







# Integration of CSR Communication in Community Empowerment to Maintain Clean Water Sustainability: A Scoping Review

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**Abstract.** Access to clean water is a fundamental human need that is increasingly under threat due to population growth and environmental degradation. Through *Corporate Social Responsibility* (CSR) initiatives, companies can contribute to the preservation of clean water resources by integrating effective communication strategies. However, studies that specifically examine how CSR communication supports community empowerment in safeguarding clean water remain limited. This study aims to map empirical evidence on the role of CSR communication in empowering communities to sustain clean water resources, using a scoping review approach. The review followed the PRISMA-ScR framework to identify, select, and analyze relevant literature. Searches were conducted in Google Scholar and Emerald Insight databases. Inclusion criteria were defined using the PICOS framework (Population: communities benefiting from CSR; Intervention: CSR communication; Comparison: non-communicative CSR practices; Outcomes: participation, empowerment, and water sustainability; Study design: empirical studies). Out of 31 articles identified, 7 met the criteria and were synthesized narratively. The synthesis revealed three key patterns. First, participatory CSR communication fosters legitimacy and trust between companies and communities. Second, community-based empowerment mechanisms such as *Village-Owned Enterprises (BUMDes)* or *Public-Private Partnership (PPP)* models prove more effective in ensuring long-term clean water programs. Third, contextual differences were evident: in developing countries CSR communication tends to emphasize dialogue and community engagement, while in developed countries it prioritizes transparency and reporting. the pivotal role of CSR communication in the success of clean water related CSR programs. Future research should adopt *mixed-methods* designs and long-term evaluations to develop CSR communication models that are integrative, adaptive, and sustainable.

**Keywords:** CSR, communication, community empowerment, clean water, scoping review, PRISMA-ScR

## 1 Introduction

Clean water is a fundamental human need and a cornerstone of public health as well as sustainable development. Despite global progress in expanding access to drinking water services, disparities in availability, quality, and long-term sustainability persist across regions. According to the WHO–UNICEF Joint Monitoring Programme (JMP), global coverage of “safely managed” drinking water services has risen to approximately 73–74% in the latest reporting period. Nevertheless, an estimated 2–2.2 billion people still lack access to safely managed drinking water; moreover, several spatial and analytical studies suggest that the number of people without safe water at home may be considerably higher exceeding 4 billion in low- and middle-income countries highlighting gaps in infrastructure and limitations in current measurement approaches [1].

At the national level, Indonesia has made notable progress in improving drinking water provision. Data from the 2019–2023 Indonesia Clean Water Statistics indicate continued expansion of service coverage, including variations across provinces. However, inequities remain in terms of access, water quality, and distribution particularly in rural and remote areas signaling the need for technical, institutional, and community-based strategies to ensure the sustainability of water sources and services [2].

Large companies often contribute to water provision initiatives through Corporate Social Responsibility (CSR) programs. Yet the success of CSR interventions does not solely depend on financial investment or infrastructure development; it is also shaped by how companies communicate their programs and engage local communities. Research on CSR communication demonstrates that credible, transparent, and participatory communication enhances program legitimacy, fosters community trust, and strengthens the sustainability of social interventions, whereas one-way or paternalistic communication frequently fails to secure long-term local support [3].

Community-based empowerment approaches such as Village-Owned Enterprises (BUMDes), public–private partnerships (PPP), and locally adapted governance models that incorporate training and participatory management have proven more effective in sustaining water facilities and promoting social accountability. Case studies in Indonesia show that the integration of CSR with local empowerment mechanisms, including capacity building and the establishment of community-based management units, contributes to improved autonomy in water management and more reliable infrastructure maintenance [4].

Nevertheless, gaps remain in understanding how communication strategies interact with empowerment models. Many CSR studies focus on activities and outputs but rarely examine, in a systematic manner, how participatory CSR communication influences legitimacy, trust, and the long-term sustainability of community-managed water initiatives. Evidence linking specific CSR communication strategies to sustainability indicators in the Indonesian context is still limited [3]. Although some local case studies exist such as CSR programs by mining or energy companies partnering with communities or BUMDes most rely on single-case approaches and lack comparative insights

across different communication and empowerment models. More rigorous evidence that integrates qualitative and quantitative data is needed to develop replicable policy recommendations [5].

Environmental pressures such as altered rainfall patterns, seasonal droughts, and rapid urbanization further heighten the vulnerability of water supply systems. In this context, social sustainability, including community ownership and local support, becomes increasingly essential. These conditions underscore the urgency of studying the integration of CSR communication and community empowerment to safeguard water resources [6].

Given these considerations, this study aims to: (1) examine the influence of CSR communication strategies (e.g., participatory versus top-down approaches) on community legitimacy and trust; (2) assess the role of empowerment mechanisms (such as BUMDes, PPP, and managerial training) in ensuring the long-term upkeep of water facilities; and (3) generate policy recommendations for companies and local stakeholders to design CSR initiatives that are effective, sustainable, and community-oriented.

## **2 Methods**

### **2.1 Study Design**

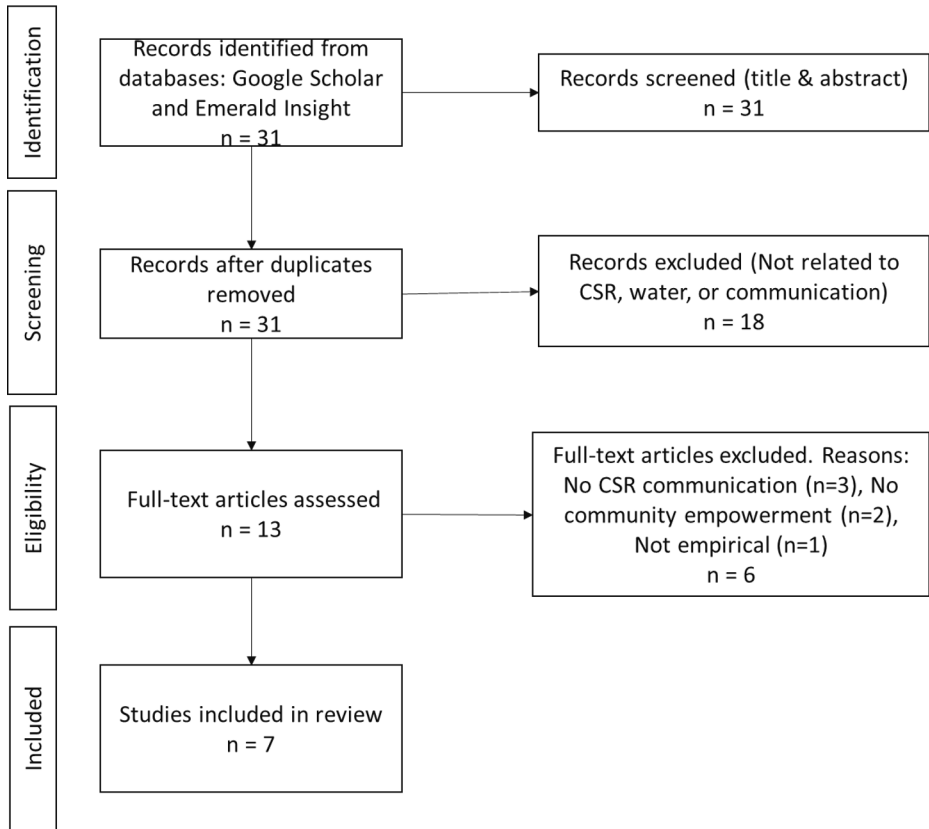
This study employs a scoping review design to systematically map empirical literature on the integration of Corporate Social Responsibility (CSR) communication within community empowerment efforts aimed at safeguarding clean water resources. A scoping review approach was selected because this topic remains relatively underexplored and requires a comprehensive mapping of available evidence, including diverse study designs, geographical contexts, and variations in CSR practices.

The review process follows the PRISMA-ScR (Preferred Reporting Items for Systematic Reviews and Meta-Analyses Scoping Review Extension) guidelines, which emphasize transparency and rigor in the procedures for searching, screening, and synthesizing relevant data.

### **2.2 Literature Search Strategy**

The literature search was conducted using two primary databases: Google Scholar and Emerald Insight. These databases were selected due to their broad coverage of academic publications (Google Scholar) and their strong emphasis on management and CSR-related studies (Emerald Insight). The search employed a combination of keywords linked with Boolean operators, including: “CSR communication” OR “corporate social responsibility communication,” “community empowerment” OR “community participation,” “clean water” OR “water sustainability,” “CSR water program,” “public–private partnership water,” and “community-based water management.” An example of the search string used is: “CSR communication” AND “community empowerment” AND “clean water.”

A total of seven articles met the eligibility criteria and were included in the analysis and evidence mapping, following the PRISMA-ScR (2020) guidelines, as illustrated in Figure 1.



**Fig. 1.** PRISMA-ScR Flow Diagram of the Study Selection Process

### 2.3 Eligibility Criteria

Article selection was guided by the PICOS framework (Population, Intervention, Comparison, Outcomes, Study design), as outlined below:

Population (P): Communities benefiting from CSR initiatives, local community groups, village stakeholders, or other community members involved in CSR-based clean water programs.

Intervention (I): CSR communication models or strategies, including participatory communication, community dialogue, transparency mechanisms, CSR reporting, and two-way communication approaches.

Comparison (C): CSR practices that lack structured communication strategies or CSR programs that function solely as philanthropic activities without community empowerment components.

Outcomes (O): Levels of community participation; community empowerment (capacity building and program ownership); sustainability of clean water programs (operational continuity, asset management, and social sustainability); and community trust and legitimacy toward the company.

Study design (S): Empirical studies including qualitative, quantitative, and mixed-methods research case studies, and evaluations of CSR programs.

Studies were excluded if they did not focus on populations in Indonesia, were not available in English or Indonesian, or did not constitute empirical research (e.g., editorials, short reports, or conference abstracts).

## **2.4 Study Selection and Data Extraction**

The article selection process was conducted in three stages: (1) an initial screening of titles and abstracts to exclude studies that were not relevant; (2) a full-text review to confirm alignment with the inclusion criteria; and (3) systematic data extraction from all eligible articles using a standardized extraction form that captured information on the authors, year of publication, study objectives, research design, population, key variables, findings, and conclusions.

Of the 31 articles initially identified, 7 met the inclusion criteria and were included for further analysis. The selection process is summarized in the PRISMA-ScR flow diagram, which presents the number of articles retained at each stage of the screening procedure.

## **2.5 Data Analysis**

Data extracted from the selected articles were analyzed using descriptive and thematic approaches to identify research foci, methodological patterns, key findings, and existing evidence gaps. The analysis emphasized three thematic areas: participatory CSR communication and its role in building legitimacy; community-based empowerment mechanisms; and variations in CSR communication practices across different global contexts.

3 Results

Table 1. Summary of PICOS Criteria for Included Studies

No	Author(s), Tahun	Judul Artikel	P (Population)	I (Intervention/Exposure)	C (Comparison)	O (Outcome)	S (Study Design)
1	Vidhi Chaudhri, 2014	Corporate Social Responsibility and the Communication Imperative: Perspectives from CSR Managers	CSR managers from major domestic and multinational companies in India, interviewed as key informants.	Organizational CSR communication practices and strategies, including how CSR is conveyed to stakeholders and the public.	No quantitative control group; thematic comparison across communication approaches (instrumental, relational, consituative) and across informants' perspectives.	Insights into communication imperatives in CSR, including communication motives, barriers, legitimacy and reputation roles, and implications for stakeholder engagement.	Qualitative in-depth interviews with thematic and conceptual analysis.
2	Sarabdeep K. Kochhar, 2014	uting Community First: Mainstreaming CSR for Community-Building in India and China	Local communities and organizational actors (companies, NGOs, community stakeholders) involved in CSR initiatives in India and China.	CSR mainstreaming strategies that strengthen social capital and community development (e.g., health, education, infrastructure, and economic empowerment programs). <b>Comparison:</b> Cross-country and cross-case comparisons of CSR models (participatory vs. top-down approaches).	Cross-country and cross-case comparisons of CSR models (participatory vs. top-down approaches).	Effectiveness of CSR in community-building, institutional/cultural barriers, role of local actors, and policy recommendations for more community-centered CSR.	Qualitative comparative analysis combining literature review and case studies.
3	Marlen G. Arnold, 2017	Corporate Social Responsibility Representation of German Water-Supply and Distribution Companies	110 water-supply and distribution companies (WSCs) in Germany.	Representation of CSR practices in publicly available documents, including ISO 26000 elements and sustainability-related disclosures.	Cross-sectional comparison of CSR indicators within content analysis (e.g., frequency of ISO 26000 elements, sustainability practices).	Patterns of CSR communication, low visibility of key sustainability elements, and gaps between reported and actual CSR practices.	Mixed quantitative-qualitative content analysis of reports and websites, with correlational analysis (non-experimental, cross-sectional).
4	R. Wilya Achmad W., Siti Anah Kuyanti,	Community Empowerment-based CSR Program in Panglima Raja Village	Community members in Panglima Raja Village.	CSR initiatives focused on economic, social, and environmental empowerment.	No explicit comparison group (qualitative descriptive study).	Community empowerment outcomes, strengthened company-community relations,	Descriptive qualitative study using interviews, observation,

	& Mujiyono (2021)		Kampar Regency, as beneficiaries of a CSR program by PT Syams Arief Siswamun.	Community empowerment through Village-Owned Enterprises (BUMDes) supported by CSR initiatives.	No explicit quantitative comparison; qualitative analysis only.	and positive changes in local social structures.	document review, and triangulation.
5	Saprudin et al. (2022)	Community Empowerment Through Village-Owned Business Entities and CSR in Rural Clean Water Supply Programs in Bogor District	Rural communities in Bogor District involved in clean water and sanitation programs (e.g., Pamsimas), including BUMDes administrators and village officials.	CSR programs for community development based on community needs and local resource potential.	No quantitative comparison group; qualitative participatory assessment.	Levels of community participation, empowerment stages, challenges in BUMDes-CSR collaboration, and recommended empowerment strategies (enabling, empowering, protecting).	Qualitative case study with data triangulation and in-depth interviews.
6	Isnani Jana Bidari, Noor Afifah Putriany, Rian Kusuma Wardhana, & Budi Siswanto, 2024	Community Development through CSR Activities of PT Solusi Bangun Indonesia, Tuban Plant	Residents of six villages surrounding the Tuban Plant of PT Solusi Bangun Indonesia, receiving CSR support.	CSR programs for community development based on community needs and local resource potential.	No quantitative comparison group; qualitative participatory assessment.	Identification of local issues, resource potentials, CSR program priorities, and recommendations emphasizing participatory, trust-based, and collaborative CSR approaches.	Qualitative research using participatory techniques and data triangulation.
7	Vinceeth Ajith, A. S. Reshma, Renjith Mohan, & M. Vinodini Ramesh, 2024	Empowering Communities to Address Drinking Water Challenges through a Systematic, Participatory, Adaptive Approach and Sustainable PPP Model	More than 250 communities/villages in India where the Jivamritam water solution was implemented.	Jivamritam— a community-based clean water solution combining modular purification technology, participatory and adaptive community processes, and a sustainable public-private partnership (PPP) model.	No quantitative control group; cross-case qualitative comparison across different communities.	Reported improvements in safe drinking water access, sustainability of the PPP model, lessons learned, and recommendations for scaling or replication.	Descriptive empirical case-series and implementation review (non-experimental).

## 4 Discussion

### 4.1 Synthesis of the Seven Studies on CSR and Community Empowerment

The synthesis of the seven studies on CSR and community empowerment revealed three overarching patterns: (1) participatory CSR communication strengthens community legitimacy and trust; (2) community-based empowerment facilitated through local institutional structures such as Village-Owned Enterprises (BUMDes) or Public–Private Partnership (PPP) models is more effective in ensuring long-term program sustainability; and (3) contextual differences exist between developing and developed countries in the ways CSR communication and reporting are conducted. These patterns offer important insights for CSR theory and provide practical implications for designing community-oriented CSR programs, particularly in the clean water sector.

### 4.2 Participatory CSR Communication as a Foundation for Community Legitimacy

Findings from *Corporate Social Responsibility and the Communication Imperative: Perspectives from CSR Managers* [7] emphasize that participatory CSR communication characterized by stakeholder dialogue, listening to community aspirations, and enabling active involvement plays a central role in building legitimacy and trust among beneficiaries. When communities are engaged not merely as recipients of information but as partners in designing and implementing CSR programs, their sense of ownership increases considerably.

This aligns with broader international literature demonstrating that stakeholder participation in CSR communication enhances corporate reputation, social acceptance, and program sustainability. Studies conducted in developing-country contexts further show that companies adopting two-way communication approaches and community consultations experience better outreach outcomes and reduced social resistance. Thus, participatory CSR communication is not merely a public relations activity but a core mechanism for achieving social legitimacy.

Moreover, previous literature consistently indicates that corporate credibility in community-development contexts depends not only on *what* companies do but also on *how* they communicate their actions [7]. For CSR programs focused on clean water and rural infrastructure, firms should therefore design communication strategies that are inclusive, dialogic, and continuous to build durable community trust.

### 4.3 Community Empowerment Through Local Structures Ensures Program Sustainability

The second pattern highlights the essential role of community-based empowerment through local institutional mechanisms such as BUMDes or adaptive PPP models. In *Community Empowerment through Village-Owned Business Entities and Corporate*

*Social Responsibility in Rural Clean Water Supply Program in Bogor District* [4], empowerment through BUMDes demonstrated that when local structures are strengthened, community participation and ownership of the clean water program increase significantly.

Similarly, findings from *Empowering Communities in Addressing Drinking Water Challenges Using a Systematic, Participatory and Adaptive Approach and Sustainable PPP Model* [8] show that adaptive PPP arrangements that actively involve communities in the design and management of water purification systems enhance long-term program sustainability. Here, communities function not only as beneficiaries but also as co-managers.

Another study, *Community Development Through CSR Activities of PT Solusi Bangun Indonesia, Tuban Plant in Tuban Regency, East Java, Indonesia* [9], provides additional evidence that CSR programs integrating local potential, social issues, and corporate community collaboration generate more positive outcomes than top-down or philanthropic CSR models lacking meaningful community engagement.

Literature on CSR and community development broadly supports this: sustainability is more likely to be achieved when communities exercise control over system management, maintenance, and long-term financing. Consequently, companies should prioritize institutional partnerships that empower local actors to ensure that CSR programs continue beyond initial funding cycles and maintain strong community involvement mechanisms.

#### **4.4 Contextual Differences Between Developing and Developed Countries in CSR Strategies**

The third pattern reveals substantial contextual differences between developing and developed nations in CSR approaches particularly regarding communication and reporting. In *Putting Community First: Mainstreaming CSR for Community Building in India and China* [10], CSR practices in India and China focus heavily on community development, emphasizing local dialogue and community relations.

Conversely, in *Corporate Social Responsibility Representation of the German Water Supply and Distribution Companies* [11], analysis of 110 water companies in Germany shows that CSR is communicated primarily through formal reporting mechanisms, ISO 26000 frameworks, and sustainability management systems, with limited direct participatory engagement.

These findings suggest that in developed countries where regulatory requirements and stakeholder expectations for transparency are higher companies rely on formal CSR reporting as a legitimacy strategy. Meanwhile, in developing countries, where basic development needs remain pressing (e.g., access to clean water, economic empowerment), firms emphasize participatory communication and locally driven initiatives.

The practical implication is that multinational companies and CSR organizations must adapt their strategies to local contexts: dialogic approaches in developing regions and structured reporting mechanisms in highly regulated environments.

#### **4.5 Integrating the Three Patterns into CSR Program Design for Clean Water Initiatives**

Integrating these three patterns into CSR program design particularly for clean water initiatives—is crucial. Participatory communication (Pattern 1) strengthens understanding and public support; community-based empowerment (Pattern 2) ensures sustainability and local ownership; and context-sensitive approaches (Pattern 3) enhance relevance and effectiveness across different socio-economic contexts.

For example, in implementing clean water initiatives in rural Indonesia or India, companies can begin with community forums, participatory system-design consultations, local capacity-building, and the establishment of institutional partnerships (such as BUMDes or cooperatives), followed by the development of formal reporting systems aligned with regulatory or donor expectations. This demonstrates that CSR programs cannot rely on one-size-fits-all templates; instead, they must be tailored to local cultural, economic, and regulatory conditions.

#### **4.6 Limitations and Recommendations for Future Research**

Despite offering valuable strategic insights, this synthesis has several limitations. First, most studies are qualitative and descriptive, providing limited quantitative comparative data to numerically assess program effectiveness. Second, although community empowerment and local institutional strengthening were evident, few longitudinal studies evaluate long-term sustainability beyond the initial intervention period.

Future research may employ quantitative designs (e.g., pre- and post-intervention surveys on community trust following participatory communication) or quasi-experimental approaches comparing CSR models with and without active community participation. Cross-country comparative studies between developed and developing contexts may also offer deeper understanding of how regulatory environments, cultural norms, and community capacities moderate the effectiveness of CSR initiatives.

### **5 Conclusion**

The findings of this review suggest that CSR programs in the clean water sector are most effective when they integrate participatory communication, community-based empowerment, and context-sensitive strategies. Companies should prioritize two-way communication to build trust, strengthen local institutions such as BUMDes or community water committees to ensure sustained ownership, and adapt program designs to local socio-economic and regulatory conditions. Multi-stakeholder collaboration, clear monitoring systems, and long-term planning are also essential to maintain program continuity beyond initial implementation. Future research should incorporate quantitative and longitudinal approaches to better measure the long-term impact of participatory and empowerment-oriented CSR models.

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