	0.557	

Heterotrait-Monotrait (HTMT) ratio also further supported discriminant validity on all construct pairs as shown in Table 8. All the HTMT ratios were lower than the established threshold of 0.90, with values of 0.762 (SAIQ-PAC), 0.651 (PAC-PTR), and 0.557 (SAIQ-PTR), which shows that the Heterotrait-Monotrait correlations were significantly lower than the monotrait correlations. This pattern supports the convergent validity of the three measures, showing that they assess different conceptual phenomena and are not artefacts of common method variance or redundancy of measurement. The results of the HTMT criterion confirm the Fornell-Larcker result, with strong evidence that the measurement constructs of Perceived Accountability, Perceived Transparency and Quality of Social Audit Implementation are sufficiently distinguished. The convergent validity of the multi-discriminant validity tests provides greater confidence in the measurement model and supports the modelling of these as independent latent variables in the framework of the structural equation model.

Table 9. R-Square and Adjusted R-Square Values for Endogenous Constructs

	R-square	R-square adjusted
PAC	0.786	0.787
PTR	0.715	0.715

As shown in Table 9, the proposed model showed high explanatory power for the two endogenous constructs. Perceived Accountability (PAC) had an R^2 value of 0.786, which means that the combined total of the direct and indirect effects of Social Audit Implementation Quality and perceived transparency accounted for nearly 78.6% of the variance in Accountability perception among Panchayat officials. Perceived Transparency (PTR) had an R^2 value of 0.715, indicating that Social Audit Implementation Quality was a variable that explained approximately 71.5% of the variance in transparency perception. The adjusted R^2 values did not differ substantially from the unadjusted values, demonstrating that the models were stable and the parameter specifications were parsimonious and did not overfit the data. Large R^2 values suggest that the theoretical constructs and their hypothesised relationships reflect the fundamental mechanisms that drive transparency and accountability perceptions, and they provide strong support for the argument that social audit implementation quality acts as an important driver of governance outcomes in MGNREGS. The high explanatory power confirms the utility of the proposed mediation model in explaining the construction of institutional accountability perceptions in rural governance contexts through participatory monitoring mechanisms.

Table 10. Effect Size (f^2) of Predictor Variables on Endogenous Constructs

	f-square
PTR → PAC	0.258
SAIQ → PAC	0.345
SAIQ → PTR	0.568

As shown in Table 10, the results of the effect size analysis indicated that all proposed paths in the proposed structural model exhibited substantive practical significance. The effect of Social Audit Implementation Quality on Perceived Transparency (SAIQ → PTR) had the largest effect size of 0.568, a large practical significance that evidenced that audit quality significantly impacted transparency perception. The outcome of the Social Audit Implementation Quality on Perceived Accountability (SAIQ->PAC) yielded an effect size of 0.345, which is a medium to large practical effect which suggest significance independent influence on accountability perceptions. The Perceived Transparency to Perceived Accountability effect (PTR → PAC) yielded an effect size of 0.258, which is a medium effect that signals that transparency has a meaningful, albeit slightly reduced, impact on accountability perceptions compared to the direct audit quality effect. Collectively, the effect sizes show that all three hypothesised pathways have practically significant effects on their respective outcome constructs, with audit quality showing the strongest overall impact on the model outcomes, justifying the centrality of implementation quality as a governance intervention mechanism in the MGNREGS.

Table 11. Inner Model Variance Inflation Factor (VIF) Values for Predictor Constructs

Inner Models	VIF
PTR → PAC	2.578
SAIQ → PAC	2.345
SAIQ → PTR	1.985

As shown in Table 11, the Variance Inflation Factor (VIF) was below the established threshold of 5.0 for all inner model pathways, confirming that problematic multicollinearity was not present between the predictor variables. The VIF values ranged from 1.985 (SAIQ > PTR) to 2.578 (PTR > PAC), all of which were considerably smaller than the critical value and implied that there was little redundancy between the predictors. The relatively low VIF values showed that the predictor constructs were sufficiently orthogonal and that parameter estimates were not biased by multicollinearity effects. This result supports the specification of the structural model and shows that the observed relationships among constructs are indeed true theoretical associations and not artefacts of inflated standard errors or unstable coefficient estimates. We are satisfied with the VIF values, which indicate that the path coefficients, statistical significance tests, and confidence intervals presented in the structural model are reliable and suitable for interpretation and use in understanding the governance mechanism within MGNREGS both theoretically and practically.

Table 12. Outer Model Variance Inflation Factor (VIF) Values for Indicator Variables

No	Outer Variable	VIF	No	Outer Variable	VIF	No	Outer Variable	VIF
1	PAC1	1.144	5	PTR1	1.022	10	SAIQ1	1.395
2	PAC2	1.474	6	PTR2	1.493	11	SAIQ2	1.565
3	PAC3	1.365	7	PTR3	1.492	12	SAIQ3	1.807
4	PAC4	1.354	8	PTR4	1.319	13	SAIQ4	1.729
5	PAC5	1.446	9	PTR5	1.248	14	SAIQ5	1.170

As shown in Table 12, the VIF values for all 14 indicator variables for all three measurement constructs were well below the critical threshold of 5.0, thereby verifying that there was no problematic multicollinearity among the indicator variables for each construct. The VIFs of the Perceived Accountability indicators varied from 1.144 (PAC1) to 1.474 (PAC2), while the VIFs of Perceived Transparency indicators varied from 1.022 (PTR1) to 1.493 (PTR2), and the VIFs of Social Audit Implementation Quality indicators varied from 1.170 (SAIQ5) to 1.807 (SAIQ3). The low VIF values of all indicators showed that each item contributed uniquely to its respective construct without redundancy or multicollinearity effects, confirming the measurement model specification and construct operationalisation reliability. The satisfactory VIF diagnostics assure that the indicator variables are adequately clear on each construct and that the precision of the measurements is not affected by collinearity problems, thus validating and ensuring the reliability of the latent variable estimates for use in the structural model.

DISCUSSION

Interpretation of Findings

This study analysed the relationships between Social Audit Implementation Quality (SAIQ), Perceived Transparency (PTR) and Perceived Accountability (PAC) in the MGNREGS framework using the mediation model. The findings indicate a coherent and theoretically consistent pattern of interrelationships that add to the understanding of how participatory monitoring mechanisms translate into better governance outcomes in rural India.

Direct Impact of Social Audit Implementation Quality to Perceived Transparency

The results of this analysis confirmed the significant positive association between the quality of social audit implementation and perceived transparency (beta value = 0.602, $p < 0.001$), which is the strongest pathway in the proposed model. This finding is consistent with the Social Accountability Theory (Brinkerhoff, 2004) and empirical findings that show that well-implemented audit mechanisms increase information accessibility and reduce information asymmetry between beneficiaries and implementing agencies. The size of this effect implies that the officials in charge of the panchayats understand that procedurally sound, inclusive, prompt, and well-followed audits significantly increase the visibility and verifiability of MGNREGS operations, such as the disbursement of funds, payment of wages, and documentation of the operational processes.

This strong relationship highlights the significance of the dimensions of implementation quality discovered in previous research (Varghese et al., 2019; Pande, 2021). When social audits involve proper participation of the community, are independent of any political interference, make audit findings available, and show systematic follow-up of any irregularities, beneficiaries feel more transparency in the functioning of the programme. This finding is especially significant in light of (contextual) evidence that many state-level audits in India are pro forma without any real engagement with the community (Rajasekhar et al., 2017), which suggests that improved quality of implementation could have a significant effect on the perception of transparency across MGNREGS jurisdictions.

Direct Relationship Between Perceived Transparency and Perceived Accountability

The relationship between perceived transparency and perceived accountability ($\beta = 0.377$, $p < 0.001$) was statistically significant and moderately strong, confirming the theoretical expectations regarding the transparency-accountability nexus as formulated by Bovens (2007) and Fox (2015). This pathway indicates that when beneficiaries perceive the MGNREGS process as transparent and verifiable, they believe that officials are responsible for their actions and that institutional mechanisms are in place to address grievances and correct irregularities.

This effect, which is somewhat attenuated compared to the SAIQ-PTR pathway, implies that transparency alone, although a necessary condition, is insufficient for accountability perceptions. Rather, transparency functions as an intermediary mechanism that must be combined with other factors, such as demonstrated institutional

responsiveness, corrective action, and grievance redressal, to generate strong perceptions of accountability. This finding is similar to Olken's (2007) observation that community participation and availability of information may achieve limited results if there is no simultaneous focus on institutional response mechanisms.

Impact of Social Audit Implementation Quality on Perceived Accountability

The quality of implementation of social audits showed a direct positive impact on perceived accountability ($\beta = 0.354$, $p < 0.001$), and the quality of implementation was independent of the transparency pathway. This direct impact suggests that auditing quality implies institutional commitment to accountability beyond its contribution to improving transparency. Panchayat officials probably sense that serious implementation of the audit process helps to signal institutional seriousness about monitoring, over-view, and corrective action, and thus create some confidence in accountability mechanisms despite the availability of information.

The existence of direct and indirect influences (total effect $b = 0.581$) suggests the presence of a two-step influence of audit quality on accountability perception. This finding enhances the theoretical understanding by showing that audit quality works through several mechanisms rather than a single mechanism that is enhanced information disclosure. Institutions that conduct high-quality audits probably couple this practice with responsive governance behaviour that supports accountability perceptions among stakeholders.

Perceived Transparency Mediation Role

The link between social audit implementation quality and perceived accountability through perceived transparency was statistically significant ($O = 0.227$, $p < 0.001$) and accounted for approximately 39% of the total effect. This finding validates the theoretical proposition that transparency serves as a substantive mediating mechanism in the relationship between audit quality and accountability outcomes and addresses an important gap in the MGNREGS literature, as identified in prior scholarship (Pande, 2021; Varghese et al., 2019).

The mediation finding implies that a meaningful share of the influence of audit quality on accountability is through its ability to increase the accessibility of information and transparency of the process. However, the large direct effect (61% of the total effect) suggests that transparency is not entirely responsible for the AQ-accountability relationship. This indicates that there are other mechanisms that add to accountability perceptions besides information disclosure, such as institutional legitimacy, perceived responsiveness to audit findings, and follow-up corrective action.

Theoretical Implications

The findings extend the Social Accountability Theory (Brinkerhoff, 2004; Fox, 2015) through empirical support for the mediation mechanisms in the context of South Asian governance. The study shows that the mechanism of social accountability is multidimensional, and transparency is a key but insufficient mediating mechanism. Beyond the simplistic assumption that access to information has a direct causal effect on accountability outcomes, this nuance helps improve the theoretical understanding.

The findings support the mediation model of institutional performance (MacKinnon, 2012), as they show that institutional outcomes are the result of causal chains that include intermediate processes. In the MGNREGS context, audit quality starts a process whereby enhanced transparency affects accountability perceptions, which is a theoretically coherent institutional mechanism. The dual-pathway structure (direct and mediated effects) represents the complexity of officials' cognitive governance process, which evaluates institutions across several cognitive and evaluative dimensions.

The study also provides insights into how participatory monitoring institutions translate design intentions into perceived outcomes. While the MGNREGS has mandated social audits as a statutory requirement, the quality of implementation plays an important role in shaping the quality of the social audits, thus confirming the view of Mansuri and Rao (2012) that the effectiveness of institutional design significantly depends on implementation fidelity and local governance context.

Policy Implications

The findings offer actionable advice to MGNREGS policymakers and implementers seeking to enhance governance outcomes through social audit mechanisms. This analysis has several policy implications.

First, investing in the quality of social audit implementation is a high-impact governance intervention. The significant impact of audit quality on both the outcomes of transparency and accountability (SAIQ \rightarrow PTR: 0.602; SAIQ \rightarrow PAC direct effect: 0.354) implies that states need to focus on improving the quality of implementation. This entails paying attention to procedural dimensions identified in the literature: ensuring that auditing is scheduled in a timely manner, ensuring that there is meaningful community participation, ensuring independence of audit units from political influence, providing accessible documentation and audit findings, and systematically following up on institutional irregularities (Varghese et al., 2019; Pande, 2021).

Second, while enhancing transparency is important, policies should recognise that perceptions of accountability require more than the disclosure of information. However, the relatively large direct impact of transparency on accountability (0.377) and the moderate effect of direct audit quality (0.354) indicate that institutional responsiveness and corrective action might be due to the same policy focus. Implementation strategies should be coordinated with transparency programs and related mechanisms for being publicly accountable that need to be explicit, responsive, and institutional to show accountability in action and not just in terms of information.

Third, the heterogeneity in audit participation exposure observed in the sample implies opportunities for greater stakeholder engagement. Of the officers with less than three audit exposures, 20.7% are potential beneficiaries of more frequent participation opportunities, especially if coupled with capacity building to strengthen them to contribute meaningfully to the audit process. Increased participation while preserving quality is an easy-to-use policy lever for enhancing perceptions of transparency and accountability.

Fourth, differential impacts across implementation quality dimensions should be recognised in policy. The strong SAIQ \rightarrow PTR effect implies that information accessibility and disclosure mechanisms are of particular importance in policy design, while the large direct SAIQ \rightarrow PAC effect implies that procedural integrity and institutional credibility are of equal importance. Comprehensive reform should not focus on a single dimension of implementation quality but on multiple dimensions.

Implications for Rural India

In addition to policy implications, the findings offer practical guidance for actors working at the governance level in rural areas, civil society organisations, and communities working together to implement the MGNREGS. The centrality of social audit quality validates community investments in capacity building for audits, training of participants, and advocacy for audit implementation standards. Civil society organisations can use these results to argue for investing in audit quality improvements without merely increasing the frequency of audits.

The findings also offer conceptual frameworks for assessing audit effectiveness. Communities and those that govern can consider the quality dimensions of implementation, such as inclusiveness, timeliness, independence, accessibility, and follow-up, in local audits to determine if audits are leading to meaningful improvements in transparency and accountability or if they are functioning as pro forma compliance exercises. This diagnostic capability can be used to advocate for specific improvements.

The findings show the multifaceted nature of audit quality and the need to recognise that audit quality is not just a single entity but something that is understood by the auditor or the panchayat officials themselves. Officials in charge of auditing implementation should realise that they will be effective if they focus on holistic attention to procedural dimensions, not narrow attention to audit conduct alone. Similarly, those in charge of audit follow-up should be aware that transparency generated through audits only becomes accountable if it is accompanied by responsive institutional action.

Compensability and Applicability

The findings support international evidence of social accountability mechanisms. Audit quality is validated through Olken's (2007) randomised field experiment in Indonesia, showing audit effects in curbing corruption, and the study by Bjorkman and Svensson (2009) on community-based monitoring in Uganda for comparative purposes. However, the particular Indian rural governance context with its specific institutional structures, democratic traditions, and implementation issues gives a particular slant to how these general principles manifest. The high educational attainment rates in this sample may not be representative of all MGNREGS jurisdictions and may therefore affect the extent to which the findings can be generalised to less-educated official populations.

The cross-sectional design of the study and its dependence on panel perceptions of panchayat officials are important limitations for generalising the results. Beneficiary perceptions may differ from official ones, and this could show stronger or weaker transparency-accountability relationships. Longitudinal designs that track the quality-improvement effects of audits to translate into actual behaviour changes would enhance causal inferences over the correlational evidence seen in this cross-sectional mediation analysis.

LIMITATIONS AND APPLICATION OF FUTURE RESEARCH

This study has several methodological limitations. The cross-sectional design does not allow temporal sequencing or causal inference, and all relationships are considered contemporaneous, that is, associations, not effects. Response bias from self-reported perceptual data will contribute to systematic measurement error, but the use of anonymous questionnaires probably allayed this concern. The focus on panchayat official respondents is a limitation, as it restricts the observation to insiders. Recruiting beneficiary perceptions would enable an understanding of how audit quality can move into the cognition of accountability at different levels of governance.

Unmeasured factors such as institutional legitimacy, political context variables, or previous experiences with the responsiveness of governance to which audit quality perceptions and accountability outcomes are related may lead to confounding relationships. Although the geographic scope may allow for a sufficient sample size, it may not be feasible to ensure generalisability to jurisdictions with significantly different governance structures or political environments.

Future research should use quasi-experimental or quasi-causal designs to strengthen inferences about the causal effects of audit quality on accountability outcomes. Longitudinal panel data tracing officials and beneficiaries across audit cycles would provide the potential to analyse the temporal dynamics and persistence of transparency and accountability perceptions. Research that incorporates multiple perspectives from stakeholders - beneficiaries, civil society actors, and implementing officials - would help shed light on whether the observed relationships among officials are generalisable across governance hierarchies. Qualitative research that examines the mechanisms by which audit quality affects audit perceptions would add to the richness of understanding of the cognitive and institutional processes that underlie the quantitative relationships documented here.

Investigation of contextual moderators such as educational attainment, previous experiences in governance, political party competition, or social capital would contribute to understanding the boundary conditions on the transparency-accountability relationships. Finally, the causal link between transparency and accountability perceptions and behavioural outcomes (participation in programs, grievance filing, institutional engagement, etc.) would help better understand the ultimate relevance of these perceptual gains for governance performance and citizen empowerment.

CONCLUSION

This study provides empirical validation for a theoretically coherent model explaining the process of quality implementation of social audits translating into better accountability perception in MGNREGS through transparency enhancement. The results show that audit quality can be achieved through both direct and mediated paths of transparency perception, and the mediation effect of transparency accounts for approximately 39% of the total effect. The relatively high explanatory power of the model ($R^2=0.786$ for accountability; $R^2=0.715$ for transparency) validates that social audit implementation quality is an important predictor of governance outcomes in rural India. The results highlight the importance of the quality of implementation, above and beyond the legal mandate, hinting that the provision for social audits in the statute results in meaningful improvements in governance only when it is accompanied by attention to the quality of procedures, community participation, institutional independence, and responsive follow-up. These results provide useful insights for policymakers, implementers, and civil society actors interested in enhancing participatory governance and institutional accountability in India's largest social protection program and have implications for social accountability mechanisms in similar governance settings worldwide.

REFERENCE

- Afridi, F., & Iversen, V. (2014). Social audits and MGNREGA delivery: Lessons from Andhra Pradesh. IZA Discussion Paper No. 8095. Institute for the Study of Labor (IZA). <https://www.iza.org/en/publications/dp/8095/social-audits-and-mgnrega-delivery-lessons-from-andhra-pradesh>
- Ram, B., & Sharma, S. K. (2023). Social audit of MGNREGA: A path of community participation in tribal area of Himachal Pradesh. International Journal of Economic, Finance and Business Statistics, 1(2), 97–104. <https://doi.org/10.59890/ijefbs.v1i2.1105>
- Birdsall, N., Meyer, C., & Sowa, A. (2013). Global markets, global citizens, and global governance in the 21st century (CGD Working Paper No. 329). Center for Global Development. <https://doi.org/10.2139/ssrn.2364171>
- Björkman, M., & Svensson, J. (2009). Power to the people: Evidence from a randomized field experiment on community-based monitoring in Uganda. Quarterly Journal of Economics, 124(2), 735–769. <https://doi.org/10.1162/qjec.2009.124.2.735>
- Bovens, M. (2007). Analysing and assessing accountability: A conceptual framework. European Law Journal, 13(4), 447–468.
- Brinkerhoff, D. W. (2004). Accountability and health systems: Toward conceptual clarity and policy relevance. Health Policy and Planning, 19(6), 371–379.
- Chawla, A. (2021). Social audit, accountability and accounting: An Indian perspective. Journal of Accounting in Emerging Economies, 11(1), 10–26. <https://doi.org/10.1108/JAEE-02-2019-0034>

- Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Lawrence Erlbaum Associates.
- Dhaktode, N., & Kumar, A. (2020). Social accountability in MGNREGA: Institutionalised social audit in United Andhra Pradesh of India. *International Journal of Governance and Public Policy Analysis*, 1(2), 11–24. <https://journals.sjp.ac.lk/index.php/ijgppa/article/view/4802>
- Feba Varghese, N C Narayanan, S B Agnihotri, & Girija Godbole. (2019). Transparency, Accountability and Participation through Social Audit: Case of MGNREGA in Sikkim, India. <https://doi.org/10.5281/zenodo.3267533>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- Fox, J. (2015). Social accountability: What does the evidence really say? *World Development*, 72, 346–361.
- Grindle, M. S. (2007). Good enough governance revisited. *Development Policy Review*, 25(5), 553–574. <https://doi.org/10.1111/j.1467-7679.2007.00385.x>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). A primer on partial least squares structural equation modeling (2nd ed.). SAGE Publications.
- Hayes, A. F. (2013). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. Guilford Press.
- Joshi, A. (2013). Do they work? Assessing the impact of transparency and accountability initiatives in service delivery. *Development Policy Review*, 31(S1), S29–S48. <https://doi.org/10.1111/dpr.12018>
- Kline, R. B. (2015). Principles and practice of structural equation modeling (4th ed.). Guilford Press.
- MacKinnon, D. P. (2012). Introduction to Statistical Mediation Analysis. Routledge.
- Mansuri, G., & Rao, V. (2012). Localizing development: Does participation work? World Bank. <https://doi.org/10.1596/978-0-8213-8256-1>
- Ministry of Rural Development, Government of India. (2005). The Mahatma Gandhi National Rural Employment Guarantee Act, 2005. New Delhi: Government of India.
- Nunnally, J. C., & Bernstein, I. H. (1994). Psychometric theory (3rd ed.). McGraw-Hill.
- Olken, B. A. (2007). Monitoring corruption: Evidence from a field experiment in Indonesia. *Journal of Political Economy*, 115(2), 200–249. <https://doi.org/10.1086/517935>
- Pande, S. (2021). Social audits in India: Institutionalizing citizen oversight. Accountability Research Center, American University. Retrieved from <https://accountabilityresearch.org/social-audits-in-india-institutionalizing-citizen-oversight/>
- Petesch, P., Smulovitz, C., & Walton, M. (2005). Evaluating empowerment: A framework with cases from Latin America. In D. Narayan (Ed.), *Measuring Empowerment: Cross-Disciplinary Perspectives* (pp. 39–67). Washington, DC: World Bank.
- Prabha, P., & Kanniammal, K. (2025). Enhancing transparency and accountability: Analysing social audit practices and control mechanisms in MGNREGS. *African Journal of Biomedical Research*, 27(5S), 463–469. <https://doi.org/10.53555/AJBR.v27i5S.5910>
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879–891.
- Rajasekhar, D., Lakha, S., & Manjula, R. (2017). Social audits in MGNREGA: Lessons from Karnataka. Institute for Social and Economic Change Working Paper No. 457.
- United Nations. (2015). Transforming our world: The 2030 agenda for sustainable development. New York: United Nations.
- World Bank. (2013). Social accountability sourcebook. Washington, DC: World Bank.