

Analysis of The Impact of Mining on The Social and Economic Community in Morosi District, Konawe Regency

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Abstract

This study aims to analyze the impact of the mining industry on the social and economic conditions of communities surrounding the industrial area of Konawe Regency, as well as to evaluate the effectiveness of Corporate Social Responsibility (CSR) programs. The research employs a descriptive qualitative approach through observation, in-depth interviews, and documentation in villages classified into Ring 1 (directly impacted) and Ring 2 (indirectly impacted). The results indicate that Ring 1 experiences the most significant social, economic, and environmental pressures, characterized by a decline in traditional livelihoods, limited access to formal industrial employment, environmental degradation, shifts in social interactions, and inequalities in local power structures. Conversely, Ring 2 is relatively more stable and experiences an economic multiplier effect through the growth of trade and services. The CSR programs remain partial and are not yet based on productive economic empowerment; thus, the benefits are not yet proportional to the impacts, particularly in Ring 1. The study underscores the importance of environmental management and the implementation of region-based CSR through participatory, inclusive, and sustainable approaches, ensuring that industrialization fairly enhances community welfare.

Keywords: Mining industry, affected rings, socio-economic impact, CSR, local community, sustainability.

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1. Introduction

The rapid expansion of the extractive industry, particularly nickel mining and smelting operations, has become a cornerstone of regional economic development in Indonesia. In Konawe Regency, Southeast Sulawesi, the establishment of a massive industrial mining zone in Morosi District has drastically reshaped both the physical landscape and the socio-economic fabric of the local population. While industrialization is often heralded by governments as a primary driver for national economic growth, macro-level infrastructure investments, and regional revenue creation, its localized impacts frequently present a double-edged sword for grassroots rural communities (Davis & Tilton, 2005; Hilson, 2002).

The global demand for critical minerals, particularly nickel for the stainless steel and electric vehicle battery industries, has rapidly accelerated the expansion of extractive industries across developing nations. In Indonesia, Southeast Sulawesi Province has emerged as a strategic hub for foreign direct investment and national strategic projects (PSN). Specifically, the establishment of the massive nickel mining and smelting industrial complex in Morosi District, Konawe Regency, stands as a cornerstone of the country's downstream mineral policy (hilirisasi). While macro-level industrialization is frequently heralded by state actors and economic planners as a primary catalyst for regional gross domestic product (RGDP) growth, infrastructure modernization, and national technological integration, its localized manifestations often yield deeply asymmetric outcomes for host rural ecosystems (Auty, 2001; Davis & Tilton, 2005).

The sudden insertion of capital-intensive, high-technology heavy industry into predominantly agrarian and coastal rural landscapes creates a profound structural shock. Prior to the industrial boom, the communities of Morosi District relied heavily on subsistence security derived from traditional farming, rice paddy cultivation, aquaculture, and small-scale

artisanal fishing. The rapid expansion of mining concessions, industrial waste treatment plants, and smelting infrastructure triggers extensive land acquisition, ecological displacement, and an involuntary transition toward a highly volatile wage-labor market (Kemp et al., 11).

Crucially, the capacity of the indigenous population to navigate, adapt to, or absorb the shocks of this industrial transformation is not uniform. The socio-economic benefits and environmental risks are distributed unequally across geographic space and social classes. To capture this uneven distribution, this study establishes a spatial analytical framework by categorizing the surrounding rural settlements into two distinct zones: Ring 1 (villages experiencing direct environmental, spatial, and social externalities due to physical proximity to industrial plants) and Ring 2 (villages situated at a greater distance, experiencing indirect, structural, or commercial spillover effects).

To mitigate these disruptions and maintain a "Social License to Operate," corporations operating within the Konawe industrial area are legally bound by national regulations to implement Corporate Social Responsibility (CSR) initiatives. Ideally, CSR should serve as an institutional bridge that transforms transient mineral wealth into sustainable, independent community capital (Manteaw, 2008). However, contemporary critique suggests that CSR in the extractive sectors of developing countries often suffers from structural flaws—manifesting as superficial philanthropy, ad-hoc public relations exercises, and top-down distributions that reinforce community dependency while failing to address root structural inequalities (Idemudia, 2014).

Given these ongoing challenges, a critical and localized inquiry is imperative. This study addresses this knowledge gap by comprehensively analyzing the spatial socio-economic impacts of the mining industry across different affected rings in Morosi District, Konawe Regency, and providing a critical institutional evaluation of the

effectiveness of corporate CSR programs in driving sustainable, inclusive community empowerment.

2. Literature Review

The theoretical discourse regarding the impacts of large-scale mining on host communities is deeply rooted in the "Resource Curse" or "Paradox of Plenty" literature. While early formulations focused heavily on macro-economic variables such as currency overvaluation and institutional corruption (Auty, 2001), modern sociological and developmental scholarship emphasizes the localized resource curse (Bebbington et al., 2008). At the community level, the resource curse manifests as an acute imbalance where local populations bear the immediate environmental and social costs of extraction, while the financial gains are centralized by national elites, multinational consortiums, and distant urban centers.

Scholars argue that capital-intensive mining infrastructure alters regional political economies, driving localized inflation, disrupting land tenure security, and eroding traditional resource-based safety nets (Hilson, 2002). The concept of "accumulation by dispossession" is highly relevant here, as customary lands and communal ecological goods are enclosed for corporate operations, forcing independent primary producers to enter the lower tiers of the industrial labor market as precarious wage laborers (Kemp et al., 2011).

In developmental geography and industrial sociology, the impact of heavy industry is understood through spatial differentiation frameworks, commonly conceptualized as "Affected Rings" or "Impact Zones" (World Bank, 2010).

1. Ring 1 (Direct Impact Zone): This zone encompasses the immediate spatial periphery of the industrial core. The literature indicates that Ring 1 communities experience severe environmental degradation (air and water pollution, soil compaction, and coastal siltation) alongside immediate social disruptions, such as the displacement of indigenous populations and direct competition for local resources.
2. Ring 2 (Indirect Impact Zone): This zone represents the secondary geographic layer. Communities in Ring 2 are largely insulated from direct ecological disasters but are highly receptive to regional macro-economic changes, demographic shifts, and the expansion of secondary market networks.

The theoretical tension lies in how these two zones experience the "multiplier effect." While Ring 2 may experience a positive economic multiplier through increased demand for services and trade, Ring 1 often experiences a negative multiplier, where ecological destruction weakens traditional livelihood capacity faster than the industrial economy can absorb the displaced labor force.

Corporate Social Responsibility (CSR) in the extractive industry has evolved from early voluntary models of corporate philanthropy to mandatory, regulated frameworks aimed at sustainable development (Manteaw, 2008). In rural contexts where state administrative capacity is often constrained or absent, mining corporations frequently take

on quasi-governmental responsibilities, providing public infrastructure, healthcare, and education.

However, development theorists make a sharp distinction between "Philanthropic CSR" and "Empowerment CSR" (Idemudia, 2014). Philanthropic CSR operates on a paternalistic model, distributing short-term, superficial aid (e.g., cash handouts, ceremonial donations) that produces corporate dependency and fails to create long-term adaptive capacity. In contrast, Sustainable Empowerment CSR utilizes a participatory, region-based approach that invests corporate rents into alternative capital accumulation—such as strengthening local micro-enterprises, funding vocational training, and building resilient cooperative economies. This ensures that when the non-renewable resource is depleted (post-mining era), the local community possesses the institutional and economic capacity to sustain its welfare independently.

3. Methodology

This study utilizes a qualitative descriptive research design embedded within a critical interpretivist paradigm. Qualitative inquiry is uniquely suited for this study as it allows the researchers to look beyond superficial quantitative metrics (such as average village income increases) and systematically uncover the structural transformations, power imbalances, and lived sociological changes experienced by host communities.

Fieldwork was conducted across several strategically selected villages within Morosi District, Konawe Regency. Using a purposive spatial sampling approach, the study categorized field sites into two clear empirical fields:

1. Ring 1 Field Sites (Direct Impact Zone): Villages sharing immediate physical boundaries with mining operations, high-temperature smelting furnaces, coal-fired power infrastructure, and industrial ports. These sites are characterized by intense land conversion and immediate ecological exposure.
2. Ring 2 Field Sites (Indirect Impact Zone): Villages located within a 5-to-15 kilometer radius from the primary industrial core. These sites serve as secondary residential hubs for migrant workers and regional logistical transit points.

To guarantee data triangulation and analytical depth, a diverse cohort of key informants (N=34) was selected via purposive and snowball sampling techniques, including:

1. Local village administration heads and traditional customary leaders (Tokoh Adat).
2. Displaced agrarian farmers and artisanal fishermen whose primary production assets were acquired or degraded.
3. Local small-scale entrepreneurs, traders, and property owners.
4. Displaced women's groups and youth representatives.
5. Corporate CSR managers, community relations officers, and local labor union organizers.

Data collection was systematically executed over an extended fieldwork period through three highly integrated qualitative techniques:

1. **In-depth, Semi-Structured Interviews:** Face-to-face interviews were conducted using customizable interview guides to capture narratives regarding land transaction histories, livelihood transitions, shifting social interactions, internal family economy strain, and perceptions of corporate community programs.
2. **Field Observations:** The research team conducted structured field observations utilizing spatial mapping protocols to document the physical extent of environmental degradation, patterns of new commercial growth, village infrastructural conditions, and the daily dynamics of local market centers.
3. **Documentary Analysis:** Secondary data sources—including village demographic ledgers, land mutation records, corporate sustainability blueprints, and local government environmental monitoring charts—were analyzed to triangulate and contextualize the field narratives.

The gathered qualitative data were analyzed using Miles and Huberman's interactive framework, which involves repetitive cycles of data reduction, spatial data display, open and axial thematic coding, and conclusion verification. To ensure the scientific trustworthiness and validity of the findings, the study employed prolonged field engagement, data triangulation across different informant groups, and member-checking with local community representatives.

4. Results and Discussion

4.1 Spatial Bifurcation: The Realities of Ring 1 and Ring 2

The empirical data collected during the field investigation reveals a profound spatial bifurcation in the socio-economic trajectories of the host communities. The introduction of the mega-industrial mining complex does not produce unified regional development; rather, it fragments the local socio-economic landscape based on geographic zoning.

4.1.1 Structural Disruption and Marginalization in Ring 1

The communities situated within Ring 1 bear the overwhelming majority of the industrial complex's negative externalities. The primary structural shock manifests as the rapid collapse of traditional primary production systems. Large-scale corporate land acquisition has effectively eliminated hundreds of hectares of productive agricultural fields and coastal aquaculture networks.

The field narratives reveal that while land compensation payments provided immediate, unprecedented cash windfalls to local landowners, these cash reserves were rapidly depleted due to localized inflation, lack of financial literacy, and consumer spending on non-productive assets. Once the initial capital was exhausted, these households found themselves permanently separated from their ancestral production bases—the land and the sea.

Furthermore, a critical paradox was observed regarding labor market integration. Although the industrial complex creates tens of thousands of formal jobs, the indigenous population of Ring 1 is largely marginalized from high-tier, stable employment. This exclusion stems from an acute skill mismatch: the local rural workforce lacks the specialized technical certifications, industrial discipline, and educational credentials required to operate complex metallurgy and heavy equipment machinery. Consequently, local youth are disproportionately relegated to low-wage, high-risk manual labor positions managed by third-party outsourcing agencies, or they remain structurally unemployed, creating intense socio-economic vulnerability.

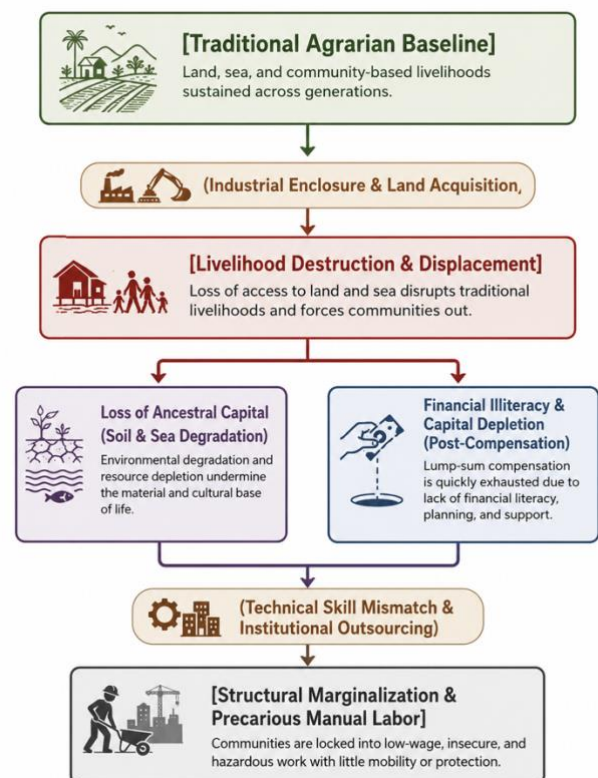


Figure 1

At the same time, Ring 1 faces severe environmental degradation. Chronic exposure to industrial dust emissions, coal-fired power plant smoke, and heavy-vehicle traffic has caused a spike in respiratory illnesses, while heavy metal runoffs have compromised local freshwater tables and depleted near-shore fish populations. This ecological decay destroys alternative subsistence strategies, rendering Ring 1 completely dependent on a volatile, low-tier industrial wage economy.

4.1.2 The Economic Multiplier and Commercial Adaptation in Ring 2

In stark contrast to the marginalization observed in the immediate periphery, the communities located in Ring 2 demonstrate a dynamic and prosperous economic adaptation. Because they are geographically removed from the epicenter of environmental degradation, these villages are able to preserve their local environments while actively capitalizing on the demographic shifts triggered by industrialization.

The influx of a vast migrant labor force—comprising both domestic Indonesian workers from other provinces and

foreign technical expatriates—has generated an exponential surge in consumer demand within Ring 2. Local actors have strategically reoriented their household economies to capture this capital flow. The local landscape is characterized by the rapid growth of secondary economic activities:

1. **Property Rentals:** Massive conversion of local land into boarding houses (kos-kosan) and commercial stalls, providing stable, high-yield passive income streams for Ring 2 families.
2. **Trade and Consumer Services:** The flourishing of local grocery stores, food stalls (warung), transport services, and entertainment amenities, creating an autonomous, vibrant local market.

This economic multiplier effect has dramatically increased household liquidity and raised the overall standard of living in Ring 2, demonstrating that when insulated from direct ecological damage, local communities can effectively harness industrial spillovers to build resilient alternative economies.

4.2 Sociological Transformations and Altered Power Structures

Beyond the economic ledger, the expansion of the industrial complex has induced fundamental sociological transformations across both rings, with a heightened intensity in Ring 1. The traditional social fabric, historically rooted in kinship networks, mutual aid (gotong royong), and egalitarian agrarian social relations, is undergoing severe fragmentation.

The primary driver of social friction is the rapid rise of economic inequality. The uneven distribution of land compensation money and corporate employment access has fractured village solidarity. Families that successfully integrated into the industrial framework or received massive compensation payments have achieved rapid upward mobility, creating distinct socio-economic stratifications within previously homogenous rural structures. This disparity breeds intense localized jealousy, social alienation, and an overall erosion of mutual trust (social capital).

Furthermore, the research identified an institutional distortion of local power dynamics. The traditional authority of village elders and formal village government systems has been systematically overshadowed by the immense political and economic influence of corporate entities. In many instances, village heads are co-opted or placed in compromised structural positions, serving as transactional intermediaries between corporate community relations departments and angry local residents. This co-optation weakens the community's collective bargaining power, as local governance structures prioritize corporate operational stability over the long-term protection of community rights, leaving marginalized groups without effective institutional channels to air their grievances.

4.3 Structural Evaluation of Corporate Social Responsibility (CSR)

The empirical evaluation of the CSR portfolios deployed by corporations within the Konawe industrial area indicates that the current frameworks are fundamentally ill-equipped to

address the structural socio-economic disruptions occurring in the region.

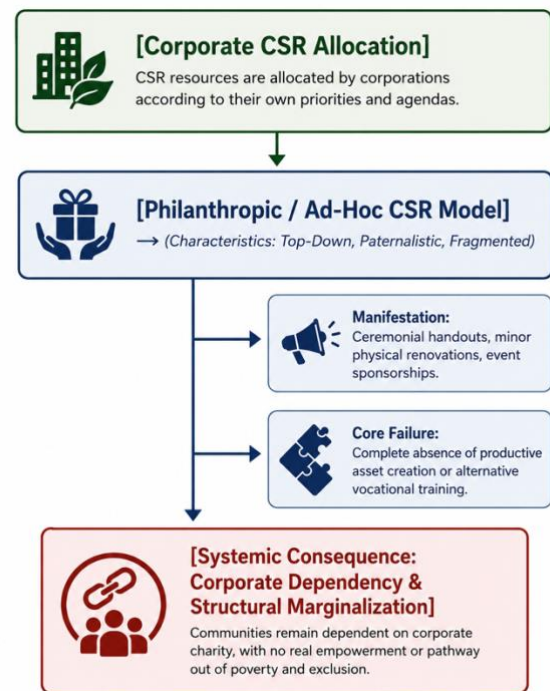


Figure 2

The data shows that corporate CSR strategies are overwhelmingly trapped in the Philanthropic and Ad-Hoc Model. Corporate interventions are heavily skewed toward high-visibility, short-term project completions, such as the ceremonial distribution of religious holiday packages, sporadic funding for local sporting events, or minor aesthetic renovations of village offices. While these initiatives satisfy superficial corporate compliance metrics, they operate on a top-down, paternalistic logic that completely ignores the deeper structural needs of the host population.

Crucially, there is an absolute absence of Productive Economic Empowerment CSR. The corporations have failed to establish sustainable alternative asset structures—such as agricultural modernization programs for displaced farmers, localized supply-chain integration programs (e.g., training local cooperatives to supply food or uniforms to the industrial complex), or dedicated technical academies designed to equip Ring 1 youth with the specialized certifications necessary to enter the formal industrial workforce.

Because current CSR programs are fragmented and non-structural, their socio-economic benefits are completely disproportionate to the severe, permanent disruptions borne by the host communities, particularly in Ring 1. Instead of fostering sustainable self-reliance, the current corporate model fosters a toxic cycle of corporate dependency and deepens regional economic insecurity.

5. Conclusion

This study demonstrates that the rapid expansion of the mining and smelting industrial complex in Morosi District, Konawe Regency, has driven a deeply asymmetric regional transformation. Rather than fostering unified prosperity, the

industrial influx has generated a sharp spatial bifurcation. The communities in Ring 1 experience structural displacement, characterized by the collapse of traditional primary livelihoods, severe environmental degradation, social fragmentation, and exclusion from formal industrial employment due to systemic skill mismatches. In contrast, the communities in Ring 2 have successfully navigated the transformation, leveraging demographic inflows to capture a positive economic multiplier effect via trade, housing rentals, and service expansion.

This structural imbalance is compounded by corporate CSR initiatives that remain trapped in an ad-hoc, philanthropic framework. By focusing on ceremonial donations and short-term physical infrastructure, corporate CSR fails to build alternative productive capital or foster genuine economic empowerment, rendering corporate social investments largely ineffective at mitigating the structural marginalization of the immediate host population.

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