

# Intersecting Inequalities: Socio-economic Determinants and Health Vulnerabilities among Tribal Communities in Jharkhand - A Micro-level Analysis of Mahuadanr Block, Latehar, Jharkhand

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## ABSTRACT

This study presents a micro-level analysis of the intersecting inequalities that shape the socio-economic determinants and health vulnerabilities of tribal communities in the remote and ecologically rich landscape of Mahuadanr, Latehar, Jharkhand. Employing a mixed-methods approach, the research wove together quantitative data from household surveys and government reports with qualitative narratives from focus group discussions and interviews with community members, local leaders, and health workers. The findings reveal a profound cycle of disadvantage, where structural barriers and health challenges are deeply intertwined. Despite strong social cohesion and rich cultural heritage, these communities face persistent economic marginalization, constrained by a reliance on subsistence agriculture, inadequate market linkages, and underdeveloped infrastructure. These conditions translate directly into critical health vulnerabilities, with elevated rates of maternal and child mortality and a high prevalence of preventable diseases such as typhoid and malaria. A central insight from the study is the stark implementation gap that perpetuates this cycle. Despite the existence of government welfare programs, geographical isolation and systemic hurdles consistently impede effective service delivery, leaving remote communities without essential support. The research concludes that breaking this cycle requires a fundamental shift toward integrated, multi-sectoral interventions and advocate for targeted policies that are both culturally sensitive and community centered, designed to simultaneously promote sustainable economic empowerment, enhance access to education and healthcare, and actively engage tribal populations in shaping their own development. Such an approach is essential to foster inclusive and sustainable well-being while preserving the cultural integrity of Jharkhand's tribal communities.

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**KEYWORDS:** Tribal Communities, Socio-economic Determinants, Health Vulnerabilities, Implementation Gap, Sustainable Well-being.

## INTRODUCTION

The tribal communities of India, officially designated as Scheduled Tribes (STs), represent a rich tapestry of cultural diversity and indigenous knowledge systems. However, they also constitute one of the most economically and socially marginalized groups in the country, often experiencing what scholars term a "geography of disadvantage" (Xaxa, 2001). The 2011 Census of India documented 705 notified tribal communities and over 1,700 subsidiary groupings, constituting a population of approximately 104 million individuals. This demographic represents 8.6 percent of the national population. Geographically,

the distribution of this population is markedly uneven. Only an estimated 10 million tribal individuals reside in urban agglomerations. The predominant majority inhabit rural and peri-urban areas, with significant concentrations in forested tracts, hill regions, and other geographically isolated territories. These communities are characterized by distinct socio-cultural systems and economies that demonstrate deep interdependencies with their immediate ecological environments. The natural landscape functions not merely as a site of habitation, but as an integral component of their cultural identity, subsistence

strategies, and cosmological frameworks. (Page No: 998, 2025). Tribal communities hold an important place in discussions on sustainable development. Many of them live in ecologically sensitive regions such as forests, hills, and other biodiversity-rich areas. Over generations, they have developed deep traditional knowledge and practices that are closely connected to nature and are inherently sustainable. Their lifestyle is rooted in balance with the environment-using resources carefully, respecting natural cycles, and maintaining harmony with the land. In many ways, their everyday way of living reflects principles of sustainability that the modern world is only now beginning to fully appreciate (Page No: 998, 2025). In the heart of eastern India, the state of Jharkhand, with a tribal population of over 26%, epitomizes this paradox of being rich in natural resources yet home to populations grappling with persistent deprivation (Pradesh et al., 2011). Despite a progressive policy framework and numerous welfare schemes aimed at tribal development, a significant gap persists between legislative intent and lived reality, particularly in the state's remote and forested regions. The issue of tribal development is extremely complex and multifaceted. Key components of tribal development include health, education, and economic growth. A single policy cannot cater to the diverse needs of India's numerous tribes, each with unique requirements. It is essential to comprehend their requirements, circumstances, cultural customs, heritage, and socio-economic lifestyle (Com et al., 2008). A person's socio-economic status strongly affects their health, nutrition, illness, and life expectancy. It also plays a major role in whether they can actually reach, afford, feel comfortable with, and use the healthcare services available to them (Jyoti, 2018).

The disparity in health outcomes between indigenous and non-indigenous communities in India is primarily attributed to variations in socioeconomic standing. However, even among indigenous populations, individuals with higher socio-economic status tend to be healthier than those with lower socio-economic status. Economic and social factors are critical, as the background and available resources significantly impact health outcomes, regardless of the indigenous status. (Subramanian et al., 2006). Daily life for tribal communities is being made extremely challenging by a number of difficulties. Limited access to fundamental resources, education, and skills is prevalent, with malnutrition and the lack of clean water and suitable shelter exacerbating their difficulties. Individuals in this situation often experience ongoing exposure to risks, including crime, victimisation and food insecurity. Cut off from

opportunities by geographic and cultural isolation, they often face significant challenges even from minor health issues due to a lack of proper healthcare. These challenges collectively form a cycle of hardship that is notoriously difficult to overcome, resulting in a daily struggle to survive (Chandrakar et al., 2023).

Tribal communities face unique health challenges rooted in their geographical isolation, economic circumstances, and cultural traditions. Our approach, therefore, focuses on their real-world needs-from improving maternal care and fighting disease to ensuring good nutrition-while actively respecting and valuing their cultural practices and knowledge (Of & Affairs, n.d.). In India, healthcare development has been largely urban-focused, despite most people living in rural and semi-urban areas. The rapid growth of profit-driven private hospitals in cities and the weakening public health system have widened inequalities in access to care (Chandrakar et al., 2023). This study focuses on the micro-context of Mahuadanr, a block in the Latehar district of Jharkhand, characterized by its ecological richness and significant tribal population. In such regions, vulnerabilities are not isolated but are the product of intersecting inequalities-a complex web where socio-economic status, geographical isolation, political marginalization, and cultural distinctiveness converge to create a cycle of compounded disadvantage (Crenshaw, 1989). The socio-economic determinants for tribal communities, such as a heavy reliance on subsistence agriculture, lack of secure land tenure, and inadequate access to education, are well-documented (Chandrakar et al., 2023). These factors directly translate into critical health vulnerabilities, including elevated rates of maternal and child mortality and a high prevalence of communicable diseases like malaria and typhoid, as highlighted in national reports like the National Family Health Survey-5 (Welfare, 2019).

Therefore, this paper presents a micro-level analysis to dissect these intersecting inequalities in Mahuadanr. It moves beyond macro-level generalizations to investigate the precise mechanisms through which structural barriers and health challenges are intertwined at the grassroots level. Tribal regions often face inadequate healthcare infrastructure, leading to high maternal and infant mortality, low immunization coverage, and the continued prevalence of diseases such as malaria and tuberculosis. At the same time, traditional herbal knowledge and indigenous healing practices remain largely excluded from mainstream healthcare systems. An integrated approach that strengthens

health services while recognizing and incorporating traditional medicine can significantly improve health outcomes. Improved maternal and child healthcare, in particular, would help reduce mortality rates, enhance life expectancy, and increase overall community productivity (*Page No: 998, 2025*).

This gap effectively nullifies the potential benefits of welfare schemes, leaving communities like those in Mahuadanr in a state of continued vulnerability.

### **Objective:**

The research is guided by the following objectives:

1. To analyze the key socio-economic determinants (livelihoods, education, infrastructure) shaping the lives of tribal communities in Mahuadanr.
2. To assess the specific health vulnerabilities and their direct linkages to the identified socio-economic conditions.
3. To investigate the systemic and geographical barriers responsible for the implementation gap in government service delivery and to propose a framework for integrated, community-centered interventions aimed at fostering sustainable well-being while preserving cultural integrity.

The findings underscore the urgent need for a fundamental shift from siloed approaches to integrated, multi-sectoral policies that are co-designed with the communities they are intended to serve.

### **Methodology**

This research adopted a mixed-methods approach to comprehensively examine the socio-economic determinants and health vulnerabilities among tribal communities in Mahuadanr, Latehar, Jharkhand. The methodological framework integrated quantitative household survey data with qualitative insights drawn from community-based interactions to capture both measurable indicators and lived experiences.

### **Research Design**

A cross-sectional, field-based study was undertaken, combining descriptive and analytical techniques. The study was designed to capture intersecting

### **Study Area**

This study unfolds in Mahuadanr, a remote corner of Jharkhand's Latehar district where life is deeply entwined with the land. Here, the rugged, forested landscapes of the Palamu Division are home to vibrant tribal communities, including the Oraon, Munda, and Birjia, whose identities and livelihoods are rooted in the dense sal forests and the rhythms of subsistence agriculture. While the monsoon rains bring life to their fields, the very geography that sustains them also creates a profound sense of isolation. For the people of Mahuadanr, this distance is not just measured in kilometres; it is felt in the arduous journeys to the nearest health clinic, the struggle to get goods to market, and the gap between promised government services and their reality on the ground. It is within this context—a place of immense cultural strength and ecological wealth, yet marked by spatial and systemic marginalization—that we explore the everyday challenges and resilience of its people, understanding Mahuadanr as a poignant microcosm of the intersecting inequalities faced by tribal communities across the region.

inequalities related to livelihood systems, access to public services, and healthcare challenges.

### **Sampling Strategy**

A multi-stage sampling technique was used:

1. Selection of villages: Villages were purposively selected to represent varying degrees of remoteness, socio-economic diversity, and accessibility to services.
2. Household sampling: Within selected villages, systematic random sampling was applied to identify respondent households.
3. Respondent selection: One adult household member, preferably the primary decision-maker or knowledge holder, was interviewed.

A total of **175** households were surveyed/interviewed.

### **Data Collection Methods**

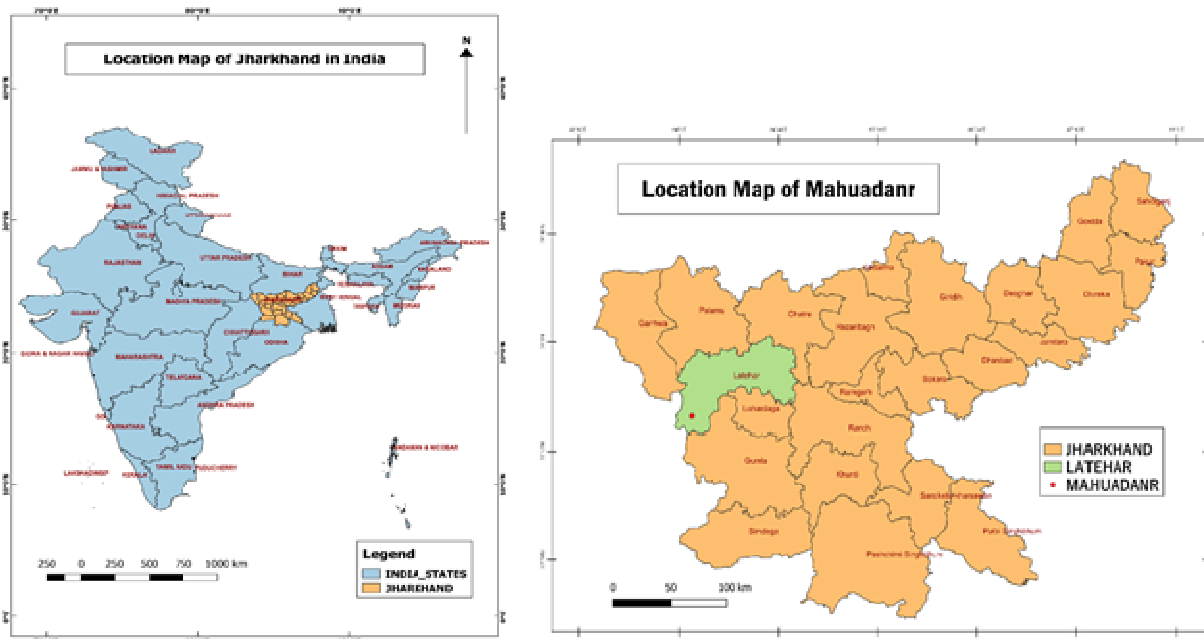
#### **Primary Data**

- Household Surveys: Structured questionnaires captured demographic data, livelihood patterns, asset ownership, education, nutrition, sanitation, healthcare access, and disease prevalence.
- Key Informant Interviews: Conducted with community leaders, PRI members, health workers and local administrators.
- Focus Group Discussions (FGDs): Separate FGDs with men, women, and youth explored perceptions of welfare programs, barriers to healthcare, and cultural practices.

#### **Secondary Data**

Supporting information was obtained from government publications, Census reports (2011 & latest available data), District Statistical Handbooks, NFHS and NSS datasets, health department records, and relevant academic literature.

This integrated methodology enabled triangulation of evidence, allowing the study to capture both structural factors and local experiences shaping health and socio-economic vulnerabilities in Mahuadanr. The approach ensured grounded, context-specific findings rooted in realities of tribal life and geospatial marginality.



**Figure 1: Location Map of the Study Area**

**Result and Discussion**

**Table 1: Demographic & Socio-Economic Profile of Mahuadanr Block**

Category	Details	
Religious Composition	Hindu	15,534 (20.79%)
	Muslim	5,076 (6.79%)
	Christian	33,396 (44.69%)
	Other Religions	20,407 (27.31%)
	Other (Sikh, Buddhist, Jain, Not Specified)	319 (0.43%)
Settlement Pattern	Urban Population	0 (0%)
	Rural Population	74,732 (100%)
Workforce Profile	Total Workers	38,122
	Main Workers	13,694
	- Cultivators	7,020
	- Agricultural Labourers	2,827
	- Other Workers	3,847
	Marginal Workers	24,428
Village Size Distribution	Non-Working Population	36,610
	Less than 200	8 villages
	200-499	28 villages
	500-999	44 villages
	1000-1999	18 villages
	2000-4999	3 villages
5000 and above	0 villages	

**Source:** Census data 2011

**Table 2: Demographic & Socio-Economic Profile of Mahuadanr Block**

Category	Total	Male	Female
Total Population	74,732	-	-
Children (0-6 years)	11,953	6,137	5,816
Literacy Rate	69.62%	65.75%	51%
Illiterate Population	31,027	12,986	18,041
Scheduled Caste (SC)	2,394 (3.2%)	1,198	1,196
Scheduled Tribe (ST)	58,802 (78.7%)	29,604	29,198
Population Density	113/km <sup>2</sup>	-	-

**Source:** Census data 2011

**Table 3: Survey Response Summary Table (with Percentages)**

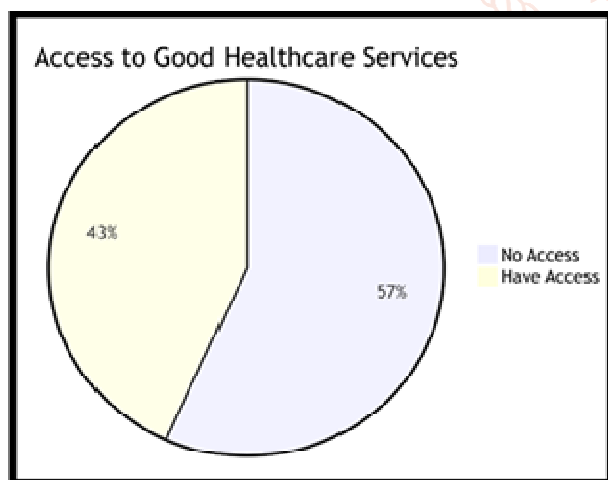
Category	Subcategory	Respondent Count N= 120	Percentage (%)
Age Group	30–40	52	43.3%
	41–50	46	38.3%
	51 and above	22	18.3%
Gender	Male	75	62.5%
	Female	45	37.5%
No. of Family Members	0–5	62	51.7%
	6 to 10	49	40.8%
	10 Above	9	7.5%
Primary Source of Income	Agriculture	65	54.2%
	Govt. Service	17	14.2%
	Labour	30	25.0%
	Self-employed	8	6.7%
Monthly Income	< 5000	39	32.5%
	6000–10000	51	42.5%
	11000–20000	19	15.8%
	> 20000	11	9.2%
House Type	Mud House	68	56.7%
	Brick House	52	43.3%
Toilet Type	Own	59	70.2%
	Govt. Sponsored	25	29.8%
Source of Water	Open Well	39	32.5%
	Borewell	63	52.5%
	Deep Boring	18	15.0%
Electricity	Yes	93	77.5%
	No	27	22.5%
Agricultural Land	< 1 Acre	82	68.3%
	1–2 Acre	32	26.7%
	> 2 Acre	6	5.0%
Intoxication	Yes	89	74.2%
	No	31	25.8%
Child Delivery Service	Yes	92	76.7%
	No	28	23.3%
Waterborne Diseases	Yes	98	81.7%
	No	22	18.3%
Clean Drinking Water	Yes	88	73.3%
	No	32	26.7%
Distance from Hospital	< 5 km	43	35.8%
	5–10 km	22	18.3%
	> 10 km	55	45.8%
Road Connectivity	Yes	59	49.2%
	No	61	50.8%
Market Distance	< 5 km	60	50.0%
	5–10 km	44	36.7%
	> 10 km	16	13.3%
Bank Service	Yes	112	93.3%
	No	8	6.7%
Use of Agricultural Technology	Yes	98	81.7%
	No	22	18.3%
Animal Husbandry	Yes	86	71.7%
	No	34	28.3%
Access to Good Health Care Service	Yes	52	43.3%
	No	68	56.7%

**Source:** Surveyed (August 2025 to January 2026)

In the quiet, rolling hills of Mahuadanr, there stands a building that tells a story of waiting. It is a health centre, painted in the fading colours of government schemes, with a sign, a phone number, and six empty beds. The most profound silence, however, comes from the doctors' chambers. All four are vacant. This is not merely a statistic; it is the daily reality for over 74,000 people—predominantly tribal families scattered across 101 small villages—for whom a clinic without a doctor is a promise unkept, a first line of defence that does not exist when malaria strikes a child or a pregnancy turns complicated. This report synthesizes demographic, socio-economic, and infrastructural data to argue that the failure of the Mahuadanr health centre is not an isolated administrative lapse but the inevitable consequence of a syndemic of marginalization, where policy neglect converges with geographic and social vulnerability to create a healthcare desert.

To understand the crisis, one must first understand the community it serves. The data paints a picture of a people rooted in the land yet buffeted by its challenges.

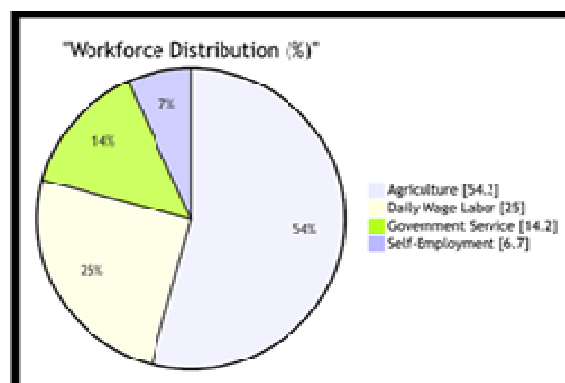
- **A Scattered Existence:** Imagine a landscape not of towns, but of small hamlets—80 of them with fewer than 500 souls. Families here live in a state of profound rurality (100%), their lives woven into tiny pockets of settlement across hills and forests. For a mother in a village of 200, the "local" health centre is often a long journey away on roads that 50.8% describe as poorly connected. This geographic dispersion is the first, fundamental barrier to care.



**Figure 2: Access to health care service**

- **Living on the Edge:** Life here is sustained by the soil. Over half of the households (54.2%) depend on agriculture, but for most, it is a fight for subsistence on less than an acre of land (68.3%). Monthly incomes are meagre; for 75% of families, earnings are under ₹10,000. This

economic precarity means a day spent travelling to a distant hospital is a day of lost wages, an impossible trade-off for daily wage labourers and marginal workers who constitute 64% of the workforce. Healthcare is a luxury their fragile economies cannot afford.



**Figure 3: Major Workforce Distribution**

- **The Environment of Illness:** Home is often a mud house (56.7%). Water comes from an open well for a third of families, a source vulnerable to the contamination that may explain why 81.7% report suffering from waterborne diseases. This is a population engaged in a constant, low-grade battle with its environment, a battle that demands, but does not receive, consistent medical support.

***The Hollow Heart of the System: A Facility of Absences***

Into this context of need steps, the Mahuadanr health centre—a institution defined by its absences. It is a stark case study in systemic failure.

- **The Vacancy at the Core:** The most critical absence is human. All four Medical Officers' posts are vacant, a situation directly attributable to the convergence of "hard-to-serve" factors: a remote, tribal area marked as a "disturbed zone," coupled with staff quarters that lack reliable electricity and water. The policy failure is compounded; while housing exists for (absent) doctors, none is provided for nurses, forcing them into an impossible search for rental accommodation in a region with no rental market. The system, in essence, actively repels the very staff it needs.
- **Proximity Without Care:** This creates a cruel paradox of access. While the building may be within 5 km for 35.8% of people, its clinical function is absent. Therefore, 56.7% of people correctly perceive they have no access to good healthcare. For nearly half the population living over 10 km away, the challenge is even more dire, especially without an ambulance. The facility becomes a taunting symbol of unmet need—visible but void.

## Discussion

The data reveals not a series of discrete problems, but a tightly woven vicious cycle that traps the community in poor health.

- **Marginalization Begets Institutional Failure:** The community's remote, tribal, and economically vulnerable status labels it a "non-preferred" posting within the bureaucratic machinery. Standard recruitment fails because it does not account for the exceptional hardship. The resulting vacancy is then treated as a routine administrative gap, not a catastrophic system collapse requiring emergency intervention. The institution fails because the community is marginalized, and the community's marginalization is reinforced by the failing institution.
- **Poverty Compounds Clinical Risk:** The high prevalence of malaria and waterborne diseases occurs in a population with minimal financial resilience. A serious illness can devastate a family economically, plunging them deeper into poverty, which in turn worsens nutrition and living conditions, creating a higher risk of future illness. The lack of a functioning local clinic forces families to make terrible choices between financial survival and seeking distant, costly care.
- **The Gender Dimension of Despair:** With female literacy at only 51%, women-the primary caregivers and health gatekeepers-face additional barriers in navigating health information and advocating for care. The reported high rate of institutional deliveries (76.7%) shows a willingness to engage with the system, but this trust is betrayed when the same system offers no doctor for prenatal or paediatric care.



**Figure 4: The Vicious Cycle of Neglect**

## Conclusion and Path Forward

The story of Mahuadanr is a human story of resilience in the face of systemic abandonment. The people are not passive victims; they report using agricultural technology (81.7%), engaging with banking (93.3%), and seeking institutional care. They are active participants in their own development, let down by a structure that is not fit for purpose.

Addressing this requires a shift from place-blind policy to place-conscious justice. Solutions must be as integrated as the problems:

- **Immediate:** Deploy a "resilience team" on a contractual, highly-incentivized basis-a doctor, a nurse, a lab technician-with superior housing and allowances, to restore basic clinical function while longer-term reforms are enacted. Launch weekly mobile clinic vans to reach the most dispersed hamlets.
- **Systemic:** Implement a "Mahuadanr Model" recruitment drive with mandatory, well-compensated rural service tied to medical education, specifically for tribal regions. Converge infrastructure projects: link road-building priorities to health access metrics and fast-track piped water to the centre and surrounding villages.
- **Community-Embedded:** Empower the existing community health worker (ASHAs) network with enhanced telemedicine support to district doctors. Develop health literacy programs co-created with local women, in their languages, to bridge the information gap.

Ultimately, the empty beds in Mahuadanr are not just a healthcare failure. They are a mirror reflecting a broader failure of equity. Filling them requires more than posting a job advert; it requires a fundamental acknowledgment that for the tribal, the rural poor, and the geographically isolated, health is not a service to be delivered if convenient, but a right to be guaranteed through deliberate, tailored, and humane policy. The people of Mahuadanr have waited long enough. Their health centre must become more than a building; it must become a testament to a system that finally sees them.

## Conclusion

The crisis in Mahuadanr transcends statistics; it is embodied in the mother's long walk to a clinic without a doctor and the farmer's impossible choice between wages and healthcare. These are the human faces of "intersecting inequalities"-the daily, compounded burdens borne by families navigating a landscape of scarcity and institutional neglect. The research reveals a system that, despite its intent, is

fundamentally misaligned with the realities of remote tribal life. The vacant health centre stands as a potent symbol not of mere administrative failure, but of a promise repeatedly broken to those who need it most. Yet, within this narrative of systemic abandonment, a counter-narrative of resilience persists. The communities themselves are not passive; they demonstrate a profound connection to their land, rich cultural knowledge, and an active pursuit of well-being within the narrow opportunities available to them. They engage with banking, adopt agricultural techniques, and seek institutional care, revealing a readiness to partner with a system that has yet to meaningfully partner with them. Therefore, the path forward requires a fundamental reorientation—from seeing these communities as recipients of aid to recognizing them as essential agents of their own development. Solutions must be as human-centered as the problems are deeply felt. This means deploying healthcare workers who are supported to stay, creating infrastructure that truly connects, and, most critically, co-designing policies with the community, ensuring they are culturally resonant and directly address lived needs. It demands transforming the vacant clinic from a symbol of neglect into a hub of genuine, accessible care.

Ultimately, bridging the chasm between policy and reality in Mahuadanr hinges on this simple, profound shift: listening, respecting, and partnering. Sustainable well-being will be achieved only when systems are rebuilt to guarantee—not just attempt—the delivery of dignity and health to every last home, no matter how remote.

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